Compendium 2000 on Effective Correctional Programming

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The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the Ministry of the Solicitor General of Canada or the various provincial/territorial jurisdictions.

Compendium 2000 strives to present a variety of opinions on, and approaches to current issues in corrections.

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Introduction LAURENCE L. MOTIUK¹

In Canada, the number of provincial/ territorial prison-admissions had increased by 22.5% between 1990-91 and 1992-93 from 207,946 to 245,746. Similarly, federal admissions increased 21.4% between 1990-91 and 1993-94 (peaking one year later than provinces/territories) from 4,646 to to 5,642. The increase in admissions contributed in large measure to the rapid growth of the Canadian federal/provincial/territorial prison population in the early 1990s. Moreover, the total actual-in prison population rose by 16% between 1990-91 and 1994-95 from 29,224 to 33.882.²

Because of this growth in the prison population, the Federal/Provincial/Territorial Ministers responsible for Justice asked Deputy Ministers and Heads of Corrections to identify options to deal effectively with growing prison populations. A paper entitled Corrections Population Growth was subsequently developed and presented to the Ministers in May 1996. An additional recommendation made in the First Report on Progress³ was "sharing research findings on offender programe effectiveness". This recommendation inspired the formation of an expert advisory group to design and develop a Compendium on Effective Correctional Programming. This introduction provides the backgroud and framework for this work.

Background

The Correctional Service of Canada (CSC) was requested bv the Federal/ Provincial/Territorial Heads of Corrections to convene an advisory group of international experts on effective correctional programming and develop a framework for a compendium on "what works" in offender programming". Subsequently, the Research Branch of CSC approched to undertake was а comprehensive review of the literature on effective correctional programs and evaluation methods. Accordinaly. а leadership role was taken in assembling an expert advisory group, designing а compendium framework, compiling relevant program information and surveying best practices across the various jurisdictions in Canada.

The expert advisory group

To create an expert advisory group, CSC identified and contracted with a number of well-known researchers/evaluators in the filed of effective correctional programming. From Canada, there was Don Andrews (Carleton University). Paul Gendreau (University of New Brunswick), Alan Leschied (University of Western Ontario), and Joseph Couture (Athabasca University). From the United Kingdom, there was James McGuire (University of Liverpool). From Germany, L! sel (Universtat Freidrick Erlangen-Nurnberg) and from the United States. Douglas Lipton (National Development and Research Institute). In conjunction with CSC Research Branch staff (Larry Motiuk, and Ralph Serin), these individuals comprised the expert advisory group tasked with drafting a framework for a compendium on "what works" in offender programming.

The framework

For the expert advisory group, potential impacts of the Compendium were seen as the following: meeting the needs of multiple users, from practitioners to administrators; sharing best practices among various jurisdictions; providing reasonable measures of evaluating program effectiveness, and, where possible, make recommendations regarding specific tools or instruments to assist staff in this regard; developing innovations in correctional programming; conducting ongoing research into program effectiveness; and enabling different jurisdictions to embrace technology transfer.

In March 1998, a second meeting of the advisory group was held to finalize the Compendium framework that had arose from earlier discussions. At this meeting, some new members joined the advisory group. They included Jim Bonta (Department of the Epprecht Solicitor General), Nicola (Correctional Service of Canada), and Kelley Blanchette (Correctional Service of Canada). Following that meeting, the framework for a compendium of "what works" in offender programming was finalized and presented to the Federal/Provincial/Territorial Heads of Corrections for approval in May 1998.

Consequently, the task of compiling a five part Compendium 2000 on Effective Correctional Programming was approved to move forward. While a massive research undertaking ensued, the sheer magnitude of it is beyond the scope of this introduction. However, an overview of the basic content of the two volumes is provided here.

Volume 1

Part One.	Contributin			ective
Part Two.	Correctiona Correctiona			and
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Part Three.	Evaluation			
Volume 2 Part Four.	Inventory Programs	of	Correc	tional

Part Five. Best Practices

Part one — Contributing to Effective Correctional Programs

In addition to introducing the initiative and purpose of Compendium 2000, Part 1 includes 8 separate chapters. Chapter 1 by James McGuire (University of Liverpool) examines what correctional staff and researchers mean when they talk about a program. Then, In Chapter 2, Don Andrews (Carleton University) describes 18 principles of effective correctional programs. In Chapter 3. Paul Gendreau with Claire Googin (University of New Brunswick), Francis Cullen (University of Cincinnati), and Don Andrews (Carleton University) guantitatively summarize a substantial body of literature on the effects of community sanctions and incarceration. Chapter 4 by James Bonta (Depatment of Solicitor General) presents an overview of what we know about offender risk assessment. He also includes a discussion of the risk and needs assessments thatunderlie effective treatment. Sharon Kennedy (Correctional Service of Canada), in Chapter 5, addresses the concept of treatment responsivity and exaines a number of responsivity assessment measures currently in use. Then, in Chapter 6, Paul Gendreau, Claire Goggin, and Paula Smith (University of New Brunswick) outline several obstacles to employing best practicesm including theoreticism and the failure to effect technology transfer. Chapter 7 by Alan Leschied (University of Western Ontario) presents current findings related to program implementation and the replication of successful programs. Finally, in Chapter 8, Denise Preston (Correctional Service of

Canada) reviews th ehistory and evolutionn of the concept of treatment resistance, descibes various reasons for and manifestations of resistance, discusses assessment issues, and suggests strategies to reduce resistance.

Part two - Correctional Programs/ Intervention

This part of Compendium 2000 is organized to provide up-to-date overviews of the treatment literature for specific program areas. The content areas were selected for their relationship to criminality, such that when the appropriate intervention is applied to meet the need it might reasonably be expected to reduce reoffending behaviour. In Chapter 9, Dennis Stevens (University of Massachusetts) examines education as one method of preparing an offender for a safe return to the community. Christa Gillis (Correctional Service of Canada), in Chapter 10. describes current employment measurement techniques and proposes modified measurement strategies. Chapter 11 by Claudio Violato, Mark Genuis, and Elizabeth Oddone-Paolucci (National Foundation for Family Research and Education) deals with various treatment and intervention approaches together with their relative efficacy. Alan Lescheid (University of Western Ontario), in Chapter 12, details the program factors contributing to effectiveness for institutionalized and non-institutionalized young offenders. Chapter 13 by Lynn Stewart, Jim Hill, and Janice Cripps (Correctional Service of Canada) provides a review of issues related to the treatment of spousal violence. Then, in Chapter 14, Lynn Lightfoot (CSC, Consultant) reviews the substance abuse treatment literature. Chapter 15 by Lynn Stewart (Correctional Service of Canada) and Rob Rowe (Carleton University) discusses the problems of self-regulation among adult offenders. James McGuire (University of Liverpool), in Chapter 16, reviews evidence concerning treatment of offenders with mental disorders. He provides definitions, focuses on outcomes and turns our attention to the management of offenders with mental disorder. Chapter 17 by William Marshall (Queen's University) and Sharon Williams (Correctional Service of Canada) explores the assessment and treatment of sex offenders. Ralph Serin and Denise Preston (Correctional Service of Canada), in Chapter 18, investigate programming for violent offenders. Then in Chapter 19, Joe Couture (Athabaska University) outlines the orientation and strategy of the Elders who work with Aboriginal offenders. Chapter 20 by Kelley Blanchette (Correctional Service of Canada) discusses effective correctional practice with women offenders. Finally, Chapter 21 by Claude Tellier and Ralph Serin (Correctional Service of Canada) highlights the contribution that staff makes in the delivery of effective correctional services.

Part Three - Evaluation

This section of Compendium 2000 provides evaluation guidelines for criminal justice policy makers, correctional administrators and program staff. In Chapter 22, Gerry Gaes (United States Federal Bureau of Prisons) provides guidelines for asking the right questions and communicating results. Then, Laurence Motiuk (Correctional Service of Canada), in Chapter 23, addresses why correctional outcome is so difficult to measure and tries to show how we can measure it as best we can. Ralph Serin (Correctional Service of Canada), in Chapter 24, examines intermediate measures of program effectiveness. Chapter 25, by Paul Gendreau, Claire Goggin, and Paula Smith (University of New Brunswick), describes how metaanalyses can help inform correctional service providers and policy-makers. Then, James McGuire (University of Liverpool), in Chapter 26 describes a program logic model of program effectiveness. Finally, Chapter 27 by Shelley Brown (Correctional Service Canada) explores cost-benefit analysis as it applies to effective correctional treatment.

Part Four – Inventory of Correctional Programs

Using a standard protocol, the Research Branch surveyed the Federal/Provincial Territorial jurisdictions regarding their correctional programs. The purpose of the survey was to provide an up-to-date inventory of all programs, both institutional and community-based, with an emphasis on programming. The effective survey incorporated program descriptions; development and evaluation; assessments of treatment need; and where applicable, outcome and/or financial data. This information can be used to determine the status of certain types of programs in different jurisdictions, to facilitate information exchange, and to assist in treatment planning for offenders throughout their involvement with the criminal justice system.

Part Five - Best Practices

Again, using a standard protocol, the Federal/Provincial/Territorial jurisdictions

were invited to submit specific programs that they wished to highlight as a best practice.

The Deliverable

Compendium 2000 on Effective Correctional Programming provides a comprehensive and critical appraisal of the empirical literature in the field of corrections and behaviour change. More importantly, it provides new knowledge on program effectiveness, an overview of existing programs in Canadian correctional jurisdictions, and guidelines for evaluating operations and policy in the area of correctional programs.

PART ONE

Contributing to Effective Correctional Programs

CHAPTER 1

JAMES McGUIRE¹

As a result of the findings of large-scale reviews of offender treatment, presented and discussed in this Compendium, there has recently been a considerable expansion of interest in the use of programs in work with offenders. Using interventions in forms that may be described as programs is not new, and there are examples of this kind of work dating back to the 1940s. The research indicates that the true era of development in this sphere commenced in 1975. This chapter examines what correctional staff and researchers mean when they talk about a program. This is not as straightforward as it sounds, and it is difficult to arrive at a single, clear-cut, unassailable definition of correctional programs that will firmly demarcate them from other forms of activity conducted with individuals sentenced by criminal courts. However, in one sense that does not matter too much. What is much more important is that when any interventions are carried out with offenders, it should be possible to specify what has taken place, in order to direct the work being done, to allow evaluation to occur, and to enable others to learn from the results.

THE GROWTH OF INTEREST IN PROGRAMS

First, it will also be helpful to set the enterprise in a broader context. Correctional programs as we currently observe them being implemented whether in institutional or community settings have a common primary objective. In attempting to accomplish it, correctional programs are just one of a number of endeavours taking place in many agencies and services that share common goals. Those goals revolve around the notion of inducing or supporting some type of *change* in the people taking part. The desired changes may include imparting knowledge, acquisition of skills, or improved health. But in criminal justice services, this usually hinges upon the concept of *correction*: the adjustment of behaviour from a pattern that is criminal or anti-social to one that is more law-abiding or pro-social.

To succeed in this requires drawing on methods that overlap, inevitably and sometimes to a considerable extent, with ones employed in other fields. Correctional services form one of a number of public agencies providing a service to the community of which they are a part. Given this role, they have many professional links with other agencies. But in addition, staff with different backgrounds, qualifications and perspectives work within each agency. Prison staff include not only custody or discipline officers dealing with security and management issues. There are also teachers, social workers, probation staff, psychologists, psychiatric nurses, and others. Thus whatever their stated aims and whichever professional group predominates, most public services employ a range of specialist staff. The net effect of this is to blur the boundaries not only between different professional roles, but also between the different activities offered to those who are the consumers of an agency's services.

Also like many other agencies, correctional services attempt to serve (at least) two main "consumers" simultaneously. The publicly declared aim of corrections is to ensure community safety, by detaining or otherwise managing those who have harmed other people's interests. But unless imprisonment is to consist of literal "warehousing", which few who are familiar with its history would rationally support, it must also then address the needs of prisoners themselves. These two tasks are inextricably interrelated, and this raises fundamental issues for the delivery of correctional programs. For unlike other agencies providing services, the use of coercion and the fact that individuals are (in the vast majority of cases) contained in service settings against their will creates a different dynamic in the manner with which programs have to be delivered. Of course, it is a myth that those who participate on an apparently voluntary basis in school, welfare, or health services always do so willingly. But some framework of restriction of liberty, even if minimal, is integral to virtually all correctional practice, and sets the preconditions for many other aspects of contact between offenders and professional staff, including provision of programs.

Correctional programming has numerous points of contact and degrees of overlap with other types of intervention that have the essential aim of engendering individual change on the basis of personal choice. This includes education, that focuses on helping individuals acquire knowledge and information. It includes *training*, which is designed to help people acquire manual or cognitive skills for application in the workplace. It also includes therapy, which is intended for alleviation of emotional distress and amelioration of symptoms of mental disorder. All of these processes also instil new modes of thinking and problem-solving that are transferable across situations, and often also new perceptions of and attitudes to the self. Thinking more broadly and considering how this would be viewed in a non Western cultural context, there are also similarities to processes of healing. Each of these domains is virtually impossible to define in any simple, satisfactory and mutually exclusive way.

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For some time, the organizations charged with supplying education and training have been accustomed to the idea that there are regular patterns which should be followed in trying to attain the objectives that are set for any given learning task. Those tried-and-tested methods that have successfully secured the objectives in the past become such an established pattern that they have be written down and specified in a manual or handbook. The concept of a *curriculum* is founded on this principle.

Recently, in the wake of large-scale reviews of the effectiveness of psychological therapies, there has been a trend towards standardization and *manualization* of the procedures to be followed (Dobson & Craig, 1998; Nathan & Gorman, 1998). This is partly to allow systematic testing of interventions in carefully controlled research trials. But it is also designed to allow other practitioners to emulate the "best practices" identified in such work. Patterns of individual clinical needs may be such that standardised approaches cannot succeed in tailoring psychotherapeutic interventions to meet everyone's requirements. However, for those types of problems that are experienced by many clients, it has proved possible to develop *empirically supported treatments* the ingredients of which can be described in detail in accompanying therapist manuals.

Over the last quarter of a century, a similar idea has progressively become implanted in correctional services, and today holds a position of some prominence.

TYPES AND LEVELS OF INTERVENTIONS

The concept of *program* is now widely discussed in correctional settings, but evidently still means different things to different people. To refine the concept slightly, a useful starting point is to examine different approaches to crime prevention and to the intervention efforts that might be planned and delivered within each. For this purpose we can borrow a familiar distinction, made by Tolan, Guerra, and Hammond (1994), between *primary, secondary,* and *tertiary* crime prevention strategies.

Primary prevention consists of two different types of strategies. *Situational prevention* is designed to limit crime opportunities, sometimes by increased security measures, police patrols, video surveillance, target hardening, or the re-design of environments in residential or retail zones (Eck, 1997; McGuire, 2000; Pease, 1994). Interventions of this type are sometimes referred to as programs; for example, neighbourhood watch programs (Sherman, 1997).

Developmental prevention entails provision of services to families and children in environments, such as socio-economically deprived neighbourhoods, with the aim of reducing long term difficulties including delinquency but also school dropout, mental health problems and substance abuse. Such developmental prevention programs have shown to be potentially highly effective (Yoshikawa, 1994); and in some instances, such as the *Perry Preschool Project*, have also been shown to be highly cost-effective over longterm follow-up intervals (Schweinhart, Barnes, & Weikart, 1993). Secondary prevention is focused on known at-risk groups. This includes for example individuals who are identified as predelinquents, who are playing truant from school, have conduct disorders, or are residents of child-care facilities (Kaufman, 1985). In some cases there may be evidence of development of delinquent or anti-social tendencies and efforts are directed towards averting subsequent involvement in juvenile offending. In other circumstances prevention may be broadly aimed at averting gang involvement or drug use in the school population as a whole (Gottfredson, 1997).

Tertiary prevention (Gendreau & Andrews, 1991) is addressed to adjudicated offenders, those already convicted of crimes, with the objective of reducing rates of recidivism. This is the domain of correctional services and the subject-matter of this chapter. Note, however, that correctional services need not be exclusively focused on tertiary prevention; for example youth justice teams may be engaged in some multi-agency programs with a secondary prevention focus.

BASIC CONCEPT AND DEFINITIONS

To an extent, the way a correctional program is defined depends in part on what we consider to be the overall function of society's correctional efforts. This raises rather daunting philosophical questions, concerning the nature of justice or social order, which are beyond the scope of this chapter, but the fact that these issues are inter-dependent should be constantly borne in mind.

With reference to the previous section, the global aims customarily given for criminal justice agencies almost always do relate to preserving the safety of the community. Thus when individuals enter the criminal justice system as adjudicated offenders, the *prima facie* basis for working with them is to return them to society less likely to offend again. It could be argued, on ethical grounds, that such issues are in principle the only ones with which correctional services should be concerned.

On scanning the literature it is possible to discover that the word "program" is used in at least three separate though interrelated ways.

Definition one

The types of interventions known as *programs* may be employed at any of the levels mentioned above (primary, secondary, or tertiary), but for present purposes discussion will be limited to the tertiary, in which most correctional service agencies usually operate. Within this context, the typical program is a circumscribed set of activities, with an appointed objective, and consisting of a number of elements that are mutually inter-connected. In its first, strictest terms, a correctional program can be defined at its core as a planned sequence of learning opportunities delivered to adjudicated offenders with the general objective of reducing their subsequent criminal recidivism. From a behavioural perspective, it is intrinsic to this that a *constructional* approach is adopted. This entails the reduction of undesirable behaviour through the application of positive reinforcement procedures and repertoire-building techniques. As Gendreau (1996) has indicated, positive reinforcers should outnumber punishers in a ratio of not less than 4:1.

This definition implies that a program has a specified objective and it should be possible for this to be clearly stated by its designers, users, evaluators and preferably also its participants. There may be intermediate objectives that in practice are only distantly connected to the goal of reducing recidivism; but the nature of any such linkage should be explained in supporting program documentation. There should be a planned sequence of activities. This might be called a curriculum: a series of sessions or a timetable. It is the physical representation of what is involved in trying to operationalize the program's objectives. The program should have internal coherence, in the sense that the activities that are planned can be shown to be justifiable for achieving the objectives. This should hold both theoretically (there is a sound model on which the design of the program is based) and empirically (there is evidence concerning its effectiveness, either as a totality or in terms of its components).

At first sight this may appear highly prescriptive. Regrettably, the entire concept of programming alienates some staff who misperceive it as a mechanised attempt to brainwash offenders. Others confuse it with the idea of programmed learning, in which specially prepared texts or interactive computer software is used to guide individuals through a knowledge-acquisition process. Methods designed in this way could form a part of some interventions; but this is distinct from what is usually referred to as correctional programming.

Outside corrections, the closest parallel to this concept is perhaps the *curriculum* in educational settings. This usually has an objective (e.g., to help students learn a language to a certain standard). It will entail activities, methods and materials designed to achieve this goal. There will be a clear, demonstrable link between the two and some procedures for monitoring and evaluating their achievement.

Definition two

In corrections the word *program* is also used in a second, broader and more flexible sense. For example, mentoring schemes for young offenders, or therapeutic communities for substanceabusing offenders are also referred to as programs. In the purer sense of definition one, the term is here a misnomer. But it is possible to specify the objectives of both these processes and to define operationally what is intended to happen within them. Thus if the experiences which are to be arranged for participants can be adequately described, to the extent that other practitioners could adopt and replicate them, it is still accurate to use the word program as applicable to these interventions.

Activities such as mentoring, intensive supervision, or physical challenge do not however contain the detailed pre-planning or expectation of measured development that is a central feature of programs in definition one. Individual change may occur, but there is no explicit structure or designated sequence through which participants progress as is the case in, for example, a cognitive skills program.

This flexibility of nomenclature can lead to confusion. Mentoring may be an added element in a juvenile correctional service in which young offenders also participate in structured activities programs that would satisfy the first definition given above. That might similarly occur in the setting of a therapeutic community. Evidently, it is very difficult to delineate the outer limits of what is meant by a correctional program.

Definition three

Taking a far broader perspective, MacKenzie (1997) has classified criminal justice interventions into six separate but overlapping groups, as follows.

- Incapacitation. Removing the offender's capacity to commit crimes, usually through detention (incarceration).
- ◆ *Deterrence.* Punitive sanctions which as a result of the infliction of pain or discomfort will deter individual offenders subjected to them (specific deterrence) or other potential offenders and members of the public-at-large (general deterrence). The primary means of accomplishing this is through restriction of liberty but additional sanctions may also be applied as in a correctional boot camp.
- Rehabilitation. Provision of treatment or allied forms of intervention designed to alter the thoughts, feelings or behaviour of individual offenders.
- Community restraints. This includes surveillance, supervision, or other methods of closely monitoring an individual's behaviour or sphere of activities such as to preclude engagement with crime opportunities.
- Structure, discipline and challenge. Physically (and sometimes mentally) demanding experiences designed to influence individuals' attitudes in a positive way or to act as a deterrent against further criminality.
- Combining rehabilitation and restraint. An amalgamation of methods of treatment with methods of surveillance or limitation of liberty that will enforce compliance with requirements.

This constitutes, potentially, a third definition of the word "program". It may be important however to distinguish between the above aspects which are structures of the criminal justice system and that flow directly from judicial sentencing; and efforts made by other correctional agencies to introduce active change ingredients into the context set by this framework. While it is a widespread public expectation that the sentence of a court will in itself have an impact on offenders, there is little evidence to support this supposition. Examination of data concerning the differential impact of sentencing on recidivism, using official criminal statistics and making comparisons between predicted and actual rates of reoffending amongst large samples, shows that sentencing *per se* is largely irrelevant to outcome (McGuire, 1998). It is on this basis that Andrews (1995) has argued that the sentence can only ever be the starting condition for programmatic intervention.

We might also question whether punishment and deterrence can be conceptualized as *programs*. From a layperson's standpoint, the *raison d'être* of criminal justice is to punish offenders for their wrongdoing (Walker, 1991). Punishment is, metaphorically speaking, the correctional equivalent of cosmic background radiation in physics; pervasive and ever-present. Simultaneously, there are additional punitive sanctions, or enhanced punishments, which can be introduced into the framework of existing sanctions; they may form the experimental conditions in some correctional research studies (Lipsey, 1992; Sherman, 1988). Yet when correctional staff, practitioners or researchers, refer to correctional programming they rarely mean innovations of this type. They are more likely to denote a set of activities with psychoeducational, therapeutic, or skills-training purposes and methods, as in the first definition given above.

Perhaps the focal defining aspect of a program does not reside in the kinds of external, directly observable components described earlier. Rather, the pivotal feature could be the proposed vehicle of change. This is the mechanism within a program which it is presumed (or preferably, firmly demonstrated) will produce the difference in recidivism that is the program designer's and the agency's ultimate goal. For punishment, that would (theoretically) consist of personal discomfort in offenders resulting from loss of liberty, the general privations of prison life, or the physical demands of a correctional boot camp regime. For a cognitive or interpersonal skills program, it would be the acquisition of new capacities for analysing and solving problems or for interacting with others. For a therapeutic community, it would entail the gradual experience of re-socialisation and growth of personal insight as daily interactions with others shape new kinds of behaviours, feelings, or beliefs. But these concepts themselves vary enormously between different types of programs, and the crossovers and exchanges between them are too numerous to permit them to serve as useful definitional markers.

VARIETIES OF OFFENDER PROGRAMS

One of the recurrent difficulties of defining programs on the basis of available literature is that descriptions of them are often used in loose, overlapping, and sometimes incompatible ways. The same program can be conceptualized in different terms depending on which aspect of it is highlighted. In addition, reviewers of research (including meta-analysts) invariably develop their own classification or coding systems when grouping programs together to compare effect sizes. Thus, an interpersonal skills program could be defined straightforward by that label. But equally, it could be categorized under the headings *skills-training*, *behavioural*, or *cognitive* depending on which aspect of it a reviewer perceived as most salient. Alternatively, as a function of its location in correctional services, it might instead be subsumed under some other title such as *diversion* or *intensive supervision*.

For example, Palmer (1996) reviewed a wide range of studies on the treatment of offenders, including 9 meta-analyses and 23 narrative literature reviews available at that date. This led to a classification of correctional interventions that showed considerable diversity. They included: confrontation; area-wide strategies of delinquency prevention; social casework; social agency, or societal institution approaches to delinquency prevention; diversion; physical challenge; restitution; group counselling or therapy; individual counselling or therapy; family intervention; vocational training; employment; educational training; behavioural approaches; cognitive-behavioural or cognitive approaches; life skills; multimodal approaches; probation or parole enhancement; and intensive supervision (probation or aftercare/parole) (Palmer, 1996, p. 134-5). As found by Palmer, there were systematic differences in effects between these different categories, even after allowing for sizeable variation within some of the groupings named.

Further, in different programs these elements might be operating singly or in combination. Palmer drew a distinction between *categories* of program, such as the different types of intervention listed above, and *program components*. The latter were more basic building blocks of interventions. If a program contained only one such element, it could be called *unimodal*; however, combined or *multimodal* programs incorporating several elements are much more common. Given the well-established pattern that a wide range of factors is associated with criminal behaviour (Farrington, 1996), it is scarcely surprising that programs deploying several methods and focusing on several targets emerge consistently well from the meta-analyses (e.g., Lipsey, 1992).

Extending this discussion, Palmer (1996) also sought to distinguish between *programmatic* and *non-programmatic* aspects of interventions. The former include all the categories and species of program elements cited earlier. The latter include a range of factors that are widely considered to be prerequisites of program success but are much more difficult to specify. They include staff characteristics; features of staff-client interactions; offender characteristics; and aspects of the settings in which programs are delivered. While not integral components of the definition of most programs, it is recognized that these issues can play a critical part in determining program outcomes. The importance of such factors has been considered in some detail by other authors including Andrews (1995), Gendreau (1996), and Lösel (1995).

Dimensions of variation in programs

The following are some principal dimensions in respect of which correctional programs vary.

Theoretical model

Programs differ according to the models of crime causation or of individual change on which they are based. Whilst the most successful programs to date involve applications of cognitive/ social-learning models, many other approaches exist and have obtained modest and occasionally larger effect sizes.

Treatment targets (criminogenic needs)

It is essential, if programs are to be effective in changing risk of future offending, that they are focused on aspects of individuals' functioning that have been shown to be linked to criminal acts. Programs vary in the number, range, and degree of interrelatedness of such targets. These are sometimes defined on the basis of established risk factors for offending (Andrews, 1995), such as cognitive or social skills deficits, substance abuse, impulsiveness, or anti-social attitudes. In other instances, they are linked to different types of offence, such as programs for burglary, car theft, or violence.

Dosage

Programs also vary simply in the numbers and duration of staffclient contacts; in their intensity over time; and in their overall time-scale of delivery. Following the risk principle it would be expected that there will be a correspondence between risk levels and assignment to different degrees of program intensity; but this relationship may not be linear. For example highly recidivistic, substance-abusing offenders may require several dimensions of program input.

Criminal justice setting

The most immediately obvious aspect of this is whether programs are delivered in institutions or in the community, with most research reviews showing the latter to yield superior effect sizes. Programs also vary in respect of the kind of agency within which they are run, the point during sentences when programming is carried out, and the amount of access to other services concurrently.

Sentencing context

The nature of the sentence imposed may have a direct influence on program delivery, as it will influence the amount of control in the hands of correctional staff, with potential consequences for the degree of participation by offenders.

Specificity

There are differences between programs in terms of the specificity of their objectives. Whereas some may have a very precise focus on a single problem area (e.g., anger management), others may have very broad objectives and a wide spectrum of treatment targets. Given the findings from large-scale reviews concerning their superior effectiveness, multimodal programs, using a combination of targets and methods of working, are usually seen as more powerful agents of change.

Program portfolios

Within a single institution there may be a range of program opportunities. Correctional services such as Correctional Service Canada have developed a hierarchy of program types, varying along several of the above dimensions (see below). Correctional planning principles can then suggest the most appropriate array of programs for an inmate, moving for example from generic, broad-ranging and multimodal programs to others with more specific treatment targets. Conceptually, such programs may be arranged in a hierarchy that permits managers and treatment providers to have an overview of the total pattern of services available within the setting.

Programs also differ in other respects; for example, whether they are designed for delivery on an individual or group basis. Both for reasons of economy and for the other advantages gained from joint activity and collaborative learning, a majority of extant programs are based on a group format.

TARGET POPULATION

Another important issue is that of who should participate in a program. In one sense that may seem obvious: the offender allocated to take part. However, it can be tentatively suggested that the more support individuals have from different aspects of their social environments, the likelier it is that they will achieve change. Evidence supportive of this comes from the impact of the presence of significant others in the Aggression Replacement Training package development by Goldstein and colleagues (Goldstein, Glick, Carthan, & Blancero, 1994). Effect sizes increased sharply as a function of the inclusion of one person who was part of the offender's own social world, selected by each participant, in program sessions. Such effects may be increased still further as more and more domains of the environment are activated in support of behaviour change. Thus Multi-Systemic Therapy which entails programming simultaneously at the individual, family and school levels (Hengeller, Schoenwald, Borduin, Rowland, & Cunningham, 1998) has yielded some of the highest effect sizes published to date (Borduin, Mann, Cone, & Hengeller, 1995).²

CORRECTIONAL PROGRAM STRATEGIES

The variety of correctional programs now available is immense and both their number and diversity are steadily increasing. To date, the most extensive range of programs in place are those managed by Correctional Service Canada (CSC) and the worldwide development of interest in correctional programming owes much to initiatives taken within the Service. The *Reasoning and*

² There is evidence that even amongst situational crime prevention programs, interventions are more effective if they contain elements of community action and participation (McGuire, 2000).

Rehabilitation program is probably the best known and most widely applied intervention of its type, now used in a number of countries. It consists of 35 two-hour group-based sessions and has been delivered in both prison and probation settings. Already however, much more intensive programs exist. For example, CSC's *Violent Offender Program* consists of a total of 120 twohour sessions. Somewhat different however is the Women's *Peer Support Program* based in the Edmonton Institution for Women, which consists of provision of on-call support to women inmates, for example to help deal with personal crises. Staff and volunteers attend a 17-session training program prior to becoming available for this purpose.

In the United Kingdom, interest in programs has developed apace in recent years, and a number of cognitive-skills programs have been accredited for application in prisons. They include *Reasoning and Rehabilitation; Enhanced Thinking Skills*, a 20-session program; and *Problem-Solving Training and Offence Behaviour*, a 30-session program that engages offenders in analyzing their own criminal actions. These interventions, alongside others focused on communication skills development and substance abuse, have been appraised by an independent *Accreditation Panel* in terms of an agreed set of criteria. The latter are designed to ensure that programs meet standards derived from the empirical research base afforded by meta-analytic reviews.

A similar process is now occurring in the community-based sector of criminal justice, both in adult probation and juvenile offender services. The Home Office's Probation Unit has designated a number of programs as *Pathfinders*, which is a preliminary developmental status prior to potentially achieving full accreditation. Programs designated so far cover a wide range of offence problems or modes of delivery, including one-to-one work in probation settings; substance abuse; responsible driving; domestic violence; sex offenders; and women offenders. Additional programs are being developed focused on basic survival skills, inmate resettlement, community service, and for incorporation in sentences of probation with additional requirements.

Correctional services in the United States have implemented a broad spectrum of offender treatment programs. They range from interventions for juveniles, including *Aggression Replacement Training* (Goldstein et al., 1994) or *Multi-Systemic Therapy* (Hengeller et al., 1998), to prison-based therapeutic communities and after-care programs for substance-abusing offenders such as *Amity* and *Vista* (Wexler, Graham, Koronowski, & Lowe, 1995). Given the scale and diversity of the correctional services and agencies in the United States, there is as yet no integrated national strategy for program implementation as can be found in Canada and more recently in the United Kingdom. For a review of a wide range of correctional service tertiary prevention programs drawing primarily on research work in the United States, MacKenzie (1997) is an invaluable source.

SAFEGUARDING INTEGRITY

Regardless of precisely how programs are defined and their ingredients assembled together, certain issues are now seen as paramount in ensuring that they are properly delivered. Lipsey (1992) found marked differences in effectiveness between programs that were thoroughly monitored and those that were not. Moncher and Prinz (1991) found that the integrity of delivery of a program has been shown to be vitally important in mental health settings. Similarly Hollin (1995) has explicated its importance when running behavioural programs and in the treatment of offenders in general.

Thus, all commentators in this field now acknowledge that it is vital that programs be delivered as planned. Procedures need to be in place to monitor this process, and to furnish feedback to program managers or external consultants. The maintenance of program integrity is known to be dependent on appropriate training of staff, provision of adequate resources, good communication between designers, managers, tutors of programs, availability of supervision, and use of some means of measuring client level of participation and change over time.

Equally, many of these tasks will be facilitated if clearly presented manuals and other associated materials support the program itself. Both the program as a whole and its constituent sessions should have clearly stipulated objectives. This is a foundation for many other aspects of the work: unless staff involved in delivering a program can visualise the required contents of sessions, their quality of delivery is likely to deteriorate. During training, staff should practise delivery and have opportunities to be observed by trainers. There should in addition be a clearly defined set of staff competency criteria to be met by those delivering the program. All of these components are products of the core definition of the program and its objectives by its planners. Whatever the nature of a program, it is crucial that these aspects can be clearly defined, if other aspects of delivery are not to become confused and dysfunctional as a result.

ACCREDITATION PROCESSES

Informed by the steadily accumulating body of treatmentoutcome research in work with offenders, correctional services, in several countries, are seeking to establish well-validated intervention programs together with methods of monitoring their application. The optimal route selected by a number of services is the development of procedures for *accreditation* of programs designed to reduce recidivism.

The model adopted by the United Kingdom involves the recruitment by prison and probation services of an independent, external panel of expert consultants. Programs thought to be suitable for accreditation and delivery in criminal justice settings are submitted to the panel. A submission should include copies of all relevant materials such as a statement of the program's theoretical rationale; session manuals; staff training manuals; assessment and evaluation measures; and other supporting documentation. These are then judged against a pre-agreed set of *accreditation criteria* that define the minimal requirements for approval of a program (HM Prison Service, 1999; Home Office, 1999). These require that the following specifications should be met.

- 1. *Model of change*. There should be a clear, evidence-based theoretical model underpinning the program that explains how it is proposed that it will have an impact on factors linked to offending behaviour.
- 2. *Dynamic risk factors.* Program materials should identify factors linked to offending, specified in the model, and which, if changed, will lead to a reduction in risk of reoffending, and the program contents should reflect these objectives.
- Range of targets. Multi-modal programs with a range of treatment targets have yielded the largest effect sizes in research reviews. Program manuals specify an appropriate range of targets and the nature of their inter-relationships.
- Effective methods. The methods of change utilized in the program should have empirical support concerning effectiveness and be co-ordinated in an appropriate way.
- 5. *Skills orientated.* Programs targeting skills that will enable offenders to avoid criminal activities have yielded higher effect sizes in outcome studies. These skills should have explicit links to risk of reoffending and its reduction.
- 6. *Intensity, sequencing, duration.* The overall amount of programming (numbers of contact hours), the mode of delivery of sessions, and total program duration should be appropriate in the light of available evidence, the program's objectives and contents, and the risk level of the targeted offender groups.
- 7. *Selection of offenders.* The population of offenders for whom the program is designed should be explicitly and clearly specified. There should be agreed and realistic procedures for targeting and selection, and for exclusion of inappropriate referrals.
- 8. *Engagement and participation.* This criterion refers to the principle of responsivity. Information should be provided concerning how this will be addressed, and how offenders will be encouraged and motivated to take part in and adhere to the program.
- Case Management. In prison settings, offenders are allocated a personal officer with responsibility for overseeing their individual sentence plans. On probation, a Case Manager supervises them. To be effective, programs should be inter-linked with this process, and guidelines provided for implementation within services.
- 10. Ongoing monitoring. In order to safeguard program and treatment integrity, procedures should be in place for collection of monitoring "quality-of-delivery" data, and systems established for its review and for taking action on the basis of it.

11. *Evaluation.* Finally, program materials should include assessment and evaluation measures, and a framework for evaluation of the program's overall delivery, short-term, and long-term impact.

With regard to each criterion, a program may score 0 (*not met*), 1 (*partially met*), or 2 (*fully met*). Some of the above criteria (items 1, 2, 7, 9, 10 and 11) are mandatory; in other words it is essential that the requirements be fully met. To be accredited, a program must achieve a minimum score of 19/22 points, including full marks on all mandatory items.

In addition to program accreditation, each location in correctional services (a prison, probation office, or other unit) must also satisfactorily meet criteria for site accreditation. This is part of a process of certifying program and treatment integrity at that site. Systems for collecting monitoring information must be in place, and the data so collected made available for an annual site audit. Audit reports are then scrutinised both by correctional agency staff and by members of the independent accreditation panel.

Lipton, Thornton, McGuire, Porporino, and Hollin (2000) described the introduction of these processes into the prison service in England and Wales from 1996 onwards. As noted above, a number of cognitive-skills programs have been accredited for prison services, and are in use in more than 60 prison establishments. In 1999, a parallel process was launched for probation services under the scrutiny of a new *Joint Prison-Probation Accreditation Panel*. Analogous practices have been adopted in Scotland (which has a separate prison administration), and at the time of writing, similar practices are in prospect in a number of other countries also.

PROGRAM IMPLEMENTATION AND DELIVERY

Clearly, the transformation of correctional services in order to move into an era of extensive delivery of programs is a massive undertaking. It is beyond the scope of this chapter to address the considerable inertia that exists in large organisations and the major issues that must be addressed if constructive change is to occur in the direction of evidence-based practice.

Several authors have provided valuable guidelines for sensibly directing this process. Reflecting on the general context of installing new programs in organisational settings, Bernfeld, Blase, and Fixsen (1990) have advocated the adoption of a *multi-level systems perspective*. This entails focusing on four separate but related levels of analysis; *client; program; organization*; and *societal*. Programs should not be seen in isolation but as parts of an interactive, dynamic and evolving whole. Using different terminology but addressing essentially the same issues and problems, Harris and Smith (1996) have discussed how to implement programmatic developments in community-based correctional services. More recently, Gendreau, Goggin, and Smith (1999) have forwarded a set of systematised principles for guiding the total process of program implementation.

REFERENCES

- Andrews, D. A. (1995). The psychology of criminal conduct and effective treatment. In J. McGuire (Ed.) What works: Reducing reoffending: Guidelines from research and practice. Chichester, UK: John Wiley & Sons.
- Bernfeld, G. A., Blase, K. A., & Fixsen, D. L. (1990). Towards a unified perspective on human service delivery systems: Application of the teachingfamily model. In R. J. & R. DeV. Peters (Eds.) *Behavioral disorders of adolescence*. New York, NY: Plenum Press.
- Borduin, C. M., Mann, B. J., Cone, L. T., & Hengeller, S. W. (1995). Multisystemic treatment of serious juvenile offenders: Long-term prevention of criminality and violence. *Journal of Consulting and Clinical Psychology*, 63, 569-578.
- Dobson, K. S., & Craig, K. (Eds.) (1998). Empirically supported treatments: Best practice in professional psychology. Thousand Oaks, CA: Sage.
- Eck, J. (1997). Preventing crime at places. In L. W. Sherman, D. Gottfredson, D. L. Mackenzie, J. Eck, P. Reuter, & S. Bushway, *Preventing crime: What works, what doesn't, what's promising*. Washington, DC: Office of Justice Programs.
- Farrington, D. P. (1996). The explanation and prevention of youthful offending. In J. D. Hawkins (Ed.) *Delinquency and crime: Current theories*. Cambridge: Cambridge University Press.
- Gendreau, P. (1996). The principles of effective intervention with offenders. In A. T. Harland (Ed.) Choosing correctional options that work: Defining the demand and evaluating the supply. Thousand Oaks, CA: Sage Publications.
- Gendreau, P., & Andrews, D. A. (1991). Tertiary prevention: What the metaanalyses of the offender treatment literature tell us about "what works". *Canadian Journal of Criminology*, 32, 173-184.
- Gendreau, P., & Goggin, C. (1996). Principles of effective correctional programming. Forum on Corrections Research, 8 (3), 38-41.
- Gendreau, P., Goggin, C., & Smith, P. (1999). The forgotten issue in effective correctional treatment: Program implementation. *International Journal of Offender Therapy and Comparative Criminology*, 43, 180-187.
- Goldstein, A. P., Glick, B., Carthan, W., & Blancero, D. A. (1994). *The prosocial gang: Implementing aggression replacement training*. Thousand Oaks, CA: Sage Publications.
- Gottfredson, D. (1997). School-based crime prevention. In L. W. Sherman, D. Gottfredson, D. L. Mackenzie, J. Eck, P. Reuter, & S. Bushway, *Preventing crime: What works, what doesn't, what's promising*. Washington, DC: Office of Justice Programs.
- Harris, P., & Smith, S. (1996). Developing community corrections: An implementation perspective. In A. T. Harland (Ed.), *Choosing correctional options that work: Defining the demand and evaluating the supply*. Thousand Oaks, CA: Sage Publications.
- Henggeler, S. W., Schoenwald, S. K., Borduin, C. M., Rowland, M. D., & Cunningham, P. B. (1998). *Multisystemic treatment of antisocial behavior in children and adolescents*. New York NY: Guilford Press.
- Her Majesty's Prison Service (1999). Service criteria for accrediting programs 1998-99. London: HM Prison Service, Offending Behaviour Programmes Unit.
- Hollin, C. R.(1995). The meaning and implications of program integrity. In J. McGuire (Ed.), What works: Reducing reoffending: Guidelines from research and practice. Chichester, UK: John Wiley & Sons.
- Home Office (1999). Criteria for accreditation of programs. London, UK: Home Office Probation Unit.

- Kaufman, P. (1985). Meta-analysis of juvenile delinquency prevention programs. Unpublished Master's Thesis, Claremont Graduate School.
- Lipsey, M. W. (1992). Juvenile delinquency treatment: A meta-analytic inquiry into the variability of effects. In T. Cook, D. Cooper, H. Corday, H. Hartman, L. Hedges, R. Light, T. Louis, & F. Mosteller (Eds.), *Meta-analysis for explanation: A casebook*. New York, NY: Russell Sage Foundation.
- Lipton, D. S., Thornton, D., McGuire, J., Porporino, F., & Hollin, C. R. (2000). Program accreditation and correctional treatment. *Substance Use and Misuse*, 35, 1705-1734.
- Lösel, F. (1995). The efficacy of correctional treatment: A review and synthesis of meta-evaluations. In J. McGuire (Ed.), What works: Reducing reoffending: Guidelines from research and practice. Chichester, UK: John Wiley & Sons.
- Mackenzie, D. L. (1997). Criminal justice and crime prevention. In
 L. W. Sherman, D. Gottfredson, D. L. Mackenzie, J. Eck, P. Reuter, &
 S. Bushway, *Preventing crime: What works, what doesn't, what's promising.*Washington, DC: Office of Justice Programs.
- McGuire, J. (1998). Memorandum of evidence. In Third report of the House of Commons Home Affairs Committee on *Alternatives to custodial sentences*. London, UK: The Stationery Office.
- McGuire, J. (2000). Property offenders. In C. R. Hollin (Ed.), Handbook of offender assessment and treatment. Chichester, UK: John Wiley & Sons.
- Moncher, F. J., & Prinz, R. J. (1991). Treatment fidelity in outcome studies. *Clinical Psychology Review*, 11, 247-266.
- Nathan, P. E., & Gorman, J. M. (Eds.) (1998). A guide to treatments that work. New York, NY: Oxford University Press.
- Palmer, T. (1996). Programmatic and non-programmatic aspects of successful intervention. In A. T. Harland (Ed.), *Choosing correctional options that work: Defining the demand and evaluating the supply*. Thousand Oaks, CA: Sage Publications.
- Pease, K. (1994). Crime prevention. In M. Maguire, R. Morgan, & R. Reiner (Eds.) The Oxford handbook of criminology. Oxford, UK: Clarendon Press.
- Schweinhart, L. J., Barnes, H. V., & Weikart, D. P. (1993). Significant benefits: The high/scope Perry Preschool Project. Ypsilanti, MI: High/Scope Press.
- Sherman, L. W. (1988). Randomized experiments in criminal sanctions. In H. S. Bloom, D. S. Cordray, & R. J. Light (Eds.), *Lessons from selected program and policy areas*. New Directions for Program Evaluation, no. 37. San Francisco, CA: Jossey-Bass.
- Sherman, L. W. (1997). Introduction: The congressional mandate to evaluate. In L. W. Sherman, D. Gottfredson, D. L. Mackenzie, J. Eck, P. Reuter, & S. Bushway, *Preventing crime: What works, what doesn't, what's promising.* Washington, DC: Office of Justice Programs.
- Tolan, P. H., Guerra, N. G., & Hammond, W. R. (1994). Prevention and treatment of adolescent violence. In L. D. Eron, J. H. Gentry, & P. Schlegel (Eds.), *Reason to hope: A psychosocial perspective on violence and youth.* Washington, DC: American Psychological Association.
- Walker, N. (1991). Why punish? Theories of punishment reassessed. Oxford, UK: Oxford University Press.
- Wexler, H. K., Graham, W. F., Koronowski, R., & Lowe, L. (1995). Evaluation of Amity in-prison and post-release substance abuse treatment programs. Washington, DC: National Institute of Drug Abuse.
- Yoshikawa, H. (1994). Prevention as cumulative protection: Effects of early family support and education on chronic delinquency and its risks. *Psychological Bulletin*, 115, 28-54.

CHAPTER 2

DONALD A. ANDREWS¹

This chapter provides a brief outline of principles of effective correctional treatment. The principles recognize the importance of individual differences in criminal behaviour. A truly interdisciplinary psychology of criminal conduct (PCC: Andrews & Bonta, 1998) has matured to the extent that progress has been made with reference to the achievement of two major scientific standards of understanding. In brief, individual differences in criminal activity can be predicted and influenced at levels well above chance and to a practically significant degree. The following principles of effective treatment draw heavily upon that knowledge base. This does not imply that the research base is anywhere near complete with reference to most issues. Rather, all of the following principles are subject to further investigation, including even those principles with relatively strong research support at this time. Also, principles not even hinted at here are expected to be developed and validated in the coming months and years.

To date, PCC has advanced because it is specific about what it attempts to account for, that is, individual differences in criminal behaviour including reoffending on the part of adjudicated offenders. It has advanced also because it recognizes that the risk factors for criminal conduct may be biological, personal, interpersonal, and/or structural, cultural, political and economic; and may reflect immediate circumstances. PCC does not limit its view to the biological, the personal, or to differential levels of privilege and/or victimisation in social origin as may be indexed by age, race, class and gender. This PCC does not purport to be a psychology of criminal justice, a psychology of social justice, a sociology of aggregated crime rates, or a behavioural or social science of social inequality, of poverty, or of a host of other legitimate but different interests.

In applications of PCC, however, these many other legitimate but different interests may not only be of value but may well be paramount. For example, within criminal law and justice systems, principles of retribution and/or restoration may be considered paramount and hence any correctional treatment efforts, if offered at all, must be offered and evaluated within the retributive and/or restorative context. Similarly, the effects of human service efforts may be evaluated within the context of institutional and/or community corrections. Moreover, ideals of justice, ethicality, decency, legality, safety and cost-efficiency are operating in judicial and correctional contexts as they are operating in other contexts of human endeavour. Thus, the principles of effective human service reviewed here are presented in the context of seeking ethical, legal, decent, cost-effective, safe, just and otherwise normative human service efforts aimed at reducing reoffending.

The phrase "otherwise normative" covers a vast area and is included in recognition of the fact that under some political conditions the values and norms of some privileged groups may be dominant no matter how weak the connection between compliance with their norms and the enhancement of peace and security. For example, sentencing according to criminal law and the principle of specific deterrence continues to occur in Canada and other countries even though there is no consistent evidence that reoffending is reduced through increases in the severity of negative sanctioning. Similarly, principles of effective human service in a justice context may be applied even when the sanctions themselves have been handed down with little concern for reducing reoffending (for example, under a pure just desert sanction) or as an attempt to provide restitution for the victim (for example, under a restorative justice disposition).

The following principles have to do with clinically relevant programming and with setting, staff, implementation and integrity issues. The first set of principles, however, restate and underscore the importance of the theoretical and normative issues referred to in the opening paragraphs. The research evidence is appended along with some relevant references to earlier reviews of principles.

SOME PRINCIPLES OF THEORY, IDEOLOGY, JUSTICE AND SETTING IN SEEKING REDUCED REOFFENDING

Principle 1

Base your intervention efforts on a psychological theory of criminal behaviour as opposed to a biological, behavioural, psychological, sociological, humanistic, judicial or legal perspective on justice, social equality or aggregated crime rates. When the interest is reduced reoffending at the individual level, theories that focus on some other outcome are of reduced value because they are less likely to identify relevant variables and strategies. The average effects on reduced reoffending of interventions based on alternatives to a psychology of crime have been negative or negligible (See Endnote). In brief, if you are interested in individual differences in criminal activity (for example, reducing reoffending) work from a theory of criminal behaviour.

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Principle 2

The recommended psychological perspective is a broad band general personality and social learning approach to understanding variation in criminal behaviour including criminal recidivism. This perspective identifies the eight following major risk factors for criminal behaviour:

- attitudes, values, beliefs, rationalisations and cognitive emotional states specifically supportive of criminal behaviour;
- immediate interpersonal and social support for antisocial behaviour;
- fundamental personality and temperamental supports such as weak self-control, restless aggressive energy and adventurous pleasure seeking;
- ◆ a history of antisocial behaviour including early onset;
- problematic circumstances in the domains of home, school/ work, and leisure/recreation;
- ◆ substance abuse. (Principles 5-8).

The general personality and social learning perspectives also identify the major behavioural influence strategies such as modelling, reinforcement and cognitive restructuring in the context of a reasonably high quality interpersonal relationship (Principle 9, 16) The behavioural base of this perspective also suggests that treatment is best offered in the community-based settings in which problematic behaviour occurs (Principle 4). In addition, the behaviour of workers in correctional settings is also under the influence of cognition, social support, behavioural history and fundamental personality predisposition and hence the emphasis placed on the selection, training and supervision of workers (Principle 16, 17).

Principle 3

Introduce human service strategies and do not rely on the principles of retribution or restorative justice and do not rely on principles of deterrence (specific and/or general) and/or on incapacitation. Moreover, seriously consider and introduce but do not rely upon other principles of justice and normative appropriateness such as professional credentials, ethicality, legality, decency, and efficiency. Rather, reductions in reoffending are to be found through the design and delivery of clinically relevant and psychologically appropriate human service under conditions and settings considered just, ethical, legal, decent, efficient, and otherwise normative. In brief, the task assigned by the human service principle of effective service is to design and deliver effective human service in a just and otherwise normative context. The principles of effective human service do not vary greatly with such considerations, although the justice and normative contexts themselves may vary tremendously. The setting factor of community versus institu tional corrections, however, does lead to a separate principle.

Principle 4

Community-based services are preferred over residential/ institutional settings but, if justice or other concerns demand a residential or custodial placement, community-oriented services are recommended. Community-oriented services refer to services facilitating return to the community and facilitating appropriate service delivery in the community. The principles of relapse prevention provide guidance for clinically relevant communityoriented services. When services are community-based, a supplementary consideration is to favour home and school-based services rather than agency-based services. For example, the best of the family interventions are not delivered in agency offices but in the natural settings of home and community.

PRINCIPLES OF RISK, NEED, RESPONSIVITY, STRENGTH, MULTIMODAL SERVICE, AND SERVICE RELEVANT ASSESSMENT

Principle 5 — Risk

More intensive human services are best reserved for higher risk cases. Low risk cases have a low probability of recidivism even in the absence of service. With the lowest risk cases, justice may be served through just dispositions and there is no need to introduce correctional treatment services in order to reduce risk. Indeed, a concern in working with the lowest risk cases is that the pursuit of justice does not inadvertently increase risk through, for example, increased association with offenders and/or the acquisition of pro-criminal attitudes and beliefs. Additionally, recognize that well controlled outcome studies have yet to find reduced reoffending when human service is delivered to the highest risk cases such as very high risk egocentric offenders with extended histories of antisocial behaviour. There is the possibility that psychopaths may put any new skills acquired in treatment to antisocial use (see Principle 10, specific responsivity). At this time, however, there are no well-controlled outcome studies of clinically appropriate treatment with psychopaths.

Principle 6 — Target Criminogenic Need

Treatment services best attempt to reduce major dynamic risk factors and/or to enhance major protective or strength factors. Criminogenic needs are dynamic risk factors that when reduced are followed by reduced reoffending and/or protective factors that when enhanced are followed by reduced reoffending. Following the major risk factors, the most promising targets include moving antisocial cognition and cognitive emotional states such as resentment in the less antisocial direction, reducing association with antisocial others and enhancing association with anticriminal others, and building self-management, selfregulation and problem solving skills. A history of antisocial behaviour can not be eliminated but new less risky behaviours may be acquired and practised in risky situations (as in relapse prevention programs). Rewards for non-criminal behaviour may be enhanced in the settings of home, school/work and leisure. In the home, the major intermediate targets are enhanced caring, nurturance and mutual respect in combination with monitoring, supervision and appropriate discipline. Similarly, reduced substance abuse may shift the pattern of rewards such that the non-criminal is favoured. The less promising intermediate targets of change include enhancing self-esteem and reducing personal distress without touching personal and interpersonal supports for crime, increasing fear of official punishment, and a focus on other weak risk factors. In summary, for adherence with the need principle, emphasize the reduction of criminogenic need and do not rely upon or emphasize the reduction of noncriminogenic need.

Principle 7 — Multimodal

Target a number of criminogenic needs. The meta-analyses now make it clear that a number of the criminogenic needs of highrisk cases are best targeted.

Principle 8 — Assessing risk and dynamic factor

Adherence to the principles of risk and criminogenic need depend upon the reliable and valid assessment of risk and need. The best instruments sample the major risk factors and can provide evidence of validity with younger and older cases, men and women, and different ethnic groups in a number of justice and correctional contexts. Assessments of risk best sample the eight risk factors as well as very specific indicators when specialized outcomes are sought. The latter specific indicators, for example, would include deviant sexual arousal and cognitive and/or social support for sexual offending when reduced sex offending is the desired outcome. Similarly, attitudinal and social support for battering would be specific risk factors when reduced family violence is the desired outcome. Please do not confuse seriousness of the current offence with risk of reoffending. Seriousness of the offence is an aggravating factor at time of sentencing but not a major risk factor.

Principle 9 — General responsivity

Responsivity has to do with matching the style, modes and influence strategies of service with the learning styles, motivation, aptitude and ability of cases. Generally, offenders are human beings and hence the principle suggests use of the most powerful influencing strategies that have been demonstrated with human beings. Consistent with the general personality and social learning perspective, these most powerful approaches are structured behavioural, social learning and cognitive behavioural influence strategies. These fundamentals include reinforcement, modelling, skill acquistion through reinforced practice in the context of role playing and graduated approximations, extinction, and cognitive restructuring. Reinforcement, extinction, modelling effects and the attractiveness of the setting of change are all enhanced by high quality interpersonal relationships characterized as open, warm, non-hostile, non-blaming and engaging. Structuring activities include anticriminal modeling and reinforcement, skill building through structured learning, problem solving, advocacy and brokerage, and the effective use of authority (see Principle 16, staff considerations).

Principle 10 — Specific responsivity and strengths

Specific responsivity factors include personality, ability, motivation, strengths, age, gender, ethnicity/race, language, and various barriers to successful participation in service. The personality set, for example, includes interpersonal anxiety (avoid heavy confrontation), interpersonal and cognitive immaturity (use structured approaches), psychopathy (keep very open communication among all workers) and low verbal intelligence (be concrete). Motivational considerations suggest matching treatment style and goals with level of motivation for change (from not even thinking of change though currently involved in change activities). The relationship principle noted under general responsivity is widely applicable but many feminist scholars stress in particular quality of interpersonal interactions in working with female offenders. Aboriginal writers support the introduction of a spiritual component when working with Aboriginal offenders. When working with reluctant cases the general rule of high quality interpersonal interactions is underscored as is the removal of concrete barriers such as inconvenient timing and location of service. Make use of personal, interpersonal and circumstantial strengths in planning and delivering service. Some of these helpful strengths are problem-solving skills, respect for family, a particularly prosocial friend or being happily employed in delivering effective service.

Principle 11 — Assess responsivity and strength factors

Sophisticated assessment instruments are available for assessment of some of the personality factors and a new generation of risk/need scales are introducing routine assessment of strength and other responsivity factors. Generally, however, watch for particular strengths and for particular barriers for individual cases and for particular groups such as women and minorities.

Principle 12 — After care, structured follow-up, continuity of care, and relapse prevention

This is introduced as a principle on its own because of the need to stress ongoing monitoring of progress and to intervene when circumstances deteriorate or positive opportunities emerge. Generally, and particularly for residential programs, it is important that programming be community oriented and attend to family, associates and other social settings. Going beyond Principle 4, Principle 12 stresses specific and structured after care and follow-up activity and requires co-ordination of applications of all of the previous principles. At a minimum, in the tradition of relapse prevention, high-risk situations and circumstances are identified and low-risk alternative responses are practiced.

Principle 13 — Professional discretion

In a few cases, with documented reasons, deviations from the general principles may be introduced. For example, for some young people and their families, it may be recommended that facilitating a move out of a particular apartment building in a particularly high crime area is a priority intermediate goal. Similarly, a major mental disorder such as schizophrenia may move from the minor risk set to the major set when specific symptoms include antisocial thoughts that others are out to get the person and should be "got" first.

Principle 14

Create and record a service plan and any modification of plans through re-assessment of risk/need and progress. The service plan describes how the human service principles of risk, need, general responsivity, specific responsivity, multimodal service, aftercare and professional discretion will be addressed in working with a particular case.

IMPLEMENTATION AND PROGRAM INTEGRITY

Principle 15 — Integrity in program implementation and delivery

Integrity has to do with whether the human service activities were introduced and delivered as planned and designed, and indeed whether the delivery of services achieved intermediate objectives. Integrity is enhanced when a highly specific and concrete version of a rational and empirically sound theory is employed. Specificity enhances the opportunity for clarity in who is being served, what is being targeted, and what style, mode and strategy of service is to be used. Specificity readily yields the production of training and program manuals in printed, taped or other formats. Integrity is enhanced when workers are selected, trained, and clinically supervised with particular reference to the attitudes and skills required for effective service delivery. Integrity is enhanced when the clinical supervisor has been trained and has access to highly relevant consultation services. In addition, specificity implies an understanding of when treatment comes to an appropriate end or an understanding of the appropriate closing of the case. The latter implies that service personnel and researchers know when dosage has been adequate and/or when treatment has been delivered successfully and/or when intermediate targets have been achieved. Thus, integrity may be enhanced through the monitoring of service process and monitoring of the achievement of intermediate objectives. At the highest levels of integrity, when clinical supervision or other styles of monitoring identify problematic circumstances (or unanticipated service opportunities) actions are initiated to modify the service plan and to overcome barriers and build on strengths. Involvement of researchers in the design and/or delivery of service amplifies integrity. In summary and in checklist format, integrity depends upon all of the following:

- Specific version of a rational and empirically sound theory a)
- Selection of workers b)
- Training of workers c)
- Clinical supervision of workers d)
- Trained clinical supervisors e)
- Consultation services for clinical supervisors f)
- Printed/taped program manuals g)
- h) Monitoring of intermediate service process
- i) Monitoring of intermediate change
- j) Action to maximize adherence to service process and enhance appropriate intermediate gain
- Adequate dosage/duration/intensity k)
- 1) Involve a researcher in the design, delivery and evaluation of service - in particular, involve a researcher interested in service process, intermediate outcome and ultimate outcome in the design and delivery of service. m) Other

Implementation and integrity issues involve staff and management issues to such a degree that their importance is underscored through statements of separate principles of staff and management considerations.

Principle 16 — Attend to Staff

The selection, training and clinical supervision of staff each best reflect the particular attitudes, skills and circumstances that are supportive of the delivery of the service as planned. Reflecting the general social learning and general responsivity principles, staff skill and cognition supportive of effective practice fall into the five general core practice categories of relationship/interaction skills, structuring/contingency skills, personal cognitive supportive of human service, social support for the delivery of clinically appropriate service, and other considerations.

Relationship. Indicators of relationship skills include some combination of the following: being respectful, open, warm (not cold, hostile, indifferent), caring, non-blaming, flexible, reflective, self confident, mature, enthusiastic, understanding, genuine (real), bright and verbal, and other indicators including elements of motivational interviewing strategies (express empathy, avoid argumentation, roll with resistance). Recall from the general responsivity principle that the effectiveness of modelling, reinforcement and even expressions of disapproval are all enhanced in the context of high quality interpersonal relationships.

Structuring. Indicators of structuring skills include some combination of the following social learning/cognitive behavioural strategies reformulated with particular reference to core effective practices. Modelling anticriminal alternatives to procriminal attitudes, values, beliefs, rationalizations, thoughts, feelings and behavioural patterns; anticriminal differential reinforcement; cognitive restructuring; structured learning skills; the practice and training of problem solving skills; core advocacy/brokerage activity; and effective use of authority. More generally expressed, some indicators are being directive, solution focused, contingency based and, from motivational interviewing, developing discrepancy and supporting beliefs that the person can change his or behaviour (supporting prosocial self efficacy).

Personal cognitive supports. Some specific indicators including:

- ◆ a knowledge base favouring human service activity;
- ♦ a belief that offenders can change;
- a belief that core correctional practices work;
- a belief that personally they have the skills to practice at high levels both in terms of relationship and structuring;
- a belief that important others value core practice and value; and

♦ a belief that reducing recidivism is a worthwhile pursuit. Social support for effective practice. The two major indicators are association with others who practice and support clinically relevant treatment, and relative isolation from anti-treatment others and from others who promote unstructured, non-directive, clientcentered practice and/or isolation from others who promote intensive service for low risk cases and promote the targeting of non-criminogenic needs.

Other. Credentials and other factors will be relevant in so far as they tap into the core practices. Obviously, the area of staff considerations is a major area for future research.

A program scores high on staff considerations when:

- a) staff are selected with reference to high level functioning on the relationship, structuring, cognitive and social support dimension of effective correctional practice;
- b) staff receive preservice and inservice training that supports high levels of core practice;
- c) staff receive on-the-job clinical supervision that is concerned with high level functioning in core practice;
- d) staff are actually observed to be functioning at high levels in their exchanges with offenders.

Principle 17 — Attend to management

Effective managers are assumed to be generally good managers with, additionally, the above-noted relationship and structuring skills along with the knowledge base and their own social support system favourable to clinically relevant and psychologically informed human service. It is management that is responsible for implementing the core principles and creating the supports for creating and maintaining integrity. Effective management will take the steps required to develop program champions inside and outside of the agency. Effective management will reward high functioning staff and have programs and sites accredited.

Principle 18 — Attending to broader social arrangements

The effective prevention and correctional treatment agency in a public manner will locate crime reduction efforts in the context appropriate to local and surrounding conditions. In brief, the correctional agency will be able to clearly locate treatment in locally appropriate contexts of public safety, restorative justice, etc. Similarly, the primary prevention agency will be able to locate their crime prevention efforts in the locally appropriate context of child welfare, family service, mental health, community development, etc.. However, if the host agency is preoccupied with punishment, restoration or child welfare etc. — if the host agency is not understanding of or interested in clinically relevant approaches to reduced antisocial behaviour — effectiveness will be reduced.

The endnote supplements the statement of principles with supportive citations, research illustrations and notes on gaps in the research.

REFERENCES

- Akers, R. L. (1973). Deviant behavior: A social learning approach. Belmont, CA: Wadsworth.
- Andrews, D. A. (1979). The dimensions of correctional counseling and supervision process in probation and parole. Toronto, ON: Ontario Ministry of Correctional Services.
- Andrews, D. A. (1980). Some experimental investigations of the principles of differential association through deliberate manipulations of the structure of service systems. *American Sociological Review*, 45, 448-462.
- Andrews, D. A. (1982). A personal, interpersonal and community-reinforcement perspective on deviant behavior (PIC-R). Toronto, ON: Ministry of Correctional Services.
- Andrews, D. A. (1989). Recidivism is predictable and can be influenced: Using risk assessments to reduce recidivism. *Forum on Corrections Research*, 1(2), 11-18.
- Andrews, D. A. (1995a). Report on an expanded exploration of appropriate correctional treatment. Paper presented at the American Society of Criminology annual meeting, Boston, MA, 1995.
- Andrews, D. A. (1995b). The psychology of criminal conduct and effective treatment. In J. McGuire (Ed.), What works: Reducing reoffending: Guidelines from research and practice (pp. 35-62). Chichester, UK: John Wiley & Sons.
- Andrews, D. A. (1995c). Assessing program elements for risk reduction: The Correctional Program Assessment Inventory (CPAI). Paper presented at "Research to Results", a conference of IARCA (now ICCA), Ottawa, ON, October 11-14th.
- Andrews, D. A. (1996). Behavioral, cognitive behavioral and social learning contributions to criminological theory. Paper presented at the American Society of Criminology annual meeting, Chicago, Illinois, November.
- Andrews, D. A., & Bonta, J. (1998). The psychology of criminal conduct. (2nd edition) Cincinnati, OH: Anderson.
- Andrews, D. A., & Bonta, J. (1994). The psychology of criminal conduct. Cincinnati, OH: Anderson.
- Andrews, D. A., Bonta, J., & Hoge, R. D. (1990). Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice and Behavior*, 17, 19-52.
- Andrews, D. A., & Carvell, C. (1998). Core correctional treatment Core correctional supervision and counseling: Theory. research, assessment and practice. Ottawa, ON: Carleton University.
- Andrews, D. A., & Dowden, C. (under review). Managing correctional treatment for reduced recidivism: A meta-analytical review of program integrity. Manuscript submitted for publication.
- Andrews, D. A., Dowden, C., & Gendreau, P. (1999). Clinically relevant and psychologically informed approaches to reduced reoffending: A meta-analytic study of human service, risk, need, responsivity, and other concerns in justice contexts. Unpublished manuscript, Ottawa, ON: Carleton University.
- Andrews, D. A., Gordon, D. A., Hill, J., Kurkowski, K. P., & Hoge, R. D. (1993). Program integrity, methodology, and treatment characteristics: A metaanalysis of effects of family intervention with young offenders. A paper based on a presentation at the meetings of the American Society of Criminology, 1992.

- Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology*, 28, 369-404.
- Antonowicz, D. H., & Ross, R. R. (1994). Essential components of successful rehabilitation programs for offenders. *International Journal of Offender Therapy and Comparative Criminology*, 38, 97-104.
- Cleland, C. M., Pearson, F., & Lipton, D. S. (1996). A meta-analytic approach to the link between needs-targeted treatment and reductions in criminal offending. American Society of Criminology annual meeting, Chicago, IL, November, 1996.
- Dowden, C. (1998). A meta-analytic examination of the risk, need and responsivity principles and their importance within the rehabilitation debate. Unpublished master's thesis, Otttawa, ON: Carleton University, Department of Psychology.
- Dowden, C., & Andrews, D. A. (1999) What works for female offenders. Crime and Delinquency, 45, 438-452.
- Garrett, C. J. (1985). Effects of residential treatment of adjudicated delinquents: A meta-analysis. *Journal of Research in Crime and Delinquency*, 22, 287-308.
- Gendreau, P. (1996). The principles of effective intervention with offenders. In A. Hartland (Ed.), *Choosing correctional options that work*. Newbury Park, CA: Sage.
- Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult offender recidivism: What works! *Criminology*, 34 (4), 575-607.
- Gendreau, P., & Goggin, C. (1997). Correctional treatment: Accomplishments and realities. In P. Van Voorhis, M. Braswell, & D. L. Lester (Eds.), *Correctional counseling and rehabilitation.* Cincinnati, OH: Anderson.
- Gendreau, P., & Ross, R. R. (1979). Effectiveness of correctional treatment: Bibliography for cynics. *Crime and Delinquency*, 25, 463-489.
- Gendreau, P., & Ross, R. R. (1987). Revivification of rehabilitation: Evidence from the 1980's. *Justice Quarterly*, 4, 349-408.
- Grant, J., & Grant, M. Q. (1959). A group dynamics approach to the treatment of non-conformists in the Navy. *Annals of the American Academy of Political* and Social Sciences, 322, 126-135.
- Henggeler, S. W., Schoenwald, S. K., Borduin, C. M., Rowland, M. D., & Cunningham, P. B. (1998). *Multisystemic treatment of antisocial behavior* in children and adolescents. New York, NY: The Guilford Press.
- Hill, J. K., Andrews, D. A., & Hoge, R. D. (1991). Meta-analysis of treatment programs for young offenders: The effect of clinically relevant treatment on recidivism, with controls introduced for various methodological variables. *Canadian Journal of Program Evaluation*, 6, 97-109.
- Izzo, R., & Ross, R. (1990). A meta-analysis of rehabilitation programs for juvenile delinquents: A brief report. *Criminal Justice and Behavior*, 17, 134-142.
- Lipsey, M.W. (1989). The efficacy of intervention for juvenile delinquency: Results from 400 studies. Paper presented at the 41st annual meeting of the American Society of Criminology, Reno, Nevada.
- Lipsey, M.W. (1992). Juvenile delinquency treatment: A meta-analytic inquiry into the variability of effects. In T. D. Cook, H. Cooper, D. S. Cordray, H. Hartmann, L. V. Hedges, R. J. Light, T. A. Louis, & F. Mosteller (Eds.), *Meta-analysis for explanation: A casebook* (pp. 83-127). New York, NY: Russell Sage Foundation.
- Lipsey, M. W. (1995). What do we learn from 400 research studies on the effectiveness of treatment with juvenile delinquents? In J. McGuire (Ed.), What works: Reducing reoffending: Guidelines from research and practice (pp. 63-78). Chichester, UK: John Wiley & Sons.
- Lipsey, M. W. & Wilson D. B. (1997). Effective intervention for serious juvenile offenders: A synthesis of research. A paper prepared for the OJJDP Study Group on Serious and Violent Juvenile Offenders. Vanderbilt University.
- Lösel, F. (1995). The efficacy of correctional treatment: A review and synthesis of meta-evaluations. In J. McGuire (Ed.), *What works: Reducing reoffending: Guidelines from research and practice* (pp. 79-111). Chichester, UK: John Wiley & Sons.
- Lösel, F. (1996). Effective correctional programming: What empirical research tells us and what it doesn't. *Forum on Corrections Research*, 8 (3), 33-36.
- Lösel, F. (1998). The importance of offender programming: German and international evaluations. A paper presented at the International Beyond prisons Symposium, March 15-19, 1998, Donald Gordon Centre, Queen's University, Kingston, ON.

- Mayer, J. P., Gensheimer, L. K., Davidson, W. S., & Gottschalk (1986). Social learning treatment within juvenile justice: A meta-analysis of impact in the natural environment. In S. J. Apter & A. Goldstein (Eds.), *Youth* violence: Programs and prospects. Elmsford, NY: Pergamon.
- McGuire, J., & Priestly, P. (1995). Reviewing what works: Past, present and future. In J. McGuire (Ed.), What works: Reducing reoffending — Guidelines for research and practice (pp 3-34). Chichester, UK.
- Palmer, T. (1974, March). The Youth Authority's community treatment project. *Federal Probation*, 3-14.
- Palmer, T. (1975). Martinson revisited. *Journal of Research in Crime and Delinquency*, 12, 133-152.
- Patterson, G.R. (1982). Coercive family process. Eugene, OR: Castalia.
- Trotter, C. (1999). Working with involuntary clients: A guide to practice. London, UK: Sage Publications.
- Van Voorhis, P., Braswell, M., & Lester, D. L. (1997). Correctional counseling and rehabilitation. Cincinnati, OH: Anderson.
- Warren, M. (1971). Classification of offenders as an aid to efficient management and effective treatment. *Journal of Crime, Law, Criminology, and Police Science*, 62, 239-258.

ENDNOTE

Comments, some references and some metaanalytic research findings for principles of effective prevention and correctional treatment

Clinically relevant and psychologically informed human service recognizes the importance of individual differences in criminal behaviour, the major importance of immediate personal and interpersonal factors, the more distal significance of broad structural factors, and the importance of differences in approaches to treatment. For years it has been hypothesized that clinically relevant and psychologically informed correctional treatment services could significantly and meaningfully reduce criminal recidivism rates (Andrews, 1979, 1980, 1982, 1989; Andrews, Bonta, & Hoge, 1990; Gendreau & Ross, 1979, 1987; Grant & Grant 1959; Palmer, 1974, 1975; Warren, 1971). Now, meta-analytic reviews of controlled outcome studies support not only the value of correctional treatment but of clinically and psychologically appropriate treatment in particular (Andrews, 1995a; Andrews & Bonta, 1998: Resource Note 10.1; Andrews, Gordon, Hill, Kurkowsky, & Hoge 1993; Andrews, Zinger, Hoge, Bonta, Gendreau, & Cullen 1990; Antonowicz & Ross 1994; Cleland, Pearson, & Lipton 1996; Garrett, 1985; Hill, Andrews, & Hoge 1991; Izzo & Ross, 1990; Lipsey, 1989, 1992, 1995; Lipsey & Wilson, 1997: Lösel, 1995, 1996, 1998; Mayer, Gensheimer, Davidson, & Gottschalk, 1986). Now, many scholars and practitioners have provided evidence-based guidelines for appropriate service and the level of agreement among the guidelines, while not perfect, is substantial (Andrews, 1995b; Andrews, Bonta, & Hoge, 1990; Gendreau, 1996; McGuire & Priestly, 1995; Lipsey, 1995; Lösel, 1995, 1998; Van Voorhis, Braswell, & Lester, 1997). [from Andrews, Dowden & Gendreau, 1999]

The meta-analytic findings reported herein are based on analyses of the Carleton University data bank (Andrews, Zinger et al., 1990; Andrews, Dowden, & Gendreau, 1999; Dowden, 1998; Dowden & Andrews, 1999). The mean effect sizes reported below may be interpreted as the difference in percentage rate of recidivism between treatment and comparison groups. For example an effect size of 0.20 reflects a recidivism rate of 40% in the treatment group (50 minus 20/2) and 60% in the comparison group (50 plus 20/2). A positive difference reflects relative success in that the mean recidivism rate of the treatment group was lower than that of the comparison group. A negative difference reflects relative failure in that the mean recidivism rate of the comparison group was lower than that of the treatment group. For example, with an effect size of -0.10, the recidivism rate would be 55% in the treatment group (50 plus 10/2) and 45% in the comparison group (50 minus 10/2).

Principles 1 and 2: The general personality and social learning perspective on criminal behaviour and prevention programming is the most promising perspective whether the context is restorative justice, retributive justice, or outside of the justice system, and/or whether the setting is community-based or residential/ custodial. Similarly, the perspective applies across categories of age, gender, race/ethnicity and social class (for examples of these perspectives see: Akers, 1973; Andrews, 1982, 1996; Andrews & Bonta, 1994, 1998; Henggeler et al., 1998; Patterson, 1982). Even without applying the clinically relevant and psychologically informed principles, it is obvious from the meta-analyses that programs with an immediate personal and interpersonal focus do much better in terms of reduced reoffending than do programs based on broad social location and/or social reaction perspectives. A mild average reduction in reoffending for personality and social psychological approaches (0.10, k = 325)compares very favourably with the mild mean increase in reoffending found for the more sociological approaches (-0.03, k =49) and with the mean increase found for deterrence programs intending to increase fear of official punishment (-0.05. k = 43).

Principle 3: The evidence favouring a human service approach in the justice context is now overwhelming. Programs based on retribution, just desert, deterrence, and/or restorative justice by themselves do not yield impressive reductions in reoffending. In the Carleton University sample, the average effect of 101 tests of the effects of increases in the severity of the punishment is a mild increase in recidivism (-0.03, k = 101). This average effect is dismal in comparison with the modestly positive mean effect of 0.12 for human service when offered in the justice context of diversion, community corrections and/or institutional corrections (k = 273). The University of New Brunswick, St John group, (See Chapter 3 of this Compendium) looked even more closely at the effects of sanctions and the findings are devastating for those who emphasize retribution, deterrence, restoration and/or diversion without the delivery of human service. The average effect of community sanctions (in 140 tests involving over 50,000 offenders) was zero (ranging from -0.07 for scared straight through 0.04 for fines). The average effect of incarceration

relative to a community sanction was -0.07 (k = 103, N = 267,804) and the average effect of more vs less custodial time was -0.03 (k = 222, N = 68,248). Please note that the studies of incarceration did not include estimates of incapacitation effects and hence the already mild mean negative effects on reoffending may be overestimating the negative effects.

Principle 4: The meta-analytic evidence in regard to community-based programming suggests that the principles of effective human service are best introduced before the research findings relevant to community settings are reviewed.

Principle 5: Support for the risk principle is now moderate to strong. The support increases as you move up from studies of the effects of sanctions through studies of human service in general to studies of human service that is consistent with the need and general responsivity principles. The average effect of criminal sanctions is mildly negative with low risk cases (-0.05, k = 34) and with higher risk cases (-0.02, k = 256). The mean effect of human service, however, is much more positive with higher risk cases (0.14, k = 211) than with lower risk cases (0.07, k = 62). When the human service is in adherence with the need and/or general responsivity principles, the effects of risk become quite substantial. For example, with adherence to need, the mean effect of service is 0.19 (k = 169) for higher risk cases compared to -0.01 (205) for lower risk cases. The comparable figures with adherence to general responsivity are 0.23 (77) and 0.04 (297) for higher and lower risk cases respectively.

Our understanding of the risk principle, however, is still limited by the relatively few studies that actually report separate effects for the lower and higher risk cases. Still more limited is knowledge of treatment effects among the lowest, low, middle, high, and very high-risk cases (including psychopaths).

Principles 6 and 7: Support for the need principles increased dramatically with the completion of Dowden's (1998) MA thesis (Andrews, Dowden, & Gendreau, 1999). Using the Andrews and Bonta (1994, 1998; Andrews, 1989) classification of more promising and less promising targets (that is, their lists of criminogenic and non-criminogenic needs) there was a clear association between the number of criminogenic needs targeted and reduced recidivism (0.55, k = 374). In dramatic contrast, the effect sizes decreased with the number of non-criminogenic needs targeted (-0.18, k =374). This dramatic difference underscores that the multimodal principle refers only to increases in the number of criminogenic needs targeted — increases in the number of non-criminogenic needs targeted contribute to reduced effect sizes. Indeed, the mean effect sizes were negative when the number of non-criminogenic needs targeted exceeded the number of criminogenic needs. The mean effect sizes increased directly with how many criminogenic needs targeted exceeded the number of non-criminogenic needs. When the number of non-criminogenic needs targeted were subtracted from the number of criminogenic needs the difference scores ranged from -3 to +6 across 374 tests

of treatment. The corresponding mean effect sizes were as follows for the difference scores of -3 through plus 6: -07 (-3, k = 9), -05 (-2, k = 14), -0.00 (-1, k = 93), -0.00 (0, k = 91), 0.14 (1, k = 71), 0.19 (2, k = 27), 0.22 (3, k = 40), 0.25 (4, k = 17), 0.32 (5, k = 7), 0.51 (6, k = 5). Our simple measure for exploration of principle 6 was a difference score of 1 or more compared to a difference score of 0 or less. The corresponding mean effect sizes were 0.19 (k = 169) and -0.01 (k = 205).

As strong as the above-noted findings may be there are serious limitations and gaps in knowledge. Ultimately, what is required are experimental investigations in which the effects of treatment on recidivism can be shown to be reduced through statistical controls for measured changes in the needs targeted. Currently there are very few studies that allow such explorations. Similarly, experimental tests of some types of need with some types of cases have rarely been conducted. For example, experimental tests of programs that target the low self-esteem of women offenders are so rare that we have yet to find a single one. Similarly, tests of particular dynamic risk factors in programs focusing upon sex offending and other types of violent offending are few in number.

Principle 9: Support for social learning and cognitive behavioural influence strategies is readily found in all but one of the metaanalyses of the effects of correctional treatment. The Carleton University meta-analyses have supported the principle of general responsivity in re-analyses of the studies reviewed by the one negative review as well as in three additional sets of tests of treatment. Overall, the mean effect size in 77 tests of social learning/cognitive behavioural strategies was 0.23 (k = 77) compared with 0.04 for 297 tests of other intervention strategies. The general responsivity principle has also been stated with reference to the relationship and structuring aspects of correctional treatment. Research on these statements of general responsivity are presented in the comments on the staff principle (Principle 16).

Principles 3, 5, 6, 7, and 9 in combination: The findings are very clear. Mean effect size increases directly with adherence to the principles of human service, risk, need and general responsivity. The average effect size for tests of criminal sanctions without the delivery of human service and tests of human service that adhered to not one of risk, need and responsivity was -0.02 (k = 124). The mean effect size for human service programs that adhered to at least one of risk, need and general responsivity was equally as unimpressive at 0.02 (k = 106). Human service programs adhering to at least two of the principles of clinically relevant and psychologically informed human service yielded a mean effect size of 0.18 (k = 84). Adherence to all three of the human service principles yielded a mean effect size of 0.26 (k = 60). The evidence suggests that adherence to the principles of clinically relevant and psychologically informed human service is rewarded by substantial reductions in recidivism.

Principle 10: In brief, a meta-analytic review of specific responsivity is required and additional primary studies of differential

treatment are required. Few question the idea that treatment strategies are best matched with case characteristics, and yet studies of recidivism rates as a function of variation in both case characteristics and treatment strategies are so few that conclusions are not yet possible from the meta-analyses. Interestingly, 12 tests of treatment did target particular barriers to treatment and an above-average mean effect size was found.

Principles 8 and 11: The human service principles of risk, need and responsivity are of particular importance because the findings of assessments now may be linked directly with the practical decisions required when clinicians and managers wish to maximize the positive effects of treatment. Note that assessments of risk may now be used not to justify enhanced punishment and control but to guide the intensity of human service efforts. Assessments of criminogenic need identify the appropriate intermediate targets of service and responsivity assessments suggest individualized treatment strategies. Discussions of reliable and valid assessment instruments may be found in Gendreau, Little, and Goggin (1996) and Andrews and Bonta (1998).

Principle 12: This principle emphasizes the value of after care, structured follow-up, continuity of care, and a community orientation through an emphasis on relapse prevention. Elements of a relapse prevention orientation were evident in only 18 of the tests of treatment but those few tests did yield an above average mean effect size. A community-based focus was associated with enhanced effect sizes as evidenced by the findings supportive of targeting associates, family and school/work (the need principle).

Principles 13 and 14: To date, the principles of professional discretion and case planning/recording have not been explored through meta-analytic summaries of links with the effects of treatment. However, emerging studies with the Correctional Program Assessment Inventory (Andrews, 1995c; Gendreau & Goggin, 1997) are showing that ongoing programs that have implemented systematic risk/need assessment and reveal adherence to the principle present promising recidivism rates . Ongoing CPAI research also speaks to Principle 15.

Principle 15: Meta-analytic tests of implementation and integrity are generally supportive of the importance of theoretical specificity, staff selection, training and supervision, printed/taped training or skill manuals, small program units (as inferred from small sample studies), involvement of researcher, and duration of service (Andrews & Dowden, under review). Monitoring of service process and/or intermediate change was not found to link with effect size. The value of consultation services for clinical supervisors is unexplored. A weakness in this literature is that programs with indications of integrity tend also to be among the best representatives of clinically relevant and psychologically informed treatment. With integrity and clinically appropriate treatment so highly correlated, it is difficult to show that integrity greatly enhances effect size. It, however, is know that indicators of integrity are unrelated to outcome when treatment is clinically inappropriate. In other words, there is no meta-analytic evidence at all that introducing clinically inappropriate treatment with high levels of integrity is of any value. There are two great needs in this area: an increase in the number of primary studies focusing on implementation and integrity, and increased attention to reporting on integrity in all controlled outcome studies.

Principles 16, 17, and 18. Scoring of the selection, training and clinical supervision of staff becomes moves beyond general integrity (Principle 15) so that the issue becomes selection, training and supervision with particular reference to the demands of the general responsivity principle. Recall, according to general social learning theory (Andrews, 1980; Andrews & Bonta, 1998) and general social learning influence strategies (Andrews, 1979; Andrews & Carvell, 1998), two dimensions are crucial. The two dimensions are quality of the interpersonal relationship and the structuring skills of the worker. Without evidence that staff were selected according to relationship or structuring skills, the mean effect size was 0.05 based on the vast majority of the tests of treatment (k = 327). However, when one or both of the core dimensions were considered, the mean effect sizes varied from 0.25 to 0.36 (k = 47 in total).

Specific elements of structuring in practice yielded mean effect sizes of 0.31 for high level reinforcement (k = 15), 0.30 for high levels of clinically appropriate disapproval (k = 8), 0.30 for structured skill training (k = 38), 0.28 for clinically appropriate modeling (k = 37), 0.26 for clinically appropriate use of authority (k = 15), 0.25 for problem solving (k = 45), and 0.13 for advocacy brokerage (k = 53). Coding according to core correctional practices (CCP) now constitutes an enhanced coding of general responsivity. In the future, the elements of CCP, soon to also include elements of motivational interviewing and cognitive restructuring, may be scored as selection factors, training factors, clinical supervision factors, and as observed elements of treatment process.

The general applicability of these elements of effective practice have been underscored by Trotter (1999) who has produced a model of social work practice with involuntary clients. He focuses on role clarification (authority), pro-social modelling and reinforcement, problem solving and relationship.

Two additional staff considerations follow directly from a general personality and social learning perspective on human behaviour. Staff performance on indicators of clinically relevant practice would reflect their relevant skills, behavioural history and personal predispositions. Additionally, performance reflects cognitive supportive of such practice and social support for clinically relevant practice. These two factors remain virtually unexplored.

Research that links management concerns and broader social arrangements to actual impact on recidivism is lacking.

We all look forward to an expanded set of principles with stronger research support. Personally, I think that some major advances are soon going to come from studies of female offenders, aboriginal offenders, treatment in restorative justice contexts, treatment in forensic mental health contexts, and primary prevention in non-justice children's and family services. The intellectual energy and expanding public support for experimentation in those areas is very impressive and very promising.

CHAPTER 3

PAUL GENDREAU and CLAIRE GOGGIN¹ FRANCIS T. CULLEN² DONALD A. ANDREWS³

Within recent years "get tough" strategies have become the latest panacea for dealing with offenders (see Cullen & Gendreau, 2000). This chapter quantitatively summarizes a substantial body of literature that assesses the effectiveness of two types of "get tough" programs; community sanctions and incarceration. A brief history of the development of these initiatives is provided accompanied by a meta-analytic summary of the data.

COMMUNITY SANCTIONS

At one time, some of the services provided in probation and parole settings adhered to a dynamic rehabilitative model wherein it was gratifying to discover well-conceptualized programs of sound therapeutic integrity (Gendreau, Paparozzi, Little, & Goddard, 1993). Reductions in recidivism of 20% to 60% were reported for some of these programs. In addition, employment and educational activities increased threefold in several studies (see Ross & Gendreau, 1980; Gendreau, 1996).

What kinds of programs were these? First, treatment staff conformed to the principles and techniques of the therapies they were employing. Secondly, staff was carefully monitored by the program developers who themselves had excellent skills in behavioural treatment and their assessments, with ongoing training frequently provided. Thirdly, offenders' individual differences relative to varying styles of service delivery were considered. Finally, the programs were intense; contact between offenders and therapist was frequent and focussed on learning pro-social skills.

The following three programs best illustrate the above. The first of these, by Walter and Mills (1980), was a behavioural employment program for juvenile probationers utilizing a token economy, contingency contracting, and life skills interventions. The program was admirable in that its treatment design intimately linked the courts with community-based employers who were trained as paraprofessional behaviour modifiers. The second example came from Andrews and Kiessling's (1980) *Canadian Volunteers in Corrections Program* that combined professionals with paraprofessionals in an adult probation supervision program. The major features of the counselling and supervision practices were the use of authority, anti-criminal modelling and reinforcement, and problem-solving techniques.

The quality of interpersonal relationships was also considered when pairing offenders with probation and parole officers. The theoretical importance of this study should not be understated as the treatment guidelines employed herein were instrumental to the continuing development of the principles of effective correctional treatment literature (e.g., Andrews, 1995; Gendreau & Ross, 1983-1984).

Thirdly, there was a series of studies by Davidson and colleagues (Blakely, Davidson, Saylor, & Robinson, 1980; Davidson & Robinson, 1975; Seidman, Rappaport, & Davidson, 1980) that featured an amalgam of behavioural techniques, relationships skills training, child advocacy, and matching of offenders and therapists. As community psychologists, they were among the first researchers to be aware of the need to overcome systembased barriers in delivering effective interventions.

Just when it seemed, however, that progress was being made in the confirmation and promulgation of effective services for probation and parole, a counterrevolution began to evolve: the new epoch of punishment-based strategies (Martinson, 1976). The reasons why this new epoch gained favour is reviewed elsewhere (Cullen & Gendreau, 2000). With the exception of occasional reports of successful intervention program in probation and parole (e.g., Davidson, Redner, Blakely, Mitchell, & Emshoff, 1987; Ross, Fabiano, & Ewles, 1988), distinct forms of "get tough" strategies known as intermediate sanctions began to proliferate in probation and parole settings. The term "intermediate" was derived from the notion that deterrence strategies based on excessive use of incarceration were too crude and expensive while regular probation (with or without treatment services), on the other hand, was too "soft". Interestingly, some proponents of intermediate sanctions asserted that probation could be even more punishing than prison (Petersilia, 1990). The most common form of intermediate sanction was Intensive Supervision Programming (ISP). As Billie J. Erwin so forcefully put it when referring to the Georgia ISP, considered by many to be a model for the United States: " ... We are in the business of increasing the heat on probationers... satisfying the publics demand for just punishment...criminals must be punished for their misdeeds" (Erwin, 1986, p. 17).

This new generation of ISPs quickly spread throughout the United States, and to a much lesser extent, within Canada. They turned up the heat by: greatly increasing contact between

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supervisors and offenders, confining offenders to their homes, enforcing curfews, submitting offenders to random drug testing, requiring offenders to pay restitution to victims, electronically monitoring offenders, and requiring offenders to pay for the privilege of being supervised. Most ISPs have employed arbitrary combinations of the above sanction types in varying degrees with the major emphasis for most being an increase in the frequency of offender-probation/parole contacts. Boot camps and quick/brief arrests or citations, often in response to spousal abuse offences, are other types of sanctions that may fall under the intermediate sanctions umbrella.

Besides serving an underlying retributive purpose and reducing prison overcrowding costs, an important expectation was that ISPs would effect pro-social conformity through the threat of punishment (Gendreau, Cullen, & Bonta, 1994).

How well are intermediate sanctions working? So far they appear to be "widening the net" by targeting low-risk offenders who would normally receive periods of regular probation. The data indicate that the use of intermediate sanctions can increase the number of technical violations and lead to higher rates of incarceration (Gendreau, Goggin, & Fulton, 2001). As to recidivism, we found little evidence of the effectiveness of intermediate sanctions among this sample of studies. Table 3.1 illustrates these results. Of note, a positive correlation indicates that the sanction was associated with an increase in recidivism while a negative correlation means the sanction has suppressed or decreased recidivism. Within Category 1, ISPs, there were 47 comparisons of the recidivism rates of offenders in an ISP with those receiving regular probation. These comparisons involved 19,403 offenders with a mean treatment effect of 0.00, expressed as a phi coefficient (Φ), indicating no difference in percentage recidivism rates between the two groups. The recidivism rate for each of the ISP and comparison groups was 29%.

The confidence interval (*CI*) is a useful index of the likelihood that a given range of values will contain the "true" population parameter. In the case of ISPs, the *CI* about Φ is -0.05 to 0.05, reflecting recidivism rates ranging from a 5 per cent reduction (Φ = -0.05) to a 5 per cent increase (Φ = 0.05). Also of note, when the *CI* contains 0, one can infer a lack of significant treatment effects (*p*>0.05).

The z^{\pm} value is a weighted estimate of Φ . That is, each effect size is weighted by the inverse of its variance ($\sqrt{N-3}$) thereby giving more emphasis to effect sizes generated with larger sample sizes. The z^{\pm} for ISPs indicates that they were associated with a 6% increase in recidivism with an associated *CI* of 0.04 to 0.07.

Upon examining the mean Φ and z^{\pm} values for each of the eight types of intermediate sanctions, one can see that 13 of the 16 *CIs* contain 0. Only in the case of restitution and fines was there any indication of a suppression of recidivism (i.e., *CI* did not include 0) but these results were criterion-dependent. A summary of the data from all of the eight categories produced mean effect sizes of 0.00 ($CI_{\Phi} = -0.02$ to 0.03) and 0.02 for z^{\pm} ($CI z^{\pm} = 0.01$ to 0.03).

In fact, an examination of the effect sizes from intermediate sanctions that purported to provide a modicum of "treatment" in each case the treatment was ill-defined and, therefore, impossible to assess as to quality — an interesting result was uncovered. The addition of a treatment component produced a 10% reduction in recidivism. On this evidence, one can tentatively conclude that the effectiveness of intermediate sanctions is mediated through the provision of treatment.

INCARCERATION

The view that the experience of prison in itself acts as a deterrent has a long history in criminal justice (Cullen & Gendreau, 2000). It is rooted in specific deterrence theory (Andenaes, 1968),

Type of Sanction (<i>k</i>)	Ν	%E	%C	$M\Phi$	$CI \Phi$	\pmb{z}^{\pm}	$CI z^{\pm}$
1. Intensive Supervision Programs (47)	19,403	29	29	0.00	-0.05 to 0.05	0.06	0.04 to 0.07
2. Arrest (24)	7,779	38	39	0.01	-0.05 to 0.04	0.00	-0.02 to 0.02
3. Fines (18)	7,162	41	45	-0.04	-0.08 to 0.00	-0.04	-0.06 to -0.02
4. Restitution (17)	8,715	39	40	-0.02	-0.15 to -0.01	0.03	-0.01 to 0.05
5. Boot Camp (13)	6,831	31	30	0.00	-0.05 to 0.08	0.00	-0.02 to 0.02
6. Scared Straight (12)	1,891	46	37	0.07	-0.05 to 0.18	0.04	-0.01 to 0.09
7. Drug Testing (3)	419	13	12	0.05	-0.12 to 0.12	0.00	-0.10 to 0.10
8. Electronic Monitoring (6)	1,414	6	4	0.05	-0.02 to 0.11	0.03	-0.02 to 0.08
9. Total (140)	53,614	33	33	0.00	-0.02 to 0.03	0.02	-0.01 to 0.03

TABLE 3.1 Mean effect of community sanctions on recidivism

Note. k = number of effect sizes per type of sanction; N = total sample size per type of sanction; K = percentage recidivism for the group receiving the sanction; K = percentage recidivism for the comparison group (regular probation); $M\Phi$ = mean phi per type of sanction; CI_{Φ} = confidence interval about mean phi; z^* = weighted estimation of phi per type of sanction; CI_{z*} = confidence interval about z^* .

Type of Sanction (k)	Ν	$M\Phi(SD)$	CI_{Φ}	\pmb{z}^{\pm}	$CI z_{\pm}$
 More vs. Less (222)^a Incarceration vs. Community (103)^b Total (325) 	267,804	0.07(.12)	0.02 to 0.05 0.05 to 0.09 0.03 to 0.06	0.00	0.02 to 0.04 0.00 to 0.00 0.02 to 0.02

TABLE 3.2 Mean phi (Φ) and mean weighted phi (z^{\pm}) for more vs. less and incarceration vs. community Sanctions

Note. k = number of effect sizes per type of sanction; N = total sample size per type of sanction; $M\Phi(SD)$ = mean phi and standard deviation per type of sanction; CI_{Φ} = confidence interval about mean phi; z^* = weighted estimation of Φ per type of sanction; Cl_z^* = confidence about z^* . ^a More vs. Less — mean prison time in months (k = 190) : More = 30.0 months, Less = 12.9 months, Difference = 17.2 months.

^b Incarceration vs. Community — mean prison time in months (k = 19): 10.5 months.

which predicts that individuals experiencing a more severe sanction are more likely to reduce their criminal activities in the future. Indeed, both the public and many policy-makers assume incarceration has powerful deterrent effects (DeJong, 1997; Doob, Sprott, Marinos, & Varma, 1998; Spelman, 1995; van Voorhis, Browning, Simon, & Gordon, 1997). Amongst academics, economists have taken the lead in support of the specific deterrence model (see von Hirsch, Bottoms, Burney, & Wikström, 1999). They maintain that incarceration imposes direct and indirect costs on inmates (e.g., loss of income, stigmatization) (Nagin, 1998; Orsagh & Chen, 1988) such that, faced with the prospect of going to prison or after having experienced prison life, the rational individual would choose not to engage in further criminal activities.

What kind of data is used to support the hypothesis that prison time suppresses criminal behaviour? The most compelling evidence comes from some ecological studies where the results are based on rates or averages (aggregate data). An example of one of the most positive results come from a study by Fabelo (1995) that reported a 30% increase in incarceration rates across 50 U.S. states, corresponding with a decrease of 5% in the crime rate for a five-year period. Fabelo's data has been interpreted as convincing evidence that prisons deter crime (Reynolds, 1996).

To be fair to deterrence aficionados, we must acknowledge that there are a number of caveats about the potency of prison in this regard. These include the following: deterrent effects are more likely to be found among lower risk offenders, harsher prison living conditions, and aggregate data which tend to wildly inflate results in favour of deterrence (for a detailed review see Gendreau, Goggin, & Cullen, 1999).

To return to the original question as to whether longer periods of incarceration are associated with reductions in recidivism, we examined two sets of data that addressed the above-noted caveats. We located 222 comparisons of groups of offenders (n = 68,248) who spent more (an average of 30 months) versus less (an average of 17 months) time in prison. The groups were similar on approximately one to five risk factors. As seen in Table 3.2, offenders who did more time had slight increases in recidivism of 3% or 2% depending on whether the effect sizes were unweighted (Φ) or weighted (z^{\pm}).

The second sample involved 103 comparisons of 267,804 offenders who were either sent to prison for brief periods (only 19% of effect sizes noted length of incarceration) or received a community-based sanction. Once again, the results from Table 3.2 indicate no deterrent effect. Using Φ as a measure of outcome, we see an increase in recidivism of 7% but no effect (0%) when effect size is weighted by sample size.

Clearly, the prison as deterrent hypothesis is not supported. The opposite conclusion, and one that is widely endorsed in some correctional circles, is that prisons do increase recidivism, in other words act as "schools for crime". This is problematic in our view. The studies in this database are lacking a great deal of essential information, moreover, the design strength of many of the comparison groups left much be desired, although we found no correlation between quality of design and effect size (Φ) . Nevertheless, while this is the "best" available evidence with which to assess the enthusiastic claims of prison deterrence supporters, the only really satisfactory answer to this particular question is for prison authorities to periodically assess incarcerates on a comprehensive list of dynamic risk factors and correlate time served and changes in risk while incarcerated with future recidivism. This will prove, by far, to be the most sensitive analysis. Regrettably, evaluations of this type have rarely been reported in the corrections literature (e.g., Gendreau, Grant, Leipciger, 1979; Wormith, 1984; Zamble & Porporino, 1990).

In summary, the addition of this body of evidence to the "what works" debate leads to the inescapable conclusion that, when it comes to reducing individual offender recidivism, the "only game in town" is appropriate cognitive-behavioural treatments which embody known principles of effective intervention (Andrews, Dowden, & Gendreau, 1999; for reviews see Cullen & Gendreau, 2000; Gendreau, Smith, & Goggin, 2001).

⁴ For the interested reader, please consult Gendreau et al. (1999) plus forthcoming work that reports on this data in much greater detail.

REFERENCES

- Andenaes, J. (1968). Does punishment deter crime? Criminal Law Quarterly, 11, 76-93.
- Andrews, D. A. (1995). The psychology of criminal conduct and effective treatment. In J. McGuire (Ed.), *What works: Reducing reoffending* (pp. 35-62). West Sussex, UK: John Wiley.
- Andrews, D. A., Dowden, C., & Gendreau, P. (1999). Clinically relevant and psychologically informed approaches to reduced reoffending: A meta-analytic study of human service, risk, need, responsivity, and other concerns in justice contexts. Unpublished manuscript, Ottawa, ON: Carleton University.
- Andrews, D. A., & Kiessling, J. J. (1980). Program structure and effective correctional practice: A summary of CaVic research. In R. Ross & P. Gendreau (Eds.), *Effective correctional treatment* (pp. 439-463). Toronto, ON: Butterworths.
- Blakely, C. H., Davidson, W. S., II, Saylor, C. A., & Robinson, M. J. (1980). Kentfields rehabilitation program: Ten years later. In R. R. Ross & P. Gendreau (Eds.), *Effective correctional treatment* (pp. 319-326). Toronto, ON: Butterworths.
- Cullen, F. T., & Gendreau, P. (1989). The effectiveness of correctional treatment: Reconsidering the 'nothing works' debate. In L. Goodstein & D. L. MacKenzie (Eds.), *The American prison: Issues in research and policy* (pp. 23-44). New York, NY: Plenum.
- Cullen, F. T., & Gendreau, P. (2000). Assessing correctional rehabilitation: Policy, practice, and prospects. In J. Horney (Ed.), *NIJ criminal justice 2000: Changes* in decision making and discretion in the criminal justice system (pp. 109-175). Washington, DC: U.S. Department of Justice, National Institute of Justice.
- Davidson, W. S., II, Redner, R., Blakely, C., Mitchell, C., & Emshoff, J. (1987). Diversion of juvenile offenders: An experimental comparison. *Journal of Consulting and Clinical Psychology*, 55, 68-75.
- Davidson, W. S., II, & Robinson, M. J. (1975). Community psychology and behavior modification: A community based program for the prevention of delinquency. *Journal of Corrective Psychiatry and Behavior Therapy*, 21, 1-12.
- DeJong, C. (1997). Survival analysis and specific deterrence: Integrating theoretical and empirical models of recidivism. *Criminology*, 35, 561-575.
- Doob, A. N., Sprott, J. B., Marinos, V., & Varma, K. N.(1998). An exploration of Ontario residents' views of crime and the criminal justice system (C98-931656-4). Toronto, ON: University of Toronto, Centre of Criminology.
- Erwin, B. (1986). Turning up the heat on probationers in Georgia. *Federal Probation*, 50, 17-24.
- Fabelo, T. (1995). Testing the case for more incarceration in Texas: The record so far. State of Texas: Criminal Justice Policy Council.
- Gendreau, P. (1996). The principles of effective intervention with offenders. In F. X. Harland, (Ed.), *Choosing correctional options that work: Defining the demand and evaluating the supply* (pp. 117-130). Thousand Oaks, CA: Sage.
- Gendreau, P., Cullen, F. T., & Bonta, J. (1994). Intensive rehabilitation supervision: The next generation in community corrections? *Federal Probation*, 58, 72-78.
- Gendreau, P., Goggin, C., & Cullen, F. (1999). The effects of prison sentences on recidivism. Ottawa, ON: Solicitor General Canada.

- Gendreau, P., Goggin, C., & Fulton, B. (2001). Intensive supervision in probation and parole. In C. R. Hollin (Ed.), *Handbook of offender assessment* and treatment (pp. 195-204). Chichester, UK: John Wiley.
- Gendreau, P., Grant, B., & Leipciger, M. (1979). Self-esteem, incarceration and recidivism. *Criminal Justice and Behavior*, 6, 67-75.
- Gendreau, P., Paparozzi, M., Little, T., & Goddard, M. (1993). Does "punishing smarter" work? An assessment of the new generation of alternative sanctions in probation. *Forum on Corrections Research*, 5(3), 31-34.
- Gendreau, P., & Ross, R. R. (1983-84). Correctional treatment: Some recommendations for successful intervention. *Juvenile and Family Court*, 34, 31-40.
- Gendreau, P., Smith, P., & Goggin, C. (2001). Treatment programs in corrections. In J. Winterdyk (Ed.), *Corrections in Canada: Social reaction to crime* (pp. 238-265). Scarborough, ON: Prentice-Hall.
- Martinson, R. (1976). California and the crossroads. In R. Martinson, T. Palmer & S. Adams (Eds.). *Rehabilitation, recidivism and research* (pp. 63-74). Hackensack, NJ: National Council on Crime and Delinquency.
- Nagin, D. S. (1998). Criminal deterrence research at the outset of the twentyfirst century. In M. Tonry (Ed.), *Crime and justice: A review of research* (vol. 23, pp. 1-42). Chicago, IL: University of Chicago Press.
- Orsagh, T., & Chen, J.-R. (1988). The effect of time served on recidivism: An interdisciplinary theory. *Journal of Quantitative Criminology*, 4, 155-171.
- Petersilia, J. (1990). When probation becomes more dreaded than prison. *Federal Probation*, 54, 23-27.
- Reynolds, M. O. (1996). Crime and punishment in Texas: Update (NCPA Policy Report No. 202). Dallas, TX: National Center for Policy Analysis.
- Ross, R. R., Fabiano, E., & Ewles, C. (1988). Reasoning and rehabilitation. International Journal of Offender Therapy and Comparative Criminology, 32, 29-35.
- Ross, R. R., & Gendreau, P. (1980). Effective correctional treatment. Toronto, ON: Butterworths.
- Seidman, E., Rappaport, J., & Davidson, W. S., II. (1980). Adolescents in legal jeopardy: Initial success and replication of an alternative to the criminal justice system. In R. R. Ross & P. Gendreau (Eds), *Effective correctional treatment* (pp. 101-126). Toronto, ON: Butterworths.
- Spelman, W. (1995). The severity of intermediate sanctions. Journal of Research in Crime and Delinquency, 32, 107-135.
- Van Voorhis, P., Browning, S. L., Simon, M., & Gordon, J. (1997). The meaning of punishment: Inmates' orientation to the prison experience. *The Prison Journal*, 77, 135-167.
- von Hirsch, A., Bottoms, A. E., Burney, E., & Wikström, P.-O (1999). Criminal deterrence and sentence severity: An analysis of recent research. Oxford, UK: Hart Publishing.
- Walter, T. L., & Mills, C. M. (1980). A behavioural-employment intervention program for reducing juvenile delinquency. In R. R. Ross & P. Gendreau (Eds.), *Effective correctional treatment* (pp. 185-206). Toronto, ON: Butterworths.
- Wormith, J. S. (1984). Attitude and behavior change of correctional clientele: A three year follow-up. *Criminology*, 22, 595-618.
- Zamble, E. & Porporino, F. J. (1990). Coping with imprisonment. Criminal Justice and Behavior, 17, 53-70.

CHAPTER 4

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There are few activities in corrections as important as the assessment of offenders. An accurate assessment facilitates the fair, efficient and ethical classification of offenders. A failure to conduct a proper assessment can lead to serious consequences. An inmate can be placed within an inadequate security setting and subsequently escapes; a Parole Board mistakenly releases an offender who was thought not to present a danger; and a parole officer fails to recognize a parolee's deteriorating situation. These are but a few examples that illustrate the importance of offender assessment.

In general, the assessment of offenders has centred on issues related to security and release. Without a doubt, the assessment of risk is very important for corrections. However, there is an understanding that offender risk assessment is also related to effective treatment. This is a recent development. Conducting an offender assessment has always been the first step toward offender treatment. But, rarely has offender assessment for treatment purposes been considered in the context of risk. Usually, assessments for treatment planning were conducted in the context of assessing offender needs. We are currently seeing a convergence in thinking about offender assessment that bridges the traditional concerns of safety and security and offender rehabilitation.

This chapter presents an overview of what we know about offender risk assessment. The review will also extend beyond the prediction of an offender's risk to reoffend. It includes a discussion of the risk and needs assessments that underlie effective treatment. We begin with a discussion of how our understanding of criminal behaviour influences our approach to offender assessments. After reviewing different explanations of criminal behaviour, the research seems to support a general personality and social psychological perspective. This perspective leads us to a number of useful ideas and practices. It not only increases predictive accuracy but it also highlights the relevance of dynamic risk factors or criminogenic needs. The identification of dynamic risk factors is critical for assessment approaches that improve the treatment of offenders.

HOW WE THINK ABOUT OFFENDERS INFLUENCES ASSESSMENT

Almost everyone has an explanation as to why certain individuals break the law. Although these explanations make interesting social conversation, there are people who devote careers out of explaining criminal behaviour. Criminologists, sociologists, psychiatrists and psychologists think about what may cause crime and formulate theories of criminal behaviour. They then search for evidence in support of their theories. The findings generated from research studies are used to modify the theories, and sometimes to discount them.

Opening any introductory criminology textbook will reveal numerous theories or explanations of criminal behaviour. For our purposes, it is unnecessary to review each single theory and the evidence for them. Most theories of criminal behaviour can be grouped into three broad perspectives of criminal conduct. Furthermore, each of these perspectives suggests very different approaches to offender assessment (and treatment). Choosing the theory that produces the best assessment practices is a highly desired goal.

The three major perspectives of criminal behaviour are:

- ♦ Sociological
- Psychopathological
- ♦ General Personality and Social Psychological

Sociological perspectives

The sociological perspectives proposes that social, political and economic factors are responsible for crime. For example, poverty, lack of employment and educational opportunities, and systemic bias toward minority groups cause frustrations and motivations to engage in crime. These perspectives, in one form or another, say that society creates crime. That is, society is largely responsible for crime and the solution to crime rests in altering the social, political and economic situations of society's members.

Psychopathological perspectives

The psychopathological theories forward a view that is almost opposite to the sociological theories. Within the psychopathological perspective, people commit criminal acts because there is something psychologically or emotionally wrong with them. The cause of crime is located in the individual who has a "sickness" or a deficit of some sort and not in society. Individuals disobey the laws and norms of society because of a neurosis, or they are following the commands of internal voices. They may have too much testosterone that drives them to commit sexual crimes or they have a neurological disorder that results in uncontrolled, violent behaviour. For the psychopathological theories, it does not matter if one is poor or not, from an ethnic minority or a politically powerless group, these afflictions and diseases know no economic, social and political boundaries.

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General personality and social psychological perspectives

The general personality and social psychological perspectives emphasize the learning of attitudes, emotions and behaviours that lead to criminal conduct. The focus is the individual (like the psychopathological theories) but it is the learning experiences of the person that account for crime. It is not so much that the offender is "sick", but that the offender was exposed to situations that rewarded and encouraged antisocial behaviour. For example, a child who grows up in a home where the parent(s) allow aggressive and hostile behaviour, model antisocial attitudes and fail to direct the child in prosocial activities (e.g., school) and appropriate friendships, learns antisocial behaviour.

Each of the three perspectives directs our attention to different factors for understanding criminal behaviour. As a consequence, they suggest what should be assessed when dealing with offenders. Table 4.1 illustrates how the various perspectives forward certain variables as candidates for assessment. For example, the sociological perspectives stress the assessment of social position. (e.g., social class, economic wealth, etc.). The psychopathological models emphasize the assessment of psychological discomfort and pathology (e.g., feelings of anxiety, thought disorder). Finally, the general personality and social psychological perspectives point to a broad range of interpersonal (e.g., peer and family support for crime), personal (e.g., employment, substance abuse, procriminal attitudes) and social (e.g., neighbourhood opportunities for crime) factors.

Theoretical Perspective	Example Characteristics Assessed
Sociological	Social status (e.g., age, gender) Race and ethnicity Financial status
Psychopathological	Psychological discomfort (e.g., anxiety) Self-esteem Bizarre thoughts
General Personality	
& Social Psychological	Peer support for behaviour Employment instability Antisocial attitudes Antisocial personality Substance abuse Antisocial behavioural history High crime neighbourhood

TABLE 4.1 The relationship between theory andoffender assessment

If we think about assessment from a theoretical perspective, we can make a few general observations. First, depending on the theoretical model, the range of variables seen as important varies. On one hand, the sociological perspective highlights relatively few variables for assessment. For the most part, assessments of social position are sufficient. Ask a few questions about one's financial situation and social and ethnic membership and the assessment is done. The other two perspectives consider many more variables. The general personality and social psychological model is particularly comprehensive as it considers social and situational factors in addition to psychological variables.

A second observation is that the sociological perspectives minimize the relevance of individual characteristics. This differential weighing of individual and broad social variables distinguish the sociological perspective from the other two theoretical viewpoints. The psychopathological and general personality and social psychology theories give considerable attention to the thoughts and feelings of individuals. In the sociological theories individual motivations, thoughts and emotions are barely mentioned.

Finally, the factors considered important in sociological perspectives of crime are mostly static factors. By focusing on static factors, the idea that people can change does not merit consideration and offender rehabilitation is assigned a minor role. You can not change one's race or ethnicity nor go from a state of poverty to wealth without the benefit of winning a major lottery. Because these socio-economic factors are largely unalterable, they can hardly serve as individual treatment goals.

At this point the reader may understandably feel a bit confused. What theory should be chosen to direct offender assessment activities? An evaluation of the evidence in support of a theoretical position is the key for selection among competing theories. A simple and straightforward way of evaluating a theoretical perspective is to see if the factors identified by theory are actually related to criminal behaviour. For example, are financial earnings, ethnicity, "nervousness", and having criminal friends associated with an individual's criminal conduct?

THE EVIDENCE FOR THEORIES OF CRIMINAL BEHAVIOUR

Table 4.2 summarizes the findings from two reviews of the literature on the prediction of criminal behaviour. One is based upon general offenders (Gendreau, Little, & Goggin, 1996) and the other one focuses on mentally disordered offenders (Bonta, Law, & Hanson, 1998). Both reviews used the statistic r (Pearson correlation coefficient) as their measure of association between two variables. An r of zero indicates no association between a variable and recidivism. An r of 1.0 is a perfect association, something that only happens when the experimenter makes a computational error. Sometimes the r is negative meaning that the association is in the opposite direction. For example, the

r of -0.19 for "mental disorder" indicates that having a mental disorder is associated with <u>less</u> recidivism. When r is less than 0.10, the association is considered quite weak. However, r values that exceed 0.10 can have practical significance.

As can be seen in Table 4.2, factors considered important by sociological and psychopathological theories of crime were among the weaker predictors. This was true regardless of the type of offender sample. In some cases (e.g., socio-economic status, personal distress) the correlations were extremely low.

The overall conclusion drawn from Table 4.2 is that the evidence is more favourable to the general personality and social learning perspective of criminal behaviour than the other two theoretical orientations. It is also noteworthy that three of the best predictors (criminal companions, antisocial personality and antisocial attitudes) are potentially changeable or dynamic. This is particularly important for treatment considerations as these variables can serve as goals in rehabilitation programs. The evidence presented in Table 4.2 is by no means the only evidence in support of a general personality and social learning perspective of criminal behaviour.²

TABLE 4.2	Predictors	of criminal	recidivism	(r)
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Theoretical		
Perspective/ Predictor	General Offenders	Mentally Disordered
Sociological		
Socio-economic status	0.06	0.00
Gender	0.10	0.11
Race	0.13	-0.01
Age	0.15	0.15
Psychopathological		
Personal distress	0.05	-0.04
Intellectual functioning	0.07	0.01
Mental disorder	NR	-0.19
General Personality		
& Social Learning		
Criminal history	0.18	0.23
Criminal companions	0.21	NR
Antisocial personality	0.18	0.18
Antisocial attitudes	0.18	NR

NR = Not reported.

TECHNICAL CHALLENGES OF OFFENDER ASSESSMENT

An empirically defensible theory may tell us what factors are important but theory does not tell us how best to assess these factors. *How* to assess offender characteristics is a technical measurement problem. In most situations where offender assessment plays a role, the underlying challenge is to correctly predict the criminal behaviour of the client. There are two general approaches to making decisions about the future criminal behaviour of offenders (i.e., recidivism). One approach, often referred to as the clinical method, uses subjective and professional judgements to assess the variables deemed important by theory. The other approach is more objective and leaves less room for subjective interpretation. This second approach is referred to as the actuarial method because it involves statistical evidence to base estimates of risk.

To illustrate the distinction in approaches, let us use the variable antisocial attitudes. Antisocial attitudes can be assessed in different ways. One can search for evidence of antisocial attitudes during a conversation with the offender (clinical method) or one can administer a paper-and-pencil test of antisocial attitudes (actuarial). In the first case, professional skills and experience are required to elicit and note expressions of antisocial attitudes. The interviewer may vary the questions asked from offender to offender. The problem with this is that the way information is gathered may potentially influence responses and therefore, the reliability of the assessment of antisocial attitudes. In the administration of a paper-and-pencil test, the assessment is conducted in a standard manner. Offenders are asked exactly the same questions and their responses are recorded in the same way for everyone.

In the real world, both approaches are frequently used together. However, the research suggests that one can place greater credibility in one approach over the other. Studies comparing clinical and actuarial methods in the prediction of criminal behaviour, or any behaviour for that manner, usually show that assessments based upon the objective approach tend to be more accurate (Grove & Meehl, 1996). What do we mean by "more accurate"? In any prediction task, there are four possible outcomes (see Table 4.3). You can predict that something will happen, and it does (cells A and D). For example, a Parole Board may predict that an offender is dangerous and the offender actually goes on to commit a violent crime (cell A). Or, the Board may predict that the offender is no risk to the public and it turns out that the offender makes a successful reintegration to society (cell D). You can make mistakes (cells B and C). For example, parole is denied to someone who, on follow-up, commits no new crimes (cell B) or parole is granted to an offender who reoffends violently (cell C).

A problem occurs when people assign different importance to the types of predictions and errors. To illustrate, one may be quite fearful in making a mistake that results in a new violent offence. A prediction strategy that would minimize this type of error would be to predict that all offenders would commit another crime. Of course, you will be right and capture everyone who may act in a dangerous manner (cell A) and there would

² For a more complete review of the evidence the interested reader is referred to Andrews and Bonta (1998).

be no one in cell C. But, at what cost? Studies suggest that there are large numbers of offenders who will not reoffend (cell B). For some, the numbers in cell B are a minor problem ("saving one victim is enough"). For others (e.g., civil libertarians, financial managers) it represents a serious social and economic issue. The offenders in cell B are denied freedom and unnecessarily incarcerated at great financial costs.

TABLE 4.3 The prediction task

	Actually Reoffends	
Predicted to:	Yes	No
Reoffend	А	В
Not Reoffend	С	D

In general, it is best to think of predictive accuracy in terms of the overall proportions of correct predictions and errors. That is, we need to know how the numbers are distributed across all four cells to gain a true appreciation of our predictions. We must also accept the reality that no prediction instrument will be perfect. We can continue to work towards maximizing our correct predictions and minimizing our errors but we must be careful not to overpromise in our ability to predict. From our discussion of clinical and actuarial approaches to offender assessment, our starting point for improving predictive accuracy is to use actuarial methods in the measurement of offender characteristics and their situations.

Measuring theoretically relevant factors in an objective, actuarial manner, unfortunately, is not as easy as it sounds. Any measuring instrument will have some error associated with it. Even the trusty ruler that you had since grade school is not 100% accurate. When it comes to the assessment of human factors, the range of error is considerably greater than errors associated with mechanical instruments such as rulers, weigh scales, etc. This is one reason why we can never achieve perfect prediction.

One approach of limiting measurement error is to use different methods for assessing the same factor. Returning to the example of antisocial attitudes, we can measure this variable with a paper-and-pencil test *and* by way of a structured personal interview. Structured interviews are not open-ended clinical interviews. The structured interview involves an observable and clear method for asking questions and recording the answers. Furthermore, the results from structured interviews can be quantified and evaluated as to their validity.

By using more than one method of assessment, the problems associated with one method of assessment are counter-balanced by another method. For example, a potential problem with a paper-and-pencil measure is that one may not be certain that the offender understood the questions or if he/she was motivated to answer truthfully. In an interview approach, the interviewer can verify whether the questions are understood and gauge the offender's interest and motivation. Likewise, a problem with even structured interviews is that the interviewer still has some discretion to make slight alternations to the questions and therefore, affect the results. To counter this potential bias, paper-and-pencil measures permit no alterations in the questions. Research has shown that when more than one method is used to assess a certain offender characteristic, the overall predictive accuracy improves significantly. These research findings are easily translated into practice and the best correctional practices are seen when we use multiple methods (e.g., questionnaires, interviews, and direct behavioural observations).

The objective, multi-method measurement of theoretically relevant factors is the first step in improving predictive accuracy. The second step to improving predictive accuracy is to combine the individual factors to form more comprehensive offender assessment measures. The combining of factors are usually done in one of two ways. The simplest, called the Burgess method, is to assign a score of 1 if the factor is present and 0 if the factor is absent. Thus, you can have a number of items/factors in a scale that are simply scored (0 or 1) and then summated to give an overall score. The other method uses advanced statistical techniques to assign different weights to the factors. For example, gender may be seen as having more importance than anxiety level. Therefore, being male may be assigned a score of 4 and high anxiety levels a score of 1. An example of an offender assessment instrument using the Burgess method is the Level of Service Inventory - Revised and an example using the weighting method is the Wisconsin Risk-Needs scale. The research evidence however, does not favour one approach of assigning scores over the other.

In the review by Gendreau et al. (1996), the r values frequently exceeded 0.30 when risk factors were combined into more general offender assessment instruments. The improvements are particularly robust when the factors come from different areas or domains. This is expected according to a general personality and social psychological theory. The theory hypothesises that there are many different factors that lead to criminal behaviour. A behavioural history of antisocial behaviour, criminal companions, antisocial attitudes, antisocial personality, family functioning, and substance abuse are some of the more important factors. Therefore, assessment instruments should measure these different domains rather than simply focus on one or two areas. Some offender assessment instruments are quite specific and focus on only one or two domains. The Statistical Information on Recidivism scale, for example, is very heavily weighted on criminal history factors. The Psychopathy Checklist - Revised measures personality and criminal lifestyle features. These instruments produce relatively good predictive accuracy. However, their largely static qualities limit their usefulness in other important correctional practices such as treatment.

Finally, if we apply multi-method assessments to the different domains or factors related to criminal behaviour and then combine these domains, the prediction estimates increase substantially. A study by Andrews, Wormith, and Kiessling (1985) presents impressive evidence on how multi-method and multi-domain sampling can improve prediction. Adult probationers were given an assessment battery that measured different domains and used different methods of measurement. They found that the correlation (r) for antisocial attitudes and recidivism was 0.46 when a paper-and-pencil measure was used and 0.63 when it was combined with a structured interview. When this information was combined with other domains (e.g., antisocial personality, criminal history, age), the correlation (Canonical correlation to be precise) increased to a value of 0.74.

PURPOSEFUL USE OF RELEVANT FACTORS

Risk assessment

Having settled upon using an actuarial approach to assess theoretically relevant characteristics, and aware of the value of multimethod and multi-domain assessment techniques, we need to consider *why* we are conducting the assessment. In the introductory statements to this chapter, we saw that one purpose is the assessment of risk to reoffend. Although, risk assessment is obviously important for release and security decisions, it also has implications for treatment planning.

Table 4.4 gives three examples of what can happen when treatment programs are delivered to offenders who pose different levels of risk. Note that none of the examples show reductions in recidivism when treatment is delivered to low risk offenders. Actually, the trend is toward increased recidivism for low risk offenders who receive treatment. Reductions in recidivism are found when *intensive* levels of treatment are directed to *higher* risk offenders. The findings displayed in Table 4.4 mirror the results from nearly 300 tests of this "risk-by-treatment" effect (Andrews & Bonta, 1998). This general result is referred to as the Risk principle of effective treatment. That is, in order to reduce recidivism, intensive levels of treatment need to be directed to higher risk offenders.³

As Table 4.4 shows, assessments of offender risk are important for more than just release decisions and security classifications. Appropriate decisions concerning who to place into treatment are informed by offender risk. The Risk principle is especially informative for clinicians and treatment staff who have been schooled and trained in therapeutic techniques that are suited to clients who are verbally skilled, reflective and socially skilled. Although the "talking" and relationship oriented therapies can be helpful to many people, they are not very effective with the typical offender client. Many offenders lack the verbal and thinking skills required by these counselling techniques. Consequently, when therapists practising relationship, verbal therapies meet failure with the offender client, they tend to blame the failure on the client's "resistance" and "lack of motivation" rather than the technique.

	Treatment Intensity		
Study	Risk Level	Low	High
Andrews & Kiessling (1980)	Low	12	17
	High	58	31
Bonta, Wallace-Capretta,	Low	14	32
& Rooney (1999)	High	51	31
Andrews & Friesen (1985)	Low	12	29
	High	92	25

TABLE 4.4 Recidivism rates (%) as a function oftreatment intensity and offender risk

Some observers have long admonished correctional and forensic therapists for preferring to counsel the low risk young, attractive, verbal, intelligent and socially skilled (YAVIS) client rather than the higher risk client who really needs the service. Not surprisingly, many therapists like to counsel the YAVIS client. This description of the preferred client also fits the description of the low risk offender. Low risk offenders are certainly more pleasant to counsel. Moreover, some of our ideas about criminals make it relatively easy to dismiss efforts for dealing with higher risk offenders ("he's a psychopath", "he's too hard core to change"). The research evidence however, suggests that it is the higher risk client that can benefit from treatment more so than the lower risk offenders. Fortunately, the importance of targeting higher risk offenders is permeating throughout the field as more treatment effort is being directed to higher risk offenders.

Needs assessment

One of the important derivations from a general personality and social psychological perspective of criminal conduct is that many of the factors identified as important are dynamic or changeable. An individual can change their attitudes and friends, he/she can find or lose a job, stop taking drugs or begin to drink heavily, and so on. Even antisocial personality features can be changed if we consider antisocial personality in a very broad sense rather than in the narrow sense of a diagnosis of psychopathy. This view of antisocial personality encourages attempts to change a constellation of dynamic offender attributes such as thrill seeking, impulsiveness and egocentrism.

For offender assessment, the theory highlights the importance of objectively and systematically assessing dynamic risk factors. Reviews of the literature show that dynamic risk factors predict recidivism as well as static risk factors (Gendreau et al.,

³ Further discussion of the Risk Principle can be found in other chapters of this Compendium.

1996). More importantly, changes in dynamic risk factors have been associated with changes in recidivism. Table 4.5 shows the results from a study by Andrews and Wormith (1984) where probationers were tested and retested on a measure of antisocial attitudes. Note for example, how offenders who scored low on a measure of antisocial attitudes at the beginning of supervision but scored more antisocial in their attitudes on the retest demonstrated increases in recidivism (from 10% to 20% to 67% when they scored in the high range). Likewise, when antisocial attitudes decreased, there was a trend toward reduced recidivism.

TABLE 4.5 Recidivism rates (%) as a function ofchanges in antisocial attitudes

Risk at Start	Risk at End		
	Low	Medium	High
Low	10	20	67
Medium	10	37	57
High	7	43	40

Dynamic risk factors are also referred to as criminogenic needs. Criminogenic needs are those offender needs that when changed are associated with changes in recidivism. The Need principle of effective rehabilitation calls for the targeting of criminogenic needs in treatment programs. From an assessment perspective, the measurement of criminogenic needs is highly important for directing treatment services and for the active supervision of offenders.

The evidence is convincing that interventions that target criminogenic needs are associated with reductions in recidivism (Andrews & Bonta, 1998). The majority of offenders in Canada are under community supervision and almost all inmates are eventually released from custody. The public and correctional staff expects that when offenders are released from institutions and supervised in the community, their risk to public safety is being effectively managed. To reach the goal of reduced risk, correctional workers must address the criminogenic needs of offenders. To support the safe release of inmates, institutional staff must demonstrate reductions in measured criminogenic needs. At present, there are intervention programs that are reasonably effective and assessment instruments that reliably document changes in dynamic risk factors. Some of the assessment instruments are quite specific to a particular criminogenic need (e.g., measures of substance abuse or antisocial attitudes) and other instruments provide more general assessments of offender risk and needs (e.g., the Level of Service Inventory - Revised; Andrews & Bonta 1995).

For offenders under community supervision, the monitoring of dynamic risk factors assumes an additional significance. Probation and parole officers need to be attentive to both improvement and deterioration in the offender's situation. Community supervisors easily note dramatic changes in the offender's situation. However, more subtle and gradual changes are not so easy to detect. Reliance on subjective, professional judgements of change is difficult to defend when objective, empirically based assessment measures are available. This is especially true when correctional staff can administer many of these measures after brief training. That is, psychologists and psychiatrists are not required to administer risk-need assessment instruments or many of the paper-andpencil measures of criminogenic needs that are available.

To summarize thus far, there have been significant advances in the development of assessment measures for offender risk and criminogenic needs. One of the most important advances over the past twenty years is the recognition of the importance of dynamic risk factors for both treatment planning and offender supervision. Systematic assessments and re-assessments of offender dynamic risk factors should be a mandatory feature of any correctional system. It is the only reasonable way of monitoring the effectiveness of offender services and supervision.

A significant amount of assessment research is now directed to improving measures of criminogenic needs and extending the assessment of dynamic risk factors to special subgroups of offenders. For example, research on dynamic risk factors with sex offenders is one important area where studies are currently underway (Hanson & Harris, 1998). Other offender groups that require more specialized assessments include women offenders, male batterers and mentally disordered offenders. Although the assessment of offender risk and criminogenic needs garner the bulk of the research on offender assessment, an emerging area of research is the assessment of offender responsivity.

Assessment of responsivity factors

How people learn from life's experiences depends, in part, on certain cognitive, personality and social-personal factors. These factors may, or may not be, offender risk factors or criminogenic needs. They do however, influence the individual's responsiveness to efforts to help them to change their attitudes, thoughts and behaviours. These responsivity factors play an important role in choosing the type and style of treatment that would be most effective in bringing about a change. A few illustrations of responsivity factors are helpful in understanding this concept.

Our first example is taken from the cognitive domain. Individuals vary in their thinking styles (e.g., concrete vs. abstract, impulsive vs. reflective) and general intelligence. In terms of risk, neither of these two factors are particularly strong risk factors (remember Table 4.2). However, these cognitive factors are very important with respect to learning new thoughts and behaviours. They influence how an individual best profits from instruction and the ease of learning. Two offenders may be of equal risk to reoffend and have the same criminogenic needs but they can differ in their cognitive level and style. One may be more verbally skilled and quicker to grasp complex ideas while the other is less cognitively skilled. The goals of treatment are the same but how one reaches that goal will be influenced by the client's cognitive responsivity factors. For the more cognitively skilled client, a program that is highly verbal and that requires abstract reasoning skills may be effective. However, this same approach would present a serious challenge for the less cognitively sophisticated offender.

Another example is taken from the personality domain, the trait of anxiety. Once again, a responsivity factor without risk or criminogenic need qualities. Levels of anxiety are poor predictors of recidivism and decreases in anxiety are not associated with reductions in recidivism. Yet, the anxiety levels of offenders could impact on the choice of treatment. For example, an anger management program may work well in a group format consisting of relatively non-anxious individuals. For clients who are extremely anxious in social situations, the program would be more effective if delivered on an individual basis.

Some risk and criminogenic need factors may have responsivity characteristics. For example, offenders described as having an antisocial personality are not only higher risk offenders with many criminogenic needs, but their lack of empathy and anxiety require an intervention approach that is highly structured. Their energetic and restless nature calls for a treatment style that is active and stimulating. Classroom discussions and quiet readings are not the preferred mode of intervention for these types of offenders.

Objective measures of antisocial personality are available with one of the best validated instruments being Hare's Psychopathy Checklist. Unfortunately, because the Psychopathy Checklist is often used to form a diagnosis of psychopathy, the instrument is not conducive to treatment planning. A diagnosis of psychopathy is often seen as a sign of untreatability. As a result, efforts to treat "psychopathic" offenders is minimal despite the fact that there is no convincing evidence that theoretically relevant interventions will not "work". In addition, there is no research exploring the role of psychopathy and/or antisocial personality as a responsivity factor.

Psychologists have been extremely successful in developing valid and reliable measures of other responsivity factors. There are many excellent measures of intelligence (e.g., the Wechsler IQ scale), anxiety (e.g., Spielberger's State-Trait Anxiety Inventory), and interpersonal maturity (e.g., Jesness I-Level). There is however, a need to develop good measures of impulsiveness, empathy and self-control, to name a few. Clearly, there is much work to be done.

In addition to cognitive and personality characteristics, some personal and demographic characteristics may operate as responsivity factors. Two possible candidates are gender and ethnicity. Women offenders may respond better to a style of intervention that is more women centred. Aboriginal offenders may benefit from a program offered by native counsellors and elders. Although there is no need for assessment measures of personal and demographic characteristics, there is a need for research examining the most effective styles of treatment based on gender and ethnicity factors.

SUMMARY AND CONCLUSIONS

Research in offender assessment holds excitement and promise. Progress in the development of offender assessment instruments has been significant and there is little reason to think that this progress will slow in the near future. A listing of the achievements over the past two decades is impressive and worthy of review. They are:

- A growing recognition of a theoretical model of criminal behaviour that has empirical support and practical implications.
 - ♦ A general personality and social psychological perspective of criminal behaviour has received significant empirical support and it has identified some of the relevant factors for assessment. The theoretical model emphasizes the importance of both static and dynamic risk factors that form a bridge between offender assessment and treatment.
- 2. A shift from professional judgements to a reliance on objective, empirical approaches in offender assessment.
 - Clinicians and other professionals are recognizing that their predictions of criminal recidivism can be enhanced with the use of objective assessment instruments. This is not to say that clinical and professional judgement need to be abandoned. There will always be cases where professional experience would be helpful. In addition, professional decision making can be made more observable and open to empirical validation. The development of structured clinical assessment instruments such as the HCR-20 is an example of how clinical assessments can be improved.
- An acceptance of the fact that prediction of criminal behaviour will never be perfect.
 - For a long time, many expected that social science methods would lead to an assessment technology that would yield almost perfect prediction. In actuality, prediction has fallen far short of perfection. Even the best instruments today produce high rates of error. However, improvements are being made and only the unabashed and ill-informed optimist expects that we will ever have an offender risk instrument that makes no mistakes. Accepting the complexity of human behaviour and the inherent errors associated with measurement is liberating. We are no longer chained to false hopes and unrealistic expectations.
- 4. The cataloguing of risk factors.
 - Meta-analytic reviews of the recidivism prediction literature have produced a veritable menu of the risk factors associated with criminal behaviour. We have never had such a compilation of what should be assessed. More importantly, for the first time, we have a *ranking* of risk factors that direct us to focus on the assessment of the more critical offender characteristics.

- 5. The discovery of the importance of dynamic risk factors.
 - Limiting our offender assessments of risk to static factors has hindered our efforts to develop effective rehabilitation programs. Dynamic risk factors, or criminogenic needs, open the door for designing and evaluating treatment programs. Knowledge of dynamic risk factors is also valuable for the monitoring and supervision of offenders.
- 6. Combining static and dynamic risk factors into riskneeds instruments.
 - Adding dynamic risk information to the static risk scales has yielded many advantages. We have moved beyond assessing risk for release and security classification that was the basic purpose of the static assessment instruments. With the dynamic information combined with the static to form risk-needs instruments we have maintained predictive accuracy and allowed for treatment planning and the assessment of offender change.

This list of achievements is truly impressive. Yet, there is much to do. We need to continue our search in identifying theoretically by relevant factors and develop measures to assess these factors. Although our prediction instruments will never reach perfection there is still tremendous room to improve predictive accuracy. Research on the assessment of responsivity factors and risk-needs factors specific to certain offender groups (e.g., sex offenders) must become a greater priority. Nevertheless, the momentum exists for continued improvements toward a more effective and humane correctional system.

REFERENCES

- Andrews, D. A., & Bonta, J. (1998). The psychology of criminal conduct (2nd ed.). Cincinnati, OH: Anderson.
- Andrews, D. A., & Bonta, J. (1995). The Level of Service Inventory Revised. Toronto, ON: Multi-Health Systems.
- Andrews, D. A., & Wormith, J. S. (1984). Criminal sentiments and criminal behaviour. (Programs Branch User Report). Ottawa, ON: Solicitor General Canada.
- Andrews, D. A., Wormith, J. S., & Kiessling, J. J. (1985). Self-reported criminal propensity and criminal behaviour: Threats to the validity of assessment and personality. (Programs Branch User Report). Ottawa, ON: Solicitor General Canada.
- Bonta, J., Law, M., & Hanson, K. (1998). The prediction of criminal and violent recidivism among mentally disordered offenders: A meta-analysis. *Psychological Bulletin*, 123, 123-142.
- Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult offender recidivism: What works! *Criminology*, 34, 575-607.
- Grove, W. M., & Meehl, P. E. (1996). Comparative efficiency of informal (subjective, impressionistic) and formal (mechanical, algorithmic) prediction procedures: The clinical-statistical controversy. *Psychology, Public Policy, and Law, 2*, 293-323.
- Hanson, R. K., & Harris, A. (1998). Dynamic predictors of sexual recidivism. (User Report No. 1998-01). Ottawa, ON: Solicitor General Canada.

CHAPTER 5

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One of the contemporary concerns in corrections is the risk management of offenders in the community. Thus, in many correctional agencies, treatment is currently viewed as an integral part of the risk management continuum, and therefore, treatment responsivity is a critical issue for correctional programs. The responsivity principle has been a largely neglected area of study, despite the fact that responsivity and other variables related to offender motivation are widely recognized as critical factors mediating the success of treatment (Brown, 1996). It is postulated that treatment readiness and responsivity must be assessed and considered in treatment planning if the maximum effectiveness of supervision and treatment programs is to be realized and if we want to ensure the successful reintegration of the offender into the community.

This chapter addresses the concept of treatment responsivity and examines a number of responsivity assessment measures currently in use. The development of a new standardized assessment battery of offender responsivity is presented, and a number of responsivity-related factors are identified and discussed in terms of their potential impact on treatment outcome. The construct of treatment responsivity is placed in a context that underscores the importance of allocating offenders to programs in the most effective manner and of identifying factors that might mediate the effectiveness of treatment services.

FOUR GENERAL PRINCIPLES OF CLASSIFICATION

The research of Andrews and colleagues outlines the four general principles of classification for purposes of effective correctional programming (Andrews, Kiessling, Robinson, & Mickus, 1986; Andrews, Zinger, Hoge, Bonta, Gendreau, & Cullen, 1990). These principles are based on their detailed analysis of programs that showed above-average success in reducing recidivism.

The risk principle states that the intensity of the treatment intervention should be matched to the risk level of the offender. This is because research has demonstrated that higher risk cases tend to respond better to intensive and extensive service, while low risk cases respond better to minimal or no intervention. Rehabilitation programs should, therefore, be reserved for higher risk offenders in order to achieve the greatest reductions in recidivism. The reality is that low risk offenders usually do well without intensive treatment. Also, there may be a harmful effect by putting low risk offenders in programs along with high-risk offenders, as one would run the risk of disrupting the low risk offender's positive social networks.

Once offenders are appropriately matched in terms of their risk level, attention should be directed to the sorts of needs to be addressed in treatment. The need principle distinguishes between criminogenic and non-criminogenic needs. The former are dynamic risk factors (Gendreau, Cullen, & Bonta, 1994), (a subset of an offender's risk level), which, if changed, reduce the likelihood of criminal conduct. In contrast, such non-criminogenic needs as anxiety and self-esteem (Gendreau et al., 1994) may be appropriate targets when working on responsivity issues; however, such needs would be inappropriate targets for risk reduction, as their resolution would not have a significant impact on recidivism.

The responsivity principle states that styles and modes of treatment service must be closely matched to the preferred learning style and abilities of the offender (Andrews et al., 1986). Treatment effectiveness depends on matching types of treatment and therapists to types of clients. Effective matching of offenders' and counsellors' "styles", as well as intensity of intervention, is central to the principle of treatment responsivity (Bonta, 1995).

The professional discretion principle states that, having reviewed risk, need and responsivity considerations as they apply to a particular offender, there is a need for professional judgement. The most appropriate treatment decisions include professional judgement, which in turn incorporates legal, ethical, humanitarian, cost-efficiency and clinical standards. In some cases, then, the application of professional judgement will (and should) override recommendations based on numerical scores alone, thereby improving the final offender assessment on programming strategies.

DEFINITION, MODEL OF TREATMENT RESPONSIVITY AND RELATED CONSTRUCTS

The responsivity principle

Three components of responsivity include matching the following treatment approach with the learning style of the offender, the characteristics of the offender with those of the counsellor, and the skills of the counsellor with the type of program conducted. Offenders differ significantly, not only in their level of motivation to participate in treatment, but also in terms of their responsivity to various styles or modes of intervention. According to the responsivity principle, these

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factors impact directly on the effectiveness of correctional treatment and, ultimately, on recidivism.

If the responsivity principle is not adhered to, treatment programs can fail, not because they do not have therapeutic integrity or competent therapists, but rather because offender responsivity related barriers, such as cognitive/intellectual deficits, were not addressed. This last factor, for example, could prevent the offender from understanding the content of the program. Consequently, various offender characteristics must be considered when assigning offenders to treatment programs.

Internal responsivity factors

We can consider responsivity factors as individual factors that interfere with or facilitate learning. The assessment of such factors is the first step in helping us develop the best strategies as to how to best address an offender's criminogenic needs. This, in turn, can ensure that offenders derive the maximum therapeutic benefit from treatment. Therefore, prior to targeting criminogenic needs, it is important that responsivity factors be examined to prepare the offender for treatment.

The responsivity principle dictates that treatment programs should be delivered in a manner that facilitates the learning of new prosocial skills by the offender. Factors that interfere with or facilitate learning can be broken down into internal and external responsivity factors.

Internal factors refer to individual offender characteristics such as: motivation, personality characteristics (i.e., psychopathy, interpersonal anxiety, depression, mental illness, self-esteem, poor social skills) cognitive/intellectual deficits (i.e., low intelligence, concrete-oriented thinking, inadequate problem solving skills, poor verbal skills, low verbal intelligence, language deficits) and demographic variables (i.e., age, gender, race, ethnicity and socioeconomic level) (Bonta, 1995; Van Hooris, 1997).

External factors refer to counsellor characteristics (i.e., some counsellors may work better with certain types of offenders) and setting characteristics (i.e., institution versus community, individual versus group).

Specific internal responsivity factors are represented in most settings. Consideration of gender issues, ethnicity, age, social background, and life experiences may prove to be important for some types of treatment because they contribute to the engagement of offenders into treatment and the development of therapeutic alliance (Dana, 1993). For instance, recent research indicates that women offenders score significantly lower than male offenders on measures of self-esteem and self-efficacy (McMurran, Tyler, Hogue, Cooper, Dunseath, & Mc Daid, 1998). Low self-esteem may be a responsivity factor that needs to be addressed in some women offenders; however, the link between self-esteem and criminal behaviour is weak. Other ways that gender as a responsivity factor can be seen is the concern women express for childcare, men dominating co-ed treatment groups, and women with a history of abuse being subjected to confrontational groups led by male counsellors.

An offender's level of intellectual functioning is an important responsivity consideration. According to Fabiano, Porporino, and Robinson (1991), cognitive skills programs are more effective with offenders of average to high-average intelligence and are less effective with offenders of below-average intelligence.

Similarly, age may be viewed as a responsivity factor. Those who have worked with young offenders, for example, can easily understand the challenge they pose in the delivery of treatment programs (Cady, Winters, Jordan, Solberg, & Stinchfield, 1996). Certainly, the "average" young offender would present different challenges to the effective delivery of a treatment than would be the case for an "average" adult offender. Age, in and of itself however, does not provide the necessary degree of precision required when the assessment of responsivity is the issue. It is important, for instance, to have adequate information on the individual's level of maturity, as this will effect how the individual views the need for change, how he or she relates to others, etc. Age alone does not provide enough information, as maturity level can vary widely within the same general age group (i.e., you may find as much variation in maturity levels within a young offender group as you would between a young offender group and an adult offender group) (Cady et al., 1996).

Using gender and maturity level to provide the context, then, it is easy to imagine how ignoring responsivity factors can result in the inaccurate assessment of an individual's treatment motivation or readiness, and how this may seriously impede an offender's compliance with treatment.

Motivation as a dynamic variable

Motivation may be operationally defined as "the probability that a person will enter into, continue, and adhere to a specific strategy" (Miller & Rollnick, 1991). The traditional view of motivation was very narrow and simplistic. Motivation was defined as a personality characteristic or problem. Thus, motivation was used as an adjective, and the desire to change was perceived as a quality one had or did not have. This view failed to include all the dynamic factors that influence a person's desire to change his or her behaviour, and has been replaced in recent years with a view that emphasizes the complexity of change. The interactionalist view asserts that internal and external factors influence the change process. From this perspective, motivation is seen as an interpersonal process that can be influenced in a positive way by the professional (Miller & Rollnick, 1991).

In this context, motivation is dynamic and, therefore, at least some responsibility falls to the therapist to motivate the offender (Miller & Rollnick, 1991). The counsellor must strive to create effective motivational choices in order to increase the probability that offenders will respond favourably to correctional programming. This includes enhancing offender motivation and dealing with resistant clients after the pre-treatment assessment of treatment readiness.

Most offenders entering treatment are unmotivated and resistant to treatment, and, moreover, most offenders have multiple treatment needs. To further compound the situation, offenders often do not acknowledge that they have problems. Generally they enter treatment because of pressure from external sources, such as family, or to secure an earlier release. Offenders who are resistant to treatment may well require pre-treatment priming (motivational counselling) in order for the formal treatment program to be effective.

Many offenders view their criminal behaviour in an egosyntonic manner. That is, they are relatively unconcerned about their actions, except in terms of legal consequences. Accordingly, offenders often feel coerced into treatment, consenting only because the contingencies for refusing to participate are sufficiently negative. Minimization of the effects of their behaviour on others, denial of responsibility, and rationalization of their law violations are common among offenders. Treatment engagement must address these obstacles, primarily by focusing on therapeutic alliance and assisting offenders to develop a cost-benefit analysis for comparison purposes (Preston & Murphy, 1997). Further, the content, intensity, and style of intervention must be consistent with the offender's current stage in the change process. This complex interaction forms the cornerstone for incorporating motivational interviewing into correctional programming (Miller & Rollnick, 1991). Treatment progress may therefore depend on the match between the offender and type of treatment modality, as well as, the interaction between counsellor and offender. Currently, however, there is little empirical data to indicate the relative contribution of these factors to treatment progress (Serin & Kennedy, 1998). Clearly, there is a need for more research in this area.

External responsivity factors

Correctional Counsellor/Worker Characteristics

Regardless of the therapeutic orientation or the characteristics of the client group, a client is more apt to engage in treatment and treatment is more likely to be effective if a good therapeutic alliance is created (Cartwright, 1980, 1987). For example, many researchers in the general psychotherapy field are of the opinion that the single most powerful predictor of the outcome of psychotherapy is the quality of the therapeutic alliance (Luborsky, Crits-Cristoph, Mintz, & Auerbach, 1988; Najavitis & Weis, 1994).

Unfortunately, there has been considerably less research examining the importance of the relationship between counsellors and offenders. With the exception of the CaVIC (Canadian Volunteers in Corrections) research conducted by Andrews and Kiessling (1980) on characteristics of effective probation officers, and the differential treatment research of Barkwell (1980) there is little systematic research on the quality of the therapeutic alliance and the interaction effects of counsellor and offender characteristics in the field of correctional treatment. This is a much needed area of research, as it has often been found that a group of counsellors working in a common setting and offering the same treatment approach can produce dramatic differences in terms of client attrition and successful outcome. Counsellor attitudes and competence that do not match the aims and content of a program may lower treatment integrity and reduce its effectiveness. The Maudsley Alcohol Pilot Project (MAPP), for example, found that community based generic workers often lacked therapeutic commitment towards their clients which limited their ability to deliver effective treatment (Cartwright, Hyams, & Spratley, 1996).

Appropriate role modelling is also a critical aspect of the counsellor offender relationship. An important role for correctional workers is to function as competent role models. According to Andrews and Bonta (1994), effective workers are able to establish high quality relationships with the client, approve of the client's anti-criminal expressions (reinforcement), and disapprove of the client's pro-criminal expressions (punishment), while, at the same time, demonstrating anti-criminal alternatives (modelling).

Setting Characteristics/Modes of Program Delivery

Some research has suggested that appropriate treatment programs delivered in the community produce two to three times greater reductions in recidivism than appropriate treatment programs delivered in prison (Andrews et al., 1990). There are different issues and constraints for each setting. For example, with institutional and treatment programs in community correctional centres, offenders typically show up for treatment as a much more captive audience. In the community or outpatient settings, the no shows rate is higher, presumably because the client has more freedom to choose. It is important to understand that external factors, in isolation, may not impact on responsivity, but rather those staff characteristics or setting characteristics interact with offender characteristics to affect responsivity, either positively or negatively.

RESPONSIVITY ASSESSMENT MEASURES

Current measures

Although responsivity is clearly identified as the third principle of effective correctional treatment, there is a paucity of standardized assessment measures in existence. The need for a systematic and comprehensive assessment of responsivity and its related constructs (i.e., motivation and treatment readiness) is essential for the successful planning, implementation and delivery of appropriate and effective treatment programs. This is especially true when reintegrating offenders into the community. Many offenders, for example, have a special condition to participate in treatment while under community supervision. For these offenders, the risk assessment clearly indicates the need for treatment to reduce their risk of reoffending. In order to make sound release decisions and enhance the protection of the public by effectively managing the risk that offenders pose; we would want to be able to assess their treatability (level of motivation and responsivity to treatment) prior to releasing them into the community. Simply relying on their self-reported motivation to change is obviously not sufficient, as the veracity of these admissions is questionable. Furthermore, offenders who say they are motivated to change are not necessarily those who present the highest risk of reoffending. In addition, motivation is a dynamic factor and, as such, can change over time and therefore needs to be reassessed over time. Needless to say, this factor is important in the assessment and ongoing measurement of progress in therapy, which, in turn, is critical to effective risk management of offenders in the community (McMurran et al., 1998).

The Client Management Classification (CMC) is a widely used responsivity tool in corrections. This instrument was developed as part of the Wisconsin Risk and Needs Assessment system, and became part of the National Institute of Corrections Model Probation and Parole Project (National Institute of Corrections, 1981). CMC differentiates five offender profiles and prescribes detailed supervision guidelines for each profile. It also facilitates case planning. According to Harris (1994), the goal of the CMC is to "tailor supervision strategies and styles to the characteristics of the offender" (page 155).

By identifying offender characteristics and recommending supervision strategies, the CMC represents an attempt to match offenders and staff based on responsivity characteristics. For example, one type of offender category of the CMC is the Limit Setter (LS). The LS offender is characterized as comfortable with a criminal life-style and long involvement with criminal activities. This individual is often reasonably capable of functioning adequately in society, however, he/she may often minimize or deny personal problems, appear to be unmotivated to use his/her abilities in a pro-social manner, and he/she is manipulative. For this type of offender the CMC recommends that the client-agent relationship be a direct one, with a willingness to confront their failure to comply with the rules. It is also suggested that the agent be on guard to avoid manipulation, and should anticipate hostility from these clients, who resent interference with their lives.

On the other end, the CMC identifies the Environmental Structure (ES) client. Characteristics of this type of offender include a lack of social and vocational skills, and a low level of intellectual functioning. A lack of foresight about consequences of criminal activity and high degrees of impulsivity are common traits. The client-agent relationship with these types of cases would be more giving and caring. A guidance and supportive role would be recommended. The CMC demonstrates the potential of assessing responsivity characteristics.

The Jesness Personality Inventory (Jesness, 1983) is another instrument that can help assess offenders' "personality" traits. This instrument is the second most widely used personality inventory in juvenile court clinics in the United States (Pinkerman, Haynes & Keiser, 1993). The Jesness was designed specifically for use with juvenile delinquent populations both male and female, ages 8-18 (Pinsoneault, 1998). Similar to the Client Management Classification, the Jesness Personality Inventory helps identify offender personality characteristics that can be an obstacle to treatment. Other responsivity factors that should be assessed include intelligence, motivational level, learning disabilities, reading ability, denial/minimisation, interpersonal anxiety, cultural issues, and communication barriers.

The Level of Service Inventory-Ontario Revision (LSI-OR) (Andrews, Bonta, & Wormith, 1995) is the first risk assessment instrument to incorporate a section on "special responsivity considerations". It should be noted that, although the responsivity items are not tallied as part of the risk score or level, they are factors to be considered in the broader case management of the offender, and may indirectly impact on an offender's dynamic risk level. The special responsivity considerations measured by the instrument are: motivation as a barrier, denial/minimization, interpersonal anxiety, cultural issues, low intelligence and communication barriers.

A Model for assessment of treatment responsivity

Prochaska and his colleagues have conducted important research on the process of psychotherapy change (Prochaska & DiClemente, 1986; Prochaska, DiClemente, & Norcross, 1992), in the areas of substance abuse, criminality, and a variety of highrisk health behaviors (Prochaska & DiClemente, 1992). These researchers believed that individuals vary in terms of their stage of readiness for change and, as such, different therapeutic approaches/techniques need to be applied, depending on the individual's readiness to take action. To ensure their intervention is sensitive to the clients' level of readiness, Prochaska developed and validated a self-report measure, the University of Rhode Island Change Assessment (URICA), on various samples. According to this model, individuals in the process of change move through a series of stages prior to changing their problematic behaviour. The five stages of change that have been identified are: precontemplation, contemplation, preparation/ determination, action, and maintenance.

In the *precontemplation stage*, the individual is not considering the possibility of change and does not think he/she has a problem. Individuals in this stage typically perceive that they are being coerced into treatment to satisfy someone else's need. The verbalization typically is "I don't have any problems that need to be addressed. I am only here because my parole officer/partner/ National Parole Board said I had to see a counsellor". Prochaska refers to this stage as "perceived coercion". Anyone working in the criminal justice system knows that, in fact, it is not perceived coercion, it is real. If the offender does not participate in treatment then there is little probability that recidivism can be reduced or that the risk level of the offender can be managed effectively.

The *contemplation stage* is characterized by ambivalence; in other words, individuals may simultaneously, or in rapid alternation, consider and reject reasons to change. At this stage individuals are aware that a problem exists, but are not ready to commit to therapy. The verbalization typically is "I am interested in learning more about this treatment group, but I cannot participate yet because I am just too busy".

The *preparation/determination stage* is characterized by a combination of intention and behavioural criteria. Individuals at this stage may report that they have made some small behavioural changes. Miller and Rollnick (1991) refer to this stage as the window of opportunity, which opens only for a limited period of time, however, clinical experience working with offenders in this stage would suggest that it is not a window, but is at best, a porthole of opportunity.

Individuals in the *action stage* have made a commitment to change and are engaging in actions to bring about change; in other words, they are actively doing things to change or modify their behaviour, experiences, or environment in order to overcome their problems. At this stage they are typically involved in therapy or counselling.

Lastly, individuals in the *maintenance stage* are working hard to sustain the significant behavioural changes they have made and are actively working to prevent minor slips or major relapses. This stage is not static, but rather dynamic particularly when the individual is exposed to high-risk situations. The problem is not that offenders do not change, but rather that they do not maintain the changes. The criteria for assessing someone to be in the maintenance stage are being able to engage in new incompatible behaviour for a period of six months.

This transtheoretical treatment model (Prochaska & DiClemente; Norcross, 1992) highlights the importance of treatment readiness and is consistent with the responsivity concept.

Although the assessment work of Prochaska and his colleagues is evolving, it provides a starting point for our work on the development of a multi-method assessment strategy of treatment readiness and responsivity with offenders (Serin & Kennedy, 1998). Its application to correctional intervention with a wide population of offenders, representing a range of offence types and settings, may well provide the conceptual focus that has been lacking.

Recent developments

A theoretically-based, multi-method assessment protocol for treatment readiness, responsivity and gain was developed in conjunction with the Research Branch of the Correctional Service of Canada (CSC) in order to contribute to the broader literature on effective correctional programming. The intent was to pilot an assessment battery that could be administered in conjunction with a range of correctional programs. Accordingly, the protocol was developed for generic application rather than for a particular type of treatment program (Kennedy & Serin, 1997). This was the first step towards a systematic protocol for the assessment of treatment responsivity in the context of a risk/need management framework, in which treatment is an integral part of the risk management continuum.

The second step is now completed and an interview-based assessment protocol for treatment readiness, responsivity and gain was developed (Serin & Kennedy, 1998). A set of guidelines for counsellors' ratings and a more explicit scoring scheme was establish to maximize reliability. Plans are also underway to develop a training package, to implement the revised protocol with a wide range of correctional programs and to begin to collect data on the assessment protocol.

Pre-treatment responsivity assessment

To augment offender assessment, as well as select and allocate treatment regimes, it would be useful to assess treatment readiness, motivation and treatability in an objective fashion. The veracity of an offender's self-reported motivation to change may be questionable, particularly when he/she is attempting to secure an earlier release and, consequently, such information should never be used in isolation. Some examples of items that should be considered in a responsivity assessment instrument would include whether or not the offender: recognizes he/she has a problem, is able to set treatment goals, is motivated for treatment, accepts responsibility for his/her problems, understands the costs/benefits of treatment, has previously engaged in treatment, (with data on the progress made therein), has access to the support of significant others, support for their involvement in treatment, and is able to express his/her feelings and emotions. Additionally, one may wish to consider the offender's, personal views about treatment providers, his/her sense of selfefficacy in making changes and leading a prosocial life, and if he/she is cognizant of the emotional demands of treatment (Kennedy, 1999).

Personality and attitudinal characteristics

Offenders' personality and attitudinal characteristics are important responsivity factors, as they will impact on the design of a treatment program. Temperamental and personality factors conducive to criminal activity such as grandiosity, callousness, impulsivity, anger problems, egocentrism and poor problem solving skills are all potential responsivity factors to consider, since they can effect an offenders willingness or ability to engage in treatment programs. Attitudinal characteristics that should be assessed include antisocial attitudes, values and beliefs, techniques of neutralization, attitudes towards victims and procriminal associates and isolation from anticriminal others (Kennedy, 1999).

Treatment participation

As indicated earlier, simply relying on offenders' self-report of how much he/she benefited from participation in treatment is insufficient. In a similar vein, program completion, in and of itself, does not provide us with any additional information in terms of how to effectively manage the risk level of the offender. Despite the obvious importance of measuring progress in treatment this has been an oftenneglected aspect of assessment. It is important for staff to measure knowledge of program content, skills acquisition, individual and group disclosure, offender confidence, transfer and generalization of skills to real life situations, insight, attendance, participation, performance and therapeutic alliance (Kennedy, 1999).

Of course, the true effects of responsivity and other (motivational) factors on treatment can only be determined by examining recidivism rates over extended periods of time. If offenders who both acknowledge responsibility for their crimes and attend and actively participate in therapy, have lowered recidivism rates compared to those who do not, then the motivational (responsivity) variables have demonstrated meaning beyond treatment gains measured during, or immediately upon completion of treatment.

CONCLUSION

The principle of responsivity, which includes the appropriate matching of offenders to programs and staff, and the identification of factors that might mediate the effectivness of treatment services, has not been given the attention it deserves. Offenders are not all alike, nor are all staff, settings, or treatment programs. The matching of offenders to treatment, counsellors to offenders, and counsellors to the treatment groups that best match their skills, can improve the effectiveness of correctional intervention. Responsivity should therefore be an important consideration in risk management and risk reduction. Failure to appropriately assess and consider responsivity factors may not only undermine treatment gains and waste treatment resources, but also may also decrease public safety.

Best practices with regard to responsivity starts with good assessment. Knowing an offender's motivation level, cognitive ability, personality traits, and maturity is essential to good case planning. Following assessment, a good case plan takes into account factors related to the treatment settings, the treatment program options and staff characteristics. For example, having a range of treatment settings available (i.e., residential, outpatient, secure, open, etc.) gives the counsellor more options with regard to placing the offender in the most appropriate treatment setting. Finally, understanding the skills and interests of staff should also become part of the case planning process, and will allow for more effective matching of offenders and counsellors. Bonta (1996) suggests that fourth generation risk assessments will, in all likelihood, include the assessment of possible responsivity factors. If we can successfully assess responsivity then we can design even more effective treatment services for offenders in the future. Research has demonstrated that the average reduction in recidivism for appropriate treatment is 25% (Gendreau & Goggin, 1996). Under conditions where responsivity factors are accurately assessed and adequately addressed, we can look forward to a greater number of offenders successfully completing treatment. Consequently, a higher degree of public safety will be achieved through even greater reductions in recidivism.

REFERENCES

- Andrews, D. A., & Bonta, J. (1994). The psychology of criminal conduct. Cincinnati, OH: Anderson Publishing.
- Andrews, D. A., Bonta, J., & Wormith, J. S. (1995). *The LSI-OR: Interview and scoring guide*. Toronto, ON: Ontario Ministry of Solicitor General and Correctional Services.
- Andrews, D. A., Zinger, I., Hoge, J., Bonta, J., Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology*, 28, 369-404.
- Andrews, D. A., & Kiessling, J. J. (1980). Program structure and effective correctional practice: A summary of CaVIC research. In R. Ross & P. Gendreau, (Eds.) *Effective correctional treatment*. Toronto, ON: Butterworths.
- Andrews, D. A., Kiessling, J. J., Robinson, D., & Mickus, S. (1986). The risk principle of case classification: An outcome evaluation with young adult probationers. *Canadian Journal of Criminology*, 28, 377-84.
- Barkwell, L. J. (1980). Differential treatment of juveniles on Probation: An evaluative study. In R. Ross & P. Gendreau, (Eds.) *Effective correctional treatment*. Toronto, ON: Butterworths.
- Bonta, J. (1995). The responsivity principle and offender rehabilitation. Forum on Corrections Research, 7(3), 34-37.
- Bonta, J. (1996). Risk-needs assessment and treatment. In A. T. Harland, (Ed.) Choosing correctional options that work: Defining the demand and evaluating the supply. Thousand Oaks, CA: Sage Publications.
- Brown, M. (1996). Refining the risk concept: Decision context as a factor mediating the relation between risk and program effectiveness. *Crime & Delinquency*, 42, 435-455.
- Cady, M. E., Winters, K. C., Jordan, D. A., Solberg, K. B., & Stinchfield, R. D. (1996). Motivation to change as a predictor of treatment outcome for adolescent substance abusers. *Journal of Child & Adolescent Substance Abuse*, 5(1), 73-91.
- Cartwright, A. (1980). The attitudes of helping agent's toward the alcoholic client: The influence of experience, support, training and self-esteem. *British Journal of Addictions*, 75, 413-431.
- Cartwright, A. (1987). A therapeutic day unit for alcohol abusers. In T. Stockwell & S. Clement (Eds.). *Helping the problem drinker: New initiatives in community care* (pp.121-144). London, UK: Croome Helm.
- Cartwright, A., Hyams, G., & Spratley, T. (1996). Is the interviewers therapeutic commitment an important factor in determining whether alcoholic clients engage in treatment? *Addiction Research*, 4(3), 215-230.
- Dana, R. (1993). Multicultural assessment perspectives for professional psychology. Boston, MA: Allyn & Bacon.
- Fabiano, E., Porporino, F., & Robinson, D. (1991). Canada's cognitive skills program corrects offenders' faulty thinking. *Corrections Today* (August), 102-108.
- Gendreau, P., Cullen F. T., & Bonta, J. (1994). Intensive rehabilitation supervision: The next generation in community corrections? *Federal Probation*, 58, 72-78.
- Gendreau, P., & Goggin, C. (1996). Principles of effective correctional programming. *Forum on Corrections Research*, 8(3), 38-41.
- Harris, P. M. (1994) Client management classification and prediction of probation outcome. *Crime and Delinquency*, 40, 154-174.

- Jesness, C. F. (1983). *Manual: The Jesness Inventory*. Palo Alto, CA: Consulting Psychologists Press.
- Kennedy, S. (1999). Responsivity: The other classification principle. Corrections Today, 6(1), 48.
- Kennedy, S., & Serin, R. C. (1999). Examining offender readiness to change and the impact on treatment outcome. In P. M. Harris (Ed.) From research to results: Effective community corrections (pp. 215-230). Arlington, VA: American Correctional Association.
- Kennedy, S., & Serin, R. C. (1997). Treatment responsivity: Contributing to effective correctional programming. *The ICCA Journal on Community Corrections*, 46-52.
- Luborvsky, L., Crits-Cristoph, P., Mintz, J., & Auerbach, A. (1988). Who will benefit from psychotherapy: Predicting therapeutic outcomes. New York, NY: Basic Books.
- McMurran, M., Tyler, P., Hogue, T., Cooper, K., Dunseath, W., & McDaid, D. (1998). Measuring motivation to change in offenders. *Psychology, Crime, & Law, 4*, 43-50.
- Miller, R., & Rollnick, S. (1991). Motivational interviewing: Preparing people to change addictive behavior. New York, NY: The Guilford Press.
- Najavitis, L. M., & Weiss, R.D. (1994). Variations in therapist effectiveness in the treatment of patients with substance use disorders: An empirical review. *Addiction*, 89, 679-688.
- National Institute of Corrections. (1981). *Model probation and parole management systems*. Washington, DC.

- Pinkerman, J. E., Haynes, J. P., & Keiser, T. (1993). Characteristics of psychological practice in juvenile court clinics. *American Journal of Forensic Psychology*, 11, 3-12.
- Pinsoneault, T. B. (1998). A variable response inconsistency scale and a true response inconsistency scale for the Jesness inventory. *Psychological Assessment*, 10(1), 21-32.
- Preston D. L., & Murphy, S. (1997). Motivating treatment resistant clients and therapy. Forum on Corrections Research, 9(2), 39-43.
- Prochaska, J. O., & DiClemente, C. C. (1986). Toward a comprehensive model of change. In W. R. Miller & S. Rollnick, (Eds.) *Motivational interviewing: Preparing people to change addictive behavior*. New York, NY: The Guilford Press.
- Prochaska, J. O., & DiClemente, C. C. (1992). Stages of change in the modification of problem behaviours. *Progress in Behaviour Modification*, 28, 183-218.
- Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to addictive behaviours. *American Psychologist*, 9, 1102-1114.
- Serin, R. C., & Kennedy, S. (1997). Treatment readiness and responsivity: Contributing to effective correctional programming. Research Report, R-54. Ottawa, ON: Correctional Service of Canada.
- Serin, R. C., & Kennedy, S. (1998). Assessment protocol for treatment readiness, responsivity, and gain: Guidelines for clinician natings. Ottawa, ON: Correctional Service of Canada.
- Van Voorhis, P. (1997). Correctional classification and the 'responsivity principle'. Forum on Corrections Research, 9(1), 46-50.

CHAPTER 6

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While considerable evidence now exists regarding "what works" with respect to offender assessment and treatment practices, recent surveys indicate that very few programs adhere to best practices. This chapter outlines several obstacles to employing best practices, including theoreticism and the failure to effect technology transfer.

Enormous gains in knowledge in the field of corrections have occurred (see Andrews & Bonta, 1998; Cullen & Gendreau, 2000) since Martinson ironically proclaimed in the mid 1970s that "nothing works" (Martinson, 1976).

Well informed corrections professionals can now claim, with a reasonable degree of confidence, that the strongest predictors of criminal behaviour and the most useful risk measures have been determined. Moreover, it is now apparent which types of "treatment" programs produce the greatest reductions in recidivism. While this is a desirable state of affairs and a most useful springboard from which to generate pro-active policies for corrections managers, the sad reality is that much of representative correctional practice bears little resemblance to what we know "works" (Gendreau & Goggin, 2000; Gendreau, Paparozzi, Little, & Goddard, 1993). A recent meta-analysis (Andrews, Dowden, & Gendreau, 1999) reported just 13% of 374 published evaluations of offender treatment programs were based on the principles of effect treatment (i.e., behavioural treatments targeting the criminogenic needs of higher risk offenders). This 13% represents a drop from 20% among studies conducted only a decade or so earlier. Taking the published literature as today's norm, one reads about unstructured programs that target the dubious needs (e.g., personal inadequacy) of lower risk offenders or programs based on simple-minded conceptions of "get-tough" strategies (e.g., electronic monitoring, boot camps). To make matters worse, many programs are delivered in custodial settings where it is difficult to effect behavioural change.

If this is the status of studies in the published literature, what are the conditions "in the real world"? Some assume the worst, that is, effective correctional interventions are virtually non-existent in field settings (Lab & Whitehead, 1990). Gendreau and Goggin (2000) attempted to assess Lab and Whitehead's claim through an evaluation of the quality of correctional treatment programs "in the field" using the *Correctional Program Assessment Inventory* (CPAI) (Gendreau & Andrews, 1996; soon to be revised as the CPAI — 2000). Unfortunately, a strong majority of programs did not receive a "passing grade". Some of the major weaknesses were inadequate assessments, unspecified treatments, a lack of suitable staff qualifications and training, and programmers' lack of awareness of the "what works" literature (Gendreau & Goggin, 2000).

The reasons for the above-noted scenarios are patently obvious. Many correctional policy makers and managers, particularly in the United States, took Martinson's (1976) proclamation to heart, embracing the new epoch of sanctions as the next "holy grail". Certainly, the socio-political context of that time was favourably disposed to adopting Martinson's proposed view (Cullen & Gendreau, 1989). Others have argued that the correctional system is simply a profit-making enterprise (Shichor, 1995) wherein the incentive to reduce crime through treatment is non-existent. More substantial profits are more easily generated through the construction and operation of additional prisons. Then, there is the assumption by some pundits, policy makers, and politicians that the court of public opinion favours a punitive policy — an impression which, by the way, is not supported by the data (Cullen, Fisher, & Applegate, 2000) — thus providing more support for the use of "get tough" strategies.

How can this paradox be resolved? That is, will there ever be congruence between the "what works" evaluation literature and actual correctional practice? Let us not be naïve; the expectation that social policy in North America in general, and corrections in particular, is primarily driven by the results from objective, valid, replicated experiments (i.e., the "experimenting society", Campbell, 1969) has been shown to be frightfully gullible (Gendreau & Ross, 1987). But is it too much to expect that, despite the power of common-sense political ideologies, the media, and the North American predilection to rule by market forces, we can aspire to at least a modest correlation between solid experimental evidence and correctional policy? We think not. If we could ensure a hit rate of even 20%-40% between evidence and policy, it would mean that correctional policy would be more rational and cost-effective. It would also pre-empt the cyclical pattern of quick fix solutions or "panaceaphilia" to which we have so readily self-prescribed (Gendreau, 1999; Gendreau & Ross, 1979). Thus, in order to approximate the ideals of the experimenting society we need to address the following issues.

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WHAT NEEDS TO BE DONE

Included among the major obstacles are the theoreticism that exists at the scholarly and policy-making levels, the difficulties in effecting technology transfer from the "experts" to managers and practitioners, and the lack of suitable training programs (Gendreau, 1996).

Theoreticism

The practice of theoreticism involves the acceptance or rejection of knowledge relative to one's personal values and experiences (i.e., intuitionism) (Andrews & Bonta, 1998; Gendreau, 1995). Methods of inquiry that are rooted in positivism and inductive reasoning are disparaged. Theoreticism is further complicated by a confusing array of sometimes bewildering value systems among the several disciplines (e.g., criminology, economics, law, management, psychiatry, psychology, social work, and sociology) and occupations (academics, administrators, clinicians, and police) who compete for intellectual hegemony in the criminal justice field (Gendreau & Ross, 1979). Theoreticism is characterized by a profound anti-intellectualism that takes the form of a lack of interest in and/or respect for other sources of knowledge and may be construed as operating in three ways. These include paradigm passion and ethnocentrism, knowledge destructions, and the "MBA" management syndrome (Gendreau, 1999; Latessa & Holsinger, 1998).

Paradigm passion and ethnocentrism

Paradigm passion refers to the realities of the world of work, which often can be quite limited. First, our training, by necessity, is narrowly focussed. Most of us associate intimately with very few colleagues, mainly those from the same social and training background. The mandates of our work settings often impose filters on our professional outlook. For example, we work in a setting in which all of our colleagues have a strong behaviourist orientation; we are exposed only rarely to contrasting viewpoints on human nature. Embracing ideas and activities that are orthogonal to what is considered *au courant* by the field receives little reinforcement.

Ethnocentrism evolves out of paradigm passion. That is, once we fall into the trap of believing that our disciplinary boundaries and the socio-political context we live in adequately define how things should be, then it is a very small step to tacitly assuming that our reality is indeed superior to others.

For example, we have witnessed expressions of bewilderment on the faces of psychologists after suggesting that one should keep abreast of criminological journals. They were seemingly oblivious to the fact that some criminological and sociological theories (e.g., differential association) have something useful to say about the prediction and treatment of offenders. As a result of reviewing some of the evidence contributed to the American Psychological Association's Commission on Violence and Youth, the first author was struck by the fact that psychologists dealing with juvenile offenders seemed blind to the supporting literature emanating from the adult domain. Similarly, drug abuse treatment evaluators have, with few exceptions, ignored the corrections literature (Gendreau, 1995). All of this is unfortunate, given that the predictors of antisocial behaviour and the principles of effective treatment for juvenile and adult offenders correspond highly, and it is difficult to distinguish between the clientele served by the criminal justice and substance abuse systems.

These examples may also be seen as evidence of a subtle form of ethnocentrism. More blatant examples of ethnocentrism are the fact that some American reviews on treatment effectiveness almost never reference the literature from foreign countries where different approaches to the "crime problem" have been implemented (e.g., less incarceration). Regrettably, there have been occasions where foreign contributions are derogatorily referenced (or worse, not referenced at all) in order, we are surmising, to validate current policies (i.e., punishment rather than rehabilitation) (see Gendreau, Smith, & Goggin, 2001).

Paradigm passion and ethnocentricism can lead to antiintellectual consequences of staggering proportions. For example, one of the singular features of ineffective treatment strategies is punishing-smarter programs (Gendreau et al., 1993). One would think that program designers and evaluators in this area would have attended to the vast experimental and human behaviour modification literature on punishment and the social psychological research on persuasion and coercion, which provide a convincing rationale as to why punishing-smarter programs should not work. There are, collectively, about 30,000 references covering these two areas. In the entire punishing-smarter literature, just two of these have ever been cited (Gendreau, 1996).

Knowledge destruction

Knowledge destruction is a deliberate and conscious attempt to ignore or dismiss competing findings. This has been a longstanding problem in the offender prediction and treatment literature (Andrews & Wormith, 1989), the reason being that the underlying support for prediction and treatment initiatives arises more from psychobiological conceptualizations of behaviour than from the social structure perspectives favoured by the disciplines of sociology and criminology. Psychobiological perspectives have been ridiculed on both moral and professional grounds. For example, some criminologists (e.g., Gibbons, 1986) have claimed that the consequence of psychobiological perspectives is repression and terror. Hirschi and Hindelang (1977) have remarked that the primary motive for dismissing disciplines such as psychology is, basically, the protection of the profession of sociology.

A number of arguments have been generated by knowledge destruction proponents to support anti-prediction and treatment views (see Andrews & Bonta, 1998), and can be generally classified within two types (Gendreau, 1995). The first of these arguments concerns methodology and claims that any prediction/treatment study can easily be dismissed because it relies on imperfect theory; fails to rule out other explanations of the results; has possible errors in measurement; and its reported effects are either not large enough or are due to statistical gymnastics. The second type of argument is more ideological in nature and takes three forms. These are: social problems are intractable, and to think that they can be successfully addressed is to live in a chimerical and utopian world; treatment involves a monopoly of values and requires more control than absolute freedom; and the results found today regarding treatment effectiveness will be irrelevant in the future because of changes in the social context. Obviously, no study can escape the above critiques unscathed. Knowledge destruction arguments will win out every time.

The MBA management syndrome

The final form of theoreticism is the MBA management syndrome in criminal justice (Gendreau, Goggin, & Smith, 2000). Over the years, in government in general and criminal justice in particular, we have witnessed a new generation of high-level corrections administrators who are generalists with little or no training in the helping professions and none in the prediction and treatment of criminal behaviour (Gendreau et al., 2000). It seems that the primary qualification for administrators nowadays is general management experience. It also helps to be a political appointee. And among this new breed of administrator, the few who are well-versed in correctional issues rarely stay long in the job.

In our opinion, the "nothing works" credo has also encouraged the MBA management syndrome. Struckoff (1978) was prescient when he predicted that, in the face of "nothing works", correctional systems without well-trained professionals would basically become fraudulent. With the demise of rehabilitation, the system is being driven by content-free administrators susceptible to political whim in having to embrace the latest panacea. Fortunately, at the federal level in Canada, the Correctional Service of Canada has not fallen prey to such an insidious development (Gendreau et al., 2000, p. 53).

Although theoreticism is anathema to empiricism, a remedy may be forthcoming from what appear to be, at face value, two more barriers. They include issues of technology transfer and training.

Technology transfer

Technology transfer means getting the necessary information into the hands of those who most need it. Unfortunately, the data in this regard indicates that such information is typically not getting into the hands of practitioners. As a case in point, when it comes to substance abuse treatment programs, it has been reported that neither management policies nor the clinical decision process is based upon readings from professional periodicals (Backer, David, & Soucy, 1995). If practitioners do receive information that mediates their approach to treatment, it tends to come from workshops, and, even then, it is only a relatively small percentage among them who profit. We suspect that this problem is not unique to substance abuse programs.

Nonetheless, there is room for a modicum of hope. There are a few measures and intervention strategies now available to programmers, trainers, and policy makers to better effect technology transfer (Backer et al., 1995; Backer, Liberman, & Kuehnel, 1986). Both Andrews and Gendreau, in common with other *Compendium* contributors, have been involved in technology transfer at the organizational and practitioner levels, in prison, parole, community corrections, and policy settings. In 1979, we reported on our first 19 attempts at technology transfer (Gendreau & Andrews, 1979), and presently we have several dozen case studies in our files. The following guidelines are based on our retrospective and subjective judgements of the conditions associated with successful attempts at technology transfer. Success, defined as having a new program still operating two years after our technology transfer intervention, occurred when:²

- we were action-oriented and worked "hands on" with staff until they felt secure enough to take over
- the agency had a senior administrator who championed the new initiatives (or if not, we identified such a person and cultivated his/her interest)
- we ensured that the socio-political and program values of the agency were congruent with those of ourselves (as change agents)
- the new initiatives were cost-effective and sustainable.

Such activities, however, are not in themselves sufficient to ensure technology transfer. The opportunity to directly bring about changes in service delivery demands that the knowledge be accessible in the first place. In order to ensure that it is, one must continuously be available to provide workshops, make nonacademic conference presentations, encourage responsible media coverage (including being amenable to media appearances), publish newsletters, and use professional associations to lobby for changes within government bureaucracies, private sector organizations, and the body politic.

Training

There are precious few training programs available for people interested in offender treatment. None of the national-level training institutes in the United States specializes in treatment, although they occasionally contract out to experts in the area. No training institutes of this kind exist in Canada. There are several academic-based training programs in the field of law and psychology in the United States, but when we consulted the most recent American Psychological Association graduate training guidelines, only a handful of possibilities for extensive training in clinical work in corrections could be identified.

 $^{^2}$ For a more complete description of the factors involved in this area consult Gendreau, Goggin, and Smith (1999).

Yet, even limited exposure can result in measurable impact. For example, implementation of just one program and/or the work of two or three individuals can have a meaningful effect. Some years ago Andrews and Gendreau (1976) initiated an undergraduate training program for corrections, that produced graduates who later went on to work in the field. Psychologists have recently established forensic/law/corrections programs in Ontario and British Columbia (Simourd & Wormith, 1995). We are already reaping the benefits of these programs at the clinical and scholarly levels. That is, criminal justice presentations at the Canadian Psychological Association's annual conferences have increased dramatically in the last five years, and some of the new generation of psychologists are continuing to make research and clinical contributions a priority.

The Department of Justice in New Zealand followed a recommendation (Gendreau & Simpson, 1986) to establish jointly funded government-university training links in correctional psychology. It comes as no surprise that this sort of development, along with the enlightened leadership of psychologists in their Department of Justice, coincides with the fact that correctional psychology is a vibrant discipline in that country and is contributing data that are having an impact on criminal justice policy in that country. Finally, rehabilitation research and practice is beginning to flourish in parts of Germany and Great Britain through the work of a few thoughtful and dedicated psychologists (e.g., Farrington, Hollin, Lösel, McGuire, & Thornton).

In closing, we remain impressed by the fact that most service providers are keen on upgrading their clinical skills. We must give them every opportunity to do so, for it is at this level that change must occur if we are to generate more effective correctional practice.

REFERENCES

- Andrews, D. A., & Bonta, J. (1998). The psychology of criminal conduct (2nd ed.). Cincinnati, OH: Anderson Publishing Company.
- Andrews, D. A., Dowden, C., & Gendreau, P. (1999). Clinically relevant and psychologically informed approaches to reduced reoffending: A meta-analytic study of human service, risk, need, responsivity, and other concerns in justice contexts. Unpublished manuscript. Ottawa, ON: Carleton University.
- Andrews, D. A., & Gendreau, P. (1976). Undergraduate training and correctional service. *Professional Psychology*, 7, 21-30.
- Andrews, D. A., & Wormith, J. S. (1989). Personality and crime: Knowledge destruction and construction in criminology. *Justice Quarterly*, 6, 289-309.
- Backer, T., David, S., & Soucy, G. (Eds.), (1995). Reviewing the behavioral science knowledge base on technology transfer (NIDA Research Monograph 155). Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, National Institute of Health.
- Backer, T. E., Liberman, R. P., & Kuehnel, T. G. (1986). Dissemination and adoption of innovative psychosocial interventions. *Journal of Clinical and Consulting Psychology*, 54, 111-118.
- Campbell, D. T. (1969). Reforms as experiments. American Psychologist, 24, 409-428.
- Cullen, F. T., Fisher, B. S., & Applegate, B. K. (2000). Public opinion about punishment and corrections. In M. Tonry (Ed.), *Crime and justice: A review* of research (vol. 27, pp. 59-137). Chicago, IL: University of Chicago Press.

- Cullen, F. T., & Gendreau, P. (1989). The effectiveness of correctional treatment: Reconsidering the "nothing works" debate. In L. Goodstein & D. MacKenzie (Eds.), *The American prison: Issues in research and policy* (pp. 23-44). New York, NY: Plenum Press.
- Cullen, F. T., & Gendreau, P. (2000). Assessing correctional rehabilitation: Policy, practice, and prospects. In J. Horney (Ed.), *NIJ criminal justice 2000: Changes in decision making and discretion in the criminal justice system* (pp. 109-175). Washington, DC: U.S. Department of Justice, National Institute of Justice.
- Gendreau, P. (1995). Technology transfer in the criminal justice field. In T. Backer, S. Davis, & G. Soucy (Eds.), *Reviewing the behavioral science knowledge base on technology transfer* (pp.198-208). (NIDA Research Monograph 155). Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, National Institute of Health.
- Gendreau, P. (1996). Offender rehabilitation: What we know and what needs to be done. *Criminal Justice and Behavior, 23,* 144-161.
- Gendreau, P. (1999). Rational policies for reforming offenders. ICCA Journal on Community Corrections, 9, 16-20.
- Gendreau, P., & Andrews, D. A. (1979). Psychological consultation in correctional agencies: Case studies and general issues. In J. J. Platt & R. W. Wicks (Eds.), *The psychological consultant* (pp.127-212). New York, NY: Grune & Stralton.
- Gendreau, P., & Andrews, D. A. (1996). Correctional Program Assessment Inventory (CPAI) (6th ed.). Saint John, NB: University of New Brunswick.
- Gendreau, P., & Goggin, C. (2000). Correctional treatment: Accomplishments and realities. In P. Van Voorhis, M. Braswell, & D. Lester (Eds.), *Correctional counseling and rehabilitation* (4th ed., pp. 289-297). Cincinnati, OH: Anderson Publishing Company.
- Gendreau, P., Goggin, C., & Smith, P. (1999). The forgotten issue in effective correctional treatment: Program implementation. *International Journal of Offender Thenapy and Comparative Criminology*, 43, 180-187.
- Gendreau, P., Goggin, C., & Smith, P. (2000). Generating rational correctional policies: An introduction to advances in cumulating knowledge. *Corrections Management Quarterly*, 4, 52-60.
- Gendreau, P., Paparozzi, M., Little, T., & Goddard, M. (1993). Does "punishing smarter" work? An assessment of the new generation of alternative sanctions in probation. *Forum on Corrections Research*, 5(3), 31-34.
- Gendreau, P., & Ross, R. R. (1979). Effective correctional treatment: Bibliotherapy for cynics. *Crime and Delinquency*, 25, 463-489.
- Gendreau, P., & Ross, R. R. (1987). Revivification of rehabilitation: Evidence from 1980s. Justice Quarterly, 4, 349-407.
- Gendreau, P., & Simpson, G. (1986). *Ministerial review of psychological services*. Wellington, New Zealand: Department of Justice, Government Printers.
- Gendreau, P., Smith, P., & Goggin, C. (2001). Treatment programs in corrections. In J. Winterdyk (Ed.), *Corrections in Canada: Social reaction to crime* (pp. 238-265). Scarborough, ON: Prentice-Hall.
- Gibbons, D. C. (1986). Breaking out of prisons. *Crime and Delinquency*, 32, 503-514.
- Hirschi, T., & Hindelang, M. J. (1977). Intelligence and delinquency: A revisionist review. American Sociological Review, 42, 571-587.
- Lab, S., & Whitehead, J. (1990). From "nothing works" to the "appropriate works": The latest step in the search for the secular grail. *Criminology*, 28, 405-417.
- Latessa, E., & Holsinger, A. (1998). The importance of evaluating correctional programs. Assessing outcome and quality. *Corrections Management Quarterly*, 2, 22-29.
- Martinson, R. (1976). California research at the crossroads. In R. Martinson, T. Palmer, & S. Adams (Eds.). *Rehabilitation, recidivism and research* (pp. 63-74). Hackensack, NJ: National Council on Crime and Delinquency.
- Shichor, D. (1995). Punishment for profit, private prisons/public concerns. Thousand Oaks, CA: Sage Publications.
- Simourd, D., & Wormith, S. (1995). Criminal justice education and training: A survey of Canadian graduate schools of psychology. *Canadian Psychology*, 36, 1-8.
- Struckhoff, D. R. (1978). Deprofessionalizing corrections is bad business. Offender Rehabilitations, 2, 333-338.

CHAPTER 7

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This chapter presents current findings related to program implementation and the replication of successful programs. It provides major findings from the meta-analyses in the context of their significance to implementation issues. Meta-analyses have assisted in developing a science of criminal conduct. Such a science draws not only linking factors that help in the understanding of criminogenic risk levels of certain individuals — nature and strength — but also on the literature regarding treatments or systems of service delivery that can promote effective outcomes in correctional practice.

Also outlined are the six organizational requirements that are necessary to support successful implementation efforts. These requirements include: sincere motivation at implementation; support at the top of leadership and each group whose co-operation is required for implementation and use; staff competence; a cost-benefit surplus; clarity of goals and procedures; and, clear lines of authority.

This chapter provides examples of measures of treatment adherence and program compliance, as well as four examples of innovations in communication, and discusses the policy relevance in corrections of successful implementation and the future research efforts in this area.

TECHNOLOGY TRANSFER IN THE HUMAN SERVICE FIELD

The transfer of knowledge in the social and human services from what has largely been an academic-based knowledge to applied settings is challenging not only to correctional professionals, but also to practitioners in a variety of human service settings. The literature chronicles numerous examples of programs that were either well conceived or poorly implemented or well implemented but poorly sustained (Bauman, Stein, & Ireys, 1991). Of course, there is also the suspicion that the failure to implement or sustain programs that have demonstrated effectiveness in research may be tied to the more insidious, cynical intentions of some policy and program "experts". This has more to do with the unwillingness of such administrators to disavow the knowledge base in a given area and indeed purposefully undermine the integrity of that knowledge. Andrews and Bonta (1998) refer to this intentional undermining as knowledge destruction, a fact identified in both the young offender (Leschied, Jaffe, Andrews, & Gendreau, 1995) and substance abuse literature (Gendreau, 1996). Techniques of knowledge destruction are characterized by the seeming sophistication of argument in using scientific principles to negate scientific fact. Erstwhile, the use of such techniques belays the negative beliefs and attitudes on the part of these commentators. Reductionism is the essence and dismissal is the intent. In the beginning, a careful reading of what is known about successful programs is paramount to successfully planned program implementation.

In an excellent review of the lessons learned from the literature on successful program implementation, Shore (1988) noted that the implementation of programs is "shaped by powerful forces" that are not easily modified even by "new knowledge". Indeed, Shore's summary include the necessity of a climate that is "created by skilled, committed professionals respectful and trusting of the clients they serve, *regardless* of the precepts; demands and boundaries set by professionalism and bureaucracies". The necessity of providing caring programs, that are coherent and easy to use, providing continuity and circumventing the traditions of limiting professional and bureaucratic limitations were absolutely the prerogative of such effective programs. Gendreau (1996) would add that a senior advocate in an organization who is willing to champion the cause of such a program is an essential ingredient as well.

Powerful forces as Shore calls them are certainly at work in the correction field when it comes to transferring knowledge to practice on a broad scale. Political beliefs that have shaped correctional practice have in many cases been antagonistic to the lessons learned from the literature on effective corrections. Deterrence, sanctions and punishment-based correctional practices and policies have been pre-eminent in the last two decades. This is despite what Palmer (1996) amongst others indicates has been a failure of such programs to demonstrate reductions in offending. Yet, juxtaposed to this emphasis on punishment reflected in correctional policy has been the extraordinary growth in knowledge in the area of effective treatment.

THE NECESSITY OF A KNOWLEDGE-BASED APPROACH

Cullen et al. (1998) cite data suggesting that there continue to be many both within and without the corrections profession who have failed to recognize the growing literature on effective treatment with offender populations. Despite this disappointing lack of awareness, the literature continues to grow, documenting not only progress in regards to the accumulation of evidence of effective interventions, but also the summaries from numerous meta-analyses that now speak to the *patterns* of effectiveness being

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documented *across* studies. Several researchers and practitioners now speak about the need for examining technology transfer; the application of what research has suggested can be effective and translating that knowledge into routine correctional practice.

Coupled with the move to monitor and measure adherence, is the growing emphasis on *dissemination* of information regarding effective programs. Training is pivotal, combining both the communication of program findings along with the kinds of support and consultation required to insure the effective replication of those programs. Some of the more well articulated interventions such as Multi-Systemic Therapy (Henggeler et al., 1998) are currently developing, along with field input and support, detailed practitioner and supervisor manuals that can assist successful dissemination. Although it must be acknowledged that such higher-level dissemination efforts that are also being evaluated are still relatively rare in the human services and correction field.

OVERVIEW OF MAJOR FINDINGS FROM THE META-ANALYSIS

In mid and latter 1970s, reviews of the program literature in corrections contributed to an extraordinary discussion that became the touchstone to a generation of corrections professionals. The nothing works debate as it is been popularly known, not only became a matter for social scientists to consider, but also played into the hands of policy makers and politicians in criminal justice. Depending upon their particular political leaning, decision makers used the results of such reviews to either proclaim the failure of rehabilitation, thereby perhaps unwittingly heralding the expanded use of get tough measures, or used them to develop the growing science of prediction and treatment in the corrections field. Followers of the debate will now be familiar with the names of Martinson (1976) in the United States and in Canada, Shamsie (1981) whose titles of qualitative reviews of the literature so provocatively proclaimed that "Nothing Worked" and that "Our Treatments Do Not Work: Where Do We Go From Here". And with each provocation, there was a Paul Gendreau, Robert Ross (1979) or Ted Palmer (1996) who suggested that a more careful reading of the outcome literature would provide "Bibliotherapy for Cynics".

Two decades have now passed, and with more sophistication in providing *quantitative reviews* of the prediction and outcome literature, meta-analyses have assisted in developing a *science of criminal conduct*. Such a science draws not only on linking factors that help in the understanding of *criminogenic risk levels* of certain individuals — nature and strength — but also on the literature regarding treatments or systems of service delivery that can promote effective outcomes in correctional practice.

Contributions from the meta-analyses

There have been a number of contributions to the meta-analysis on correction treatment. Perhaps the most well known are those authored by Andrews and his colleagues (1990) and by Lipsey (Lipsey & Wilson, 1995; Lipsey, 1995). Technical understanding of the approach taken by these authors will not be provided here. Suffice to say that the quality and nature of the meta-analyses that are reported reflect the quality and number of the studies in the field. Hence, the nature and quality of knowledge could not have been achieved and reported on by Andrews and Lipsey were it not for the efforts of so many who contributed to that knowledge base. Indeed, Leschied and Cunningham (1999) report that the accumulation of published accounts of outcome studies in the youth corrections field has *more than tripled* in the past ten years when compared to the years prior to 1988.

Major assessment issues

Both cross-sectional and longitudinal studies have identified factors that link past or current conditions with individuals that place them at increasing risk for criminogenic involvement. Andrews and Bonta (1998) summarize that these studies support a social-psychological understanding of criminogenic risk. That is, individuals may cognitively process certain conditions in their environment that develop or reward certain styles or content of thinking that are reflected in anti-social behaviour. Those system variables that influence risk to a greater extent includes families of origin, peer associates and school or working conditions. Data has also supported the link between antisocial behaviour with substance use in the understanding of crime cycles (Huizinga, Menard, & Elliott, 1989). Measures of those factors that contribute most significantly and seem to be attracting the greatest attention in the literature include multifactored indicators as measured by the Level of Service Inventory (Andrews & Bonta, 1998), criminal sentiments (Simourd & Van de Ven, 1999) and psychopathy (Hare, 1991).

Accurate and relevant assessment of criminogenic risk is tied to the major outcomes from the meta-analysis on effective treatment. While Lipsey has identified the major general contributors to successful correctional programs, Andrews et al.'s principle contribution rests in the refining of understanding regarding the appropriate target of intervention. While Lipsey's results were encouraging regarding the average effect sizes supporting reductions of 10 to 30 per cent in reoffending within particular types of programming (i.e., behavioural over psychodynamic), Andrews' findings that certain program components targeted to specific criminogenic risk factors — referred to as clinical relevance — could improve outcomes by an even greater extent. Hence, Andrews articulated the risk principle of case classification as a critical component of effective service thereby linking assessment with service delivery in the overall approach to effective correctional treatment. These findings therefore suggest that assessment of appropriate risk relevant to criminal justice involvement is a necessary and fundamental part of successful program implementation.

GENERAL CONSIDERATIONS FOR SUCCESSFUL IMPLEMENTATION

As with any change of strategy in human service, the complexities of factors that need to be addressed in promoting a shift in correctional practice may seem daunting if not absolutely overwhelming to an initiator of program change. Ellickson and Petersilia (1983) identified six principle organizational considerations that were necessary in initiating program implementation in corrections. They included:

- sincere motivation at implementation;
- support at the top of leadership and each group whose co-operation is required for implementation and use;
- staff competence;
- ♦ a cost-benefit surplus;
- clarity of goals and procedures;
- ♦ clear lines of authority.

In addition, program shifts for implementation in corrections requires the support of both legal and non-legal stakeholders in the community. The courts, as in conflict with the rule of law, may see what may make sense from a program perspective. For example, if justice is seen as too individualized, i.e., sanctions are not seen as proportionate given the nature of the offending, the rule of law may be perceived as under-mined because of the inequity of the severity and nature of the sanction. Clarity in the purpose and role of the courts and other law-related forums need to be seen as complementary to the role and purpose of correctional programs. We can find a progressive example of this type of thinking in the evolution of the declaration of principle in the *Young Offenders Act* in Canada. Since revisions in 1989, the Act has considered the goal of community safety as a coincidental pursuit in addressing the needs and circumstances of the young offender.

CONTEXTUAL ISSUES IN SUCCESSFUL IMPLEMENTATION

Experience in North America over the past two decades has reflected the trend towards incarceration as the correctional policy of choice. Trends in support for incarceration, coupled with the legacy of the nothing works conclusions of reviewers of correctional programs in the early and mid 1970s, created considerable challenges to implement programs that were not predicated simply on adding to the incarceration rate. In many respects, findings from program reviews suggesting that the community was the preferred context in which to deliver effective programs. Hence, development of trends such as intensive probation supervision programs was a tough sell, even though evidence suggested their abilities to influence offending rates. There are two important factors to be considered. The first is to have an awareness of the extant literature on effective practice; to be aware of what is possible in delivering a successful program, and to not oversell the effects of even successful programs. While the general outcome literature is now reporting reductions in offending ranging from 20 to 40 per cent (Andrews

et al., 1990; Lipsey & Wilson, 1998) there are some areas of correctional practice where data has not supported claims of effectiveness. One such area is related to outcomes with psychopathic individuals.

The second critical consideration in promoting program implementation is knowledge of willingness, and level of acceptance of policy makers, correctional professionals, and the immediate community to accept a shift in policy. Petersilia as cited in Harris and Smith (1996) suggests, *"Unless a community recognizes or accepts the premise that a change in corrections is needed, is affordable, and does not conflict with its sentiments regarding just punishment, an innovative project has little hope of surviving much less succeeding".*

Community versus residential context for treatment

While there seems to be some minor variations in interpretation of the effects of the immediate context to support implementation of programs, as a general statement, community contexts seem more able to support effective outcomes when compared to programs delivered in residential contexts (Andrews & Bonta, 1998). Henggeler and his colleagues argue that treating high risk youth in the community is a more ecologically valid approach to assess and treat them since it allows for an increased opportunity to work directly with the systems that are both influencing and being influenced by the behaviour of their families and peers. Hoge, Leschied, and Andrews (1993) in a study on the components in young offender programs found that factors in agreement with items related to effective correctional practice were more likely to be identified in community programs than in residential programs.

EMPIRICAL FINDINGS RELATED TO IMPLEMENTATION

The evolution of research development in the correction field has only recently emphasized the importance of providing outcome evaluation as a standard in service delivery. Indeed one of the somewhat surprising findings reported in Andrews et al. is the fact that programs that were being evaluated *by those charged with their implementation* were actually characterized through their outcomes as more effective than those that were not being as closely monitored. Hence it would seem that evaluation could also be characterized as a factor in successful implementation. Monitoring for program implementation however has not met with the same level of development. This section will highlight two examples of implementation evaluation which serve to assist in understanding programs that are relatively successful in identifying effective implementation strategies.

Treatment adherence

For any experienced corrections professional, it will come as no surprise that implementation, while critical, is only a part of any success story. The real challenge arises in trying to implement a program consistent with the components reflecting an effective strategy — referred to as program integrity (Andrews & Hill, 1990) and to support those factors that can sustain a program after it has shown itself to be effective.

Multi-systemic therapy

Henggeler and his associates at the Medical University of South Carolina have turned their attention not only to program contents that are effective with high-risk youth, but also to those factors that can sustain an effective program over the longer term.

A brief overview of Multi-systemic therapy (MST) suggests that a therapeutic focus on certain systemic factors within the lives of highly conflicted youth will be rewarded with significant reductions in youth criminal activity. Results from Henggeler et al. (1997) revealed that while some treatment gains were sustained in some youths, others were not. Further analysis by the authors indicated that program sustainability was tied to the presence of certain therapist/program characteristics that in turn characterized specific components of the MST model. The conclusion of this study suggested that to achieve sustainability of positive outcomes from intervention, adequate and on-going training and consultation was necessary. Further, these authors developed the Therapist Adherence Measure (TAM) which consists of 26 items that ask family members to rate their therapist on items that would reflect consistency of the intervention with the principles of MST. Computer scoring with the TAM allows for a relatively short turn around time to provide a quantified summary to the therapist and their supervisor regarding how consistent the intervention was provided on a case by case basis. Data suggests that therapist adherence is positively correlated with client outcomes. The development of similar adherence measures particular to a given intervention is possible given clearly identified and well articulated aspects of the nature of the intervention and type of service delivery.

Program compliance

While studies such as with MST examine treatment adherence at the therapist level, another line of investigation recommends evaluating a program's ability to comply with pre-set conditions that *evidence has suggested* are consistent with overall components of effective programs.

Correctional Program Assessment Inventory

The Correctional Program Assessment Inventory (CPAI) (Gendreau & Andrews, 1996) is an inventory developed out of the meta-analysis literature on effective programs. It consists of seventy-five items covering eight components critical to the understanding of what constitutes an effective program, along with two areas that are considered integral to effective programs, namely emphasis on evaluation and ethical considerations. The components consist of: program implementation, client pre-service assessment, program characteristics, staff characteristics, evaluation and other (i.e., ethical consideration). All of the components and the questions asked of programs consist of factors influenced by the reviews of the effective correction literature. Table 7.1 summarizes the eight components of the CPAI.

Scale	Scale description
Program	Surveys the conditions under which
implementation	the program was introduced.
Preservice assessment	Surveys applications of the principle
	of risk, need and responsivity.
Program characteristics	Assesses targeting of criminogenic
	factors and the use of cognitive
	behavioural techniques.
Therapeutic integrity	Surveys service delivery, emphasising
1 0 7	intensity and matching conditions.
Relapse prevention	Surveys extent to which programs
	focus on post-release programs.
Staff characteristics	Surveys staff and training issues.
Evaluation	Examines the extent to which the
	system emphasizes/encourages
	research and evaluation activities.
Other	Assesses emphasis on ethical concerns
	and security of program funding.

TABLE 7.1 Summary of the CPAI components

In a review of young offender programs in one jurisdiction, Hoge, Leschied, and Andrews (1993) examined over one hundred programs measured by the extent and nature of components on the CPAI. Data reflected the range of program components that were available and where they tended to reside suggesting that the presence of programs with higher scores on the important scales from the CPAI tended to be in the community as opposed to custody. Further analysis using a measure such as the CPAI can identify training and staff needs, movement of service from residential to community approaches in capitalizing on the strengths of certain programs. While the authors would defer that measures such as the CPAI should not be held as a "gold standard", nonetheless, such a measure holds promise in assessing programs on a broad scale.

ISSUES IN DISSEMINATION AND TRAINING

As programs generally, and correctional programs in particular move to higher levels of accountability, the movement towards standards of practice and compliance reviews will be encouraged. Indeed, in the next two years, Correctional Service Canada will be moving towards adopting a set of standards to guide the content and delivery of programs. The increasing challenge therefore will be to move the developing knowledge to the field in order to implement effective correctional practices, and to look to innovative ways to communicate this knowledge in order to support change at the policy and practitioner level. These four innovations in communication in corrections are worth note as examples:

- ♦ RCJNet is a list serve website that communicates to numerous correction processionals about knowledge in the correction field. The service provides website links, summaries of recent justice documents, or summaries of research that may be of interest. Using latest technology, RCJNet serves as a clearinghouse for current correctional information. The Office of Juvenile Justice and Delinquency Prevention out of Washington DC serves a similar purpose in the United States in making current documents available on line for wide spread dissemination.
- The National Institute of Justice has initiated a distance education program providing learning opportunities to correctional professionals through a system of centres connected through satellite-linked communications systems. From a single source, unlimited numbers of practitioners and policy makers across a limitless geographic area can interact with the leaders in the field in hearing of new program or policy ideas.
- ◆ The London Family Court Clinic, along with Multi-Systemic Therapy (MST) Services Incorporated in Charleston, South Carolina, has developed an interactive website that links MST teams across North America and Europe. Practitioners using MST are able to communicate with one another with respect to promising therapeutic approaches or clinical issues that may arise in the course of service delivery. Recently, the development of a MST clinical team in Norway was able to link to the Ontario teams. Collegial supervision takes on new meaning in this.
- ◆ The Toronto-based Institute for Anti-Social and Violent Youth has, for close to twenty-five years, provided an extracting and commentary service on articles of particular interest to the young offender field. Such services help to focus and summarize information of particular currency and relevance to the field by reviewing articles from major journals.

SUMMARY AND CONCLUSION

Implementation of programs is a challenging prospect. What correctional professionals have going for them however is a knowledge base that supports certain programs and policies over others with the goal towards increasing community safety. This chapter has highlighted the major issues in implementation as being:

- ◆ An acknowledgement of the literature on what works for effective corrections and policy practices. This literature highlights appropriate assessment strategies that increase the potential for interventions to be clinically relevant to factors that influence criminogenic risk.
- Identification of contextual factors that can influence the probability that program innovation will be successfully introduced. These factors include leadership support for implementation, staff competence and goal clarification for the reasons behind implementation.
- Specific contextual factors influence successful implementation. Current knowledge suggests that different factors influence successful *community-based* implementation versus *residential-based* implementation.
- Measures for both treatment adherence and program compliance have been developed to evaluate and monitor the degree of success in program implementation.
- Training and dissemination is now considered the great challenge facing implementation in the correction field. Arguably what could shape the next generation of corrections professionals is the challenge of communicating the knowledge on effective strategies to practitioners. Using current technology, clearinghouse extracting services, the internet and interactive communication technology are all examples of methods in communicating that knowledge to those who make decisions both for policy and for practice.

And as Shore (1991) cited almost a decade ago, "...It is essential in order to institutionalize these effective interventions, to find better ways of maintaining accountability and achieving credibility by becoming a part of the shift toward outcome accountability, outcome-focussed assessment". (p. 3).

Once we have the knowledge, choose to implement those things that have shown themselves to be effective, communicate those findings to the field, the obligation remains to evaluate the effects of those interventions towards those we have directed our knowledge.

Lastly, as work continues to document effective strategies in reducing offending, larger scale dissemination efforts need to be evaluated and refined. My experience in supporting MST dissemination and development of programs in Ontario across four geographically diverse sites has supported the belief that large scale efforts with co-operation across sites enlisting the support of the programs' initiators is possible. However, what remains to be evaluated is the potential sustainability of such efforts with what degree of effort in on-going training and consultation. This question will in part be addressed in the National Institute of Justice study that is underway.

REFERENCES

- Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., & Cullen, F. (1990). Does correctional treatment work? A clinically-relevant and psychologically-informed meta-analysis. *Criminology*, 28, 369-404.
- Andrews, D. A., & Bonta, J. (1998). The psychology of criminal conduct (Second Edition). Cincinnati, OH: Anderson Publishing.
- Bauman, L. J., Stein, R. E. K., & Ireys, H. T. (1991). Reinventing fidelity: The transfer of social technology among settings. *American Journal of Community Psychology*, 19(4), 619-639.
- Cullen, F. T., Wright, J. P., Brown, S., Moon, M. M., Blankenship, M. B., & Applegate, B. K. (1998). Attitudes toward prevention. *Crime and Delinquency*, 44(2), 187-204.
- Ellickson, P., & Petersilia, J. (1983). Implementing new ideas in criminal justice. Santa Monica, CA: The Rand Corporation.
- Gendreau, P., & Andrews, D. A. (1996). Correctional Program Assessment Inventory. St. John, NB: University of New Brunswick.
- Gendreau, P., & Ross, R. R. (1979). Effective correctional treatment: Bibliotherapy for cynics. Crime and Delinquency, 21, 463-489.
- Hare, R. (1991). *The Hare Psychopathy Checklist-Revised*. Toronto, ON: Multi Health Systems.
- Harris, P., & Smith, S. (1996). Developing community corrections: An Implementation perspective. In A. T. Harland (Ed.) *Choosing correctional options that work: Defining the demand and evaluating the supply* (pp. 183-222). Thousand Oaks, CA: Sage Publications.
- Henggeler, S. W., Schoenwald, S. K., Bourduin, C. M., Rowland, M. D., & Cunningham, P. B. (1998). *Multisystemic treatment of antisocial behaviour in children and adolescents*. New York, NY: The Guildford Press.
- Henggeler, S. W., Melton, G. B., Brondino, M. J., Scherer, D. G., & Hanley, J. H. (1997). Multisystemic therapy with violent and chronic juvenile offenders and their families: The role of treatment fidelity and successful dissemination. *Journal of Consulting and Clinical Psychology*, 65(5), 821-833.
- Hoge, R. D., Leschied, A. W., & Andrews, D. A. (1993). An investigation of young offender services in the province of Ontario: A report of the repeat offender project. Toronto, ON: Ministry of Community and Social Services.

- Huizinga, D. H., Menard, S., & Elliott, D. S. (1989). Delinquency and drug use: Temporal and developmental patterns. *Justice Quarterly*, 6(3), 419-455.
- Leschied, A. W., & Cunningham, A. (1999). A community-based alternative for high-risk young offenders. *Forum on Corrections Research11*(2), 25-29.
- Leschied, A. W., Jaffe, D. G., Andrews, D. A., & Gendreau, P. (1995). Treatment issues and young offenders: An empirically derived vision of Canadian juvenile justice. In R. Corrado, N. Bala, R. Linden, & M. Leblanc (Eds.) Juvenile justice in Canada: Theoretical and analytical assessment (pp. 347-366). Toronto, ON: Butterworths.
- Lipsey, M. W. (1995). What do we learn from 400 research studies on the effectiveness of treatment with juvenile delinquents. In J. McGuire (Ed.) What works: Reducing offending (pp. 63-78). Chichester, UK: John Wiley and Sons.
- Lipsey, M. W., & Wilson, D. B. (1998). Effective interventions for serious juvenile offenders: A syntheses of research. In R. Loeber & D. P. Farrington (Eds.) Serious and violent offenders: Risk factors and successful interventions (pp. 313-366). Thousand Oaks, CA: Sage Publications.
- Lösel, F. (1998). Treatment and management of psychopaths. In D. J. Cooke, A. Forth, & R. B. Hare (Eds.) *Psychopathy: Theory, research and implications for society* (pp. 303-354). The Hague, Netherlands: Kluwer Academic Publishers.
- Martinson, R. (1979). What works: Questions and answers about prison reform. *The Public Interest*, *35*, 22-54.
- Palmer, T. (1996). Programmatic and nonprogrammatic aspects of successful implementation. In A. T. Harland (Ed.) *Choosing correctional options that work: Defining the demand and evaluating the supply* (pp. 131-182). Thousand Oaks, CA: Sage Publications.
- Shamsie, J. (1981). Our treatments do not work, where do we go from here? Canadian Journal of Psychiatry. 26, 357-364
- Shore, L. B. (1988). Within our reach: Breaking the cycle of disadvantage. New York, NY: Doubleday Publications.
- Shore, L. B. (1991). Successful programs: From moving models to moving mountains. Presented to the "Empowering Families" Conference. St. Louis, Missouri. December 7, 1991.
- Simourd, D., & Van de Ven, J. (1999). Assessment of criminal attitudes: Criterionrelated validity of the criminal sentiments scale-modified and pride in delinquency scale. *Criminal Justice and Behaviour*, 26(1), 90-106.

CHAPTER 8

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Treatment resistance, while ubiquitous, has a negative impact on treatment outcome, in terms of poorer compliance regarding attendance and performance and reduced treatment gains. Given that the primary outcome anticipated from correctional intervention is the protection of the public, efforts to reduce treatment resistance are paramount.

This chapter reviews the history and evolution of the concept of resistance, describes various reasons for and manifestations of resistance, discusses assessment issues pertinent to resistance, and suggest strategies to reduce resistance.² This chapter also describes treatment engagement strategies employed in a specific Correctional Service of Canada intervention, the Persistently Violent Offender treatment program (Serin, 1995).

I will use the terms, clinician and client, as opposed to therapist and patient throughout the chapter. These terms, while not ideal, are more encompassing of the multitude of disciplines and professional relationships that are affected by treatment resistance.

HISTORY OF RESISTANCE

Resistance to behaviour change is not a new concept. It has been evident in virtually every healing process since the earliest human cultures. Shamans and priests, who acted as healers in earlier times, recognized the importance of inducing people into the healing process. Ancient philosophers also observed various forms of resistance.

Although it has been observed throughout the ages, Freud originated the term resistance as it applies to modern psychotherapy. He viewed it as an unconscious or intra-psychic event that was manifested in a variety of defence mechanisms intended to protect clients from becoming aware of unacceptable thoughts and impulses. Behaviour change was not thought to be possible until clients were freed from their pathological conflicts through the elimination of resistance. Thus the elimination of resistance became the cornerstone of psychoanalytic therapies and psychoanalysts addressed resistance directly.

Phenomenological theorists also postulated that resistance serves a self-protective function for clients. In contrast, however, they believed that resistance could best be eliminated through the development of a strong, positive therapeutic relationship and that such a relationship was best fostered by clinicians maintaining an attitude of unconditional positive regard toward clients. Thus, while the elimination of resistance was an important goal, it was addressed indirectly.

Behaviourists view resistance as evidence of counter-control or non-compliance. While they do not make assumptions about the purpose that the counter-control serves or the client's motives for engaging in it, they attempt to reduce it by changing the contingencies that maintain it.

Cognitive theorists propose that resistance occurs due to distorted thinking on the part of clients. For example, it stems from clients' cognitive rejection of explanations of self that are inconsistent with their pre-existing schema. Although they advocate the use of cognitive-restructuring techniques such as Rational Emotive Therapy (Ellis, 1985) to reduce resistance, they note that the degree of resistance and the reasons for it are constantly changing, necessitating varied approaches.

Each of the theories presented so far views resistance as residing within the client. In contrast, systems theorists view resistance as an interaction of the components in the system being treated. Depending on the type of treatment, whether individual, couples, family, or group, and the location of treatment, whether in-patient or out-patient, there could be numerous components contributing to resistance. This includes the identified client, the client's spouse or family, peers, and environment. It also includes the clinician. To reduce resistance, systems theorists propose a number of strategies, after first identifying the source(s) of the resistance.

Several things are evident from the foregoing review. First, no single psychotherapeutic theory fully explains and addresses resistance. Each one presents a different definition of resistance and offers different approaches to its reduction. Second, despite their differences, the theories all recognize the occurrence of resistance as normal, natural, and predictable. Third, all the theories recognize the reduction of resistance as likely the most important problem of psychotherapy. Finally, the definition of resistance has evolved over time from a static, uni-dimensional, intra-psychic force to a dynamic, multi-dimensional, interactive process. While various definitions have been put forth, the most commonly accepted one seems to be the one proposed by Greenson (1967). He defined resistance as "all those conscious or unconscious emotions, attitudes, ideas, thoughts or actions which operate against the progress of therapy". This definition encompasses all the components of the multi-dimensional view of resistance.

This shift in perspective from considering resistance to be a static, uni-dimensional concept residing within clients to a dynamic,

¹ Correctional Service of Canada

² Interested readers are referred to Anderson & Stewart (1983), & Cullari (1996) for comprehensive coverage of resistance and strategies for the reduction of resistance.

multi-dimensional concept is mirrored in contemporary thinking about motivation, the converse of resistance. Motivation has traditionally been viewed in a static way as a relatively fixed personality trait. Clients are viewed as either resistant or motivated and clinicians are reluctant to work with them until and unless they somehow become motivated. More recently, motivation has come to be viewed in a dynamic way as a state of readiness to change. Conceptualized this way, the purpose of therapy is to move clients from one state to another by reducing defensiveness and resistance at every stage. Evidently, what clinicians do to facilitate movement between states depends on the client's state of readiness at the start of treatment. Similarly, the amount of progress demonstrated in moving clients from one state to another depends on the client's state when treatment begins (Prochaska, DiClemente, & Norcross, 1992).

TYPES OF RESISTANCE

Given the frequency with which resistance is observed in all forms of psychotherapy, it is not surprising that many clinicians and researchers have attempted to categorize it along several dimensions. Some of these dimensions are the stage at which the resistance occurs, the form it takes, and the reason(s) for it. Related to timing, for example, one classification scheme identifies four types of resistance: initial resistance, halfway resistance, inertia resistance, and resistance to termination.

Initial resistance often takes the form of attendance problems, testing of limits, and challenges to clinician credentials. It is possibly the most important type of resistance to handle both quickly and effectively as statistics indicate that up to 50% of clients drop out of treatment after the first session.

Halfway resistance occurs during the action phase of treatment when clients are being most challenged to implement behavioural changes. This is also the "storming" stage of treatment (Goldstein, 1988) where clients typically begin to become frustrated with the process of treatment, with fellow clients in a group setting, and with clinicians. Halfway resistance takes many forms, including a recurrence of attendance problems, reduced compliance with homework, frustration, and expressing the desire to quit.

Inertia resistance occurs after about six months of treatment. It is described as the client's attempt to preserve the status quo by resisting further intervention and change. Because inertia resistance takes many forms similar to halfway resistance, it appears to be difficult to separate the two types. As well, it may be difficult to separate it from the fact that clients may legitimately have arrived at a treatment plateau, given statistics suggesting little therapeutic gain for most clients after about 25 sessions.

Resistance to termination is manifested in clients suddenly becoming "sick" again, or relapsing to earlier dysfunctional behaviours in an effort to maintain contact with clinicians.

Another classification scheme related to timing looks specifically at on-going forms of resistance. Two types of resistance are noted: resistance to progress or to change and resistance to co-operation. These would likely be subsumed under all but resistance to termination in the foregoing scheme.

Related to the form resistance takes, the most encompassing scheme identifies two broad forms: behavioural and communication. Behavioural resistance can be demonstrated by a myriad of examples such as attendance and punctuality problems, noncompliance with homework, frequent client requests for favours, intimidating actions, and, in some cases, "model" behaviour demonstrated by unobtrusively resistant clients. Communication resistance affects response quantity, content, and style. Response quantity refers to the amount of information clients reveal while response content refers to the nature of what clients reveal. Resistant clients often reveal very little or very little of any relevance. Response style refers to the way in which clients communicate. It includes being silent, a monopolist, argumentative, and unwilling to talk. It also includes interrupting, ignoring, and denying.

While these classification attempts are useful, none of them have been empirically developed or validated. This is likely due to difficulty in operationally defining concepts such as resistance and motivation. This, in turn, makes the measurement of such concepts difficult. Various measurement strategies have been employed to-date, including self-reports, self-monitoring, behavioural observations, and measures of treatment outcome, but none is ideal. Clearly, the development of theoretically relevant, empirically sound, and clinically useful measures of both resistance and motivation would be important. This would also enable an examination of issues related to motivation such as the relative importance of the degree of change in motivation during treatment as compared to the attainment of a minimum "threshold" level of motivation either prior to or during treatment. Related to the difficulty in operationally defining resistance is that each scheme conceptualizes resistance in a slightly different way. This is not surprising given different theoretical perspectives of researchers and different definitions of resistance, however operationalized. This suggests that each one would recommend different strategies to reduce resistance.

Another limitation of these attempts is that the categories suggested by the schemes related to timing do not appear to be mutually exclusive. Inertia resistance seems quite similar to halfway resistance and on-going resistance could be subsumed by all but resistance to termination. Nor do the same schemes appear to be exhaustive, given the numerous types of resistance suggested by the scheme related to form. Related to this, none of the schemes include a category of "legitimate" resistance, alluded to by the possibility that inertia resistance could simply indicate a treatment plateau. Also included in this category would be clients' legitimate rejection of poor advice or treatment techniques inconsistent with their personal or cultural backgrounds.

Finally, although the classification scheme related to form encompasses a broad range of client behaviours and communications, it does not address the underlying reasons for these forms of resistance. A further complication is that in many cases it is difficult to separate the form from the reason. All of this suggests that a classification scheme that incorporates both the form of and the reason for the resistance would be important if subsequent efforts to reduce resistance are to be effective.

REASONS FOR RESISTANCE

Resistance can stem from the following five sources: the client, the treatment or techniques employed, the environment, the clinician, and the client-clinician relationship.

Clients variables

Scores of client variables have been related to resistance. Some are legitimate in that they naturally and predictably occur, while others occur as deliberate attempts to subvert therapy. They can be classified into the following subgroups:

- disorder;
- ♦ personality;
- behavioural;
- ♦ client fears; and
- ♦ client self-serving.

However, there is considerable overlap between subgroups in that some client behaviours may stem from personality variables which, in turn, stem from particular disorders.

Disorder variables — The very nature of certain disorders often predisposes clients to be resistant to treatment efforts. Most often, this is related to how the disorder affects clients' abilities to trust. These disorders include borderline, anti-social, narcissistic, and paranoid personality disorders, psychopathy, schizophrenia, organic or neurological disorders, intellectual deficits, and substance abuse.

Personality variables — Clients who are hostile, defensive, demanding, and rebellious are resistant to intervention. So are those who reject authority, have an extreme sense of entitlement, and an excessive need for control. Finally, those with an eternal locus of control such that they deny, minimize, or externalize blame are also resistant to intervention.

Behavioural variables — Numerous client behaviours contribute to resistance. These include lack of motivation to change and failure to see personal problems as serious. These also include various skills deficits, anger, aggression, and violence, and being suicidal.

Client fears variables — A variety of client fears are related to resistance. Some reflect a lack of understanding of the nature of therapy while some serve a self-protective function. For example, clients may fear a lack of confidentiality in the therapeutic relationship. They may also fear being expected to do something they do not want to do or learning something about themselves that they would rather not learn. They may also fear change itself or have a fear of success. Related to fears serving a self-protective function, clients may fear intervention as they feel considerable anxiety, guilt, or shame about the behaviour in question. Or, they may feel hopeless about their ability to change.

Clients self-serving variables — Clients may be resistant for various self-serving reasons. For example, they may experience secondary gains from the dysfunctional behaviour that is being targeted in treatment. Or, they may have other hidden agendas to justify continuing to behave the way they do.

Treatment variables

Although evidence seems to suggest that, to clients, the process of therapy is more important in inducing change than the technique, treatment variables can have an impact on resistance. Most obviously, a poor match between type of treatment or treatment techniques and clients does not bode well for behaviour change. For example, verbal therapies, abstract concepts, and written homework would likely lead to resistance on the part of low functioning, illiterate, inarticulate clients. Related to this, client dissatisfaction with treatment is related to resistance, although there is only a moderate relationship between client satisfaction and outcome.

Group size can also affect client resistance and treatment outcome. Smaller groups result in clients communicating only to the clinician as opposed to each other, effectively eliminating the potential benefits of group treatment. Larger groups result in quiet members blending in, loud or aggressive members dominating, reduced consensus, and increased client dissatisfaction. On-going conflict in the group also tends to increase client resistance.

Treatments of shorter duration tend to result in less client resistance and, although there is no significant difference in the amount of resistance encountered by various types of therapies, behavioural therapies seem to engender slightly less resistance than others.

Environment variables

Various environment variables maintain or promote client resistance. Cultural disparities between clients and clinicians can have a negative impact on resistance as can clinicians' failure to understand culturally defined client behaviours. Low socioeconomic status can also have a negative effect on client resistance, primarily due to lowered client expectations of their need for and ability to change. As well, poor social support systems can serve to maintain client resistance. The setting in which treatment is provided can also engender client resistance. This is particularly true if the setting is a negative one or if clients are institutionalized and possibly attending treatment involuntarily.

Clinician variables

There has been little systematic research looking at the impact of clinician qualities on the therapeutic process, and on client resistance. As with attempts to measure the concepts of resistance and motivation, the lack of research may be related to difficulties defining and operationalizing seemingly relevant clinician qualities. It may also be related to difficulties measuring clinician qualities due to the controversial and potentially threatening nature of such a task. It may also reflect a fundamental attribution error. That is, clinicians may be more likely to take credit for treatment successes, as indicated by successful reduction or elimination of resistance, than treatment failures, indicated by continued resistance. Lack of research notwithstanding, several clinician qualities have been suggested to contribute to client resistance. These can be divided into the following two sets.

The first set of clinician qualities contributing to resistance is independent of the existence of client resistance. That is, in such cases, clients may or may not demonstrate resistance, but clinicians may erroneously conclude that they are due to their own cognitive or perceptual distortions. First, clinicians may fall prey to a confirmation bias. They may believe that resistance is an inevitable part of all therapeutic interventions, therefore they may be inclined to over-interpret some client behaviours as examples of resistance. Second, clinicians may impose various roles upon clients such as the role of "sick" person. If clients disagree with the imposition of any roles or of particular roles, they may be viewed as being resistant. Third, clinicians may impose their values on clients and may then view clients who disagree as being resistant. Fourth, clinicians may have other expectations or demands of clients that, if legitimately resisted by clients, may be viewed as resistance. This is particularly true if clinicians and clients disagree on treatment goals and techniques.

The second set of clinician qualities has a negative impact on client resistance. In these cases, client resistance is evident, but clinicians respond in ways that exacerbate the situation. First, clinicians that are confrontational in their approach to clients are often met with increased resistance (Murphy & Baxter, 1997). So are those who fail to moderate their feedback to clients with poor self-concepts. Second, clinicians that criticize or blame clients, even subtly, have a negative effect on therapeutic outcome. Third, clinicians that provide little guidance to clients early in sessions fail to reduce client resistance. So do those that prematurely label clients' unconscious motivations rather than gather information or reflect feelings (Murphy & Baxter, 1997). Finally, clinicians with poor relationship skills fail to effectively reduce client resistance.

Client-clinician relationship

In some respects, it is difficult to separate the client-clinician relationship variables from client variables and clinician variables as, ultimately, both sets of factors have their impact on the client-clinician relationship. Nevertheless this relationship, hereafter referred to as the therapeutic alliance, and variables affecting it are considered separately because of the importance of the therapeutic alliance to client resistance and therapeutic outcome.

Clinical researchers have written extensively about the therapeutic alliance. They have noted that the therapeutic alliance is likely

to be the most important factor related to compliance with treatment. It accounts for most of the variance in treatment outcome, and is the strongest predictor of outcome in brief dynamic and client-centred therapies.³

The development of a therapeutic alliance is contingent upon both client and clinician variables. Related to clients, therapeutic alliance depends upon clients' commitment to treatment, working capacity, and ability to establish healthy interpersonal relationships. Obviously, factors described in the client variables section, including hostility, defensiveness, and mistrust, impair clients' interpersonal functioning. Client perceptions and opinions are also important. These include their perceptions of the openness and friendliness of the clinician, of being treated with respect, and the degree to which they feel they can trust the clinician. These also include perceptions of being actively involved in the treatment plan, feeling that their expectations are being met, and being satisfied with both the clinician and treatment.

Related to clinicians, therapeutic alliance depends upon qualities such as competence, empathy, sincerity, and acceptance of clients. It also depends upon the degree to which clinicians can motivate clients and the type and quality of communication with clients. Also important are negative clinician attributes such as highly moralistic and judgmental attitudes toward clients, clinician interpersonal or relationship problems, erroneous clinician perceptions of clients as resistant, and counter-transference issues. In particular, difficult and resistant clients tend to make clinicians feel rejected, threatened, frustrated, and angry. These feelings can impair clinicians' abilities to develop a therapeutic relationship.

STRATEGIES TO REDUCE RESISTANCE

Clinicians should select intervention strategies only after careful analysis of the form of resistance clients are demonstrating, the likely reasons for the resistance, their relationship with clients, and when in the therapeutic relationship the resistance is manifested. Due to the sheer number of combinations this level of analysis can potentially yield, it is impossible to prescribe specific techniques for every possible manifestation of resistance. Instead, this section will list various strategies to try for any given form of and reason for client resistance. Often, it will be necessary to employ several techniques, either concurrently or successively. In all cases, however, two things should be kept in mind. First, the ultimate goal of the selected strategy is to reduce resistance, enhance motivation, and facilitate treatment gains. Second, it is important to work with rather than against resistance.

Prochaska, DiClemente, and Norcross (1992) conceptualize motivation as a four-stage process. In the precontemplation stage, clients do not see themselves as having any problems requiring attention or, if they do, they have no immediate intention of making any changes. Those who enter treatment at this stage typically do so under duress, are less open, and put forth little effort. They are also typically quick to relapse to maladaptive

³ See Horvath, & Symonds (1991) for a meta-analysis of the relationship between therapeutic alliance and treatment outcome.

behaviours. In the second stage, contemplation, clients are aware that they have problems requiring attention, but waver between taking no immediate action and expressing and/or demonstrating some commitment to change. In the action stage, clients have made a commitment to change and actively begin modifying their behaviour, experiences, and environments. Finally, in maintenance, clients have made significant behavioural changes and are actively working to prevent relapse. This model implies clinicians should expend both time and effort prior to and early in treatment motivating clients to move from precontemplation to contemplation to action, if necessary.

Strategies for reducing client-related resistance

Given the relationship of resistance to dropout rates, it is important to effectively address it early on. One possibility is to provide treatment priming or pre-therapy sessions prior to the commencement of a particular course of treatment. This could be provided on an individual or group basis. Advantages of the former are that clients might feel more comfortable in a one-on-one situation and therapeutic alliances would likely develop more readily. Advantages of the latter are that clients would have an opportunity to become familiar with fellow clients prior to the commencement of the formal group, clinicians would have an opportunity to assess group dynamics to take such observations into consideration in delivering the treatment program, and cost-effectiveness. In addition to the advantages of each of these formats, providing priming sessions would orient clients to the expectations of treatment and should facilitate more rapid and extensive treatment gain.

If priming sessions are not a possibility or if they are not completely successful, resistance will have to be addressed early in treatment. It is best not to address resistance directly in the first session, as that should be a non-threatening opportunity for clients and clinicians to formulate initial, hopefully positive, impressions of each other. Following this, however, numerous strategies could prove beneficial depending on the nature of and reason for the resistance. If clients are resisting due to particular fears, normalizing their fears and anxieties could provide some relief. Positive re-framing of uncertainty as a sign that some of their coping strategies are no longer adequate could also provide relief. Similarly, positive re-framing of treatment as an opportunity to change and grow may reassure them. If these tactics do not work, relaxation training may be advisable. Reducing hopelessness and demoralization through the provision of unconditional positive regard may help. So might identifying and reinforcing their use of positive coping strategies. Making initial demands as simple as possible will maximize the likelihood of both compliance and success, both of which should encourage clients. Subsequent demands can be made progressively more difficult as clients progress. Assisting them to consider the costs and benefits of changing versus maintaining the status quo could help. Clinicians can do this by inviting clients to consider alternative perspectives and information. They should provide information and feedback about clients' current situations and the consequences of maintaining their current behaviour. They should also provide information about the likely advantages of changing. In providing such information, clinicians are, in effect, attempting to develop a discrepancy between clients' current behaviour and important personal goals such that clients begin to shift their "motivational balance" in favour of the pros of changing versus those of the status quo.

If clients are resisting for reasons other than fear, other strategies are possible. For example, removing practical obstacles to treatment, such as scheduling appointments or groups at convenient times can help. Clinicians should, however, maintain a balance between active helping and having clients assume responsibility for behaviour change. Limit-setting with respect to attendance, participation, and behaviour is typically both warranted and useful. Sometimes, behavioural contracting may be necessary to enforce limits. Medication may be helpful if resistance is occurring because of a mental disorder. Moral reconation therapy, a form of moral reasoning (Little & Robinson, 1988), may also be helpful when resistance is occurring due to deficits in clients' moral reasoning. If resistance is occurring at particular stages of treatment, such as during the "storming stage", it may help to explain the stages of treatment to normalize its occurrence.

When resistance is ongoing, as in repeated statements challenging clinician credibility or program integrity, clinicians have several options as to how to address it, either individually or ingroup sessions. They can attempt to respond specifically to the content of what clients are saying. While this may be helpful in certain circumstances, it can also exacerbate the situation as clients may then resist what the clinician has said. In effect, the specific content of clients' challenges is a red herring. They can respond to the process of the challenge either directly or indirectly. In the former case, clinicians can label clients' behaviour as resistance and use this as a forum for further discussion. However, clients may resist such a direct approach. In the latter case, clinicians can make an observation such as "I've noticed that when we discuss X, you do Y" and then ask clients for an explanation. This is most often the least threatening means of addressing resistance. Third, they can sidetrack on-going resistant behaviours by deflecting challenges or changing topics. This can be an effective way of defusing resistance in a specific situation, but it may not have the effect of eliminating resistance over the long-term. In attempting to address on-going resistance in a group format, it may help to enlist other clients in the group in the discussion. This is because resistant clients may be less defensive with their peers than with clinicians.

Finally, if resistance is ongoing and repeated attempts have failed to reduce it, it may be necessary to terminate clients from treatment. This is particularly true if the ongoing resistance is interfering with the progress of other clients. Termination from treatment should be carefully considered, however, as it may serve to reinforce clients' use of resistant behaviours to avoid taking responsibility for other problematic behaviours. It may also reinforce their notions of power in relationships either because they have successfully used intimidation to get what they want or clinicians may use their authority to control clients. As well, clients may feel further misunderstood and rejected.

Strategies for reducing treatment-related resistance

Clinicians should strive to achieve the best match between clients and treatment. This includes careful consideration of client characteristics such as intelligence, learning style, and symptom severity. This also includes careful consideration of treatment specifics such as its form (individual or group), group size (8 to 12 is ideal), type (behavioural or psychodynamic, for example), intensity, and duration. Wherever possible, client preferences should be taken into consideration.

Clients should be actively involved in developing their treatment plan, setting treatment goals, and selecting treatment techniques to achieve their goals. Plans, goals, and techniques imposed by clinicians will likely engender client resistance with the end result of limiting treatment outcome. The agreed-upon goals must be reasonable, attainable, and pro-social and clinicians should provide regular feedback concerning clients' attempts to achieve their goals.

On-going conflict in the group can be handled in a couple of ways. Clinicians can conduct a process-oriented group in which they address the conflict directly. Alternatively, they can meet individually with the clients who seem to be in conflict to ascertain the reasons for the conflict and to develop some conflict resolution strategies. Or, they can discharge one or more clients from the group.

Strategies for reducing environment-related resistance

Some environmental factors, such as cultural background and socio-economic status, are beyond the control of clients and clinicians. However, their impact on resistance can be minimized. For example, clinicians must endeavour to be culturally sensitive. They can attain this through continuing education efforts and by open communication with clients. Clinicians should ask clients directly about the impact of their cultural background on their beliefs, attitudes, and behaviours and they should take these factors into consideration in treatment planning. With respect to socio-economic status, clinicians should strive to encourage clients about their potential for and ability to change. As with cultural factors, they should take socio-economic status into account in treatment planning. Resistance due to the setting in which treatment is offered may have to be addressed similarly to cultural and socio-economic factors. That is, in many cases clients and clinicians may not be able to control where treatment is delivered. This is particularly true if treatment is delivered in an institutional setting. Where possible, selecting the best possible location to foster a therapeutic atmosphere within the institutional setting can be helpful. So can reminding clients that, despite the negative atmosphere, they can maintain a positive attitude and change their behaviour for the better. As well, motivational interviewing techniques to encourage clients to see the benefits of treatment may help those involuntary clients who are resistant because they believe they are being forced to take treatment. More indirectly, staff training efforts may have a positive effect on the institutional atmosphere that can then, in turn, have a positive effect on client resistance.

Where clients are resistant due to the negative impact of their social support system, clinicians should use motivational interviewing techniques. In doing so, they should lead clients to see the negative impact of their peers on their stated treatment goals. They should also encourage clients to develop potential strategies to minimize negative peer influences. In contrast, telling them that their peers are a bad influence and instructing them to stop associating with their peers will likely be counter-productive.

Strategies for reducing clinician-related resistance

It is incumbent on clinicians to determine their contribution to client resistance and to modify their behaviour accordingly (Mahrer, Murphy, Gagnon, & Gingras, 1994). In addition to accurately assessing client resistance and skillfully employing the strategies above, the following qualities seem essential. Clinicians should be perceptive, sensitive, empathic, friendly, and trustworthy. They should also be flexible and tolerant. They should demonstrate acceptance of clients, despite their behaviour, good communication skills, and a sense of humour.

Clinicians should also possess the following interpersonal characteristics. They should be supportive of and encouraging to clients, at all times emphasizing client readiness and willingness to make behaviour changes. This is consistent with motivational interviewing techniques suggested by Miller and Rollnick (1991). They should use self-disclosure carefully as the utility of clinician selfdisclosure depends on the type of therapy, the purpose of the self-disclosure, the particular client, and the amount that is disclosed. Moreover, the relationship between clinician self-disclosure and treatment outcome is unclear.⁴ They should minimize their use of confrontational approaches as these only serve to increase resistance and attrition rates. They also serve to reinforce power dynamics in relationships that may be counter-therapeutic for clients for whom power issues in relationships are a problem. As well, aggressive confrontation exemplifies clinicians taking responsibility for bringing about behaviour change in clients (Jenkins, 1990).

⁴ See Chapter 3 of Cullari (1996) for an in-depth consideration of client and clinician self-disclosure.

Finally, clinicians should critically evaluate the source of any counter-transference reactions they may have to clients. For example, in the event that they feel anger toward clients, they should try to discern whether or not their anger stems from provocative client behaviours or from their own frustration with recalcitrant clients. After having identified the source of their counter-transference reactions, clinicians must then manage them appropriately otherwise their reactions could serve to increase client resistance. In some cases, it may be necessary to increase their use of supervision or peer support. In others, they may need to refer clients elsewhere.

Strategies for reducing client-clinician relationship resistance

Utilizing strategies suggested in the sections related to both client and clinician resistance should facilitate the reduction of clientclinician resistance, thereby enhancing the therapeutic alliance. Some other strategies are also of note.

Just as ensuring a good match between clients and treatment is important to reduce treatment-related resistance, so too is ensuring a good match between clients and clinicians. This entails consideration of factors such as cultural background and sensitivity, gender, personality, and interpersonal style.

Clinicians should attempt to maintain an empathic and consistently positive attitude towards resistant clients. This is not the same as unconditional positive regard; effective clinicians are able to support and motivate clients and effectively disapprove of certain behaviours. Related to this, clinicians working with any clients, but particularly those considered treatmentresistant, should avoid judging, denigrating, labelling, or otherwise blaming them. Clinicians can encourage them to take responsibility for their behaviour without attributing blame.

Clinicians must establish and maintain clear professional roles and boundaries from the outset. This is distinct from clinicians making a deep personal commitment to clients as is often implied in client-centred therapies.

FORENSIC POPULATIONS AND SETTINGS

Thus far, this chapter has focused on resistance as it applies to non-specific client populations. While many of the issues and suggestions likely apply to forensic populations, some issues are particularly germane while other additional ones must be considered.

Just as resistance was identified as ubiquitous and predictable in all forms of psychotherapy, it is inevitable with forensic populations. Numerous client-related reasons for resistance were identified; forensic clients demonstrate most, if not all of these factors simultaneously and in greater severity than non-forensic clients. That is, the majority of forensic clients are diagnosed with one or more disorders that seriously impair their ability to effectively engage in treatment, demonstrate hostile, defensive, and aggressive personalities, skills deficits, lack of motivation, a number of fears and insecurities, and numerous self-serving behaviours. Moreover, forensic populations tend to be less motivated for treatment, more resistant or non-compliant while in treatment, have higher attrition rates, demonstrate fewer positive behavioural changes while in treatment, and, possibly, demonstrate higher recidivism rates after participating in treatment (Gerstley, McLellan, Alterman, Woody, Luborsky, & Prout, 1989; Ogloff, Wong, & Greenwood, 1990; Rice, Harris, & Cormier, 1992. Many of these characteristics are understandable given that all forensic clients are being involuntarily detained through some legal mechanism and are participating in treatment under some level of duress. As well, forensic settings are typically less than optimal for inducing or maintaining motivation for treatment and behaviour change.

In addition to the strategies suggested for non-specific client populations, clinicians working with forensic populations must take the clients' legal dilemmas into account. For example, forensic clients may appear resistant when they are actually trying to protect themselves from further legal consequences. This occurs when they would like to disclose information in treatment, but fear being charged for additional offences or are instructed not to disclose any information while their offences are under appeal. Clinicians working with forensic populations must also take safety and security factors into account. For example, they must ensure that they meet with clients in locations that are physically safe and they must carefully consider how to deal with potentially aggressive clients. As well, they must make determinations of a clients' risk for violence based upon the resistance, motivation, and treatment gains demonstrated in treatment.

Andrews and Bonta (1994) state that correctional treatment should be delivered to higher risk offenders, target criminogenic needs, be based upon cognitive-behavioural or social learning theories as opposed to non-directive, insight-oriented, or evocative approaches, and take into consideration the principles of risk, need, and responsivity. Relating to the process of treatment, they specify several clinician and therapy variables such as the relationship and contingency principles. The relationship principle posits that a positive therapeutic alliance between clinicians and clients has the potential to facilitate learning. Clinician qualities that contribute to a positive interpersonal relationship include being open, enthusiastic, and flexible, attentive and understanding, and demonstrating mutual liking, respect, and caring for offenders. The contingency principle holds that clinicians must, as part of their relationship with clients, set and enforce agreed upon limits to physical and emotional intimacy as well as clear anti-criminal contingencies. The latter includes effective reinforcement for pro-social behaviour and effective disapproval for anti-social behaviour.

This indicates, then, that the development of a therapeutic alliance or a positive interpersonal relationship between clinicians and clients is of primary importance with both non-forensic and forensic populations. This may not be the case, however, for psychopaths.

STRATEGIES FOR REDUCTION OF RESISTANCE WITH PSYCHOPATHS

Although many of the techniques for therapeutic engagement with forensic clients likely apply to psychopaths, perhaps the most resistant of clients, some may be contraindicated (Preston & Murphy, 1997). As noted by several researchers and clinicians, psychopaths possess a unique cluster of personality characteristics (Cleckley, 1982; Hare, 1993; Meloy, 1995). Most notably, they have a diminished capacity to form meaningful interpersonal relationships although they can effectively mimic such a capacity. This suggests that treatments placing heavy emphasis on the development of a therapeutic alliance between clinicians and clients are likely to fail with psychopathic clients. Moreover, such treatments may be risky to clinicians because psychopathic clients lack the empathy required to inhibit their aggressive responses.

Psychopaths typically experience less anxiety and worry than non-psychopaths, a characteristic which mitigates against behaviour change. First, lack of anxiety causes them to be unconcerned about both the effect of their behaviour on others and the effect of incarceration on themselves. Second, lack of anxiety causes them to be less responsive to negative feedback from clinicians.

Psychopaths are also grandiose and tend to relate based on power more than affection. These qualities are sometimes manifested in demands to be dealt with by the most senior available staff. For example, during police investigations they may request to be interviewed by the most senior investigating officer and in treatment they may expect to be treated by the most senior clinician (Hazelwood, 1995). Their grandiosity also means that they may express over-confidence in their skills and abilities, including those they intend to use to reduce their risk to society. Clinicians must not uncritically accept such verbal declarations; they should always look for behavioural evidence that clients have the requisite skills.

In addition to being grandiose, psychopathic clients can be manipulative. This underscores the need for clinicians to be persistent in setting and enforcing limits on their relationships with psychopaths. Clinicians must not protect them from the legal and social consequences of their behaviour (Cleckley, 1982) and they must repeatedly reinforce to them that they will be convinced by actions rather than words when it comes to behaviour change. Manipulativeness also indicates that clinicians must be wary of giving psychopathic clients the benefit of the doubt even in seemingly innocuous situations. This is because psychopaths may perceive clinicians as gullible and therefore legitimate targets for future manipulations if they can be conned in any given situation. Finally, clinicians who work with psychopathic clients often experience a number of counter-transference reactions such as condemnation of psychopathic clients as untreatable and a wish to destroy or cause harm to seemingly intractible psychopaths. These have been well described by Meloy (1995). Clinicians must be cognizant of their counter-transference reactions in order to deal with them most appropriately.

PERSISTENTLY VIOLENT OFFENDER TREATMENT PROGRAM

The Persistently Violent Offender Treatment Program is a demonstration project developed and funded by the Research Branch of the Correctional Service of Canada. It was a multiyear, multi-site non-residential treatment program currently offered in two medium-security institutions in Canada. The program targeted persistently violent offenders, defined as those having at least three convictions for violent (non-sexual) offences. It was based upon a social problem-solving theoretical framework and was delivered according to cognitive-behavioural principles. It involves 16 weeks of half-time participation (Preston, Murphy, Serin, & Bettman, 1999).

Given the population in question, most were treatmentresistant. For this reason, the first section of the program was a motivational module designed to facilitate participant interaction, commitment, and trust. The module began with two weeks of individual therapy as a form of priming. This allowed clients and clinicians a non-threatening opportunity to begin to get to know each other. Clinicians addressed any concerns clients may have had and began to explore clients' goals for the treatment program. At all times, clinicians were respectful, empathic, and supportive. As well, they employed motivational interviewing techniques.

The motivational module also included one week of group sessions. During this week, violence was rarely discussed. Instead, clients and clinicians generated group rules, discussed obstacles to treatment such as on-going substance use, impulsivity, and aggressive beliefs and how to minimize their impact on treatment outcome, and completed a cost-benefit analysis of program completion. In all of these exercises, the short-term and long-term positive and negative impact of various behaviours on clients and others were considered.

The second and third sections of the program were the problemdefinition and skills-building modules, respectively. While specific resistance-reducing strategies were not incorporated into these modules as they were in the motivational module, other factors facilitated the reduction of resistance. As already stated, at all times clinicians treated clients with respect and they required clients to act respectfully toward them and others. Clinicians enlisted the group's help in dealing with resistant clients as clients were more likely to internalize their peers' feedback. On occasion, a peer tutor was hired to serve as a positive role model for resistant clients. As well, clinicians encouraged the use of problem-solving and conflict resolution skills in each group such that clients felt more empowered and took more ownership over how the group progressed.

In terms of client responsivity factors, clients should optimally have attained a grade eight academic level in order to be admitted. However, clients who had not attained this level were been admitted. In such cases, weekly individual sessions allowed an opportunity for clinicians to monitor and assist with progress, the peer tutor provided some assistance, and student volunteers were of considerable utility. Basically, clinicians had license to utilize whatever mechanism best assisted clients to learn group material. Also related to client responsivity is that program content were presented in a simplified fashion, both in group and in homework assignments. Wherever possible, diagrams and analogies were used.

Finally, clinicians selected for the program were screened for personal suitability factors. Preferably, they were competent, confident, sensitive individuals who ascribed to a "firm but fair" approach in dealing with clients. The perception of self-confidence is particularly important with this population as they have a tendency to prey upon staff who appear to be lacking in confidence. They had to have a strong sense of their professional identities and boundaries and be intrinsically motivated. The former helped them to avoid having strong negative counter-transference reactions to clients that could have potentially interfered with their professional judgements while the latter assisted them in maintaining their enthusiasm with this population despite their recalcitrant nature. They also had to work together co-operatively and supportively, to model appropriate behaviours to clients, to reduce potential manipulation by clients, and to sustain each other through inevitable difficulties.

MEASUREMENT OF MOTIVATION IN THE PERSISTENT VIOLENT OFFENDER PROGRAM

Clients who participated in the Persistently Violent Offender treatment program completed a comprehensive assessment battery before and after the treatment program. Self-report measures of responsivity and motivation for treatment were included in the assessment battery (Serin & Kennedy, 1997). Given the lack of correlation between offender self-reports of motivation and behaviour change and outcome, clinicians also completed weekly behavioural ratings of client motivation and behaviour change, as indicated by attendance, participation, behaviour, and attitude. Future analyses will examine the correlation between the two methods of assessment and the relationship of each one to treatment outcome.

CONCLUSION

As was evident from this chapter, given the number of reasons for and forms of treatment resistance, it is impossible to prescribe exactly what to do with any client in any given situation. Careful analysis by clinicians is a prerequisite to employing the most efficacious means to reduce treatment resistance. These efforts are essential given that treatment outcome is contingent upon the reduction of treatment resistance and that the primary anticipated treatment outcome of correctional interventions is the protection of public safety.

REFERENCES

- Anderson, C. M., & Stewart, S. (1983). Mastering resistance: A practical guide to family therapy. New York, NY: Guilford Press.
- Andrews, D. A., & Bonta, J. (1994). The psychology of criminal conduct. Cincinnati, IL: Anderson Publishing.
- Cleckley, H. (1982). The mask of sanity. St. Louis, MI: Mosby Press.
- Cullari, S. (1996). *Treatment resistance: A guide for practitioners*. Massachusetts: Allyn & Bacon.
- Ellis, A. (1985). Overcoming resistance. New York, NY: Springer.
- Gerstley, L., McLellan, A. T., Alterman, A. I., Woody, G. E., Luborsky, L., & Prout, M. (1989). Ability to form an alliance with the therapist: A possible marker of prognosis for patients with antisocial personality disorder. *American Journal of Psychiatry*, 146, 508-512.
- Goldstein, A. P. (1988). The prepare curriculum: Teaching prosocial competencies. Champaign, IL: Research Press.
- Greenson, R. R. (1967). The working alliance and the transference neuroses. *Psycholanalysis Quarterly*, 34, 155-181.
- Hare, R. D. (1993). Without conscience: The disturbing world of the psychopaths among us. New York, NY: Simon & Schuster.
- Hazelwood, R. (1995). The sexually violent offender. Two-day workshop sponsored by Specialized Training Services, Inc., Toronto, ON. October.
- Horvath, A. O., & Symonds, B. D.(1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology*, 38, 139-149.
- Jenkins, A. (1990). Invitations to responsibility: The therapeutic engagement of men who are violent and abusive. Adelaide, Australia: Dulwich Centre Publications.
- Little, G. L., & Robinson, K. D. (1988). Moral reconation therapy: A systematic step-by-step treatment system for treatment resistant clients. *Psychological Reports*, 62, 135-151.
- Mahrer, A. R., Murphy, L., Gagnon, R., & Gingras, N. (1994). The counsellor as a cause and cure of client resistance. *Canadian Journal of Counselling*, 28, 125-134.
- Meloy, J. R. (1995). Treatment of antisocial personality disorder. In G. Gabbard (Ed.), *Treatments of psychiatric disorders: The DSM-IV edition*, (pp. 2273-2290). Washington, DC: American Psychiatric Press.
- Miller, W. R., & Rollnick, S. (1991). Motivational interviewing: Preparing people to change addictive behavior. New York, NY: Guilford Press.
- Murphy, C. M., & Baxter, V. A. (1997). Motivating batterers to change in the treatment context. *Journal of Interpersonal Violence*, 12, 607-619.
- Ogloff, J. R. P., Wong, S., & Greenwood, A. (1990). Treating criminal psychopaths in a therapeutic community program. *Behavioral Sciences and the Law*, 8, 181-190.
- Preston, D. L., & Murphy, S. (1997). Motivating treatment-resistant clients in therapy. Forum on Corrections Research, 9(2), 39-43.
- Preston, D. L., Murphy, S., Serin, R. C., & Bettman, M.(1999). Persistently violent (non-sexual) offender treatment program: Therapist manual. Ottawa, ON: Correctional Service of Canada.
- Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of the structure of change. In Y. Klar, J. D. Fisher, J. M. Chinsky, & A. Nadler (Eds.), Self-change: Social psychological and clinical perspectives. New York NY: Springer-Verlag.
- Rice, M. E., Harris, G. T., & Cormier, C. A. (1992). An evaluation of a maximum-security therapeutic community for psychopaths and other mentally disordered offenders. *Law and Human Behavior*, 16, 399-412.
- Serin, R. C. (1995). Persistently violent (non-sexual) offenders: A program proposal. Research Report R-42. Ottawa, ON: Correctional Service of Canada.
- Serin, R. C., & Kennedy, S. (1997). Treatment readiness and responsivity: Contributing to effective correctional programming. Research Report R-54. Ottawa, ON: Correctional Service of Canada.

PART TWO

Correctional Programs and Interventions

CHAPTER 9

DENNIS J. STEVENS¹

We live in an age of globalization, restructuring, and rapid technological change. As a result, institutions such as government, corporations, and institutions of higher learning are adapting new roles, new responsibilities, and new relationships (Wilson, 1992). How do civilized and just nations expect to maintain prosperity and safety if many of its illiterate and poor are frequently under correctional control?

There is often concern about correctional populations, yet correctional outcomes are often overlooked. Compelling evidence is offered which shows that controlling crime through education may be an effective and economical method of reducing recidivism rates. Phrased differently, education may be one means of improving reintegration potential of offenders. This chapter examines education as one method of preparing an offender to step back into his or her community with a renewed sense of self image, pride through the accomplishment, and a plan to stay clear from one of the simulators of criminal activity unemployment. The argument will be made that one of the least expensive yet most effective methods of crime control (reducing recidivism) is through the education of offenders.

CONTEXT

A one-day snapshot of prisoners in Canada's correctional facilities shows that at midnight on October 5, 1996 there were 23,679 prisoners in Provincial and territorial prisons and 13,862 in Federal prisons or a total of 37,541 prisoners (Canadian Centre for Justice Statistics [CCJS], 1999a). Prisoners in Provincial custody serve an average of 31 days and federal custody prisoners serve an average of 44 months (Boe, Motiuk, & Muirhead, 1998). In 1995-96, 114,562 offenders passed through Provincial and territorial prisons and 4,402 offenders passed through federal institutions (CCJS, 1999b). Thus, a high percentage of the Canadian population is exposed to the criminal justice system or more specifically, 151 per 100,000 of the adult population. Canada has one of the highest rates of incarceration in the developed world, second to the United States. This represents an unusual opportunity to help educate a population who otherwise may not see education as a positive experience.

Offenders admitted into the custody of the Correctional Service of Canada typically rank among Canada's most poorly educated citizens. Nearly two out of three offenders (64%) have not completed their high school diploma, of which 30% have not even completed Grade 8. In 1993/1994, 70% of newly admitted offenders tested below the Grade-8 literacy equivalency while more than four in five new inmates (86%) scored below Grade 10 (Boe, 1998). Similarly, research indicates that in the United States prison system, 19% of adult prisoners are completely illiterate, and 40% are functionally illiterate, which means they would be unable to write a letter explaining a billing error (Center on Crime, Communities & Culture, 1998).

The reality of recidivism rates within the Canadian penal system requires attention. Overall, about one half of male offenders released from Canadian federal institutions recidivate. Also, about two thirds of the Aboriginal offenders and roughly one third of women offenders are returned to prison. Recidivists tend to be younger at the time of their first adult conviction, have more extensive criminal histories and are single.

The public, although decidedly punitive toward lawbreakers, are more lenient toward inmates because the public believes, those offenders are no longer an immediate threat. That is, there is an expectation that punishment will teach an offender a lesson. Therefore, it could be reasonable to argue that reduced recidivism rates, from the public's perspective, is the responsibility of the community where former inmates are released, as opposed to the prison system an offender was released from (Allen & Simonsen, 1998). Nonetheless, returning unprepared, uneducated, and unusually bitter individuals to the community could represent a further threat to public safety and enhance recidivism rates (Bureau of Justice Statistics, 1997; Stevens, 1997a; 1997b; 1994). The more offenders are isolated from a law abiding society and deprived of society's amenities or opportunities, the more likely it is that they will reject the lifestyles and laws of that society (Glaser, 1975; 1997; Stevens, 1998a: 1998b; Stevens & Ward, 1997). One method of bringing individuals into society's embrace is through education especially a liberal arts education since it can provide a better understanding of society along with its expectations as its rewards.

EDUCATION PROGRAMS

Currently, educational and vocational programs are available at most correctional institutions in Canada. Educational programs consist of Adult Basic Education — (Grade 1 to 10), Secondary Education, Vocational, College, and University level programs. Inmates generally pay for their own post-secondary education, unless it can be demonstrated that the education addresses a specific criminogenic need. Each program component provides offenders

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with opportunities to acquire education commensurate with need, achievement and ability. Through vocational programs such as plumbing, welding and small engines repair, inmates are provided with job related skills training relevant to employment opportunities available in the institutions and in the communities.

In all correctional programs, offenders interact in group settings that provide them with opportunities to learn and practice skills that might be required in work settings in the private sector. Examples of these skills are: problem solving, critical thinking, punctuality, interacting with others, being respectful of other people's opinions and feelings, and dealing with authority figures.

CORCAN is one of the most recognized programs. Through its five business lines: Agribusiness, Construction, Manufacturing, Services and Textiles, CORCAN provides offenders with work experiences and training which replicates private sector work environments as closely as possible. CORCAN programs are in place in 32 institutions across Canada, creating the equivalent of 2,000 full time trainee positions. Offenders receive training in the manufacture and provision of a wide range of products and services such as office furniture, clothing, shelving, agricultural products, metal fabrication, data entry, digital imaging and telemarketing. CORCAN products are marketed to the public sector: governments, non-profit organizations, and educational and health care institutions. CORCAN also offers community based short-term employment, job counselling, and placement programs.

Although vocational training is vital, this chapter will focus on academic education at the secondary and post secondary level or college. It should be clear that every offender responds favourably to vocational training or its opportunities.

Canada is extremely successful in conducting vocational training programs, however, I believe that men and women inmates who earn a college degree while under correctional supervision tend to lead law abiding lives more often than offenders who have not earned a college degree. That is, some may want to deal more efficiently with themselves, their families, and their community by embracing those values, skills, and knowledge that might help an individual make well-informed decisions. Once we're past the realities that not all offenders are educable, desire further education, and/or will never complete a college degree, it might be safe to assume that some, although fewer than expected, will advance themselves through education. Yet, it is argued that offender characteristics are stronger predictors of recidivism rates than the correctional mission or organisational affect itself (Clarke & Harrison, 1992). Some scholars question the efficacy of prison treatment programs casting doubts on studies showing positive outcomes of a college education for inmates (Andrews et al., 1990; Cullen & Gilbert 1988; Logan & Gaes, 1992).

The mission of correctional education

Some say that the primary purpose of education is learning and academic progress (Langenbach, North, Aagaard, & Chown, 1990;

Lawrence, 1994). However, the philosophy of correctional education should also reflect the characteristics of the correctional environment and its students, especially since correctional settings are a closed and an abnormal environment (Reagen & Stoughton, 1976). The role of correctional education is to:

- function as an agent of change for both the prisoner and the system;
- maintain its integrity in terms of its basic commitment to freedom of inquiry; and
- study, evaluate, and respond to all variables in the individual, the system, and society that are to be benefited by the educational concerns with process, product, and social reform (Reagen & Stoughton, 1976, p. 15).
- The role of correctional academic education could:
- relieve boredom of dead-head prison time;
- give student-inmates a better understanding of society;
- give non custody professionals an opportunity to monitor correctional operations;
- keep offenders busy with positive pursuits;
- give inmates an opportunity to experience values of a law abiding individual (teachers); and
- alter behaviour preventing costly reincarceration.

THE CONTROVERSY

Is there a fundamental and unresolvable antagonism between the keeper and the kept? Yet, many inmates want to improve their lot and if given a change, will do so as evidenced by many offenders who never return to prison, once released (Lowman & MacLean, 1995; Statistics Canada, 1994). Does correctional education reduce recidivism rates? Most of the evidence appears to be inclusive (Linden & Perry, 1982; Morrison, 1993). However, some researchers argue that there is no conclusive evidence correlating correction education to reduced recidivism while others go further and suggest that little can alter criminally violent behaviour (Cary, 1993; Cullen & Gilbert, 1988; Fogel, 1976; Palmer, 1991; Samenow, 1984). For example, Martinson (1974) argues that with few and isolated exceptions, rehabilitation efforts of advanced education that have been reported so far (1947-1967) have had no appreciable effect on reduced recidivism. Martinson's influence in corrections has frequently been associated with the shift from a treatment/rehabilitation orientation in corrections to a just deserts/justice orientation.

Opponents to correctional education argue that criminal tendencies learned on the outside cannot be "unlearned" on the inside, and, they add, offenders gave up their rights to amenities such as education when they took away the rights of others (Reagen & Stoughton, 1976).

Can we accept that offenders do have an after-life from correctional environments, and discount the idea that when they are confined they accept the inmate code, as argued by Caron (1978)? This code is, presumably, a guidebook on how to succeed in prison by not really trying to reform. In the face of such controversy, some researchers say that whatever categories the correctional administrators place a newcomer in, it will not mean very much, as a prisoner's true standing comes from fellow inmates (Lowman & MacLean, 1995). Perhaps there is some confusion with these thoughts as they relate to Clemmer's (1958) prisonization effect. The term prisonization refers to the longer inmates are incarcerated, the stronger their identification with inmate norms and values, and the more difficulty they would have adjusting to life once released. True, Clemmer suggests that inmates, like other social groups, have a culture which he defined as a mode of life or thought that is not peculiarly individual but which can be characterized as a shared set of attitudes that can eventually impact behavioural patterns and lifestyles. Part of this process includes learning enough of the culture to make individual characteristics of the environment - an environment that produces a deprivation of liberty, a loss of worldly possessions, a denied access to heterosexual relationships, a divestment of autonomy, and being compelled to associate with other criminals or what Sykes (1966) refers to as the "pains of imprisonment".

But neither Clemmer's perspective nor my studies examined prisonisation effects on student-prisoners. I am of the opinion that a student-prisoner learns a different set of values and norms than a typical prisoner.

EDUCATION AND RECIDIVISM

On the other side of the controversy, researchers who examined the relationship between correctional education and recidivism levels abstracted a total of 97 articles published between 1969 and 1993. The results reveal "solid support for a positive relationship between correctional education and [lower] recidivism." In the 97 articles, 83 (85%) reported documented evidence of recidivism control through correctional education, while only 14 (15%) reported a negative relationship between correctional education and reduced recidivism. The following statement of McCormick (1999) sheds some enlightment on what some inmates think about education:

"We resent the walls, bars, uniforms, being told what to do, what programs we must take. None of us arrived by accident and if we are honest with ourselves, we'll acknowledge a whole series of destructive behaviours that preceded our committal to a monastery of the damned. In view of status and our chances of success upon release, the future doesn't look particularly bright. But until we come to terms with our individual reality — separate the crime from the man, decide that the "I am" is capable of much more than what the label implies — we're doomed to failure. Administration uses statistics to create the illusion of massive reform. But it's up to us to demand delivery. Enrol in courses. Ask for help from each other. Educated cons have reason to lift their heads. Whether the "man" wants to acknowledge it or not, educated prisoners get respect from everybody inside and outside the prison, and that's the one thing that can't be taken away from us at the gate."

Additionally, one study examined the recidivism data of 60 released inmates for a 3-year period in the United States (Stevens & Ward, 1997). Nonetheless, each participant had earned an associate and/or a bachelor's degrees while incarcerated in a high custody North Carolina prison. When the data were pooled with data from other states, it appeared that earning a degree while incarcerated significantly reduced recidivism rates for both men and women offenders. Specifically, of the 60 North Carolina released inmates, 5% (3, all men with associate's degrees) were returned to prison for criminally violent offences in the 36 months following their release. Women and men offenders who earned four-year degrees were not reincarcerated during the three-year period after their release, and, all but one of these individuals found employment relating to their degree. Also, the income of the degree-earning students was greater than their income prior to incarceration if employed, but most of them were unemployed at the time of their arrest and subsequent conviction. These findings are congruent with a study that shows individuals who received higher education while incarcerated have a significantly better rate of employment (60-75%) than those who do not participate in college programs (40%) (Center on Crime, Communities & Culture, 1998).

Continuing along this line of reasoning, approximately 40% of the general prison population in North Carolina were reincarcerated within three years of their release (NCDOC, 1995). In this case, if the degree-earning individuals were typical of the general prisoner population of North Carolina, 24 former inmates (40% X 60) would have been re-confined instead of 3. The difference of 21 inmates saved North Carolina taxpayers \$612,893 for the first year of their re-incarceration and each year thereafter. Canadian incarceration costs are much higher than North Carolina's cost. Reprocessing costs and the costs of their crimes are not available to include in the above the savings. Equally important, however, is that the prison population in North Carolina is similar to the Canadian prisoner population in both federal and Providential prisons, but, the release rate in Canada is 10 times that of North Carolina. Theoretically, if the 60 were 600 (at 40%=240), and the savings were 11 million dollars instead of \$612,893 then Canada stands to gain financially in this area of social control. And don't forget the differences in daily cost of inmates and the prosecution costs, which would probably put the yearly savings over 16 million dollars annually. Doubled the second year. Additionally, the above study focused on those offenders who finished a college education in one region of the state. It did not examine prisoners who were involved in the educational process but did not earn a degree.

The average confinement time served in Canada is far different than in North Carolina. Can Canada educate its educable prisoner population in 44 months or less? In a word, yes, if Canadian policy makers reflect on "a core of new thinking" about education. First, however, offenders who do not have a secondary school education or its equivalent should be required to finish once they are under correctional supervision. It should be a requirement of their release. Correctionally supervised individuals who completed secondary school should have the opportunity at federal and Provincial expense to pursue a college program leading to a college degree. Masters programs and Ph.D. programs should be made available but at the expense of the individual. Those programs can be best accomplished through telecommunication. In summary, it is less expense to educate than incarcerate. Following are some "idealized" points to consider.

A CORE OF NEW THINKING

How many educational organizations will become obsolete? Certainly, many educational leaders have the courage to realize that non-traditional academic roles of that of a visionary and an agent of moral change is what is required of them if their organization desires continued success. A visionary might see that student demographics and future student employment demands have changed, and as a moral agent of change a visionary leader might see that the role education plays in student advancement has changed, too.

CENTRALIZED DIVISION OR UNIT

The next step is to establish a centralized division or unit under the direction of a single educational director at the federal level and single educational directors at each Provincial level working in a collaborative governance of the educational enterprise. That is, it operates under a federal structure in which individual unit work co-operatively to achieve organizational goals, which include competency. This education correctional service administers, supervises, and operates both a secondary and university programs and reports directly to the commissioner of Correctional Service of Canada. Accreditation can be accomplished through one of the many educational institutions already established in Canada or it can create its own entity and apply for accreditation.

CURRICULUM

The collaborative governance of the enterprise should develop both secondary and undergraduate programs that facilitate completion at a faster pace and with greater curriculum consistency than traditional programs. These programs should include the policy that students enrol in a program as opposed to signing up for classes, depending on the student's academic level. Each program has sequenced modules (classes) structured in a logical progression to ensure that educational objectives can be met. Module sequences are not negotiable unless a student requires retaking a specific module. There could be four separate programs developed — one at the secondary level, and three at the college (undergraduate) level. The secondary level program consists of required core courses as outlined by most secondary institutions. One of the three college programs is provided to accommodate general educational core requirements of a typical university, and two college programs take over after the general educational core courses are met (either through the general education requirement program or from other qualified educational sources). Of the two, one is a program leading to a baccalaureate degree with a major in behavioural science and the other program leads to a baccalaureate degree in business. More degree programs would make matters more complex. Classroom structure, formats, and grades (competency) should be consistent which will allow for easy movement from one program to another, and from one location (inside or outside of prison) to another.

CLASS TIME

The relationship between educational seat-time and gaining knowledge is a worrisome perspective. Many traditional students sit in classrooms for an entire semester and have difficulty in articulating or understanding the principles of a course. In a traditional college course, students are expected to sit in a classroom for approximately 45 hours a semester. For some reason, that amount of time has been designated as appropriate. However, many college educational programs have cut seat time primarily because student demographics and priorities have changed. Drawing on those strengths, a teacher can expect students to participate at an entire different level than traditional students and additional workload for the student will far make up the difference in seat time. For example, at one institution where I developed and operated a similar program as the one described, students sat in class for four hours, once a week, for five weeks to complete a three 3-semester hour (module), and after 12 modules received a baccalaureate degree (assuming the student qualified to enter the program). Student output in these programs were similar or greater than student output in traditional programs preserving classroom integrity.

ENCOURAGING EDUCATION

One method to encourage education in the penitentiary is to have part (or all) of the educational process delivered inside prison and part (or all) of the educational process delivered outside of prison, thus program consistency is equally important. A student can take the same module or program at many locations throughout Canada. All individuals under correctional supervision including those on parole can attend these educational programs thereby enhancing solidarity among students that will also aid in their completing the program. The advantages of having offenders engaged in an educational pursuit is that correctional supervision is shared through teachers and other students while meeting educational objectives and ultimately reducing recidivism levels.

DIFFERENT MEASURES OF COMPETENCY

The term "competency" no longer should suggest that a student have the capacity to do a job; consequently, educators and business leaders should stop measuring competency with learning outcome approaches. Grades are sometimes ambiguous indicators of performance. Students move into the next module by accomplishing the objectives of the last module. Most of those objectives have to do with application. Thus, gaining a competency in a certain module means that the student has met the objectives of the module. Rutherford (1998) somewhat agrees with this perspective and offers a modern definition for "competency" while providing a model for developing competency standards in educational institutions and businesses. Such standards teach students/workers not only job skills, but also how to apply, and adjust those skills in specific environments. Great and safe nations require a more competent law abiding work force, and one method of producing it is to educate those individuals within that nation who can utilize an education most.

METHODS OF DELIVERY

Modules should include different methods of educational delivery in classrooms conducted by qualified educators, merged with a delivery system via computers, distance learning methods, and/or telecommunication programs. Distant learning methods work well but require full time qualified educators to be part of that system. In fact, those instructors should be the primary focus of the system. However, technology teaching must be part of the curriculum so students can compete for challenging jobs.

Yet, educational endeavours, for example, are caught up in technology, and think they need new ways of organizing teaching and learning (Ehrmann, 1995). Because some educators are pleased when lecturing as they witness the eyes of their students light up and respond as though they understand the material. The styles of delivery by some educators border the edge of a Hollywood production. An assumption, made by an awesome professor is that once a student hears the truth, prior beliefs will be irrelevant. The student may even get an A for the course. Yet, if we probe, we might discover that the original belief is still present and virtually untouched, says Ehrmann. In some cases students are further confused by the lecture. That's because they had used their hidden preconceptions to (mis)interpret what the teacher was saying. The students were never forced to become conscious of their prior beliefs, let alone to test them against new ideas. When educating adults, the problem is greater.

The result is what an artist might call "pentimento," a layer of "learning" is painted over a pre-existing belief, but, after a time, the original belief about the content re-emerges, mostly untouched, argues Ehrmann. It's a style of teaching by broadcast, even though students are in the same classroom or watching telecommunication monitors. That's because the information flow is almost entirely from the faculty member outward to the students. Little fresh information flows from the students to the faculty member (or to each other). This kind of broadcast instruction may happen several times before ultimate graduation. And (surprise!) after that graduation it turns out that the graduate still does not understand (Ehrmann, 1995). It is eventually realized that broadcast teaching can be inefficient, even ineffectual, because instructors currently don't discover what each of their students already thinks.

Adult students have their own experiences and understanding of the social world, and their point of view may be right — for them. That is, adult learners require help in understanding their own realities and theories about those realities. Central to this process of learning is critical reflection and testing new meanings through deliberate reflection on the evidence, on arguments based upon alternative points of view, and on critically examining assumptions (Mezirow, 1991). Faculty members should ask more probing questions in class (whether the students are in the same room or a hundred miles away). They should devise assignments that help students confront their beliefs and test their skills. Overall, I am suggesting that educational endeavours should become student-centred starting with the knowledge of the student in order to advance the adult learner. This is a method of teaching I call collaborative learning.

COMPUTERS

This core of new teaching goes beyond educational delivery strategies. A new study on the impact of computers on mathematics learning shows positive results. The study, involving almost 1,200 secondary students in British Columbia and Alberta, found that students using computer courseware achieved higher test scores and levels of comprehension than 'control' students using traditional approaches. The test group used The Learning Equation Mathematics (TLE), computer courseware developed by ITP Nelson in co-operation with participating Ministries of Education. Learning outcomes were measured on Alberta's provincial grade nine achievement test, based on the common western mathematics curriculum (Computers and Learning, 1999). The results among adult learners should be greater.

Keltner and Ross (1995) argue that computer and information technology is taking on increasing importance in the workplace and in society, and that educators and policymakers are redoubling their efforts to bring technology into the classroom. Furthermore, computer technology does not necessarily suggest Internet access. CD ROM databases and computer programs do not require accesses to the Web to be instructional.

However, the point is that if grade school children are better prepared for a transition from an industrial to an information age, then individuals who can not compete with school children will fail more often.

ASSESSMENT

As educational programs get underway, assessment methods should be in place to determine the effectiveness of those programs. That is, the utility of non-traditional forms of assessment is an important issue. This thought is consistent with Stecher, Rahn, Ruby, Alt, and Robyn (1997) who argue that recent changes in assessment practices may hold great promise for educators especially vocational educators. The authors suggest a focus of program definition, implementation, and administration; the quality and feasibility of the assessment; and the potential usefulness of the assessment approach for educators. My own experience suggests that non-traditional method of assessment for adult educators and learners are more accurate.

CONCLUSIONS

As appealing as getting "tough on criminals" may sound, civilizations historically have utilized every method imagined to control criminal activity, and yet crime continues to flourish. One assumption a civilized society can make is that the severity of punishment has not always guaranteed the results sought: justice and efficient crime reduction, argues Glaser (1997). Canadians have taken the initiative of critically examining and, eventually eliminating capital punishment in response to their findings that death might not be an answer to control crime in a moral nation. In Canada's quest for justice and control crime, change is pervasive, and education is an efficient agent for societal change. Offering individuals under correctional supervision a student-centred advanced educational program provides an avenue for those offenders who want change, an opportunity to advance themselves and ultimately the community. An educated population can protect a just and safe community from terrorism that might surface from both inside and outside its borders. Education is the new millennium's power and currency, and the wealth of a nation must be distributed to more of its population. It is time that policy makers commit to combating crime by helping violators help themselves. Barth (1990) argues, and rightfully so, that each educational enterprise faces the task of constructing an effective educational and intellectual community around a unique set of issues and individuals. To this end, educating offenders to become productive members of society without compromising custody in a short period of time may seem like an impossible task, yet, consider the alternatives.

Traditional notions may have been successful for traditional students, but might produce failure for adult students. This thought is congruent with Boyett and Boyett (1998) who argue that educational organizations must foster "communities of practice" (informal networks in which students and teachers exchange ideas and experiences). A visionary might see that the relationship between the educational organization and the student has changed. For instance, the role of educator has changed from lecturer to facilitator. As a moral agent of change knowledge and its priorities are different. For instance, the educational process should become student-centred by beginning with what the student knows as opposed to beginning with what the organization knows. Pedagogy and curriculum should emphasise application, and theoretical concepts might become guideposts as opposed to the other way around.

There are no utopia educational systems. Rather, the way to improve schools is through "preserving what is valuable and reworking what is not," suggests school reform writers like Tyack and Cuban (1995). In this way, progress is measured by whether the definite problem at hand has been resolved or lessened. Effective reform begins with a well-defined problem to address, and remains flexible to the circumstances of the situation it is applied to.

An interesting guide about educational reform comes from Tyack and Cuban who suggest the following:

- No master plans for the fixing of all problems will be accepted. We cannot leap into a perfect educational system, but must work to make things better bit by bit.
- Involve teachers, parents, and administrators in the process of reform (especially teachers) and make sure that the "answers" are to questions that are being asked by those involved.
- ♦ Move in small steps.

Tinker! I think a colleague, Paul Friday, summed it best with his thought that there is no better way to gain knowledge than from the experiences of others nor a more effective way to achieve our own altruistic goals than through the information we, as educators, transmit to the leaders of tomorrow!

REFERENCES

- Allen, H. E., & Simonsen, C. E. (1998). Corrections in America: An introduction (8th ed.). Englewood Cliffs, NJ: Prentice Hall.
- Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., & Cullen, F.T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology*, 28(3), 369-404.
- Barth, R. (1990). Improving schools from within. San Francisco, CA: Jossey Bass.
- Boe, R. (1998). A two-year follow-up of federal offenders who participated in the Adult Basic Education (ABE) Program. Research Report R-60. Ottawa, ON: Correctional Service of Canada.
- Boe, R., Motiuk, L. L., & Muirhead, M. (1998). Recent statistical trends shaping the corrections population in Canada. *Forum on Corrections Research*, 10(1), 3-7.
- Boyett, J. H., & Boyett, J. T. (1998). Leading a knowledge organization: Three keys to success. On The Horizon: The Strategic Planning Resource for Education Professionals.
- Bureau of Justice Statistics. (1997). *Sourcebook of criminal justice statistics: 1996*. Washington DC: US Department of Justice.
- Canadian Centre for Justice Statistics. (1999a). Gisèle Carrière's office. Personal e-mail communication.

Canadian Centre for Justice Statistics. (1999b).

- Caron, R. (1978). Go-boy. Scarborough: Fleet Paperbacks.
- Cary, M. K. (1993). How states can fight violent crime. Two dozen steps. Center on Crime, Communities and Culture.(1998).
- Clarke, S., & Harrison, A. L. (1992). Recidivism of criminal offenders assigned to community correctional programs or released from prison in North Carolina in 1989. Report prepared for the North Carolina Sentencing and Policy Advisory Commission. Institute of Government. Chapel Hill, NC: The University of North Carolina.
- Clemmer, D. (1958). *The prison community*. New York, NY: Holt, Rinehart & Winston.

- Computers and Learning (1999). Society for the Advancement of Excellence in Education.
- Cullen, F. T., & Gilbert, K. E. (1988). *Reaffirming rehabilitation*. Cincinnati, OH: Anderson.
- Ehrmann, S. C. (1995). The bad option and the good option. *The Educom Review*, 30(5), 41-43.
- Fogel, D. (1976). ... We are the living proof... The justice model for corrections. Cincinnati, OH: Anderson.
- Glaser, D. (1975). Strategic criminal justice planning. Rockville, MA: National Institute of Mental Health.
- Glaser, D. (1997). Profitable penalties: How to cut both crime rates and costs. Thousand Oaks, CA: Pine Forge Press.
- Keltner, B., & Ross, R. L. (1995). The cost of school-based educational technology, Programs. RAND.
- Langenbach, M., North, M., Aagaard, L., & Chown, W. (1990). Televised instruction in Oklahoma prisons: A study of recidivism and disciplinary actions. *Journal of Correctional Education*, 41(2), 87-94.
- Lawrence, D. (1994). Inmates students: Where do they fit in? *Journal of the Oklahoma Criminal Justice Research Consortium*, 1, 55-63.
- Linden, R., & Perry, L. (1982). The effectiveness of prison education programs. Journal of Counseling, Services, and Rehabilitation, 6(4), 43-57.
- Logan, C., & Gaes, G. (1992). Meta-analysis and the rehabilitation of punishment. Justice Quarterly, 10, 245-263.
- Lowman, J., & MacLean, B. (1995). Prisons and protest in Canada. In E. Sbarbaro & R. Keller (Eds.), *Prison crisis: Critical readings* (pp.180-199). Albany, NY: Harrow and Heston, Publishers.
- Martison, R. (1974). What Works? Questions and answers about prison reform. *The Public Interest*, (Spring), 22-50.
- McCormick, J. E. (1999). Personal communication.
- Mezirow, J. (1991). Faded visions and fresh commitments: Adult education's social goals. A policy paper prepared for the AAACE (November 11).
- Morrison, K. P. (1993). Reading, writing, and recidivism. CEA News and Notes, 15(2), 11 and 18.
- North Carolina Department of Corrections (NCDOC). (1995). Report on inmate incarceration cost per day for the year ended June 30, 1995. Raleigh, NC.

- Palmer, T. (1991). The effectiveness of intervention: Recent trends and current issues. *Crime and Delinquency*, 37, 330-346.
- Reagen, M. V., & Stoughton, D. M. (1976). School behind bars: A descriptive overview of correctional education in the American prison system. Metuchen, NJ: Scarecrow Press.
- Rutherford, P. (1998). Competency-Based training: The link between education and workplace excellence. On The Horizon: The Strategic Planning Resource for Education Professionals.
- Samenow, S. E. (1984). Inside the criminal mind. New York, NY: Times Books.
- Statistics Canada. (1994). CANSIM cross-classified tables 00580701, 00580702, 00590203 and 00590206.
- Stecher, B. M., Rahn, M. L., Ruby, A., Alt, M. N., & Robyn, A. (1997). Using alternative assessments in vocational education. RAND.
- Stevens, D. J. (1998a). The impact of time-served and regime on prisoners' anticipation of crime: Female prisonisation effects. *The Howard Journal of Criminal Justice*, 37(2),188-205.
- Stevens, D. J. (1998b). Educating offenders. Forum on Corrections Research, 10(1), 33-36.
- Stevens, D. J. (1997a). Violence begets violence. Corrections Compendium: The National Journal for Corrections. American Correctional Association, 22(12), 1-2.
- Stevens, D. J. (1997b). Influences of early childhood experiences on subsequent criminally violent behavior. *Studies on crime and crime prevention*, 6 (1), 34-50.
- Stevens, D. J. (1997c). Origins of prison gangs in North Carolina. Journal of Gang Research, 4(4), 23-35.
- Stevens, D. J., & Ward, C. (1997). College education and recidivism: Educating criminals is meritorious. *Journal of Correctional Education*, 48(3),106-111.
- Stevens, D. J. (1994). The depth of imprisonment and prisonisation: Levels of security and prisoners' anticipation of future violence. *The Howard Journal* of Criminal Justice 33(2), 137-157.
- Sykes, G. M. (1966). Society of captives. New York, NY: Princeton University Press. Tyack, D., & Cuban, L. (1995). Tinkering toward utopia: A century of public
- school reform. Harvard, MS: Harvard University Press. Wilson, I. (1992). A new social charter for higher education? On the Horizon,

1(2), 1-3.

CHAPTER 10

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Offender employment has played a pivotal role in corrections since the introduction of institutions (Funke, Wayson, & Miller, 1982; Gaes, Flanagan, Motiuk, & Stewart, 1999; Guynes & Greiser, 1986; Miller & Greiser, 1986; Townsend, 1996), although the purpose of employment has changed with prevailing correctional ideologies. Even though employment is an important rehabilitative tool, little is known about the factors and processes that contribute to employment stability among offenders (Gillis, 1998; Ryan, 1998), as few systematic empirical studies have been conducted in this area (Gaes et al., 1999; Pearson & Lipton, 1999; Ryan, 1998). Recent meta-analyses provide empirical verification of employment as a moderate risk factor for recidivism among offenders (Gendreau, Little, & Goggin, 1996; Gendreau, Goggin, & Gray, 1998). This finding reiterates the importance of enhancing our understanding of the employment construct in order to provide effective assessment and to assist in the reduction of this need through appropriately directed intervention strategies.

This chapter describes current employment measurement techniques and proposes modified measurement strategies. Research findings regarding program effectiveness are then applied to the exploration of employment as a correctional intervention aimed at increasing the likelihood of successful community reintegration among offenders. It also introduces a conceptual framework for the systematic exploration of community employment stability, and its impact on offender reintegration; and provides recommendations regarding directions for future employment research and interventions with offenders.

ASSESSMENT OF EMPLOYMENT NEEDS

Employment is a prevalent need among incarcerated Canadian offenders, with approximately 75% of offenders (76% of men, and 74% women) identified with employment needs at the time of entry to a federal institution (Motiuk, 1997). Moreover, offenders have indicated that they perceive employment deficits as contributing to their criminal behaviour (Erez, 1987).

Empirical support substantiating the link between offender employment deficits and recidivism was provided in a metaanalytic review of the literature by Gendreau *et al.* (1996). In their quantitative review, Gendreau and colleagues identified unstable education and employment (subsumed within the broader "social achievement" domain) as a contributing factor to recidivism among offenders (r = 0.15). An expansion of the meta-analysis was conducted as part of a larger review of the Correctional Service of Canada Dynamic Factors Identification and Analysis (DFIA) protocol, from the Offender Intake Assessment (OIA) process (see Gendreau et al., 1998). The OIA process, used to evaluate offenders' criminogenic needs upon entry to federal correctional institutions, incorporates employment as one of the seven major offender need areas in the DFIA (Motiuk, 1997; Taylor, 1997). In their meta-analysis Gendreau et al. reported education/employment (r = 0.26), employment needs at discharge (r = 0.15), and employment history (r = 0.14) as some of the most powerful predictors of recidivism within the employment domain. The average correlation with recidivism of the 200 effect sizes from 67 studies was r = 0.13.

Although employment deficits are firmly entrenched as a moderate predictor of recidivism, the impact on recidivism may be underestimated due to oversimplified definition and measurement of the construct. Employment risk factors have traditionally been assessed in a dichotomous manner (i.e., presence/absence of employment deficits), thereby potentially reducing their predictive ability. In addition, many items are historical in nature, limiting the utility of this information for directing current interventions.

The employment domain in the DFIA is more comprehensive in its assessment of static and dynamic employment risk factors. It is therefore useful not only in predicting an individual's risk for recidivism, but also for guiding the level of employment intervention required to decrease an individual's risk level in accordance with the risk principle. Moreover, items from the DFIA employment domain may be used to suggest specific areas requiring attention, consistent with the need principle.²

The advent of dynamic risk assessment tools such as the DFIA has contributed not only to our ability to more effectively appraise offender needs and competencies, but also to our ability to track change in employment needs as a function of treatment participation. Nonetheless, there is a need to progress toward improved dynamic assessment of competencies, attitudes, values, beliefs and satisfaction with employment, as proposed by Gendreau and colleagues (1998). Gendreau advocated the enhancement of dynamic assessment within the DFIA, using a compilation of scales such as those proposed in Gillis (1998). In accordance with the principles of effective classification (Andrews, Bonta et al., 1990; Andrews & Bonta, 1998), dynamic assessment would contribute to better understanding of an offender's criminogenic

¹ Correctional Service of Canada

 $^{^2}$ See Andrews, Bonta, & Hoge, 1990; Andrews & Bonta, 1998 for discussion of the risk and need principles.

needs and employment competencies and strengths, consequently increasing the potential to prioritize offender employment needs and to guide effective intervention strategies. Furthermore, a dynamic assessment strategy in relation to offender employment needs would allow for reassessment to track change in employment needs as a function of training. An amalgamation of static and dynamic risk and needs assessment protocols would most effectively appraise competencies that potentially contribute to safe reintegration, in addition to evaluating factors that place the individual at risk for future involvement in crime. Such an approach is consistent with Correctional Service of Canada's *Correctional Strategy*, which advocates prioritizing offender criminogenic needs and providing correctional intervention on the basis of effective needs identification.

EMPLOYMENT AS TREATMENT

Just as employment assessment has often been conducted using a dichotomous approach to the identification of employment needs (i.e., absence/presence of needs), program evaluations have typically used an approach that likewise limits the utility of the information provided. Numerous researchers attempting to review the employment literature have noted these methodological weaknesses (Gaes et al., 1999; Gerber & Fritsch, 1995; Pearson & Lipton, 1999; Ryan, 1998). For instance, many evaluations of employment intervention strategies have defined the independent variable in a dichotomous manner (i.e., participated/did not participate in employment program). Such an approach precludes examination of integral factors such as selection bias, quality of participation, length of time in the program, and reasons for attrition. Additionally, many program evaluations fail to report important information pertaining to offender employment needs and competencies prior to program participation. Moreover, the issue of comorbidity in offender needs, such as the combination of employment and substance abuse needs, is important to consider for its potential impact on work performance and treatment gain. Ryan summarized many of the methodological flaws that inhibit our ability to formulate conclusive evidence on the impact of offender employment training, including: "problems in research methodology and program development, including comparability of experimental and control groups, selection of participants, tracking of ex-offenders, differentiation between structural and subcultural variables, and definition of job retention" (Ryan, 1998, Executive Summary, p. E5). A comprehensive evaluation of employment program effectiveness must thus consider a variety of factors that may moderate the impact of the program on the criterion of interest (e.g., job attainment and retention, successful community performance).

In assessing the impact of employment training on offenders, one must be cognizant of the aforementioned limitations. To date, findings have been equivocal, with some studies reporting positive effects of employment on recidivism, and others reporting limited or no effects (Gaes et al., 1999; Gerber & Fritsch, 1995; Pearson & Lipton, 1999; Ryan, 1998). Some reviewers, based on a qualitative analysis of the literature, have adopted a fairly optimistic outlook on the impact of employment training on recidivism (e.g., Braithwaite, 1980; Gerber & Fritsch, 1995). Pearson and Lipton aptly summarized the state of the employment literature, based on results from their meta-analytic review of educational and vocational programs: "Although some types of educational and vocational programs appear *promising* in terms of reducing recidivism, due to a lack of studies using high-quality research methods we are unable to conclude that they have been *verified* effective in reducing recidivism" (Abstract, italics in original). This paucity of systematic research in the realm of offender employment can be contrasted with the extensive knowledge base derived from exploration of the overall treatment effectiveness literature.

Over time, researchers have observed particular practices that differentiate effective from ineffective programs, and these have been confirmed and replicated using meta-analytic techniques (Gendreau, 1996; Gendreau & Andrews, 1990; Gendreau et al., 1996). Meta-analyses of the treatment literature provide quantitative information at the aggregate level regarding the impact of programs on recidivism, thereby bypassing many of the problems associated with the qualitative interpretation of single studies (Andrews & Bonta, 1998; Gendreau et al., 1996). The two most comprehensive meta-analytic reviews of the treatment literature to date (McGuire & Priestly, 1995), conducted by Lipsey (1990) and Andrews, Zinger and colleagues (1990), substantiate the numerous principles of effective intervention elucidated by correctional theorists and researchers.

Lipsey analyzed the relationship between treatment and recidivism in 443 studies of juvenile offending and found support for the effectiveness of intervention in 64% of the treatment versus comparison studies. Whereas juveniles in the comparison conditions, on average, evidenced a recidivism rate of 50%, offenders in the treatment conditions recidivated at an average rate of 45%. Although this represents a 10% reduction in recidivism in favour of treatment conditions, Lipsey further corrected for the unreliability associated with official records of offending, and postulated that treatment effects were more likely in the range of 20% (from 50% recidivism to 40%).

Lipsey extended the analysis to explore factors associated with treatment effects, including type of study and type of treatment. After controlling statistically for various methodological factors (e.g., small sample size, attrition, etc.), he found that type of treatment contributed significantly to effect size estimates. He found that recidivism was reduced most substantively under treatment conditions that: lasted longer (and had more meaningful contact with offenders); were provided external to correctional settings and institutions; were under the influence of the evaluator; were behaviour-oriented, skill-oriented and multimodal; were provided to higher-risk cases; and were provided with other relevant factors in mind (e.g., influence of family, peers). According to Lipsey, treatments that are structured and focused may contribute to an average 30% reduction in reoffending rates. In summary, Lipsey's findings were pivotal in underscoring the importance of correctional treatment, and more significantly, appropriate treatment (i.e., multimodal, skills-oriented, and cognitive/behavioural), in contributing to improved outcomes for delinquents.

Andrew, Zinger and colleagues (1990) specified in detail the role of appropriate treatment in contributing to a reduction in recidivism. As a response to the claim by Whitehead and Lab (1989) that "interventions have little positive impact on recidivism" (p. 276), Andrews, Zinger et al. reanalyzed their data according to the principles of effective correctional intervention (Andrews, Bonta et al., 1990). In the replication and expansion of the juvenile and adult correctional literature, they found that appropriate correctional service, based on the principles of risk, need and responsivity, was more effective in reducing recidivism (mean phi = 0.30) than unspecified correctional service (-0.06) and non service criminal sanctioning (-0.07). Not only did they find support for appropriate treatment, but they also found that treatment effects were maintained across statistical controls for various methodological factors (e.g., sample size) that contributed to the effect size. These results, and those presented by Lipsey (1990), clearly favour the efficacy of correctional treatment (and particularly intervention efforts guided by program integrity as well as the principles of risk, need, and responsivity) in contributing to a reduced likelihood of recidivism.

In light of these meta-analytic findings on the overall treatment literature, theorizing regarding treatment efficacy has progressed from the question "*Does* treatment work" for, as Lipsey (1995) contends, it is no longer a question of *whether* intervention is effective in reducing recidivism. We know that treatment "works" and we must use the information derived from research to develop effective intervention strategies for offenders who manifest employment needs.

These principles were linked together by Andrews and Bonta (1994, 1998), who present a model detailing the various components that influence treatment services to offenders, building on the foundation provided by earlier research (Andrews & Kiessling, 1980; Hoge & Andrews, 1986; as cited in Andrews & Bonta, 1998). In conducting a comprehensive correctional program evaluation, Andrews and Bonta (1994) assert that following elements must be considered:

- Surrounding community and/or agency conditions,
- Preservice client characteristics,
- Preservice counsellor characteristics,
- Program characteristics,
- Process and content of treatment service,
- ◆ Intermediate treatment goals, and
- ♦ Ultimate outcomes.

If employment is considered a program, then these same principles apply to the provision of effective employment interventions. In this section, pertinent employment research findings will be applied within each of these elements comprising effective correctional treatment.

It is important to recognize that these program components do not occur in a vacuum, but interact in their contribution to program effectiveness (Andrews & Bonta, 1998). In order to gain a better understanding of the "black box" of treatment (Gendreau, 1996), program evaluation should explore these components in a holistic, interactive manner.

Surrounding community and/or agency conditions

Andrews and Bonta (1998) describe surrounding community conditions as the "broader social-structural, cultural and politicaleconomic conditions" (p. 89) that impact on clients, staff, type of intervention and outcomes. Within the realm of employment, political climate has played an integral role in the perception of institutional work for offenders.

"From its beginnings, the evolution of prison industry has been intertwined with changing notions concerning the complex causes of human behaviour and with fluctuations in correctional philosophy. Shifting public attitudes toward corrections in general, and industries in particular, produced restrictions that stunted industries growth." (Miller & Greiser, 1986, p. 14).

This is analogous to the perception of treatment, in general, that has fluctuated with prevailing political climate. Generally, widespread support and optimism for rehabilitation was supplanted by anti-treatment sentiment, followed by a more cautious and empirically informed interpretation of effective approaches to treatment.³

The dual role allocated to offender employment is an issue that has persisted throughout the history of prison industries. Miller and Greiser (1986) contend that one goal of prison industry is the reduction of costs associated with incarceration. The secondary goal, however, has varied with prevailing correctional ideology.

Initially, prison employment, with its moralistic and punitive overtone, was provided with a view to "reform the misguided". Later, institutional employment was perceived as providing a mechanism for offender rehabilitation and reintegration. However, a decline in prison industries was evidenced early in the 20th century due to community opposition to marketplace competition following the Great Depression. Additionally, access to alternative activities designed to keep offenders occupied (e.g., institutional libraries) contributed to the downsizing of industries operations. Moreover, the post-depression era was associated with adoption of the "medical model" of correctional rehabilitation, which viewed offenders as individuals who were ill and in need of treatment. Employment, with its promotion of work ethic, did not fit with this focus on diagnosis, classification, and treatment and was therefore perceived as offering minimal rehabilitative value within this correctional philosophy (Funke et al., 1982; Miller & Greiser,

1986). Miller and Greiser credit Glaser (1964) with increasing recognition of the relationship between prison industry and offender reintegration, due largely to his pivotal research on pre-release preparation, post-release employment and recidivism. Glaser reported that successful probationers were twice as likely to make use of the skills they had developed through institutional work programs than probationers who were unsuccessful during their release.

Although goals have varied over time, Miller and Grieser describe the contemporary era of prison industries as "*characterized by a resurgence of interest in prison industries and a new integrative correctional philosophy*" (p. 1), consistent with a rehabilitative approach to dealing with offenders. This view on the role of industries has been echoed in more recent offender employment-related research (Gaes et al., 1999; Gerber & Fritsch, 1995; Gillis, 1998; Ryan, 1998; Simon, 1999). The reintegrative value of institutional employment is recognized internationally, even by correctional systems differing radically in their guiding philosophies and ideologies (Van Zyl Smit & Dünkel, 1999).

These early themes are still evident in current theorizing on the dual, and sometimes conflicting, role of correctional industries — the "struggle between philosophies" (Miller & Greiser, 1986, p. 3) — namely, economic versus rehabilitative returns. Simon (1999), in her research on employment in British prisons, reported that shop instructors recognized both production of goods and promotion of skill development in offenders as important objectives. When asked to rate the relative importance of these goals, instructors emphasized the production of high quality goods as the principal objective of industries work; Simon proposed that instructors require clarification of their role, so as to prioritize offender development over production of goods. However, these industry objectives are not necessarily mutually exclusive, as illustrated in a typology of goals related to modern day correctional industries proposed by Guynes and Greiser (1986).

According to Guynes and Greiser, the various goals associated with prison employment impact the offender, the institution, and society. Institution-based goals contribute to the orderly operation of the institution and include the attainment of such objectives as reducing idleness, structuring daily activities, and reducing costs within the correctional agency. The reduction of idleness has been a goal since the inception of offender-based employment programs, as it addresses the important custodial function of occupying offenders in a constructive manner during incarceration (Greiser, 1996; Maguire, 1996). Additionally, offenders employed with prison industries may adapt better to institutional life (Flanagan & Maguire, 1987; Gleason, 1986). For example, Maguire reported that prison industry contributed to a reduction in the number of institutional infractions incurred by offenders employed by correctional industries, relative to a comparison group who did not participate in industrial programs. Similarly, Saylor and Gaes (1996) found that relative to a comparison group, offenders who participated in industries,

vocational training or apprenticeship programs were less likely to receive misconduct reports in the year prior to release. Moreover, research by Simon (1999) provided insights into the manner in which shop instructors and offenders participating in industries programs regard the institutional and reintegrative (communitybased) impacts of institutional employment programs. Although reserved in their endorsement of the impact of institutional work experience on securing a job after release, instructors felt that industries work in prison contributed to positive outcomes for offenders at the institutional level. Similar sentiments were expressed by offenders; although only one quarter (of 117) of offenders surveyed felt that institutional employment offered any value in contributing to work opportunities on release, more than half (56%) reported that institutional work placement assisted them in coping with living in the institution. In her survey of offenders incarcerated in the state of Michigan, Gleason reported similar findings on offender perceptions of the value of institutional employment.

Society-based goals involve repayment to society through such means as financially assisting dependents in the community, and providing victims with restitution. These goals are based on the premise that offenders are responsible for repaying the costs resulting from their criminal actions. Furthermore, their contribution to the production of goods for the state serves to defray some of the costs associated with their incarceration (Guynes & Greiser, 1986).

Most important in relation to rehabilitation and reintegration, offender-based goals include such areas as attainment of positive work habits, real work experience/vocational training, and more concrete objectives, including money management skills and release money. The focus within an offender-based framework is reintegration and rehabilitation (Guynes & Greiser, 1986; Flanagan, 1988).

Preservice client characteristics

Preservice client characteristics, namely: risk, need and responsivity, is an important factor that has been highly overlooked in evaluation of the employment literature. Although our knowledge of risk is good, it has not been adequately used in placing offenders into employment positions, nor has information on offender risk and need levels been effectively used in evaluating treatment gain. Many studies have been conducted regarding the impact of employment programs on recidivism, but few have explored important program characteristics, staff characteristics, or more surprisingly, offender characteristics.

Risk

Motiuk and Belcourt (1996) conducted one of the few employmentbased studies to consider offender risk levels. This study examined post-release outcome for a group of 269 offenders who participated in CORCAN at least six months prior to conditional release and who spent a minimum of one year in the community following release. CORCAN, a special operating system within the Correctional Service of Canada, employs offenders in institutional manufacturing, agribusiness, construction, services (i.e., keyboarding, data entry, and telemarketing) and textiles operations. Monthly, CORCAN employs 2000 full-time equivalent positions. In one year, 4000 offenders are employed by CORCAN, with an average stay of approximately one month.

Motiuk and Belcourt compared rates of return for offenders released on full parole and statutory release with national average recidivism rates. CORCAN participants released on full parole were returned to federal custody at a rate of 19.2%, whereas the national average was 26.6%, which constitutes a difference in return of 27.8%. The results were more pronounced for return to federal custody for a new offence, with 12.1% national average rate of return and only 1.9% for CORCAN participants (a difference of 84.3%). This finding of a substantially lower rate of return did not apply for CORCAN participants on statutory release (46.4% versus 44.0%), indicating an interaction between success on release and risk level. No differences were obtained in return to federal custody for a new offence among offenders on statutory release. Furthermore, analyses indicated that offenders in this sample released on full parole were categorized as lower risk to reoffend than offenders on statutory release, substantiating the link between risk level and propensity to successfully reintegrate into the community.

Need

Although risk is important, it is desirable to ascertain how dynamic factors impinge upon outcome for offenders. To this end, the preliminary study conducted by Motiuk and Belcourt was expanded to consider employment needs among this sample of offenders and the relationship to community reintegration. Gillis, Motiuk, and Belcourt (1998) expanded the initial follow-up period by one year (average follow-up 23 months) and reported employment status for a subset (n = 99) of the 269 offenders who initially comprised the sample. Consistent with the risk assessment literature, the authors reported an interaction between overall risk level, employment needs, and employment status during the first six months of release.

More than half of the offenders in the sample exhibited employment needs on release and two thirds experienced difficulty obtaining employment in the first six months of release. When overall risk and need scores were examined in relation to employment status, analyses indicated that offenders classified as higher risk were much less likely to be employed than lower risk offenders. Results of particular interest involve the relationship between employment status and reoffence. Offenders who were employed were convicted at less than half the rate of unemployed offenders (17% versus 41%) and committed only one quarter as many new violent offences as unemployed offenders (6% versus 21%). When employment needs were subdivided into their four components ("asset," "no need," "some need," and "considerable need"), it is particularly telling that all offenders identified as having employment as an asset (n = 6) were employed, and none recidivated during the follow-up period. Conversely, no offenders identified with considerable needs (n = 15) obtained employment, and 43.8% were convicted of a new offence in the follow-up period.

It is important to note that the two studies derived from this sample did not have control groups, which limits the conclusions that may be drawn. However, these preliminary "snapshots" of offenders who worked for CORCAN during incarceration suggest that employment plays a potentially important role in assisting offenders in their reintegrative efforts. Furthermore, this research has served as the basis for the development of more stringent studies that will contribute to an enhanced understanding of how employment contributes to safe community reintegration (see Gillis, 1998).

Responsivity

Responsivity is an area that has not been explored in evaluating employment programs. Responsivity refers to a style and mode of program delivery that is consistent with the learning style and ability of offenders.⁴

Other areas relating to responsivity include gender and ethnicity. More specifically, women and Aboriginal offenders may have specific employment needs and responsivity factors to consider, and may manifest different competencies. It is important to identify factors that may be specific to these populations through research, and to follow-up accordingly with programs designed to meet their specific employment needs.

Additionally, motivation, although proposed as a potential responsivity factor has received surprisingly little attention in the correctional treatment literature. Recently, Tellier (1999) developed a theoretical framework for the incorporation of motivation as a contributing factor to offenders' readiness to change their behaviour. The framework is based on the concept that motivation levels fluctuate as offenders progress through different stages of change (Prochaska & DiClemente, 1984). Inclusion of assessment processes based on the theoretical model proposed by Tellier would contribute to a refinement in our understanding of how program readiness impacts on offenders' treatment gain in employment programs. Ultimately, the model could contribute to increased appreciation of the role of motivation in contributing to employment stability and safe community reintegration. Such an approach recognizes that offenders enter treatment with varying levels of readiness to change and willingness to address their needs and therefore require different levels of program intensity.

⁴ For more details on Responsivity, see Chapter 5 of this Compendium: Treatment Responsivity: Reducing Recidivism by Enhancing Treatment Effectiveness, by Sharon Kennedy.

Preservice counsellor characteristics

Andrews and Bonta (1998) specify the importance of counsellor training skills and ability to establish a warm interpersonal relationship with the client in contributing to positive program outcomes. Moreover, inherent in a cognitive behavioural/social learning programmatic framework is the idea that prosocial modelling is a key element to behaviour change among program participants.

In the employment context, CORCAN instructors spend the majority of the day with offenders and therefore play a potentially important role in the skill development, attitude, and behavioural change among offenders (Fabiano, LaPlante, & Loza, 1996; Gillis, Getkate, Robinson, & Porporino, 1995).

As part of an employability research initiative in CORCAN, Gillis (1994) conducted a study exploring the relationship between instructor leadership styles, perceived credibility and performance; and offender-reported measures of work attitudes and motivation. A multi-source assessment approach incorporating measures obtained from work instructors, offenders and managers, was used to assess the impact of instructor attributes on offender work motivation. Managers (n = 7), work instructors (n = 35) and offenders (n = 143). Seven institutions from the Correctional Service of Canada participated in this research.

Supervisor leadership behaviours were assessed using the Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 1990), which examines transactional, transformational and nonleadership behaviour. Transactional leaders participate in exchanges with their employees, rewarding predetermined objectives and punishing employees for failing to attain goals. An augmenting effect beyond that of transactional leaders is characteristic of transformational leaders, who inspire and stimulate employees to perform beyond their expectations in achieving goals. These charismatic leaders are noted for their motivational coaching styles and ability to adapt their approach to meet individual employee needs. As opposed to this active, mentoring form of leadership, non-leadership is characterised by a "laissez-faire" approach (Bass, 1985, 1990; Bass & Avolio, 1990). The MLQ also examines organizational outcome measures, such as extra effort exerted by employees. In addition to these leadership qualities, this study explored a measure of perceived instructor credibility, comprised of trust, inspiration and competence adapted from Kouzes & Posner (1993).

Supervisors and offenders completed the leadership questionnaire, and offenders also completed the credibility questionnaire, and a set of scales designed to assess work motivation, including: intrinsic job motivation, meaningfulness of work, responsibility for work outcomes, and job involvement. Offender punctuality ratings compiled by instructors provided a behavioural measure of offender motivation. Finally, managers completed a modified version of the leadership questionnaire, evaluating instructor effectiveness in obtaining extra effort from offenders in their shops and increasing shop productivity.

Analyses of the data supported the hypothesis that active transformational leadership is associated with motivational outcomes in employees. Instructors rated by offenders as displaying transformational behaviours were associated with higher levels of extra effort, work motivation, and job involvement reported by offenders. Importantly, offender-rated instructor transformational leadership was significantly related to offender punctuality ratings. Moreover, a particularly strong finding was the association between manager ratings of instructor effectiveness and offender-reported extra effort exerted in the workplace and offender punctuality ratings. As hypothesized, a non-leadership instructor orientation was linked lower levels of offender-reported work motivation, job involvement, and willingness to exert extra effort. Transactional leadership was not associated with offender-reported work attitudes nor punctuality ratings (Gillis, 1994; Gillis et al., 1995).

This research extended and substantiated results from an earlier study conducted by Crookall (1989), who found that instructors trained in transformational leadership (versus situational leadership) were associated with significant improvements in personal growth, as gauged by turnover, work habits, respect, job skills, citizenship and progress toward rehabilitation.

The research also provided important information regarding the pivotal role of correctional staff in influencing offenders. Prior to this study, most research on correctional staff explored corrections-related attitudes, but failed to evaluate how these attitudes and behaviours impact on offenders. Moreover, this leadership research illustrates the importance of appropriate staff selection and staff training strategies. Future staff training should incorporate not only leadership training, but also effective approaches to working with offender populations. As demonstrated in the leadership research, offenders respond differentially to leadership styles. Training should also incorporate how to provide instruction to offenders (i.e., coaching offend ers) in a manner that responds to the offender's particular learning style, in accordance with responsivity principle. Moreover, the mode of delivery should be based on the risk and needs principle, with offenders manifesting significant employment needs given a higher level of one-on-one intervention. As illustrated in these studies (Crookall, 1989; Gillis, 1994), modelling is key for program delivery, a finding consistent with meta-analytic research on treatment effectiveness. Finally, not only did this research substantiate the treatment effectiveness literature in a different context — offender institutional employment — but it also provided support for the utility and validity of the transformational leadership typology within a correctional context.

Program characteristics

Treatment setting is a program component that is particularly relevant in the context of employment training. Currently within the Correctional Service of Canada (CSC), the majority of systematic employment training programs are offered at the institutional level. Importantly and increasingly, employment program operations are attempting to parallel those found in community, with expectations of performance from offenders consistent with community standards.

Given that meta-analytic results support the increased efficacy of community-based treatment over institutional intervention, more focus should be placed on community-based employment initiatives for offenders (Andrews et al., 1990; Lipsey, 1990). Although institutional employment opportunities contribute to the offender's potential for safe and effective community reintegration (Motiuk & Belcourt, 1996; Saylor & Gaes, 1996), more intensive effort should focus on communitybased initiatives that offer job readiness training, job placement strategies and on-the-job training opportunities. Additionally, there is a need for follow-up sessions and systematic intervention at the community level. More specifically, community employment placement and training opportunities are required to: facilitate the linkage and ease the transition to the community, provide financial support and promote peer support and effective prosocial role models to offenders upon release. This approach is consistent with policy recommendations in the recent Report to EXCOM on Employment (CSC, 1999), which advocates enhancement of CORCAN community operations, and development and implementation of national short-term employability programs for offenders at the institutional and community levels.

Process and content of treatment service

As a subset of overall risk, employment offers real potential for change among offenders with its focus on combining concrete skills-based training with the development and enhancement of generic employability skills, transferable to community employment settings. Research has shown that shop instructors and offenders agree that institutional employment has the potential to enhance offender work habits and attitudes (Gillis, 1994; Simon, 1999). The focus on general employability skills, as opposed to very concrete and job-specific skills, has received increasing attention in the Canadian correctional employment system (see CSC, 1999; Fabiano et al., 1996; Gillis, Robinson, & Porporino, 1996; Mulgrew, 1996).

Since the early 1990s, CORCAN has placed high priority on developing employability skills in offenders. CORCAN has worked closely with the Conference Board of Canada, who surveyed Canadian employers regarding attributes they look for in effective employees (McLaughlin, 1992). Using the Conference Board of Canada criteria and research findings from the early employability initiative, CORCAN in collaboration with the Research Branch, developed the *Offender Performance Evaluation* to refine assessment of offender employment skills and competencies. The form evaluates generic academic, personal management and teamwork skills identified by the Conference Board of Canada in their *Employability Skills Profile* as integral for effective work performance. Scored on the basis of behavioural indicators, the form provides concrete information to correctional staff and offenders regarding offender work competencies and need areas. Easy to score and interpret, the form also provides a mechanism for feedback regarding offender work performance and goals for future intervention. The form is currently in use in CORCAN shops, although its application will be expanded to all work placements in the attempt to adequately assess how institutional employment experience contributes to offender employability skills.

A primary objective of correctional employment is the provision of job skills and enhancement of positive work attitudes that will assist offenders in their reintegration to the community upon release. This approach recognizes that generic skills are important, as often, community job placements are not consistent with institutional employment training experience (Simon, 1999). Employment is provided to offenders in the anticipation that work habits and attitudes will generalize across different work situations (i.e., in the community upon release). It is postulated that the enhancement of positive work attitudes will ultimately translate into behavioural change. Results reported in Gillis (1994) indicate that behavioural differences, in the form of better punctuality ratings, have been noted among offenders with more positive work attitudes and higher levels of motivation. However, further research is required to address the potential impact of work attitudes and specific employability skills on community employment and reintegration.

Intermediate treatment goals

In evaluating program effectiveness, it is important to keep in mind that many evaluations have used recidivism as the sole criterion of program effectiveness. These studies, therefore, do not account for more intermediate outcomes that one would anticipate as resulting from employment programs, namely, increase in specific and generic skills, and employment status upon release. Understandably, these factors are often excluded due to the difficulty in monitoring long-term, and even shortterm, outcomes associated with community adjustment.

As described in the previous section, an important intermediate outcome of employment is the development of employability skills — generic skills transferable to numerous work settings. In exploring treatment gain, it is important to examine offender perceptions of the attitudes and skills that are developed or enhanced as a function of participation in institutional employment programs. To this end, the *Offender Performance Evaluation* will allow for the examination of how particular skills impact on offenders' ability to find and keep work in the community, while on release. Future research will incorporate the information relating to change in skills as a function of participation in CORCAN (tracking offenders' employability skills from the time they start working for CORCAN, to completion of their work) in the attempt to gain an enhanced understanding of the impact of skill development on subsequent reintegration for offenders. Coupled with employment needs data from the OIA, this information has potential utility in contributing to the effective assessment of treatment gain.

A logical intermediate outcome of employment programming is employment status and/or job retention. However, Ryan (1998), in her review of the job retention literature, asserts that job placement was used frequently as an outcome variable in research in the 1969s and 1970s, but was rarely tracked in subsequent research. Her review of the literature "revealed an almost complete lack of a systematic, logically developed body of knowledge about job retention of released inmates" (p. 9). Clearly, employment stability - or job retention - must be included as a crucial proximal outcome measure in communitybased offender employment research (Gillis, 1998; Ryan, 1998; Simon, 1999). In evaluating employment training strategies for offenders, it is imperative that researchers look beyond recidivism to other pertinent proximal outcomes measures of program success (Braithwaite, 1980; Hodanish, 1976) to include dynamic factors associated with finding and keeping work.

Saylor and Gaes (1996) produced one of the few studies exploring community employment status. They reported that offenders who participated in industries, vocational or apprenticeship programs, or a combination of the two, were 24% more likely to obtain employment on conditional release than a matched control group.

Conversely, Markley, Flynn, and Bercaw-Dooen (1983), in a study examining employment success in a sample of offenders who had received job skills training, found no effect of training in the experimental group, relative to a control group matched on age, sex, race, education and skill level prior to training. More specifically, offenders who had received vocational training did not differ from the control group on the "success index," which measured months employed per year and yearly earnings during release. Importantly, however, the "success index" used by the authors to evaluate outcome represents a significant contribution to the employment literature.

Lipsey (1995) also reported upon the relationship between treatment efficacy and various outcomes other than delinquency. In his analysis, he examined the global effects of treatment on the following non-delinquency outcomes: psychological outcome (e.g., attitudes, self esteem), interpersonal adjustment (e.g., peer or family relationships), school participation (e.g., attendance, dropout), academic performance (e.g., grades, achievement tests), and vocational performance (e.g., job status, wages). An overall 'success rate' was calculated by splitting each of the outcome measures at the median; treatment and control groups were compared on their attainment of the minimum median value on outcome (i.e., their relative success rates). In a comparable fashion to delinquency outcome, positive treatment effects were found on each of the nondelinquency outcomes, ranging from 10% improvement to 30% improvement. An average effect of 10% was obtained for vocational accomplishment in the studies (n = 44) explored by Lipsey.

Additionally, we need to explore not only *whether* an offender is employed, but whether she or he is *gainfully* employed. An ongoing project in the research branch is exploring these questions in a community-based study of offender employment (see Gillis, 1998).

Ultimate outcomes

Although recidivism is an important criterion to consider, it should not be used as the sole outcome measure of program effectiveness, particularly in the context of employment (Hodanish, 1976). Furthermore, Ryan (1998) raises important issues regarding the reliability of recidivism statistics as criterion measures, and provides a good argument for not relying solely on recidivism as the criterion of program effectiveness.

As previously outlined, very few well-controlled studies of employment impacts on recidivism have been conducted but overall, employment intervention is promising in its potential to reduce recidivism (Pearson & Lipton, 1999). Saylor and Gaes (1996) provided one of the best controlled studies in their prospective evaluation of the impact of institutional employment and vocational training on offenders' post-release performance. Study group participants consisted of offenders who had participated in prison industries (57%), combined industrial and vocational experience (19%) and vocational and/or apprenticeship training (24%). The study also included a statistically matched comparison sample of offenders released in the same calendar quarter as the employment group. Long-term follow-up (range 8 to 12 years) provided important information about the impact of training on post-release recidivism.

The study examined not only federal recommitment (i.e., for a new offence or supervision revocation) but also time in community until recommitment. Men who participated in correctional industries survived in the community 20% longer than a comparison group, and the vocational or apprenticeship training group, 28% longer. Although results for the employment/training group were not statistically significant, the same trend was noted. Saylor and Gaes suggest that additional employment-related variables should be examined for their impact on community adjustment following release from prison.

Summary

This section delineated the importance of considering numerous factors that impinge upon the ability of a program to effect change among offenders. The individual's characteristics, including the level of risk he or she presents for future involvement in crime, the intensity of the manifested need, and the individual's amenability to treatment are important factors to consider in combination with actual treatment characteristics. Program evaluation should incorporate intermediate measures of program effectiveness, minimally including community employment status as a pertinent outcome measure.

THEORETICAL MODEL

The need for an integrated theoretical perspective on employment cannot be disputed. Before effective programs can be developed and implemented for offenders, one first requires an understanding of the various factors and processes that combine to influence not only reintegration potential, but also employment stability in the community.

As previously mentioned, many studies to date have explored employment primarily in relation to recidivism, an approach which neglects important proximal outcomes. Exploration of intermediate targets is crucial for several reasons. First, many employment programs promote the development of job specific skills, but often, community employment opportunities are not consistent with those offered in the institution. Use of recidivism as the sole criterion of program effectiveness ignores other important potential gains from employment participation, including job attainment, job retention, and increased prosocial orientation (Gillis, 1998; Ryan, 1998). Safe community reintegration, however, is the ultimate objective of the provision of programs to offenders, and should be included in a comprehensive theoretical perspective on employment.

A theoretical model was recently formulated to assist in the prediction of employment stability (Gillis, 1998). Revised from a theoretical model to predict criminal behaviour (see Gillis, 1997), the model adopts a social learning/social cognition perspective in its amalgamation of the theoretical perspective proposed by Andrews and Bonta (Andrews, 1982, 1995; Andrews & Bonta, 1998 and by Ajzen 1985; Ajzen & Fishbein, 1980 Fishbein & Ajzen, 1975). Furthermore, the model incorporates the risk factors most predictive of recidivism.

The Personal Interpersonal Community-Reinforcement perspective (PIC-R; Andrews, 1982, 1995; Andrews & Bonta, 1998) was formulated to account for inhibitory and facilitatory factors related to criminal offending. The theory employs a social learning perspective in its specification of the interrelationships between (a) personally-mediated events, comprised primarily of the individual's attitudes, values and beliefs, and personality, which in turn, impact upon personally-mediated control (e.g., self-regulation and cognitive functioning); (b) interpersonallymediated control, consisting of the influence of others (i.e., associates/social support) via modelling, expressed approval, etc.; and (c) automatic rewards, which typically gain their rewarding properties through previous experience. These proximal factors, in interaction with more distal contextual elements (such as neighbourhood), influence the manner in which the individual perceives the costs/rewards for criminal behaviour. In the model, the PIC-R perspective borrows from the theory of planned behaviour

in using the framework provided by the theory, and in operationalizing the various constructs that will be used in predicting employment status. The casual pathway postulates that relevant beliefs contribute to attitudes, associates, and self-efficacy. Intention mediates the impact of attitudes, associates and self-efficacy on behaviour. For the present study, this model was modified to predict employment stability for offenders on conditional release, by incorporating relevant work attitudes and beliefs.

The pre-test data collection phase for this research on employment stability was completed in September 1999, and post-test data collection in March 2000. Initially, the research explores factors that contribute to employment stability. Ultimately, the study will be extended to evaluate the impact of employment stability on long-term community reintegration. Thus, this research will explore proximal and more distal outcomes potentially related to attaining and maintaining employment in the community.

The current community-based employment research will also contribute to the development of a brief employment checklist comprised of factors that are most strongly linked to community success. This list of protective factors, coupled with known employment risk factors, will assist parole officers in tracking important employment factors among offenders who manifest employment needs.

Furthermore, rather than pure reliance on the assessment of static employment deficits among offenders, this research strategy involves exploration of dynamic employment factors. Accompanying the evolution of employment assessment strategies is the potential for renewed effort to target employment strengths and competencies that will assist offenders in their community adjustment.

INNOVATIONS AND FUTURE DIRECTIONS

It can safely be asserted that there is a resurgence of interest in employment as an important factor in the safe reintegration of offenders. However, the systematic study of employment as a risk and need factor is still in its infancy. Although we know employment is important in contributing to outcomes for offenders, we are in the preliminary stage of understanding the processes and factors that are important to employment success and community reintegration.

This parallels the status of risk and needs assessment in corrections. Our knowledge of risk is good, but our understanding and ability to effectively intervene to decrease criminogenic needs is constantly evolving as our knowledge base increases. Employment, as a subset of offender needs, constitutes an important area of study. Once an enhanced understanding of the mechanisms and processes associated with employment stability is attained, this information may be used to guide the development of intervention strategies, both at the institutional and community level. Moreover, once this level of understanding has been achieved, subsequent intervention efforts should focus on responsivity issues (including gender, ethnicity, motivation, and different learning styles), which have received relatively little exploration to date in the correctional literature.

Currently, a project is in the development phase within the Research Branch, CSC, which will survey women offenders' employment histories and experiences since release. This research will assess womens' primary employment interests and training/employment programs they would find helpful. Importantly, the study will evaluate impediments to finding and maintaining employment as perceived and experienced by women on conditional release. Moreover, parole officers will be requested to respond to a survey to gain an understanding of their perspective on women offenders' employment needs and training requirements. Ultimately, the information will be used to guide employment training strategies and job readiness programs delivered at the institutional and community level for women offenders on conditional release (Gillis, 1999).

Consistent with proposals in the Task Force on Employment, an integrated strategy for institutional and community-based employment intervention is required. In particular, given the empirical support for the efficacy of community-based intervention over institutional treatment, it is proposed that more effort be placed on providing employment intervention to offenders on conditional release. Moreover, in accordance with metaanalytic findings regarding program effectiveness, it is advocated that an intensive cognitive-behavioural employment skills program be developed and offered to offenders manifesting employment needs. Such a program would involve skills development in everyday interactions with peers and co-workers and would be designed with the intention of increasing offenders' job efficacy, in addition to generic employment skills (e.g., positive work attitudes and behaviours) defined by Canadian employers as integral for successful job performance. The program would offer differing levels of intervention, so offenders with different employment needs could enter the program at varying stages, in accordance with the risk principle and consistent with the concept of stages of change. Importantly, also, this program would offer job placement opportunities, intense supervision and coaching by a qualified employment counsellor. Consideration should also be given to forecasting availability of particular types of employment in the labour market, as research has shown that jobs traditionally sought out by offenders (e.g., manual and/or unskilled labour) is no longer as plentiful as it once was (Simon, 1999).

Additionally, an important element in guiding and assessing program effectiveness is an appropriate evaluation component. All future employment intervention strategies should incorporate evaluative components that provide feedback regarding program efficacy in attaining objectives (e.g., increased knowledge, employment attainment and maintenance, and additional indicators of community adjustment). Finally, there is reason to adopt an optimistic outlook that current research and endeavours to intervene with offenders with employment needs will yield valuable information for the development of a comprehensive and systematic employment strategy.

REFERENCES

- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), *Action control: From cognition to behavior* (pp. 11-39). New York, NY: Springer-Verlag.
- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice Hall.
- Andrews, D. A. (1982). A personal, interpersonal and community-reinforcement perspective on deviant behavior (PIC-R). Toronto, ON: Ontario Ministry of Correctional Services.
- Andrews, D. A. (1995). The psychology of criminal conduct and effective treatment. In J. McGuire (Ed.), What works: Reducing reoffending. Guidelines from research and practice (pp. 35-62). West Sussex, England: John Wiley & Sons.
- Andrews, D. A., Bonta, J., & Hoge, R. D. (1990). Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice and Behavior*, 17, 19-52.
- Andrews, D. A., & Bonta, J. (1994). The psychology of criminal conduct. Cincinnati, OH: Anderson.
- Andrews, D. A., & Bonta, J. (1998). The psychology of criminal conduct (2nd ed.). Cincinnati, OH: Anderson.
- Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology*, 28, 369-404.
- Bass, B. M. (1985). Leadership: Good, better, best. Organizational Dynamics, 13, 26-40.
- Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. Organizational Dynamics, 18, 19-31.
- Bass, B. M., & Avolio, B. J. (1990). *The Multifactor Leadership Questionnaire*. Palo Alto, CA: Consulting Psychologists Press.
- Braithwaite, J. (1980). Prisons, education and work: Towards a national employment strategy for prisoners. Queensland, Australia: Australian Institute of Criminology.

Correctional Service of Canada (1999). *EXCOM Task Force on Employment*. Crookall, P. S. (1989). *Leadership in prison industry*. Unpublished doctoral dis-

- sertation, University of Western Ontario, School of Business Administration. Erez, E. (1987). Rehabilitation in justice: The prisoner's perspective. *Journal*
- of Offender Counseling, Services and Rehabilitation, 11, 5-19. Fabiano, E., LaPlante, J., & Loza, A. (1996). Employability: From research to
- practice. Forum on Corrections Research, 8(1), 25-28.
- Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention and behavior: An introduction to theory and research. Reading, MA: Addison-Wesley
- Flanagan, T. (1988). Prison labor and industry. In G. Goodstein & D. MacKenzie (Eds.), *The American prison: Issues in research and policy* (pp. 135-161). New York, NY: Plenum.
- Flanagan, T., & Maguire, K. (1987). Prison labor and prisoner adjustment. Albany, NY: Hindelang Criminal Justice Research Centre, SUNY.
- Funke, G. S., Wayson, B. L., & Miller, N. (1982). Assets and liabilities of correctional industries. Lexington, MA: Lexington Books.
- Gaes, G. G., Flanagan, T. J., Motiuk, L. L., & Stewart, L. (1999). Adult correctional treatment. In M. Tonry & J. Petersilia (Eds.), *Prisons* (pp. 361-426). Chicago, IL: University of Chicago Press.
- Gendreau, P. (1996). Offender rehabilitation: What we know and what needs to be done. *Criminal Justice and Behavior*, 23, 144-161.
- Gendreau, P., & Andrews, D. A. (1990). Tertiary prevention: What the metaanalyses of the offender treatment literature tell us about 'what works'. *Canadian Journal of Criminology*, 32, 173-184.
- Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult offender recidivism: What works! *Criminology*, 34(4), 575-607.
- Gendreau, P., Goggin, C., & Gray, G. (1998). Case need domain: Employment. Forum on Corrections Research, 10(3), 16-19.

- Gerber, J., & Fritsch, E. J. (1995). Adult academic and vocational correctional education programs: A review of recent research. *Journal of Offender Rehabilitation*, 22(1/2), 119-142.
- Gillis, C. A. (1994). The influence of shop supervisor characteristics on employeereported work attitudes in a prison industry setting. Unpublished master's thesis. Ottawa, ON: Carleton University.
- Gillis, C. A. (1997). Integrating the PIC-R perspective and theory of planned behaviour: Specifying the role of attitude in predicting criminal behavior. Unpublished paper. Ottawa, ON: Carleton University.
- Gillis, C. A. (1998). The prediction of employment stability in a sample of federal offenders on conditional release. Unpublished dissertation prospectus. Ottawa, ON: Carleton University.
- Gillis, C. A. (1999). Women offenders and employment. Forum on Corrections Research, 11(3), 37-40.
- Gillis, C., Getkate, M., Robinson, D., & Porporino, F. (1995). Correctional work supervisor leadership and credibility: Their influence on work motivation. *Forum on Corrections Research*, 7(3), 15-17.
- Gillis, C. A., Motiuk, L. L., & Belcourt, R. (1998). Prison work programs: Impact on post-release employment and recidivism. Research Report R-69. Ottawa, ON: Correctional Service Canada.
- Gillis, C., Robinson, D., & Porporino, F. (1996). Inmate employment: The increasingly influential role of generic work skills. *Forum on Corrections Research*, 8(1), 18-20.
- Glaser, D. (1964). The effectiveness of a prison and parole system. Indiana: Bobbs-Merrill.
- Gleason, S. (1986). Inmate attitudes toward vocational training: A case study of vocational training students in the State Prison of Southern Michigan. *Journal of Offender Counselling, Services and Rehabilitation, 10*, 49-60.
- Greiser, R. C. (1996). Public and private sector partnerships in prison industries and offender employment. *Forum on Corrections Research*, 8(1), 43-45.
- Guynes, R., & Greiser, R. C. (1986). Contemporary prison industry goals. In American Correctional Association (Ed.), A study of prison industry: History, components, and goals (pp. 19-29). College Park, Maryland.
- Hodanish, M. J. (1976). Rehabilitation through employment: Proceed with caution. Offender Rehabilitation, 1, 147-161.
- Kouzes, J. M., & Posner, B. Z. (1993). Credibility: How leaders gain and lose it, why people demand it. California: Jossey-Bass.
- Lipsey, M. (1990). Juvenile delinquency treatment: A meta-analytic inquiry into the variability of effects. Russell Sage Foundation.
- Lipsey, M. (1995). What do we learn from 400 research studies on the effectiveness of treatment with juvenile delinquents? In J. McGuire (Ed.), What works: Reducing reoffending. Guidelines from research and practice (pp. 63-78). West Sussex, UK: John Wiley & Sons.

- Maguire, K. (1996). Prison industry program and inmate institutional behavior. Forum on Corrections Research, 8(1), 39-42.
- Markley, H., Flynn, K., & Bercaw-Dooen, S. (1983). Offender skills training and employment success: An evaluation of outcomes. *Corrective and Social Psychiatry and Journal of Behavior Technology Methods and Therapy*, 29, 1-11.
- McGuire, J., & Priestly, P. (1995). Reviewing 'what works': Past, present and future. In J. McGuire (Ed.), What works: Reducing reoffending. Guidelines from research and practice (pp. 3-34). West Sussex, UK: John Wiley & Sons.
- McLaughlin, M. (1992). Employability skills profile: What are employers looking for? (R-81-92-E). Ottawa, ON: Conference Board of Canada.
- Miller, N., & Greiser, R. C. (1986). The evolution of prison industries. In American Correctional Association (Ed.), A study of prison industry: History, components, and goals (pp. 1-18). College Park, Maryland.
- Motiuk, L. (1997). Classification for correctional programming: The Offender Intake Assessment (OIA) process. Forum on Corrections Research, 9(1), 18-22.
- Motiuk, L., & Belcourt, R. (1996). CORCAN participation and post-release recidivism. Forum on Corrections Research, 8(1), 15-17.
- Mulgrew, P. (1996). Generic and employability skills for inmates. Forum on Corrections Research, 8(1), 29-31.
- Pearson, F. S., & Lipton, D. S. (1999). The effectiveness of educational and vocational programs: CDATE meta-analyses. Paper presented at the annual meeting of the American Society of Criminology, Toronto, ON.
- Prochaska, J. O., & DiClemente, C. C. (1984). The transtheoretical approach: Crossing traditional boundaries of therapy. Homewood, IL: Dow Jones-Irwin.
- Ryan, T. A. (1998). Job retention of offenders and ex-offenders: Review and synthesis of the literature. Unpublished manuscript. Columbia, SC: College of Criminal Justice, University of South Carolina.
- Saylor, W. G., & Gaes, G. G. (1996). The effect of prison employment and vocational/apprenticeship training on long-term recidivism. *Forum on Corrections Research*, 8(1), 12-14.
- Simon, F. H. (1999). *Prisoners' work and vocational training*. London, UK: Routledge.
- Taylor, G. (1997). Implementing risk and needs classification in the Correctional Service of Canada. Forum on Corrections Research, 9(1), 32-35.
- Tellier, C. (1999). A dynamic multiconstruct model for conceptualizing motivation for change in corrections. Unpublished paper. Ottawa, ON: Carleton University.
- Townsend, T. (1996). Offenders and work in the Correctional Service of Canada: A historical evolution. *Forum on Corrections Research*, 8(1), 35-38.
- Van Zyl Smit, D., & Dünkel, F. (1999). (Eds.), Prison labour: Salvation or slavery? (pp. 335-347). Aldershot, UK: Oñati International Institute for the Sociology of Law.
- Whitehead, J. T., & Lab, S. P. (1989). A meta-analysis of juvenile correctional treatment. Journal of Research in Crime and Delinquency, 265, 276-295.

CHAPTER 11

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This chapter deals primarily with intervention and treatment programs in corrections. It also provides a brief overview of theories of causes, in particular criminality, family, social and psychological theories. The focus of the intervention programs is on *tertiary prevention*, particularly for youth already convicted of crimes, with the objective of reducing rates of recidivism.²

THEORIES OF CRIMINALITY

Social control theory

Social control theorists posit that socialization is the process by which people become bonded to family, school, and law (Hirschi, 1969). In this theory, conformity is explained through socialization and bonding between the individual and society (Wiatrowski et al., 1981). This is a process whereby individuals develop commitment to society leading to some form of internal control. This bonding consists of four main elements: attachment, commitment, involvement, and belief. The stronger the bond, the less likely the person will demonstrate criminal behaviour. Social control theory maintains the importance of conventional value attachments as instrumental in the prevention of juvenile criminality, and the weakening of such attachments is likely to induce involvement in criminal behaviour.

Subculture theory

In subculture theory, individuals are socialized into violating the law as a result of their exposure and affiliation with deviant influences. The greater the youth's association with his criminal peers, the greater the possibility of differential association with them, and therefore with definitions conducive to criminality. The most commonly stressed variables in subculture formulations are criminal associates and peer approval for criminality. It follows that if criminality is committed in accordance with values and attitudes learned from peers, such behaviour should be exhibited by individuals whose friends approve of such illegal activity.

Segrave and Hastad (1985) did find criminal behaviour to be positively associated with both criminal associates and peer approval for criminality. They found that criminal companions are related to committing criminal acts, regardless of the level of attachment or of conventional attitudes for women and, especially for men. The apparent overpowering strength of peer involvement is disputed in the findings of Williamson (1978), who found that lack of appropriate activities for youth is a major determinant of criminality.

Strain theory

One of the postulates of Strain theory (Brennan, Huizinga & Elliott, 1978) is that the greatest amount of criminality is among people of lower socioeconomic status. Such a position states that there is a perception within the individual that sees only limited access to legitimate opportunities. The motivation to deviate is enhanced when individuals accept and internalize culturally formulated goals of success and perceive legitimate avenues for achieving them as severely limited. Thus criminal individuals see themselves, more so than their middle or upper class contemporaries, as being blocked from reaching their goals. This theory postulates that such members of society are "forced" to deviate in order to achieve goals they are not able to attain through legitimate channels.

Family systems theory

There are two basic emphases in family-systems: Learning in the family focusing on modelling, child-rearing and dysfunctional relationships within the family, and Lack of affectional bonds, especially between parent-child (Henggeler, 1998).

In the first variant of family systems, the parents themselves model dysfunctional and criminal behaviour. In these families, one or more parent may be a criminal and thus pass this on to their children. Moreover, these parents have difficulty in their child-rearing practices employing harsh, punitive, and violent discipline strategies. These children have little opportunity to model self-control, restraint and moral reasoning. There are four aspects of criminality in parents that have failed to provide to their children: 1) house rules, 2) adequate parental monitoring of behaviour, 3) proper effective contingencies, and 4) adequate crises and problem solving.

The second variant of family-systems revolves around the endemic difficulty of parent-child relationships. These negative attachments are thought to create rejection in the children as well as a lack of responsibility, poor concern for consequences, impulsive behaviour and inability to learn from experience. Stott (1982) in a 5-year longitudinal study of 102 offenders, and a 10-year follow up of 700 juvenile offenders, concluded that 93 percent of criminal acts stemmed from a "breach of affectional bond between parent and child" (p. 318). The insecure attachment had been

¹ National Foundation for Family Research and Education

² For more details on tertiary prevention, see Chapter 1, *Defining Correctional Programs* by James McGuire

communicated to the adolescent by threatened rejection, loss of the preferred parent with no substitute, the mother was undependable, and the adolescent feared the loss of the preferred parent.

A further complicating factor in family systems is stress that can happen due to breakdown: illness, death, unemployment, abandonment, poverty, and difficulties of general living. These stresses create discord that threatens family existence and lead to maladaptive emergency response, including criminality.

Summary of theories of criminality

The major theories of criminality and statements about their relative validity are summarized in Table 11.1. It can be seen that family systems theory is indicated as having the highest validity because current data and evidence provide strong support for it. Strain theory received the poorest endorsement of validity.

Criminality is associated with numerous variables and is explained by several theories. Given the plethora of explanations and variables, complex causal models will undoubtedly be required to delineate the factors that are central to criminality. Such results from complex studies may demonstrate the multidimensional nature and causality of criminality and thus support the socialecological model of behaviour. Thus a viable model of criminality is one that includes multiple pathways from the key systems in which youths are embedded, particularly the family.

TREATMENT AND INTERVENTION APPROACHES

The role of mental health services

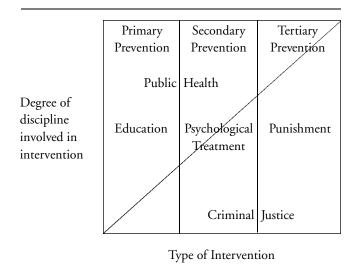
The multidimensional nature of criminality requires the intervention of many agencies. Because mental health professionals have expertise in family systems and/or behavioural treatment approaches, their contribution to the effort of reducing violence among adolescents can be considerable. Many offenders may be receiving treatment from other professional sectors (private practice psychiatrists and psychologists, hospitals, counsellors and psychologists). Even so, there is unquestionably a need for further involvement of mental health services with offenders.

Figure 11.1 indicates an ideal relationship between public health (Mental Health) and the criminal justice systems in dealing with criminality. Public health strategies are aimed at understanding, reducing, and preventing risk factors to criminality not merely to responding to specific episodes. Multi-institutional and multidisciplinary models that change behaviour, knowledge and attitudes are central to such an approach. Mass media, health care institutions, public schools, businesses and health fairs, are all sources of education, information and intervention. Once criminality is understood as a health problem, effective interventions may emerge.

Anyone who wishes to replicate a particular program in their own jurisdiction must be certain that their clients are similar to those involved in the initial implementation of the intervention. Moreover, care must be taken to secure the services of the appropriate practitioners and resource allocations. Failure to do so will not only lead to unsuccessful implementation, but may be a disservice to the clients as well.

The discussion surrounding intervention has frequently been characterized by the belief that "nothing works" when dealing with offenders. This incorrect depiction of the effects of intervention has been a serious barrier to the implementation of successful intervention. If practitioners and politicians believe that nothing can be done, the drive for conceptualizing effective service delivery for offenders is lost and the problems continue unabated.

Figure 11.1 Ideal relationship between public health and criminal justice systems for preventing criminality*



*Adapted from Prothow-Stith and Spivak (1992), p. 807

INTERVENTION WITH FAMILIES OF OFFENDERS

A basic assumption of family therapy is that problems are closely associated with dysfunctional family interactions and consequently, treatment must ameliorate problematic family relations.

Behavioural Parent Training and Functional Family Therapy are the two most promising approaches to family therapy for offenders. The aim of Behavioural Parent Training is to assist parents in accurately monitoring child behaviour and to provide consistent reinforcement for positive behaviour and punishment (e.g., loss of privileges) for negative behaviour (Henggeler, 1998). To date, such approaches have tended to be more effective with adolescents.

Consistent with family systems approaches, Functional Family Therapy assumes that criminality reflects maladaptive interactions with the family. A variety of techniques are used with this approach including contingency contracting and training in communication skills among family members. To this point this type of intervention appears to be most effective with more moderate young offenders. Wade et al. (1977) described and evaluated an intensive family crisis intervention program. The intervention strategies included five components:

- 1. Immediate referrals to capitalize on the motivation of the family crises situation;
- Intensive but time-limited outreach services in the young offender's home;
- A focus on the family as a system which was functioning maladaptively;
- 4. Both male and female counselling teams of the same ethnic origins of the family; and
- Reliance on adjunct agencies and professionals as needed. Half of the 153 families served over a two-year period had experienced some degree of family disorganization such as divorce, separation, remarriage, adoption or death of a natural parent.

The program was considered a success based on both recidivism data and goal attainment data (Wade et al., 1977). After one year, the recidivism rate was low (14.75%), and only 1 of 66 adolescent siblings came before the court during the one year follow-up. A number of goals were also assessed and found to improve substantially, including improved family communications, increased school attendance, reduced runaways, and increased acceptance of responsibility in the family.

In a family preservation program called Homebuilders, Haapala and Kinney (1988) found that 87% of 687 high-risk status offenders avoided out-of-home placement for 12 months after service intake. The program included a multiplicity of treatment orientation including behaviour modification in the natural environment, crisis intervention theory, client-centered therapy, value clarification, assertiveness training, and multiple-impact therapy. As the program evolved over a 15-year period, additional treatment interventions such as Rational Emotive Therapy were added. This program has been so successful that by 1987, 28 state programs based on the Homebuilder model that began in Washington State in 1974, have been developed.

Over the past decade it has become increasingly clear that the treatment of choice for most offenders is family therapy (Gordon & Arbuthnot, 1988). Professionals are often in private practice and are very expensive. Therefore, there is an emerging trend to use paraprofessionals such as caseworkers, teachers, ministers, probation officers, students, parents and volunteers. Because paraprofessionals are much less expensive than professionals, family based intervention can be expanded. In a systematic review of the literature comparing the effectiveness of paraprofessionals to professionals, Gordon and Arbuthnot concluded that paraprofessionals achieve results equal to or superior to those achieved by professionals. Obviously, the use of paraprofessionals should be explored further given these positive results.

Community-based programs

Although the stress is on including the family of the offender in the treatment program, for many offenders it is unrealistic to expect that it will be possible to involve the family. Clearly, there

Theory	Explanation	Validity
Social Control Theory	Criminality is caused by individual characteristics that might be inherited, developed or learned (e.g., genetic disorders, psychiatric problems, learning disabilities).	Substantial evidence supports this view, though critics argue that this theory is not sufficient to fully explain criminality . by itself
Subculture Theory	Criminality is caused when the individual fails to become properly socialized to accept the values of family, school, law and morality. Juveniles are socialized into violating the law as a result of exposure to and affiliation with deviant influences.	Evidence indicates that criminal behaviour is positively associated with criminal associates and peer approval for criminality. These, however, probably reflect antecedents to criminality rather than its cause.
Strain Theory	Criminality is caused by chronic poverty and low socioeconomic status.	There is a definite relation between poverty and criminality but this is probably a correlation rather than a cause.
Family Systems Theory	Children learn dysfunctional criminal behaviour from their parents and/or endemic difficulties of parent-child relationships that create developmental pathology in children such as criminality.	This view is one of the most currently accepted causes of criminality although substantial empirical work is still required.

TABLE 11.1 Summary of major theories of criminality and their relative validity based on current data

is a need for an effective program that could be applied in a community that does <u>not</u> necessitate direct intervention with the offender's home.

"Community based programs" is a general term that encompasses a plethora of activities and projects. These include placing offenders in individual foster homes, establishing group homes for offenders, establishing community centres which provide athletic, recreation and cultural activities, and public works projects (tree trimming, litter removal, playground maintenance, etc.). Skills based programs involve vocational training and job placement, tutoring, and educational upgrading. Social support includes the buddy system as well as discussion and support groups. Finally, community based prevention measures include mass media campaigns and the development and implementation of school based curricula.

The Violence Prevention Project of the Health Promotion Program for Urban Youth (Prothrow-Stith, Spivak, & Hausman, 1987), represents an effort to reduce the incidence of criminal behaviour and associated social and medical hazards for adolescents at the community level. This program is based on individual behaviour modification through risk communication and education. In consultation with a host of individuals from various therapeutic services, a curriculum was developed and became the central material for a grade 10 health class. The program offers support for the value of education in attempting to reduce criminality in one of the most demanding communities for the adolescent: the community school.

In another innovative community program, O'Donnell et al. (1979) employed a "buddy system" where adult paraprofessionals were paired with offenders who had been referred by public schools for behaviour and academic problems. The main tasks of the buddies were to help reduce the presenting behaviour problems and to help increase the adolescents' school attendance and academic performance through contingency management using praise, social support, and money as reinforcers. The primary purpose of this buddy system, however, was the prevention and remediation of criminal behaviours. All of the subjects had committed major criminal offences.

Results of the O'Donnell et al. study showed that of 335 offenders in the buddy system group, they experienced 22.3% fewer arrests after three years than did those in a control group. The overall arrest rate was 20.7%, though the overall rate ranged form 10.8% to 81% when recent offence history, sex, and type of crime committed was considered. There were no data provided on school attendance information or achievement in the study, though O'Donnell et al. pronounced the buddy system a success solely on re-arrest rates.

Many other community-based programs have been shown to be successful in reducing re-arrest rates and generally improving the conduct and behaviour of the young offenders. Walter and Mills (1989), for example, described a successful program where offenders were placed in jobs and monitored both by professionals and employers. Henggeler (1989) has described a number of community based programs including public works projects, group homes and vocational training which have been successful with young offenders. Finally, Fabiano et al. (1990) have described skills based programs (knowledge and social) which has reduced recidivism in offenders, and Quigley et al. (1992) are attempting to implement a computer-assisted vocational life skills program for offenders in Newfoundland in hopes to reduce recidivism rates.

Multisystem interventions

The essence of multisystem interventions is the recognition that there are multiple determinants of anti-social behaviour. The context of intervention from this perspective is the various systems in which the adolescent functions including the family, peers and school. One type of intervention is the Multisystemic Therapy. This type of intervention is a family-based approach that emphasizes adolescent cognitive variables and the youth's and family's relations with extra-familial systems. To date several studies have shown that multisystemic therapy is effective in changing the types of family interactions which are associated with criminality, decreasing the youth's association with deviant peers and reducing the overall rate of adolescent behaviour problems.

Vocationally oriented psychotherapy is another form of multisystem intervention in which the therapist provides both intensive psychotherapy and assistance in obtaining educational and vocational placement. Follow-up studies indicate that adolescents receiving this approach evidenced better social adaptation to family life, employment success, and legal difficulties than did comparison boys (Henggeler, 1998).

Child Advocacy Treatment is another form of multisystems intervention which uses paraprofessionals (e.g., university or college students) as intervention agents with juvenile offenders. Non-professionals use behavioural contracting techniques and child advocacy to intervene in a wide range of problem areas (e.g., peer, family, school). Preliminary outcome data suggest that this approach is very promising (Gordon & Arbuthnot, 1988).

Effective treatments of criminality must recognize the multiple determinants of adolescent anti-social behaviour. All three interventions described above address individual and systemic characteristics, are pragmatic and problem-focused, are conducted in a variety of community settings, and are as flexible and intensive as necessary.

SUMMARY AND CONCLUSIONS

By way of summary, the treatment and intervention approaches together with their relative efficacy are compiled in Table 11.2. As can be seen from Table 11.2, family interventions and multi-systems intervention are rated as most effective.

Treatment or Intervention	Explanation	Validity
Family Intervention	Since the families of offenders are frequently dysfunctional, this approach seeks to ameliorate this and reduce recidivism and improve family relations.	Well-implemented and executed family interventions have proven to be highly successful in most of their goals. Unfortunately, families of some offenders will simply refuse to participate in any program.
Community Programs	These include a plethora of activities and projects such as group homes, public works, vocational training, educational upgrading, community centre activities, etc.	The success of these has been mixed. It depends largely on the type of programme, the needs of the juveniles, and the resources of the program.
Multisystem Intervention	Multisystemic therapy (family based), vocationally oriented psychotherapy, and child advocacy treatment are the main types. These are broad- based treatment approaches that intervene at multiple levels of the youth's ecology (e.g., school, family, peers etc.).	Preliminary outcome studies indicate that well implemented and intensive programmes show promising results. More research is required to establish efficacy, however.

TABLE 11.2 Summary of treatment and intervention approaches for offenders and their relative efficacy

By the mid-1970s researchers and policy makers had become pessimistic about the efficacy of correctional treatment in general. Research and outcome studies since that time, however, have shown that many carefully designed and executed programs have been successful. Perhaps the most successful and promising are family based interventions and multisystem interventions. Other interventions such as diversion programs, community based programs, and even some in correctional institutions have demonstrated success. Some of these programs can be very expensive because of the intensive use of professionals in direct contact with the offender, the family, peers and so on. Fortunately, an emerging trend has been to use paraprofessionals under the supervision of professionals. More fortunately still, outcome studies and evaluations have shown that paraprofessionals are generally as effective or more effective than professionals in dealing with offenders (Gordon & Arbuthnot, 1988).

As the above program descriptions indicate, there are a variety of interventions which have been successfully implemented with offenders. The key to successful implementation is to determine the specific needs of an offender and then to match those needs to the appropriate program. Failure to do this will likely result in the failure of the intervention.

REFERENCES

- Brennan, T., Huizinga, D., & Elliott, D. S. (1978). The social psychology of runaways. Lexington, MA: DC Heath.
- Fabiano, E., Robinson, D., & Porporino, F. (1990). A preliminary assessment of the cognitive skills training program pilot project. Ottawa, ON: Correctional Service of Canada.
- Gordon, D. A., & Arbuthnot, J. (1988). The use of paraprofessionals to deliver home-based family therapy to juvenile delinquents. *Criminal Justice and Behavior*, 15, 364-378.

Haapala, D. A., & Kinney, J.M. (1988). Avoiding out-of-home placement of highrisk status offenders through the use of intensive treatment. *Criminal Justice* and Behaviour, 15, 334-348.

- Henggeler, S. W. (1989). Criminality in adolescence. Newbury Park, CA: Sage.
- Henggeler, S. W. (1998). Delinquency. In M. Fisher, K. Schonberg, & E. Alderman (Eds.), Comprehensive adolescent health care. (2nd ed). New York, NY: Mosby.
- Hirschi, T. (1969). *Causes of criminality*. Berkeley, CA: University of California Press.
- O'Donnell, C. R., Lydgate, T., & Fo, W. S. (1979). The buddy system: Review and follow-up. *Child Behaviour Therapy*, 1, 161-169.
- Prothrow-Stith, D. (1989). Interdisciplinary interventions applicable to prevention of violence and homicide in black youth. In Surgeon General's Workshop on Violence and Public Health DHHS (pp. 35-43). Pub. No. HRS-D-MC 86.1. Washington, DC.
- Prothrow-Stith, D., & Spivak, H. R. (1992). In S. B. Friedman, M. Fisher, & S.K. Schonberg (Eds.), *Comprehensive Adolescent Health Care* (pp. 806-811). St. Louis, MO: Quality Medical Publishing.
- Prothrow-Stith, D., Spivak, H. R., & Hausman, A. J. (1987). The violence prevention project: A public health approach. *Science, Technology and Human Values*, 12, 67-69.
- Quigley, M., Jeffery, G. H., & McNutt, M. (1992). Computer-assisted vocational life skills program for offenders. *Canadian Journal of Counselling*.
- Segrave, J., & Hastad, D. (1985). Evaluating three models of criminality causation for males and females: Strain theory, subculture theory, and control theory. *Sociological Focus*, 18, 1-17.
- Stott, D. (1982). Criminality: The problem and its prevention. New York, NY: SP Medical and scientific Books.
- Wade, T. C., Morton, T. L., Lind, J. E., & Neuton, R. F. (1977). A family crisis intervention approach to diversion from the juvenile justice system. *Juvenile Justice Journal*, 28, 43-51.
- Walter, T. L., & Mills, C. M. (1989). A behavioural-employment intervention program for reducing juvenile delinquency. In J. S. Stumphauzer (Ed.), Progress in behavior therapy with delinquents. Springfield, IL: Charles C. Thomas.
- Wiatrowski, M. D., Griswold, D. B., & Roberts, M. K. (1981). Social control theory and criminality. *American Sociological Review*, 46, 525-541.
- Williamson, H. (1978). Choosing to be a criminal. New Society, 9, 333-336.

CHAPTER 12

ALAN W. LESCHIED¹

Recently, there has been a move toward a more risk-specific means of classification. Knowledge and measurement of risk can assist in case planning and selection of appropriate targets for service to be effective. Currently, there are several measures and systems for classifications and these are outlined in this chapter.

Knowledge has greatly increased in the areas of young offender management and treatment. Progress has been made for the description of successful components of intervention and in method of service delivery. Advances have also been made to identify the factors that can distinguish chronic or persistent offenders. The major risk factors for adolescents are summarized.

Knowledge of the general literature of risk is critical in the development of broad-based strategies to assess criminogenic potential in adolescents. Following from the risk principle of case classification,² knowledge and measurement of risk can assist in case planning and selection of appropriate targets for service to be effective. According to Hoge and Andrews (1996), the assessor must make meaningful assumptions about the general *level of risk* to guide the *intensity* of intervention, and specific statements of *areas of risk* to provide *relevance in case planning and targeting* for appropriate treatment to take place.

PROMISING PROGRAMS

During the past decade, meta-analytic reviews of the young offender treatment literature have contributed significantly to the appreciation that the "nothing works" debate is now over in youth corrections. Current discussions now emphasize the issues of what works and for whom and how to translate existing knowledge of successful programs to other jurisdictions. (See Chapter 7 in this *Compendium*).

Findings from the meta-analyses

Meta-analysis statistically compares the types of treatments that are offered, to whom they are directed and with what outcomes. The number and quality of the studies that are included in the review only limit the meaningfulness of meta-analysis. Fortunately, there is now a sufficient number of qualitative studies to make interpretations of the treatment literature in youth justice with confidence, although Lösel (1995) outlines some of his reservations with respect to limiting the generalization of such findings.

In two separate analyses Lipsey suggested that the overall effect size linking treatment with reductions in reoffending lie between 20 to 40 per cent as contrasted with no treatment comparison groups, and only slightly less when compared to groups receiving some type of "usual service" (Lipsey, 1992; Lipsey & Wilson, 1997). Stronger effect sizes were found in his studies in the following variables: higher risk cases, longer duration of treatment and behavioural-oriented multimodal treatment with a stronger emphasis on "sociological" than psychological orientation of service delivery.

Institutional versus non-institutional placement for treatment

Lipsey and Wilson's (1997) subsequent review distinguished placement of treatment, residential versus community, in differentiating characteristics of effective programs. This is a critical differentiation since much of the debate regarding effective youth justice policies centres on the importance of incarceration as a relevant factor in community safety. Lipsey and Wilson noted in their analysis that different contributions are made for various components of service as a function of the placement for treatment. Table 12.1 summarizes factors relevant for effective programs in institutional and non-institutional placements.

TABLE 12.1 Program factors contributing to effectivenessfor institutionalized and non-institutionalized youngoffenders

Institutional-base	Non-institutional-based	
Components	Components	
Interpersonal Skills Teaching Family Model Multiple Services Behavioural Programs Individual/Group Programs	Interpersonal Skills Individual/Group Programs Multiple Services Restitution/Probation Employment/Academic Programs	

Effect sizes accounting for total program outcome across both institutional and non-institutional programs suggested that the three factors comprising the highest ranking were; interpersonal skills training, individual counselling and behavioural programs. The second grouping of lesser, yet significant contribution were the two program factors consisting of multimodal services and restitution for youths on probation.

Faculty of Education, University of Western Ontario, and The Family Court Clinic
 See Andrews, Bonta & Hoge, 1990 for a more complete review of the risk-based

concept of classification

The work of Andrews et al. (1990; 1992) was consistent with the findings of Lipsey. However Andrews' work provides more specificity in regards to appropriate targeting for intervention — known as the risk principle — and increasing sophistication regarding style and type of intervention, namely the importance of cognitivebehavioural oriented interventions. On a broader level, Andrews' work outlined characteristics of promising programs as:

- Employment of systematic assessment that emphasizes factors relevant to criminality;
- Possess therapeutic integrity;
- Attend to relapse prevention;
- Target appropriately;
- Employ appropriate styles of service.

Andrews and Gendreau (1998) have developed the *Correctional Program Asessment Inventory* which assess the extent to which the principles of effective service within a particular program may be present based on the empirical outcomes from the meta-analysis.

Despite the encouraging findings, Lösel (1995) has set forth a cautionary note. While underscoring many of the principle findings from Lipsey and Andrews, his conclusions are perhaps a bit more tentative, and worthy of comment. Lösel suggests that while the links to effective intervention are clearly in the positive direction, they remain small relative to the proportion of variance accounted for by error or by factors not accounted for in the evaluations. He cites the need for research to address the following:

- Differential effects of offender characteristics
- Modearator variables such as psycopathy that seem to influence the extent of favourable outcomes
- The lack of replication of documented, effective programs.

THE EARLY INTERVENTION AND PREVENTION LITERATURE

Greenwood (1999) in his review of promising programs noted "carefully targeted early childhood interventions can yield measurable benefits and that some of those benefits endure for some time after the program has ended." And while literature on clinical outcomes as well as cost-effectiveness continue to support early intervention and prevention efforts, recent public opinion data has perhaps brought its importance into clearer focus. Cullen et al. (1998) reported that the public's support for early intervention efforts actually exceeded the public's support for incarceration, a somewhat surprising finding. Canada has illustrated its awareness in establishing a separate *National Crime Prevention Centre* with the commitment to contribute significant financial support in the development of crime prevention strategies. The *Canadian Council on Social Development* has created an advisory committee to assist in the development of crime prevention priorities.

GENERAL VERSUS SPECIFICALLY TARGETED PROGRAMS

The early intervention literature can be divided in two important ways. The first is by the preferred age at the time of intervention. The second is by the *nature* or *extent* of intervention and refers to the preference of programs to be targeted towards specific groups, or whether programs should be provided to a general class of persons.

Age as a predictor of risk

The age of preference for early intervention is tied to the literature on prediction. Findings from Bronfrenbrenner (1979), Farrington (1995) and Patterson (1992) are helpful sources since they provide developmental contexts in which to understand the *meaningfulness* of certain factors as being linked to conduct disorder. For example, early childhood learning difficulties may be manifested as school avoidance in mid elementary school years that might suggest the need for early learning assessments or general academic screening. In the National Crime Prevention Council (1996) *Preventing Crime*

Level	Goals	Means
Prenatal	Promote healthy babies	Prepared parents; supports to parents
Birth	Facilitate attachments and prevent child abuse	Home visiting supports early identification of difficulties
Family	Increase family cohesion and improve parenting skills	Range of supports to parent
Toddler/Pre-school	Encourage cognitive/social development and aggression	Early child care/education with family reduce involvement to children whose families require assistance community/societal actions to prevent violence
School	Improve school outcomes	School-bases initiatives

TABLE 12.2 Crime prevention model: prenatal to six years

Source: National Crime Prevention Council's Preventing Crime by Investing in Families, May 1997.

by Investing in Families: Promoting Positive Outcomes in Children Six to Twelve Years Old, a model designed as a function of age is provided to guide targets for prevention. The Model is found in Table 12.2.

The model for early intervention provided by the National Crime Prevention Council is but one developmental model that can be found in the literature. Many such models exist. They share in common the belief that age is a significant marker that can help determine appropriate targets guiding the preferred nature and type of intervention. A second means of conceptualizing prevention and early intervention is to determine whether the goals of intervention are of primary or tertiary significance. Primary prevention reflects the need to "treat" all persons of a significant class while tertiary prevention/intervention suggests that only a designated group within a class of persons would benefit from the suggested intervention. This distinction has emerged as having real significance. Useful resources in community development for prevention efforts are the two publications, Building a safer Canada: A community-based crime prevention manual and Step by step: Evaluating your community crime prevention efforts (Justice Canada, 1996).

The final word on prevention can be found in Tremblay and West (1995). In their excellent review entitled *Developmental* crime prevention (p. 224-225) these authors conclude with "...money invested in early (e.g., pre-school) prevention efforts with at-risk families will give greater payoffs, than money invested in later (e.g., adolescent) prevention efforts with the same at-risk families. ... The prevention strategy should reduce the amount of resources needed for corrective services from our education, health, and justice systems."

SPECIFIC INTERVENTIONS AND SERVICE DELIVERY ISSUES

Community-based intervention

Both of the meta-analyses reported by Andrews and Bonta (1998), and Lipsey and Wilson (1997) suggested that effect sizes linked to more effective outcomes were characteristic of programs delivered in the community as contrasted to those delivered in residence. Henggeler (1989) suggests that in part this is accounted for by the type and quality of interactions adolescents experience with the social influences that surround them. To be effective, programs need to be in a position to influence those *social* factors that may in turn be interacting with a particular youth's competencies (e.g., problem-solving skills, beliefs and attitudes). Hence, particular attention is now being paid to interventions that influence the systems that are consistent with the major predictors of delinquency risk, namely, families, peers and schools.

Multi-systemic Therapy

Multi-systemic Therapy (MST) refers to the consistent application of principles that reflect what is known in the young offender literature. While some reviewers may suggest that MST does not represent "anything new under the sun", it is in the method of service delivery that MST has shown itself to be effective with high risk youth. Consistent with the risk principle of case classification, MST attempts to influence the major criminogenic risk factors through the application of appropriate strategies in a multi-determined, multi-modal fashion.

In addition to reflecting the knowledge-base in the offender literature, Multi-systemic Therapy has been evaluated with a series of randomized clinical trials that have included appropriate follow-up periods.³

While MST reflects interventions that have shown themselves to be effective, it is in the method of service delivery *within a specified set of principles* that MST distinguishes itself. The nine principles against which MST adherence is measured consist of the following:

- The primary purpose of assessment is to understand the "fit" between the identified problems and their broader context.
- Therapeutic contacts should emphasize the positive and should use systemic strengths as levers for change.
- Interventions should be designed to promote responsible behaviours and decrease irresponsible behaviour among family members.
- Interventions should be present-focused and actionoriented, targeting specific and well-defined problems.
- Interventions should target sequences of behaviours within or between multiple systems that maintain the identified problems.
- Interventions should be developmentally appropriate and fit the developmental needs of the youth.
- Interventions should be designed to require daily or weekly effort by family members.
- Intervention efficacy is evaluated continuously from multiple perspectives with providers assuming accountability for overcoming barriers to successful outcomes.
- Interventions should be designed to promote treatment generalizations and long-term maintenance of therapeutic change by empowering care givers to address family members' needs across multiple systemic contexts.

Finally, MST may ultimately prove its worth to juvenile justice and children's mental health systems due to the development of a variety of dissemination manuals and training approaches. One such dissemination effort is taking place in Ontario, where a four year randomized clinical trial is now into its second year of implementation, and it consists of four participating sites in a variety of settings with therapists and supervisors who have participated in the intensive training and consultation that

³ An overall review of the MST approach can be found in *Multisystemic Therapy of Antisocial Behavior in Children and Adolescents* by Henggeler and his colleagues published in 1998.

characterizes the application of MST. Similar to MST clinical trials in the U.S., this trial is being rigorously evaluated (see Leschied & Cunningham 1998a; 1998b).

Cognitive-behavioural oriented interventions

Cognitive-behavioural treatment (CBT) with young offenders has received considerable attention. This can be attributed to at least three influences: the general literature regarding effective interventions with children and adolescents has been supportive of CBT; risk factors regarding attitudes, beliefs and values have shown themselves to be particularly strongly related to antisocial behaviour, and recent meta-analyses have shown CBT to be the treatment of choice related to effectiveness over and above the traditional influences of psychodynamic, medical and behavioural interventions.

CBT refers to interventions that connect thoughts to behaviour. Hollin (1990) describes it this way "... The cognitivebehavioural position acknowledges the importance of environmental influences while seeking to incorporate the role of cognitions in understanding behaviour. Cognitions are given a mediational role between the outside world and overt behaviour; cognitions are seen as determining what environmental influences are attended to, how they are perceived, and whether they might affect future behaviour."

Interest in CBT has been based not only on disappointing results from medically - based interventions (lack of empirical support generally) and behaviourally — based interventions (lack of support for sustainable gains and genralization) but as well on the general theoretical assumptions about the socialpsychological understanding of the etiological research on the development of delinquency. This body of theoretical work suggests that the interaction of the individual with systems that can influence attitudes and subsequent behaviour may improve the explanatory value of the studies on prediction and assessment. Hence, the importance of understanding how children and adolescents mediate their experience may not only assist in explaining the behaviour, but may also contribute meaningfully in how to alter behavioural outcomes. Such outcomes can encourage youths to shift their thinking away from attitudes that support anti-social behaviour and towards the development of thinking styles and content that promote prosocial behaviour. Finch, Nelson, and Ott (1993) suggest that the general expanded influence of CBT in the child/adolescent literature can be attributed to factors such as:

- Increasing evidence that thought processes influence behaviour.
- Traditional stimulus-response explanations cannot account for all outcomes
- Thought processes can account for behavioural change
- Operant approaches have not provided convincing evidence that S-R theories can account for generalization and maintenance.

Andrews et al. (1990) discuss the important aspect of *clinical relevance* in decision-making when important case management decisions arise. Clinically relevant decisions can be considered as those that link the decision to correctly priorize or target certain behaviours/systems for change with the particular risk profile of the individual. Given the importance placed on attitudes from the prediction literature with young offenders, targeting cognitions would seem to make considerable sense as an important focus for service providers.

Not only has CBT made inroads in the promotion of effective intervention with children/adolescents generally, but numerous programs now exist to train workers in the youth corrections field in both residential and community contexts (see for example the training materials developed through the London Family Court Clinic, Baker & Leschied, 1997; Baker, 1998). CBT programs targeting specific types of offenders/offences include: Choices Program developed by Ross and Fabiano (1985) that targets general offending patterns: Aggression Replacement Training developed by Goldstein et al. (1987) that combines psychoeducational intervention, skill streaming and moral education to reduce aggression in high risk youth; and sex offender treatment controlling inappropriate arousal through cognitive restructuring, a program summarized in the work of Ryan and Lane (1991). CBT interventions are typically delivered as part of an overall strategy that frequently also includes systems involvement through family therapy and can be delivered either while a youth is in the community or in residential care.

DIRECTED INTERVENTIONS TOWARD VIOLENT, SUBSTANCE ABUSING AND SEX OFFENDING YOUTHS

Programs targeting violent youths

Unlike the stability of the construct of anti-social behaviour, violence or aggression in youth is considered a more complex and variable event. Indeed, misconceptions in the belief that childhood/adolescent aggression is a unitary construct may well be one of the main impediments to developing effective solutions. Of the many variables that can affect concepts of understanding youthful violence are factors such as; age of onset, context of violence, the multi-determined nature of the seeds of violence and gender differences (Loeber & Stouthamer-Loeber, 1998). While readers will be familiar with the literature on genetic and biological bases of violence with youths, current research emphasizes the importance of violence as a *learned* behaviour. As such, learning can take place in response to a child/youth feeling overwhelmed and out of control, where the role of aggression may be to reassert control, or develop what Bandura refers to as reestablishing self-efficacy (Bandura, 1997). Violence can also be vicariously learned as a result of experiencing the rewards that are perceived to be associated with exercising power through others.

Social skills training and anti-bullying programs have also become popular, particularly in light of the encouraging findings reported by Olweus and his colleagues (1987). Olweus suggests that strategies targeting aggressive children — anti-bullying can bring about meaningful reductions *not only in those children who receive the program, but in general levels of aggression within the schools which employed the program.*

Programs have also been developed to target safe and secure practices that are delivered within the juvenile justice system. For example, Leschied, Cunningham, and Mazaheri (1997) summarized the literature on programs, practices and policies that can reduce violence in detention and short-term custody systems. Such factors as the availability of social skills programs, "dawn to dusk" programming, training for staff that emphasizes the development of conflict resolution skills, classification for purposes of identifying perpetrators and likely victims of violence are components of safer practices within detention. Goldstein and his research team (Goldstein, Glick, Irwin, Pask-McCartney, & Rubama, 1989) have also reported extensively on the development of their aggression replacement training strategies to reduce adolescent violence. This program emphasizes modelling, role playing, performance feedback and transfer training in the context of other systemic interventions within the family and community.

Programs targeting substance abusing youths

Substance use stands alone as a major risk factor for chronic/ persistent young offenders. It is also highly related to peer associates in the context of affiliation with peers who endorse anti-social values as opposed to prosocial values (Andrews et al., 1992; Henggeler, 1989). Elliott, Huizinga, and Ageton (1985) also make the point that while the presence of substance use may signal problems in the selection of peers, use of illegal drugs or overuse of alcohol may also be associated with a significant mental illness such as depression. Hence, the assessment of degree and nature of drug use needs also to made in the context of concern for possible mental health disorder.

For intervention to be meaningful, Gresswell and Hollin (1992) underscore the importance of acknowledging the developmental significance of illegal substance use. Their model of alcohol use suggests that what may have begun in early adolescence as behaviour that was connected to socialization (e.g., being peer driven), may become, by late adolescence, characteristic of a cognitive distortion (e.g., "being high gives me courage", "it makes me feel less guilty when I do something wrong"). Hence, to be effective, programs need to be tailored to the developmental significance of the behaviour. Substance abuse programs need also to be intensive and include strategies such as: monitoring, being system-based (situated within the family and peer group) and include a relapse prevention component that is planned in a way to capitalize on changes that take place within the formal structure of the intervention.

Programs targeting sex offending youths

Interest in adolescent sex offending has not been well developed from a research perspective and no doubt represents one of those areas that will require a great deal more emphasis both for purposes of improving assessment and treatment. What is known currently, is that adolescent sex offenders do not represent a unitary group and vary on a number of important dimensions that include: the nature of the relationship of perpetrator to victim familial versus extra-familial; age and level of maturity at onset of first offence; nature of offence pattern — whether offending is restricted to sexual offences or whether it represents a general pattern of anti-social acts; and the nature and intrusiveness of sexual offending from indirect victimization (obscene phone calls) to rape and aggravated sexual assault.

Appropriate selection of treatment will follow from an understanding of the type/nature/duration of the offending pattern. Epps (1996) and Ryan and Lane (1991) have both summarized selected treatment strategies as a function of individual need of particular offenders. Treatment strategies typically include a combination of cognitive interventions, anger management, social skills training, alcohol and substance abuse programs, victim empathy and age appropriate development of socially acceptable sexual behaviour.

RESTORATIVE JUSTICE PROGRAMS

Revisions to Canada's youth justice legislation are providing considerable impetus for the development of alternatives to the traditional court system. This trend in Canada is keeping pace with similar initiatives in Western Europe, Australia, and New Zealand (Beyond Prisons Conference, 1998). The development of such alternatives is recognition that for lower risk and some moderate risk youth, an alternative to court that attempts to reconnect the youth to the values of their immediate community may have more long term benefit and provide a cost savings to the community.

The values of, what has become known as the *Restorative Justice Movement*, as summarized in Cunningham, Leschied, and Currie (1999) include the following:

- crimes are the "property" of the individual and not the state
- the goal is to restore harmony among the victim, offender and their community
- courts are seen as ineffective since they have the potential to victimize both victims and the offenders
- the process works against further isolating the victim from the crime and the offender
- ♦ solutions are generated from the community.

The original basis for restorative justice as an approach to community healing stems from traditional custom by aboriginal groups in New Zealand. Judge Barry Stuart of the Yukon Territories suggests that "*The health of a community improves when its members participate in conflict resolution.*" Further, he indicates, "[communities] *have a natural capacity to prevent crime,* *and rebuild broken lives and relationships caused by crime*" (The Church Council on Justice and Corrections, 1996).

Restorative justice programs typically include the involvement of a community justice panel or community group that meet with the youth and their family. This meeting symbolizes community level accountability and often will also include the victim or a representative of the victim (e.g., the manager of the store where a shoplifting incident took place). Some programs may utilize a form of "public shaming" that is used to extract an apology while others will require not only an admission of guilt/responsibility but also tangible compensation back to the individual/community as reflected in the completion of a financial restitution order or community work.

FUTURE DIRECTIONS

It is clear that considerable knowledge is now available to guide intervention not only at the practitioner level, but for policy and lawmakers as well. So many of the program issues related to young offenders relate to the courts, other aspects of the children's mental health and child welfare systems and with the laws that govern practice at both the federal and provincial levels. An integrated children's service delivery system that is mindful of the latest findings from research and program evaluation is now seen as an imperative in capitalizing on current knowledge. Several issues however do stand out in their importance for service development in the young offender field. Several suggestions for future development include:

- Development of protocols that enhance the implementation of those programs that have shown themselves to be effective already. Implementation with integrity guided by adherence to proven models — what is referred to in some venues as *technology transfer* — is clearly needed to capitalize on the findings from the outcome literature.
- Emphasis on selected groups that have been largely overlooked in the literature thus far. These groups would include young girls and adolescent women who are beginning to show up in both Canada and the United States' data summaries as an increasingly important subgroup within the young offender population (Statistics Canada, 1998, U.S. Department of Justice, 1998; Matthews, 1998). An additional group for further examination would also include, what Loeber as coined, the very young offender (VYO) (Loeber, 1999). This group is comprised of those youth who, from as early as the age of 4 to 6 years, may begin to demonstrate behaviours that are predictive of later offending. Such work is a necessary precursor to the further development and refinement of prevention and early intervention programs for youths to inhibit their coming into contact with the formal juvenile justice system.
- Lösel pointed out in his meta-analysis that there continues to be an absence of replication studies that seek further

validation for those interventions that have shown themselves to be effective in reducing offending. It may very well be that through replication and refinements, generalization of those effective strategies can lead to a broader more influential knowledge base to guide the development of the next generation of effective programs.

REFERENCES

- Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology*, 28(3), 369-404.
- Andrews, D. A., & Bonta, J. (1998). *The psychology of criminal conduct*. Second Edition. Cincinnati, OH: Andersen Publishing.
- Andrews, D. A., Bonta, J., & Hoge, R. D. (1990). Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice and Behavior*, 17, 19-52.
- Andrews, D. A., & Gendreau, P. (1998). Correctional program assessment inventory. Unpublished Manuscript.
- Andrews, D. A., Leschied, A. W., & Hoge, R. D. (1992). Review of the profile, classification and treatment literature with young offenders: A social psychological approach. Toronto, ON: Ministry of Community and Social Services.
- Baker, L. (1998). Cognitive behaviour therapy with young offenders. London, ON: Family Court Clinic and the Ministry of Community and social Services.
- Baker, L., & Leschied, A. W. (1997). Effecting change: A cognitive behavioural approach to working with youths in custody. London, ON: Family Court Clinic and the Ministry of Community and Social Services.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York, NY: W. H. Freeman.
- Beyond prisons conference. (1998). Proceedings. Kingston, ON: Queen's University and Correctional Service Canada.
- Bronfrenbrenner, U. (1979). The ecology of human development: Experiments by design and nature. Cambridge, MA: Harvard University Press.
- Church Council on Justice and Corrections (1996). Satisfying justice: Safe community options that attempt to repair harm from crime and reduce the use and length of imprisonment. Ottawa, ON.
- Cullen, F. T., Wright, J. P., Brown, S., Moon, M. M., Blankenship, M. B., & Applegate, B. K. (1998). Public support for early intervention programs. *Criminal Justice and Behavior*, 44(2), 187-204.
- Cunningham, A., Leschied, A. W., & Currie, M. (1999). Review of the pre-court youth diversion program: Halton Regional Police Service. Unpublished manuscript. Burlington, ON.
- Elliott, D. S., Huizinga, D., & Ageton S. S. (1985). Explaining delinquency and drug use. Beverly Hill, CA: Sage Publications.
- Epps, K. (1996). Sex offenders. In C.R. Hollin (Ed.). Working with offenders: Psychological practice in offender rehabilitation. Chichester, UK: Wiley Press.
- Farrington, D. (1995). The development of offending and anti-social behavior from childhood: Key findings from the Cambridge study in delinquent development. *Journal of Child Psychology and Psychiatry*, 36, 929-964.
- Finch, A. J., Nelson, W. M., & Ott, E. S. (Eds.) (1993). Cognitive-behavioral procedures with children and adolescents: A practical guide. Boston, MA: Allyn and Bacon.
- Goldstein, A. P., Glick, S., Reiner, D., Zimmerman, D., & Coultry, T. M. (1987). Aggression replacement training. Champagne, IL: Research Press.
- Goldstein, A., Glick, B., Irwin, M. J., Pask-McCArtney, C., & Rubama, I. (1989). *Reducing delinquency: Intervention in the community*. New York, NY: Pergamon Press.
- Greenwood, P. W. (1999). Costs and benefits of early childhood intervention. Office of JuvenileJustice and Delinquency Prevention. Washington, DC: U.S. Department of Justice.
- Gresswell, D. M., & Hollin, C. R. (1992). Towards a new methodology for making sense of case material: An illustrative case involving attempted multiple murder. *Criminal Behavior and Mental Health*, 2, 329-341.
- Henggeler, S. W. (1989). *Delinquency in adolesence*. Newbury Park, CA: Sage Press.

- Henggeler, S. W., Schoenwald, S. K., Bourduin, C. M., Rowland, M. D., & Cunningham, P. B. (1998). *Multisystemic treatment of anti-social behavior in children and adolescents*. New York, NY :The Guildford Press.
- Hoge, R. D., & Andrews, D. A. (1996), Assessing the youthful offender issues and techniques. New York, NY: Plenum Press.
- Hollin, C. R. (1990). Cognitive-behavioral interventions with young offenders. Oxford, UK: Pergamon Press.
- Justice Canada (1996a) Building a safer Canada : A community-based Crime Prevention Manual. Ottawa, ON
- Justice Canada (1996b) Step by Step: Evaluating your community safety and crime prevention efforts. Ottawa, ON: Federal-Provincial-Territorial Working Group on Community Safety and Crime Prevention.
- Leschied, A. W., & Cunningham, A. (1998a). Clinical trials of multisystemic therapy with high risk phase I young offenders, 1997 to 2001, Year-end report 1997-1998. London, ON: The Family Court Clinic.
- Leschied, A. W., & Cunningham, A. (1998b). Alternatives to custody for high risk young offenders: The multi-systemic therapy approach. *European Journal* on Criminal Justice Policy and Research, 6, 545-560.
- Leschied, A. W., Cunningham, A., & Mazaheri, N. (1997). Safe and secure: Evaluating Ontario's Phase II young offender detention system. Toronto, ON: Ministry of Correctional Services.
- Leschied, A. W., & Cunningham, A. (1999). A community-based alternative for high-risk young offenders. *Forum on Corrections Research*, 11(2), 25-29
- Leschied, A. W., & Cunningham, A. (1999). Clinical trials of multy-systemic therapy in Ontario, 1997-2001: Evaluation update. London, ON: Family Court Clinic.
- Lipsey, M. W. (1992). Juvenile delinquency treatment: A meta-analytic inquiry into variability of effects. In T. D. Cook, H. Coopwer, D. S. Corday, Hartman, L. V. Hedges, R. J. Light, T. A. Louis, & F. Mosteller (Eds.) *Meta-analysis: A casebook*. New York, NY: Russell Sage Foundation.

- Lipsey, M., & Wilson, D. B. (1997). Effective intervention for serious juvenile offenders: A synthesis of research. New York, NY: Russell Sage Foundation.
- Loeber, R., (1999). From misbehaviour to delinquant behaviour. What we have learned from studies on development risk-factors, and effective solutions. Presented to the Children Conference, University of Toronto, Toronto, ON.
- Loeber, R., & Stouthamer-Loeber, M. (1998). Development of juvenile aggression and violence: Some common misconceptions and controversies. *American Psychologist*, 53(2), 242-259.
- Lösel, F. (1995). The efficacy of correctional treatment: A review and synthesis of meta-evaluations. In J. McGuire (Ed.) What works: Reducing reoffending guidelines from research and practice. Chichester, UK: John Wiley and Sons.
- National Crime Prevention Council. (1996a). Preventing crime by investing in people: An integrated approach to promote positive outcomes in children. Ottawa, ON.
- Matthews, F. (1998). Violent and aggressive girls. *Journal of Child and Youth Care*, 1(40), 1-23
- Olweus, D. (1987). Schoolyard bullying: Grounds for intervention. School Safety, 4-11.
- Patterson, G. (1992). Developmental changes in anti-social behaviour. In R. Dev. Peters, R. J. McMahon, & V. L. Quinsey (Eds.) Aggression and violence throughout the lifespan. Newbury Park, CA: Sage Publications.
- Ross, R. R., & Fabiano, E. A. (1985). *Time to think: A cognitive model of delinquency prevention and offender rehabilitation*. Johnson City, IN: Institute of Social Sciences and Arts.
- Ryan, G. D., & Lane, S. L. (1991). Juvenile sexual offending: Causes, consequences, and correction. Lexington, MA: Lexington Books.
- Tremblay, R. E., & West, W. E. (1995). Developmental crime prevention. In M. Tonry & D. P. Farrington (Eds.) Building a safer society: Strategic approaches to crime prevention. Chicago, IL: The University of Chicago Press.
- U.S. Department of Justice (1998). *What about girls 2.* Washington, DC: Office of Juvenile Justice and Delinquants, Fact Sheet # 84.

CHAPTER 13

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This chapter provides a brief review of issues related to the treatment of spousal violence. Specifically, it will focus on the assessment and treatment of male offenders who have abused their women partners. We begin with a brief description of the range of abusive behaviours and statistics on the prevalence of spousal violence in Canada followed by theory derived models of intervention. The discussion then focuses on therapeutic factors related to appropriate treatment targets, therapist and offender characteristics and other responsivity issues. A brief section on treatment issues unique to Aboriginal offenders is included. Assessment issues are reviewed, with a focus on pre and post treatment assessment. The final section presents a review of treatment outcome literature and discusses some of the problems associated with program evaluation in that area.

THE SCOPE AND NATURE OF THE PROBLEM

Official statistics provide under estimates of the actual incidence of family violence. Many cases go unreported by victims for a number of reasons such as their fear of reprisal, fear of loosing children to Social Services and lack of alternative accommodation. Some victims may simply not realize that spousal assault is illegal. Nevertheless, the official rates are high enough to illustrate that spousal violence is a serious problem in Canada. In 1997, there were 22,254 reported spousal violence incidents (Fitzgerald, 1999). Of these, 88% involved women victims. Although the general surveys have been restricted to research on heterosexual couples, several smaller studies have indicated that the prevalence of abusive relationships in gay and lesbian relationships is also high (Lockhart et al., 1994; Waldner-Haugrud & Gratch, 1997).

There is evidence that offenders may have particularly high rates of perpetrating family violence. A file review indicated that 27% of federal offenders who had been in a marital relationship were violent to a woman partner at least once (Robinson & Taylor, 1995). More recently, a survey of federal offenders assessed at intake indicated that 40% were found to have some file evidence of abuse against a partner that required a more in depth assessment. Of these, 82% were assessed as being high or medium risk to continue to be abusive (Kropp, 1998). Risk markers for family violence such as: criminal histories, previous histories of violence, alcohol abuse, low education and high unemployment, violence in the family of origin and personality disorder (Dutton & Hart, 1993) are characteristics of a high percentage of federal offenders. For example, 80% of federal offenders have committed a violent offence, 61% have histories of alcohol abuse, 70% test below the grade level and 71% have unstable job histories (Johnson & Grant, 1998).

Abusive behaviours can be categorized into three major groupings: physical, sexual and psychological/emotional. Physical abuse in a relationship is defined as any form of physical violence perpetrated on a partner. In 1997, approximately 74% of spousal assault incidents were classified as common assault, 14% of incidents were classified as either assault causing bodily harm or aggravated assault (Statistics Canada, 1999). Unlike other forms of spousal abuse, in cases of assault causing bodily harm or aggravated assault, men are more likely to be the victims, possibly because women resort to weapons to compete against the greater physical strength of their male partners. However, homicide rates in Canada indicate that male violence is more likely to lead to the death of a woman. From 1978 to 1997, 1,472 wives were killed by their husbands and 442 husbands were killed by their wives, a ratio of 3.3 to 1. It is noteworthy that there was a reported previous history of spousal violence in 56% of spousal homicide cases from 1991 to 1997. Alcohol consumption had been involved in 38% of these cases.

Sexual abuse of a partner typically involves forcing the victim to perform sexual acts against his/her will or physically attacking the sexual parts of the victim's body. It is difficult to assess the extent of sexual abuse in relationships for several reasons. First, offenders' relationship to the victim is not usually noted following charges of sexual offending. Second, the secretive nature of both sexual offending and spousal assault lowers the rate of reported sexual abuse in relationships. Statistics Canada (1999) included sexual assaults in their "Other Violent Offences" category, which totalled 5% of offences in 1997.

Emotional or psychological abuse is a broad category that involves controlling the victim through verbal means or creating an atmosphere of fear. In essence, psychological abuse incorporates all types of abusive behaviour that does not involve physical contact, and is seen as a component of all types of spousal violence. One type of psychological abuse that has achieved criminal status is criminal harassment (stalking). In 1997, 7% of all spousal abuse incidents reported to police were for stalking. Several other forms of abuse discussed in the literature are: economic abuse (encouraging and abusing economic dependence); isolation (controlling or limiting the victim's support network) or spiritual abuse (ridiculing or abusing the victim's spiritual or cultural beliefs). Although these are important factors to examine in

¹ Correctional Service of Canada

spousal abuse situations, they can often be subsumed under the general group of emotional or psychological abuse.

RATIONALE FOR TREATMENT OF ABUSERS

Family violence has a damaging and costly impact on the community as well as a direct and sometimes tragic impact on the lives of affected spouses and children. The national survey on violence against women indicated that 45% of all women who had experienced violence had suffered an injury and, of these, 43% had required medical attention. Fifty-two percent had taken time off work as a result of injury (Statistics Canada, 1993). Statistics Canada estimates that health costs of injuries and chronic health problems caused by abuse amounts to a billion dollars every year (Day, 1994). Victims of domestic violence demonstrate increases in psychosomatic disease and drug and alcohol abuse. A significant portion of police time is allocated to intervening in family violence situations. Levens and Dutton (1980) coded taped call for police services in Vancouver and found that 13.5% were specifically for husband and wife disputes.

Family members are suspected in about one-quarter of all assaults against children. In the majority of cases of physical assault, fathers were the perpetrators (71%) and fathers were the primary perpetrators of sexual assault (97% of the cases). Family members were responsible for 76% of all child homicides. In 28% of these cases, there was known history of domestic violence. Children are also indirect victims of domestic violence as witnesses to the abuse. It is estimated that in as many as 80-90% of cases, the children know about the violence against their mother even if they do not directly witness the attack (Statistics Canada, 1999). In a recent analysis comparing children who have witnessed violence often, sometimes and seldom, to those who have never witnessed violence, researchers found that child witnesses were more likely to exhibit behaviours such as conduct disorder-physical aggression, emotional disorder, indirect aggression and property offences. In their recent review of the literature, Cunningham et al. (1998) noted that child witnesses often experience risk of injury as well as emotional trauma, reduced academic success and as adults their own families are often characterized by poor parent child communication. Suddermann and Jaffe (1999) noted that, behaviourally, children who witness violence become aggressive, non-compliant, irritable and easily angered. They also noted psychological problems of anxiety, depression, withdrawal, low self-esteem and an increase in somatic complaints. Socially, these children can have difficulty because of some of the above problems which often translates into academic problems. In their study of children in women's shelters, Suddermann and Jaffe found that 56% met the criteria for Post-Traumatic Stress Disorder, with most having some symptoms of this disorder. Finally, they also note the occurrence of "subtle" symptoms, such as inappropriate attitudes regarding conflict resolution and violence against women, condoning relationship violence, and hypersensitivity regarding problems at home and self-blame.

As adults, sons who are child witnesses of abuse are at an increased risk of becoming perpetrators of family violence and daughters are more likely to be victims. Straus, Gelles, and Steinmetz (1980) found that men who had witnessed wife assault in their families of origin had rates of battering three times greater than those who did not. Children in this study who were both witnesses of abuse and victims, were twice as likely to report an incident of spousal violence during the study year than those who did not (1 in 3). Clearly then, mounting an effective response to the problem of family violence would translate into reductions in individual and societal costs and would contribute to reductions in these costs in the next generation by breaking the intergenerational cycle of family violence.

THEORY DERIVED MODELS OF TREATMENT

A number of theoretical models have been proposed to explain the behaviour of abusive men. Sociological and sociobiological explanations provide broad analyses of culturally influenced or genetically programmed responses of abusive men but provide little direction on how to intervene clinically with individual abusers. Medical/ biological explanations cite evidence of links to organic brain damage that point to specific medical or clinical interventions for a limited number of perpetrators known to have such impairments.

Since the late 1970s the theoretical explanation that has had the most impact on the design of broadly based intervention programs for both male perpetrators and the victims of family violence is the feminist model. This approach points to the societal and political power imbalance between men and women as the key reason why men abuse women. The theory explains that the structure of patriarchal societies encourages the adoption of men's sense of entitlement to exert power and control over their families. This sense of entitlement justifies their use of a number of tactics such as the use of economic control, use of or threat of physical or sexual violence, and psychological tactics to maintain the power imbalance in their favour. In Canada, advocacy by women's groups for women and children who have been victims of male violence has contributed to an increase in public awareness of the problem, the development and funding of services for the victims of family violence as well as a greater sensitivity for the handling of these cases within the criminal justice system. Internationally, feminist analysis has contributed to the establishment of organizations that work to address the broad-based inequalities between men and women with many societies. Feminist based treatment programs for the victims of family violence have focussed on the empowerment of women and an analysis of the power dynamics. The Duluth treatment program is the most influential proponent of this model in the treatment of abusive men (Pence & Paymar, 1993). Their analysis of the tactics of men who batter, abusive men's attitudes toward their partners (the Power and Control Wheel) and the program's emphasis on learning egalitarian non-violent relationship strategies (the Equality Wheel) are now core components of most treatment programs for abusive men.

However, the research support for the theoretical basis of the approach and the treatment outcome literature on purely feminist based programs is thin. Sugarman and Frankle (1996), in a meta-analytic review of 29 studies of domestic violence, concluded that there was "limited support for the ideological component of the patriarchal theory of wife assault." They found that, contrary to feminist theory, violent husbands were more likely to have an "undifferentiated" general schema, that is, they did not adhere to rigid sex role stereotypes and their attitudes toward women did not differ from non-violent husbands. Another criticism of the feminist explanation of family violence is that it cannot account for the high rates of violence among same sex relationships and evidence of women on men violence. What is more, treatment programs for male batterers that are strongly feminist and take an accusatory approach in working with participants may contribute to the high attrition rates reported in the field. Despite the important contribution the feminist based theory has made to the improvement of services for women and to a recognition of the contribution of political and economic disparity to domestic violence, it is not surprising that a single factor explanation cannot fully account for complex social phenomena nor that treatment programs derived from it cannot point to clear evidence of effectiveness.

A second theoretical orientation that has informed interventions with male batterers and with child witnesses is social learning theory. In this approach, domestic violence is conceived of as learned pattern of behaviour established through modelling patterns witnessed as children and in the society at large. The theory predicts that exposure to violent models in the home and in the popular culture increases the risk of a child becoming violent in his adult relationships. The treatment model inspired from this model downplays the role that individual psychopathology might play in the establishment of abusive patterns and instead directly targets the abusers' maladaptive responses to situations and events and retrains them to apply prosocial cognitive and behavioural responses. Evidence of the intergenerational transmission of violent patterns would appear to lend general empirical support for the theoretical model. However, it cannot account for the fact that most boys exposed to violent models will not become violent as adults. Kaufman and Zigler (as cited in Cunningham et al., 1998) noted decreased likelihood of adult abusiveness in child witnesses who had the love/support of one of his/her parents, supportive and loving adult relationships, acknowledged their experience of witnessing abuse, and committed to not being abusive in their own relationships.

Complete explanatory models should be multifaceted and include an analysis of how factors interact to contribute to domestic violence. Given that evidence points to a multi-modal treatment as being more effective in reducing criminal recidivism. It is reasonable to conclude that treatment programs to reduce relationship violence among criminal populations should also acknowledge the complexity of the origins of the problem by addressing multiple targets that are empirically shown to contribute to abusive behaviour.

A nested ecological model described by Dutton (1995) that explains domestic violence as multi-determined, influences the theoretical treatment approach adopted by the Correctional Service of Canada. The model, which is derived from the work of developmental psychologists and ethologists, provides a comprehensive explanation of intimacy violence. It considers the interactions between the broad social context, the perpetrator's intrapsychic features and the interpersonal context.

The model also points to appropriate targets to address in treating domestic violence perpetrators. It consists of four levels of social contexts, each influenced by the other.

- Macrosystem. This first level consists of the broad attitudes and beliefs regarding wife assault that are held by one's culture. For example, the influence of patriarchy and the social and cultural prescriptions that endorse male aggression and men's power and control over women.
- 2. *Exosystem.* This level consists of social structures that influence the immediate context where the assault occurs. For example, work groups, friendships or other groups that connect the family to the larger culture. Work stress or the lack of social support could increase the risk for family violence. Association with other men who endorse violence toward women is another pathway that increases the risk that men will be abusive in their intimate relationships.
- 3. *Microsystem*. The third level consists of the family unit or the immediate environment within which the abuse takes place. This includes the level of conflict within the family unit, the factors that led up to, and the consequences of, the abuse; and
- 4. Ontogenetic Level. The last level is the individual component. Examples of individual factors related to family violence are: the perpetrator's developmental history, his possible experience of abuse and neglect as a child, his exposure to violent models, his degree of empathy, his ability to manage his emotions, his response to handling conflict and the level of anxiety over relationship changes. The individual response is influenced by his exposure to elements in the previous levels.

EFFECTIVE TREATMENT FOR ABUSIVE OFFENDERS

Effective intervention begins with a comprehensive theoretical model that points to treatment targets to address the multiple factors that influence relationship violence. For abusive offenders, we believe that the intervention should be consistent with broad features common to correctional programs that have the best outcomes in reducing recidivism. Meta-analytic and theoretical reviews have identified a cognitive-behavioural approach as the most effective treatment orientation in reducing criminal recidivism (Lipton, 1998; Lösel, 1995; Andrews & Bonta, 1994). There is limited research on the outcome of family violence treatment approaches with criminal populations, but one study found some support for a cognitive-behavioural approach over a process/psychodynamic approach with anti-social abusers (Saunders, 1996). In addition, meta-analytic studies have identified that correctional programs are more effective if they:

- are structured and focused, use multiple treatment components, focus on developing skills (social skills, academic and employment skills), and use behavioural and cognitive-behavioural methods (with reinforcements for clearly identified, overt behaviours as opposed to non-directive counselling focusing on insight, self-esteem, or disclosure);
- provide for substantial, meaningful contact between the treatment personnel and the participants (Sherman et al., 1997);
- ensure that treatment integrity is monitored to avoid program drift and ensure that service providers are adequately trained in the technique;
- select treatment targets that are dynamic factors related to risk (in this case attitudes and skills with due attention to substance abuse);
- apply interventions that employ active and participatory approaches such as role playing rather than passive didactic instruction;
- focus attention not only on highlighting the problem behaviour for the clients but also in assisting them to replace it with pro-social behaviour;
- bridge institution-based programs to community-based programs after release;
- arrange follow-up by using behavioural indicators of desired outcomes;
- use information learned from post-treatment follow-up to modify the program if needed.²

(Reproduced, in part, from Cunningham et al, 1998)

The principal goal of a relationship violence program is the elimination of all forms of violent and abusive behaviour by offenders against their intimate partners. The programs seek to reduce the physical, sexual, emotional, psychological, and financial abuse of intimate partners. Although most family violence programs do not specifically provide instruction on parenting, or on prevention of abuse of the elderly, a secondary goal of most programs is the elimination of all violent and abusive behaviour in the family. Intermediate goals are to:

- develop perpetrators' insight into factors related to abuse;
- increase their awareness of the range of abusive attitudes and behaviours toward partners and children and the negative effects of these attitudes and behaviours in relationships;
- replace abusive attitudes and behaviours with non-abusive attitudes and behaviours; and
- develop a sense of responsibility for abusive and violent behaviours;

Some will argue that intervention should also improve the survivors' and children's well-being (Tolman & Edleson, 1995).

The principal targets for change in a cognitive-behavioural intervention for abusers are:

- The irrational or distorted attitudes and beliefs that influence the appraisal of the situation and/or allow the perpetrator to deny or reduce his responsibility for his violent or abusive behaviour. Cognitive-behavioural techniques are used to teach participants to analyse thinking patterns and then change the premises, assumptions and attitudes that underlie those thinking patterns (Edleson, 1996). Once the individuals are able to develop a critical awareness of beliefs underlying sexist and violent behaviour, they are then introduced to alternative beliefs, actions and behaviours. Examples of such distorted thinking are, images of masculinity that demand that men take control of family life, attitudes supportive of demeaning or abusing women, hostile attributions that construe neutral situations as ones called for aggression, unrealistic thinking that demands that all aspects of a relationships unfold in a specified way.
- The strong emotional responses that lead to aggression against partners. Many programs focus on anger or arousal of the perpetrator. Spouse specific anger/hostility, and not generalized anger has been found to predict relationship violence (Boyle & Vivian, 1996). Perpetrators learn how to monitor their arousal and recognize the cues signalling when they are losing their temper in their relationships. They then learn to apply anger/arousal control techniques such as relaxation, anger-down self-talk, reframing, etc. Throughout this process they learn to control their behaviour by controlling their arousal level. The same techniques can be used to monitor and manage other strong emotions related to relationship violence such as depression, jealousy and anxiety over relationship loss.
- Skill deficits. Effective programs will assist participants in addressing deficits in cognitive, coping and social skills required to deal with strong emotion and conflict or to forge healthier non-violent relationship patterns. Some cognitive skills that contribute to behavioural change are prosocial problem solving, learning how to anticipate positive and negative consequences of actions and restructuring

² Recently, Correctional Service Canada has begun to submit its core programs for accreditation. The process reviews programs to determine that their content, implementation and evaluation framework is consistent with high standards similar to those listed above.

problem thinking. High risk, or high need offenders may have social skills deficits that also need to be addressed. Learning effective communication and conflict resolution strategies reduces the risk of future assaults and increases the opportunity to build positive relationships.

• Problems in self-regulation. Teaching offenders how to anticipate difficult situations and inoculate themselves against negative experiences by applying relapse prevention techniques has become an innovation in correctional programs since the mid 1980s (Pithers, 1990). Although there is not yet a body of outcome studies empirically supporting the use of a relapse prevention component in correctional treatment, it is entirely consistent with a systematic approach to risk management, particularly as a means of structuring the community follow-up component. This model helps the offender identify those factors that have contributed to his abusive behaviour pattern and points him to his internal resources (the appraisal component he has modified and coping skills he has learned) and his identified external resources (network of support) that he can rely on when confronted with stressful (high risk) situations. Follow-up in the community applying these techniques is particularly important when offenders have direct access to potential victims.

For a significant number of offenders, their abusive patterns will involve the abuse of substances, particularly alcohol abuse. An understanding of how substance abuse figures in the pattern of violence and the provision of specialized treatment for serious or chronic users is an essential component of effective correctional programs for abusers.

Appendix A provides an outline of the High Intensity Family Violence program recently implemented in institutions within CSC. The program is designed to treat high risk offenders with multiple needs; lower risk offenders may not require all elements of the program. We believe that it meets the criteria of effective programs for high-risk offenders and addresses the targets relevant to this population. However, we do not yet have data evaluating the effectiveness of the program. The program has recently been accredited by an international experts' panel.

RESPONSIVITY ISSUES

Abusers, in general, are a heterogeneous group. They can vary significantly in education, social status, income and attitudes. Some abusers may only display violent behaviour in their intimate relationship(s). Others may have general deficits that result in their being violent in many settings. Some use alcohol as a disinhibitor; others do not. Some may be angry when they are violent; others may be calm, using violence as a instrument of control. Client characteristics contribute to differential outcomes following the initial assaultive incident. About one-third of men who assault their partners do not repeat the violence whether they receive treatment not (Rosenfeld, 1992). Others are multiple recidivists despite interventions. Treatment efforts should be responsive to client characteristics. The treatment approach appropriate for an apparently pro-social, educated and financially successful spousal abuser may be very different from a lower functioning pro-criminal abuser who uses violence in many contexts. Several researchers have developed typologies of abusers (Dutton, 1995, Holtzworth-Monroe & Stuart, 1994; Saunders, 1992; Hamberger, Lohr, Bonge, & Tolin, 1996). There are three broadly defined profiles they have identified: those who are generally violent and lacking in empathy (anti-social), those who are emotionally volatile and dependent (borderline personality organization) and those who experience discomfort dealing with intimacy but are not violent outside intimate relationships (overcontrolled group; sometimes referred to as the non pathological group). Saunders' (1996) work provided some evidence that differential treatment approaches work better for some groups than others. The borderline and dependent abusers responded better to an unstructured supportive group while anti-social, manic and substance abusing men responded better to a more structured feminist cognitive-behavioural approach.

In correctional settings, the heterogeneity of the population is somewhat reduced. Among federal offenders, for instance, many offenders referred to treatment are not serving their sentences only for wife assault; they have general criminal histories as well. Preliminary research suggests there may be two broad profiles: offenders who are generally assaultive and criminally oriented and offenders who have specific histories of problematic relationships marked by attachment anxiety, jealousy and dependency. We have not yet reached the point in program development where we can determine the extent to which the treatment approach adopted within CSC will adequately address the needs of both profiles, but it is an area to consider in later phases of program development.

Another element of responsivity is the motivation of the abuser for self-change. Dropout rates for treatment in most community settings is high. Brown, O'Leary and Feldbau (1997) cite ranges of 40 to 60% for court mandated treatment programs and higher rates for self referred populations. It is obvious that not all perpetrators are equally ready to undertake personal change. While an effective treatment program helps the abuser recognize his responsibility for his violence, Murray and Baxter (1997) have discussed the counter-therapeutic effect of a confrontational and accusatory counselling style that relentlessly targets denial and minimization. The authors recommend applying the Transtheoretical model (Prochaska & DiClemente, 1986), which proposes stage specific methods for intervening with clients. Abusers at the first stage, Precontemplators, would not yet see the necessity for changing their behaviour in relationships so attempting to engage them immediately in active treatment is not likely to be effective. Confrontational tactics may increase resistance. Motivational

interviewing (Miller & Rollnick, 1991), on the other hand, is a collaborative style that engages the client by helping him to assess the costs and benefits of changing his behaviour. Other techniques recommended for Precontemplators are dramatic relief, in the form of testimonials from individuals who have completed treatment; films or books that present the effect of abusive behaviour and the value of change; consciousness raising information about the self and the problem; environmental reevaluation that helps the client assess how his problem affects others; and other techniques that encourage a belief in the individual's ability to change are appropriate methods to encourage Precontemplators to consider self-change (Levesque, 1998). It may be useful to provide a form of treatment primer consistent with the Transtheroretical model for offenders unwilling to participate in treatment.

A critical factor in treatment outcome is the quality of the relationship, or working alliance, forged between the client and the therapist or group facilitator. As mentioned above, the least effective are facilitators who are aggressive and authoritarian and use challenge and confrontation. Effective change agents are those who share with the client an understanding of the goals of treatment, share an understanding of the tasks required to get there and are able to forge a warm and supportive bond with the client (Bordin, 1994). The gender of the therapist may be especially critical in treatment of spousal abusers. Most group programs are co-facilitated by a man and a woman to take advantage of the opportunity it presents of modelling appropriate intergender relationships. The therapists can model a man-woman relationship based upon mutual respect. Furthermore, the woman therapist is able to speak more authoritatively on women's issues, and stands as a model that challenges "all women" statements (e.g., "Women are too emotional"). The male therapist is able to act as a model of prosocial male behaviours and challenge certain male stereotypes (e.g., "A man's house is his castle."). Thus, by balancing the sex of the therapists, the team can better address issues that are raised in the group.

The forging of the working alliance with men of diverse ethnic backgrounds may be affected by the cultural competency of the therapist. Clinicians need to be sensitive to the cultural backgrounds of their clients. This sensitivity extends to understanding the context of their behaviour and their personal beliefs that support violence and abuse within the family as well as the best values of the culture that support and promote positive images for families and intimate relationships.

ABORIGINAL OFFENDERS

The Correctional Service of Canada is committed to provide to Aboriginal offenders programs that are developed and delivered by Aboriginal experts. To the extent that Aboriginal offenders are not acculturated into main stream culture, specific programs should attend to differential learning styles and to the appropriateness of the selection of skills for the community to which the offenders will return. For example, Aboriginals from communities where there was relatively little contact with Euro-Canadian culture, who speak their native language and may have led more traditional life styles report feeling uncomfortable in group sessions that require disclosure of personal information and the expression of emotion. Eye contact in communication and the use of assertion skills are not adaptive skills for their social interaction (Waldram & Wong, 1994). Bicultural or assimilated aboriginal offenders may feel more comfortable in cognitive-behaviour group.

Aboriginal core programs integrate cultural and spiritual teachings such as the medicine wheel and ceremonies led by Elders, such as the use of sweetgrass, tobacco, and the sweat lodges with a cognitive behavioural treatment approach. These programs help Aboriginal offenders maintain or establish a link with their culture; to establish a route toward symbolic healing; and to identify key individuals who act as guides, healers and support on their release to the community.

In interventions to address family violence there are two major aspects unique to Aboriginal history that have had an impact of family violence and are likely to affect treatment: the impact of residential schools and post-colonial contact. The impact of residential schools on Aboriginal culture is well documented. For several decades Aboriginal children were removed from their home environments and placed in residential schools, punished for using their language and often prevented from extensive contact with their families. These children would have had much less exposure to effective family models (Taylor & Alksnis, 1995). They did not have the opportunity to observe their parents and grandparents deal with conflict, parenting or marital problems. In many cases, these children also suffered physical, sexual and emotional abuse from their caretakers or older residents. These would have been their models as they graduated and returned to their communities.

Treatment programs for Aboriginal offenders need to address the impact of residential schools. Offenders who may not have attended a residential school can often speak of its effect on their family and community. The inclusion of this material must be addressed in a very sensitive manner. Violence in relationships is always the responsibility of the perpetrators. While the negative cultural effects of residential schools cannot be used as a rationalisation for their abusive behaviour, it can be understood as a partial explanation.

Another issue that has an impact on family violence within Aboriginal communities is cultural abuse. This is a form of emotional psychological abuse where an individual's cultural/spiritual beliefs are denigrated. This type of abuse can enter the relationship if the partners are of different cultures or have different cultural beliefs. Although the partner may perpetrate this abuse, it is often reinforced by the larger culture. The use of residential schools to systematically acculturate Aboriginals is a prototypic example of how cultural abuse can occur at the societal level.

By examination of the cultural context, and the level of the offender's immersion in that culture, correctional staff may

better serve the needs of their clients and assist in risk management in the community.

ASSESSMENT AND EVALUATION FRAMEWORK

Addressing spousal violence in correctional settings begins with the assessment of the perpetrator. There are three major purposes to assessment:

- The prediction of risk for future spousal assault and the assessment of behaviour/attitudes that signal the return to abusive and violent behavioural patterns. Risk assessment identifies offenders who should receive more intensive service through informed supervision and treatment and follow-up.
- The evaluation of treatment gain through the measurement of treatment targets such as attitudes and skill deficits associated with spousal violence.
- 3) The profiling of abusers through the assessment of characteristics. Profiling allows for post treatment evaluations to determine whether differential outcomes may be based on client variables.

Similar to other criminal offences (Andrews & Bonta, 1994), we typically rely on past behaviour to predict future behaviour in spousal abuse cases. The reliance on official records in cases involving intimate violence is problematic because of the very low reporting rate in such cases. However, unlike many other criminal offences, spousal abuse has an easily identifiable future victim. This makes monitoring easier when abusers are in the community.

The Spousal Assault Risk Assessment Guide (SARA) is one instrument that has been developed specifically to assess the risk for future spousal violence (Kropp, Hart, Webster, & Eaves, 1995). Items were selected based on retrospective analysis of histories of known spousal assaulters. The instrument is designed to be a case manager's guide to reviewing file and interview information. At this stage in the instrument's development, there are no cut-off scores to rank risk. However, after completing the guide the rater is required to assess the subject as at low, medium or high risk for future violence against his partner or others. The SARA has items associated with four major categories: criminal history, spousal assault history, characteristics of the current offence, and psychosocial adjustment. Generally speaking, the first three categories are relatively static, although there are some items, such as minimization or denial of spousal assault history that can change over time. Within the category of psychosocial assessment many of the items focus on recent functioning (e.g., recent relationship problems), while a few relate to historical issues (e.g., childhood witness/victim of family violence). The SARA allows for the identification of critical items. Through this process, the clinician can note items that he or she sees as central to their final risk rating. Although only a few items may have been endorsed on an individual's protocol, he may be rated as high risk because of one or two critical items. Conversely, an individual could have a high overall score but be rated lower risk because all the items pertain to incidents that occurred years ago.

Research on the SARA has confirmed that it performs better than the Psychopathy Checklist-Revised (PCL-R) in identifying future spousal assaulters. Moderate or high-risk ratings on the SARA point to the need for a comprehensive strategy to address the problem for that offender. In prison, individuals rated as high risk should be closely monitored during Private Family Visits. They should be referred to more intensive treatment options and closely supervised when released through regular home visits and contact with the spouse and children.

Other relevant measures include behavioural indices. A common rating scale used in spousal violence research is The Conflict Tactics Scale (CTS) and its revision (CTS2) (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). The CTS was comprised of 19 items, subsumed under three scales: violence, verbal aggression and reasoning. The CTS2 included a revision of these scales: physical assault, psychological aggression and negotiation and the addition of two new scales: injury and sexual coercion. The CTS has been used for more than two decades to examine partners' use of physical violence, psychological violence and non-violent negotiation in dealing with relationship conflicts. The original intent of the CTS was for survey work in spousal violence (Straus, 1990).

Despite its widespread use, the CTS has come under a lot of criticism. Critics have noted that the instrument is limiting in that it focuses on conflict-related violence, has a limited set of violent acts, includes threats as violence and equates different violent acts (e.g., use of a weapon or a threat are both counted as one incident). Other researchers have criticized the choice of what is termed severe violence and minor violence. Straus (1990) responded to this criticism by noting that this division roughly parallels the distinction between common versus aggravated assault. Other criticisms focus on the scope of the CTS suggesting that the dynamics of family violence are ignored. Based on the results of the CTS, one cannot ascertain the context of the violence or who initiates violence. These issues become important in gaining a full understanding of the perpetrators.

Some of these criticisms seem to be addressed in the revised CTS2, others must simply be accepted as a limit of any assessment tool. Straus (1990) points out that researchers can add specific incidents that are important in their research. There has been an expansion of items in the CTS2, and it now examines sexual assault and injury (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). Needless to say, this survey approach can provide researchers with much needed information. It presents conflict as a normal part of relationships that may encourage some respondents to be more forthcoming. It also allows for easy comparison between responses of each partner. Those using the CTS2 in clinical settings should be aware that it was not designed

to examine relationship dynamics. Basically, it can be used as a relatively standard way of gathering data on incidents. It can also be used to examine changes in the frequency of incidents, a potential goal of therapy. Clinicians need also to examine the severity of the abuse through other means.

There are several self-report attitudinal measures used in the field. Typically these measures focus on assessing the extent to which men endorse sexist attitudes toward women or endorse the abusive and violent actions. Researchers recognize the shortcomings of self-report measures because of their inherent susceptibility to impression management. To some extent, impression management can be statistically controlled though use of a measure of social desirability. However, even such an addition does not preclude the respondent denying or minimizing their attitudes or behaviours. Many researchers opt for combining official records, interview or rating methods with self-report and partner instruments to help increase the validity of their interpretations. A recent development in the assessment field is the use of standardized scenarios or vignettes to probe offenders' responses to hypothetical situations. Carefully constructed and scored, such measures can provide rich data and can mitigate the extent to which social desirability contributes to their responses.

Best practice in pre and post treatment assessment batteries would seek out convergent sources of data that tap behaviours and attitudes that are the target of treatment. Rating scales completed by facilitators should systematically assess the offenders' observed progress in treatment against the program goals (for example, an intervention specific Goal Attainment Scale (GAS-FV) (CSC, 1999).

Attitudinal measures (e.g., Shepard & Campbell (1992), particularly those that assess the participant's rationalizations around abusing women) combined with a social desirability measure (e.g., BIDR), assess changes in attitude towards women and women assault. Self-report measures based on the Transtheoretical model can assess readiness to change (e.g., the modified URICA, Levesque, 1998).

Objective tests assess the extent to which offenders have learned the knowledge content of the program. Participants' responses to scenarios or vignettes provide information on both skills development and attitude change and may not be as vulnerable to desirable responding as self-report measures. Profiling tools should be able to provide information on factors related to criminal recidivism and spousal abuse in particular: IQ, personality psychopathology, employment status as the time of offending, criminal history, age at time of offending and extent of problem with substance abuse.

Given that the primary goal of treatment is the cessation of violence against the partner, the principal treatment outcome variable of interest is a measure of repeated episodes of violence. Reliance on official records underestimates actual rates to such an extent that average base rates of recidivism are quite low. Most reports using official records have found that fewer than 20% reoffend after one to three years of follow-up. Such low base rates will require large differences between treated and untreated groups or very large sample sizes to produce significant treatment effects. When possible, follow-up interviews with the partner supply information on a range of abusive behaviours that official records lack. There are, however, several challenges in using this method as well. Obviously, outcome data is limited to those abusers who continue to co-habit. There are often difficulties tracking partners willing to participate in such follow-up interviews. Researchers have also noted that results of such surveys can be affected, among both the partners and male participants, by their increased awareness of the range of behaviours that are abusive after treatment.

TREATMENT EFFECTIVENESS

Since in most correctional settings, a group format is the most cost efficient, this section will only review the outcome on group programs. In community settings, however, couples counselling, family counselling and individual counselling are other formats for the delivery of interventions for relationship violence.

There are several problems that plague group treatment evaluation, and therefore, limit any firm statement about what works. Group interventions vary in their treatment approach and degree of structure. Some are primarily educational, some are unstructured self-help groups and more recently, court mandated programs tend to combine a feminist analysis of power and control issues with a cognitive-behavioural approach. Non-representative samples are created through screening in volunteers and through group attrition. Many clinical studies have small samples, reducing statistical power. Studies use various definitions of abuse, different definitions of relationship, and various methods for reporting on outcome (official, self and partner reports). Most studies do not have a control group, although some use comparison groups.

Generally, evaluations have determined that most abusers (53-85%) stop their violence after treatment in follow-up periods ranging up to 54 months (Edleson & Syers, 1990; Dobash & Dobash, 1999). However, it is harder to make a definitive assessment of whether treatment provides incremental improvement beyond the deterrent effect of arrest.

Rosenfeld's (1992) review of mandatory treatment programs found that, on average, drop outs did just as well as those who attended treatment. He concluded that evidence to support the effectiveness of treatment was minimal. Dutton (1995), however, has cited strong treatment effects for court mandated offenders. In a six-month follow-up, 16% of untreated abusers and 4% of treated offenders reoffended. Gains were maintained two and one-half years later when results indicated that 40% of untreated and 4% of treated men recidivated. The effects of treatment were also evident in samples of self reports from men and of women partners from the treated group which demonstrated that levels of violence and verbal aggression dropped after completion of the program. Conclusions of researchers based on their results have proved such contrary claims that they have been compared to competing political advertisements.

In other areas of correctional treatment, a major contribution to the confusing debate on specialized program effectiveness has been meta-analyses. Levesque (1998) examined the spousal assault literature using the meta-analytic method. However, reflective of the paucity of rigorous research, only 11 studies met the inclusion criteria. She found moderately significant improvement in the treatment group (Effect Size (ES) = 0.19; p<0.05) using official records. She found no differences (ES = 0.06, ns) between treatment and comparison groups when using partner reports. The overall results were heavily weighted by the results of one study (Harrell, 1991) which actually found that program participants did more poorly than an untreated comparison group. Since the study was well designed, it presents the alarming possibility that some interventions for male spousal assaulters may actually make them worse.

Since Levesque (1998) reviewed the outcome studies up to 1997, a number of important additional studies have added to the literature. Dobash and Dobash (1999) have recently evaluated nonequivalent criminal justice interventions with court mandated abusers. They found that all the criminal justice interventions resulted in reductions in violence but the treatment programs resulted in greater reduction and the reduction was sustained after one year.

In a 15-month follow-up study, Gondolf (1999) interviewed partners of men who attended abusive men's groups from four sites. The four programs were used because they were seen as well-established, maintained state standards, collaborated with women's programs, and use cognitive behavioural approach. One program was a 3-month pre-trial program, the second was a 3-month post-conviction referral program, the third was a 6-month post-conviction referral program and the fourth was a9-month post-conviction program that incorporated in-house substance abuse and individualized treatment. He found an overall assault rate of 32%, a severe assault rate of 20% and a repeated assault rate of 19%. There were no significant differences among the four sites on overall assault rate; however, there were significant site differences in the other two categories. The 9-month program showed fewer severe assaults (12%) and fewer repeat assaults (11%). Since the general assault rates were similar across sites, based on a criterion of cost effectiveness, Gondolf endorses the 3-month intervention over the longer treatment. In the absence of a no treatment comparison group, however, the study cannot contribute to the question of whether treatment programs in general are effective interventions.

Although reviews of outcome studies in the area can be confusing, one can generally conclude that success rates are only moderate at best but some men do seem to benefit from treatment (Cunningham et al., 1998). There is room for improvement in program design that could reasonably be expected to increase treatment effects. Many of the evaluated programs are short — around ten sessions, only a few are more than 20 sessions. Based on his meta-analysis of correctional treatment, Lipsey's (1995) found that high intensity treatment, which he defined as those offering 100 hours of service, were more effective for high-risk offenders. None of the abuser programs we reviewed approached the recommended 100 hours of treatment. No formal descriptions are provided of methods that are used, if any, to engage poorly motivated clients and there is a paucity of programs designed and implemented for men from minority groups. Although few of the evaluations offered detailed descriptions of the program content, it is not clear that any of them are providing relapse prevention models or are ensuring follow-up and maintenance for graduates of the program. In correctional settings we are well positioned to provide well informed supervision of graduates of the programs released to the community.

CONCLUSIONS

The above discussion is a brief introduction to a complex problem of spousal assault. There seems to be a small developing literature that is illuminating appropriate treatment in this area. Recently, programs apply an eclectic approach, linking power and control analysis with skills development under an over cognitive-behavioural rubric. Similarly to general correctional programs (Andrews & Bonta, 1994), non-directive, unstructured and insight-oriented programs are not recommended. However, much more rigorous evaluation of programs is required before we will be able to point definitively to specific interventions that are more effective than others for this population. By linking the current research with what is known about general criminal offenders, we are able to develop plausible hypotheses regarding appropriate treatment and supervision for abusers in correctional settings.

REFERENCES

- Andrews, D. A., & Bonta, J. (1994). The psychology of criminal conduct. Cincinnati, OH: Anderson.
- Bordin, E. S. (1994). Theory and research on the therapeutic working alliance: New directions. In A. O. Horvath & L. S. Greenberg (Eds.). *The Working Alliance* (pp. 13-37). New York, NY: John Wiley.
- Boyle, D. J., & Vivian, D. (1996). Generalized versus spouse-specific anger/hostility and men's violence against inmates. *Violence and Victims*, 11, 293-317.
- Brown, P. D., O'Leary, K. D., & Feldbau, S. R. (1997). Dropout in a treatment program for self-referring wife abusing men. *Journal of Family Violence*, 12(4), 365-387.
- Correctional Service of Canada (1999) Goal Attainment Scale-FV, Ottawa, ON.
- Cunningham, A., Jaffe, P. G., Baker, L., Dick, T., Malla, S., Mazaheri, N., & Poisson, S. (1998). Theory-derived explanations of male violence against female partners: Literature update and related implications for treatment and evaluation. Paper presented for Reintegration Programs, Ottawa, ON: Correctional Service of Canada.
- Day, T. (1994) *Costs of violence against women*. Preliminary results for Canadian Advisory Council on the status of Women. Ottawa, ON.
- Dobash, R. E., & Dobash, R. P. (1999). Criminal Justice programmes for men who assault their partners. In C.R. Hollin (Ed.). *Handbook of* offender assessment and treatment. Chichester, UK: John Wiley and Sons.
- Dobash, R. E., Dobash, R. P., Cavanagh, K., & Lewis, R. (1999) Changing violent men. Thousand Oaks, CA: Sage.

- Dutton, D. (1995) The domestic abuse of women: Psychological and criminal justice perspectives (Rev. ed.). Vancouver, BC: UBC Press.
- Dutton, D., & Hart, S. D. (1993). Risk markers for family violence in a federally incarcerated population. *International Journal of Law and Psychiatry*, 15, 101-112.
- Edleson, J. L. (1996). Controversy and change in batterers' programs. In J. L. Edleson & Z. C. Eisikovitis (Eds). *Future interventions with battered women and their families* (pp. 154-169). Thousand Lakes, CA: Sage Publications.
- Edleson, J. L., & Syers, M. (1990). Relative effectiveness of group treatments for men who batter. *National Association of Social Workers*, 26 (2), 10-17.
- Fitzgerald, R. (1999). Family violence in Canada: A statistical profile. Statistics Canada. Catalogue no. 85-224.
- Gondolf, E. W. (1999). A comparison of four batterer intervention systems: Do court referral, program length, and service matter? *Journal of Interpersonal Violence*, 14(1), 41-61.
- Hamberger, L. K., Lohr, J. M., Bonge, D., & Tolin, D. F. (1996). A large sample empirical typology of male spouse abusers and its relationship to dimensions of abuse. *Violence and Victims*, 11, 277-292.
- Harrell, A. (1991). Evaluation of court ordered treatment for domestic violence offenders, final report. Washington, DC: The Urban Institute.
- Holtzworth-Monroe, A., & Stuart, G. L. (1994). Typologies of male batterers: Three sub-types and differences among them. *Psychological Bulletin*, 116, 476-497.
- Johnson, S. L., & Grant, B. (1998). Review of issues associated with serious spousal abuse among federally sentenced male offenders. Research Report R-84, Ottawa, ON: Correctional Service of Canada.
- Kropp, P. R. (1998). Research related to the use of the SARA. Presentation at a Correctional Service of Canada working group. Ottawa, ON.
- Kropp, P. R., Hart, S. D., Webster, C. D., & Eaves, D. (1995). Manual for the spousal assault risk assessment guide. (2nd ed.). Vancouver, BC: The British Columbia Institute on Family Violence.
- Levens, B. R., & Dutton, D. G. (1980). The social service role of the police: Domestic crisis intervention. Ottawa, ON: Solicitor General of Canada.
- Levesque, D. A. (1998) Violence desistance among battering men: Existing interventions and the application of the transtheoretical model of change. Unpublished doctoral dissertation, University of Rhode Island, Rhode Island.
- Lipsey, M. (1995). What do we learn from 400 research studies on the effectiveness of treatment with juvenile delinquents? In, *What works: Reducing reoffending*, edited by J. McGuire. Chichester, UK: John Wiley.
- Lipton, D. (1998). How do cognitive skills training programs for offenders compare with other modalities: A meta-analytic perspective. Paper presented at the Stop and Think Conference, York, England.
- Lockhart, L. L., White, B. W., Causby, V., & Isaac, A. (1994). Letting out the secret: Violence in lesbian relationships. *Journal of Interpersonal Violence*, 9(4), 469-492.
- Lösel, F. (1995). The efficacy of correctional treatment. In *What works: Reducing reoffending*, edited by J. McGuire. Chichester, UK: John Wiley.
- Miller, W. R., & Rollnick, S. (1991). Motivational interviewing: Preparing people to change addictive behavior. New York, NY: Guilford.
- Murray, C. M., & Baxter, V. A. (1997). Motivating batterers to change in the treatment context. *Journal of Interpersonal Violence*, 12(4), 607-619.
- Pence, E., & Paymar, M. (1993). Education groups for men who batter: The Duluth Model. New York, NY: Springer.
- Pithers, W. (1990). Relapse prevention with sexual aggressors: A method for maintaining therapeutic gain and enhancing external supervision. In W. Marshall, D. Laws, & H. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender.* New York, NY: Plenum.
- Prochaska, J. O., & DiClemente, C. C. (1986). Toward a comprehensive model of change. In W. E. Miller & N. Heather (Eds.), *Treating addictive behaviors: Processes of change*. New York, NY: Plenum Press.
- Robinson, D., & Taylor, J. (1995). The incidence of family violence perpetrated by federal offenders: A file review study. Ottawa, ON: Correctional Service of Canada.
- Rosenfeld, B. D. (1992). Court-ordered treatment of spouse abuse. Clinical Psychology Review, 12, 205-226.

- Saunders, D. G. (1992). A typology of men who batter: Three types derived from cluster analysis. *American Journal of Orthopsychiatry*, 62(2), 264-275.
- Saunders, D. G. (1996). Feminist-cognitive-behavioral and process-psychodynamic treatments for men who batter: Interaction of abuser traits and treatment models. *Violence and Victims*, 11(4), 393-414.
- Shepard, M. F., & Campbell, J. A. (1992). The Abusive Behavior Inventory: A Measure of psychological and physical abuse. *Journal of Interpersonal Violence*, 7, 291-305.
- Sherman, L. W., Gottfredson, D. C., MacKenzie, D. L., Eck, J., Reuter, P., & Bushway, S. D. (1997). *Preventing crime: What works, what doesn't, what's promising*. Washington, DC: Office of Justice Programs, U.S. Department of Justice.
- Statistics Canada (1999). *Family violence: A statistical profile*. Ottawa, ON: Canadian Centre for Justice Statistics.
- Statistics Canada (1993). The violence against women survey: Highlights. Ottawa, ON: *The Daily*, 18 November.
- Straus, M. A. (1990). Ordinary violence, child abuse and wife beating: What do they have in common? In M. A. Straus & R. Gelles, (Eds.), *Physical* violence in american families: Risk factors and adaptations to violence in 8,145 families. New Brunswick NJ: Transaction Publishers.
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised conflict tactics scale (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*, 17, 283-316.
- Straus, M. A., Gelles, R. J., & Steinmetz, S. K. (1980). Behind closed doors: Violence in the American family. New York, NY: Doubleday.
- Sudermann, M., & Jaffe, P. G. (1999). Children and adolescents who witness violence. New Directions in intervention and prevention. In R. D. Peters, R. McMahon, & D. A. Wolfe (eds.), *Child abuse: New directions in prevention and treatment across a lifespan.* (pp 55-78) Thousand Oaks, CA: Sage.
- Sugarman, D. B., & Frankle, S. L. (1996). Patriarchal ideology and wife-assault: A meta-analytic review. *Journal of Family Violence*, 11, 13-40.
- Taylor, J., & Alksnis, C. (1995). Models of family among aboriginal and nonaboriginal offenders. Ottawa, ON: Correctional Service of Canada.
- Tolman, R., & Edleson, J. (1995). Intervention for men who batter: A review of the research. In S. R. Stith & M. A. Straus, (Eds.) Understanding partner violence: Prevalence, causes, consequences, and solutions. (pp. 262-273). Minneapolis: National Council on Family Relations.
- Waldram, J. B., & Wong, S. (1994). Group therapy of Aboriginal offenders in a Canadian forensic psychiatric facility. *American Indian and Alaska Native mental Health research*, 6(2), 34-56.
- Waldner-Haugrud, L. K., & Gratch, L. V. (1997). Sexual coercion in gay/lesbian relationships: descriptives and gender differences. *Violence and Victims*, 12(1), 87-98.

APPENDIX A

HIGH INTENSITY FAMILY VIOLENCE PROGRAM DESCRIPTION

Treatment targets

To increase offenders':

- Awareness of the consequences of their abusive behaviour
- Ability to respond non-abusively
- Ability to change abusive beliefs and behaviours
- Ability to identify high risk situations and to effectively manage these in the future

Treatment primer

Candidates will be assessed for readiness to change. For offenders who are identified as appropriate for the program, but are not ready to change (e.g., refusing treatment), a treatment primer will be used to prepare them for engaging in the treatment process. Long-term offenders who are not prioritized for treatment for several years may also be offered the treatment primer.

The treatment primer will consist of an information package or resource kit designed to raise awareness of family violence issues and promote the value of addressing family violence concerns, in a non-confrontational manner. Resource materials will include fact sheets, books, videos, and testimonials and biographies of men who have changed. Offenders who use the resource materials will be given follow-up interviews with the program facilitators to discuss the materials.

Core program components:

Motivational enhancement

Goals:

- ♦ Increase interest in the program and motivation to change
- Develop group cohesion
- Develop trust in the facilitators and the therapeutic process
- Increase awareness of the extent and importance of the problem for each participant
- Develop personal goals

Psychoeducational component

Goals:

- Increase awareness and provide definition of abusive behaviours
- Develop understanding of the dynamics of family violence
- Increase understanding of both healthy and unhealthy relationship patterns
- Introduce relapse prevention and the ABC model, for incorporation into autobiographies
- Increase understanding of the link with substance use

Cultural component

Goals:

- Examine cultural influences on the development of beliefs and attitudes supportive of family violence
- Examine impact of transitions such as immigration, coping with racism on family dynamic
- Identify positive values in the culture of origin

Autobiographies

Goals:

- Develop understanding of early abusive relationship patterns in family of origin and their impact on current behaviour
- Develop understanding of personal abusive relationship patterns
- Identify personal risk factors and how they contribute to abusive behaviour
- Develop understanding of personal dynamics of abuse and identify personal abuse cycle

• Develop rationale for later presentation relapse prevention material

Skill building

Goals:

- ◆ Identify specific change targets, including thinking patterns, attitudes and beliefs, and behaviours that underlie abuse, using the ABC model
- ♦ Apply the ABC model to emotions management
- Develop skills to make targeted changes (e.g., challenge thinking errors, irrational beliefs, and controlling behaviour and replace with healthy prosocial alternatives)
- Develop social skills such as interpersonal problem solving, conflict resolution, and communication
- Practice skills using role plays and exercises
- Integrate skills into understanding of personal patterns
- Link skills to empathy building and maintenance of healthy relationships

Parenting

Goals:

- ♦ Identify the range of abusive behaviours that are child abuse
- Understand the impact of child abuse and being child witnesses of abuse on children
- ♦ Identify what abusers can do to assist child witnesses of abuse
- Discuss some aspects of non-abusive (nurturing) parenting
- Discuss how to manage high-risk situations that are triggered over co-parenting issues.

Relapse prevention and risk management

Goals:

- Identify personal risk factors and high risk situations for abusive behaviour
- ◆ Apply newly developed skills to coping with high risk situations using role plays and exercises
- Develop personal relapse prevention/risk management plans
- Share plans with partners
- Develop personal follow-up plans for the community, emphasising the importance of continued treatment, maintenance, and support services

Healthy relationships

Goals:

- Define healthy relationships
- Integrate all previous program material under the common theme of healthy relationships
- Apply program materials to the development of healthier relationships
- Review and closure

CHAPTER 14

LYNN O. LIGHTFOOT¹

Alcohol and drug use have consistently been found to be related to a variety of criminal behaviours including property crimes and crimes against persons, (Chaiken & Chaiken, 1982, 1990, Lightfoot & Hodgins, 1988). This relationship holds true whether one studies populations of known substance abusers (Ball, Shaeffer, & Nurco, 1983; Inciardi, 1979, 1981), criminal justice populations (Barton, 1980; 1982; Innes, 1988), and in general population surveys (Robins & Regier, 1991). This relationship also holds true in both adult and adolescent offenders (Elliott & Hunizinga, 1984; Elliott, Hunizinga, & Ageton, 1985). Substance use is also related to poor halfway house adjustment (Moczydlowski, 1980) and parole failure (National Coucil on Crime and Delinquency (NCCD), 1972). Although recent research has indicated that the relationship between substance use and crime is more complex than originally assumed (Bureau of Justice Statistics, 1990), treatment and other interventions aimed at reducing or eliminating offender substance use are potentially effective tools in reducing recidivism.

The primary goal of this chapter is to review the substance abuse treatment literature conducted from 1980 to the present, in order to identify those methods of interventions that have been empirically evaluated in specific types of offender populations, and with what degree of success. In other words, do we have any convincing evidence (i.e., from methodologically sound investigations) that reducing or eliminating substance use in offenders reduces recidivism rates?² As we will soon discover, this very simple question soon becomes very complex and leads to the following type of further questions. For example, is there any evidence that particular treatment modalities, or combinations of treatments, are differentially effective for offender populations? Do some treatments work better for some "types" of offenders? How do we determine which "types" of offenders to intervene with? Which substances should we concern ourselves? Are some substances more criminogenic than others, or should our goal be to eliminate all substance use? Does compulsory treatment work, or do offenders have to be willing participants in treatment in order for it to be effective? What about treatment goals for offenders? Is abstinence the only reasonable goal, or are moderation and harm reduction goals appropriate targets for some offender population?

In order to provide a context wherein these issues can be addressed, this chapter is organized in four sections. First, we explore the nature and extent of the relationship between criminal behaviour and substance use and abuse. Theoretical models and definitional issues are briefly presented to identify significant etiological factors and to clarify terms. The second section will focus on treatment and major methodological issues in the outcome evaluation of substance abuse treatment programs, and describes and reviews models of treatment and their related modalities of intervention. In the third section, we address the heterogeneity of substance abuse disorders, and introduce the concept of matching offenders to treatment modality to improve treatment outcomes. Finally, the results of the treatment outcome studies of the Offender Substance Abuse Pre-release Program as well as the Choices Program recommendations for future directions in treatment development and research are summarized.

WHAT ARE WE TRYING TO CHANGE?

Defining substance abuse and dependence

Before we can examine the effects of treatment, it is important to clarify exactly what behaviour(s) we are targeting with our interventions. A variety of terms are often used interchangeably in the literature including, "Substance Abuse", "Substance Misuse", "Chemical Dependence", "Substance Dependence", and "Addiction" without any clear consensus as to their operationalized meaning. This difficulty in reaching a consensus on definitions no doubt results from the divergent conceptual frameworks that different investigators and clinicians hold.

In the field of alcoholism in the United States, the most widely held model is the medical or disease model (Nirenberg & Maisto, 1990). In this model, alcohol abuse is conceptualized as a disease entity that is progressive and irreversible, (Jellinek, 1960). In more recent years, the model has been expanded to include licit and illicit substances, and some behaviours including gambling and sexuality (Peele, 1984). According to this model, treatment can never cure the alcoholic, or drug addict, but can arrest the progress of the disease if abstinence is strictly adhered to. Twelve-step programs are based on a disease model conceptual framework. However, the international literature has repeatedly confirmed the heterogeneous nature of alcohol and drug abusing populations. Different etiologies and presentations have led to multidimensional, *bio-psycho-social* conceptual models of substance use disorders that recognize the complex interrelationships between

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² This chapter is a revised version of a chapter originally prepared for the International Community Correctional Association 5th Annual What Works in Community Research Conference 1997.

psychological, biological, and social variables. These multivariate models suggest that a range of treatment modalities and goal alternatives will be required if the diverse needs of those with substance use disorders are to be met.

One of the most widely used methods to identify (diagnose) substance use disorders is provided in the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM IV-R, 1994), the major classification system for mental disorders. Both the DSM IV-R and the International Classification of Diseases (ICD-9 WHO, 1979) are loosely based on a conceptual framework first developed by Edwards and Gross (1976). In this framework, the central concept, alcohol dependence, is defined as a syndrome with a number of essential elements, such as narrowing of the drinking repertoire; salience of drink-seeking behaviour; increased tolerance; repeated withdrawal; drinking to relieve or to avoid withdrawal symptoms; a compulsion to drink; and reinstatement of the syndrome after abstinence. These elements were considered to exist in a matter of degree, resulting in a syndrome with a range of severity from none to severe. Importantly, Edwards et al. assert that alcohol-related physical, social and psychological disabilities (problems) could be experienced without the individual necessarily suffering from the dependence syndrome. Although in recent years it has been receiving increased criticism, the alcohol dependence syndrome has been identified as having important implications for assessment and the selection of treatment goals (Orford & Kedie, 1986).

Within DSM IV-R, this underlying dimensional conceptualization has been translated into two major diagnostic categories: Substance Use Disorders and Substance-Induced Disorders. Substance Use Disorders subsumes two diagnoses, an Abuse diagnosis and a Dependence diagnosis. Abuse is considered to be a recurrent and maladaptive pattern of use that causes clinically significant impairment in any of social, legal or occupational functioning, or use in situations that are physically hazardous over a twelve-month period. It also includes substance use that continues despite persistent or recurring social problems caused or exacerbated by the effects of the substance. A diagnosis of Substance Dependence requires evidence of three or more symptoms from those noted above. In addition, evidence of physical dependence on the substance as indicated by increased tolerance or withdrawal symptoms after termination of use are additional criteria. Importantly, once an individual qualifies for a diagnosis of Dependence, DSM-IV requires that future episodes of substance related problems receive a diagnosis of Dependence. This suggests that once an individual has developed a physical dependence on a substance there is a significant qualitative change that is permanent.

In DSM-IV-R, this diagnostic model is applied to eleven different categories of psycho-active substances including; alcohol, amphetamine like drugs, cannabis, nicotine, cocaine, hallucinogens, inhalants, opiates, phencyclidine (PCP) and sedative hypnotics or anxiolytics. DSM-IV-R also provides for a polysubstance

diagnosis. Thus DSM-IV allows for the systematic diagnosis of a full range of substance use disorders. One of the major deficiencies in the offender substance abuse treatment literature, has been the failure to operationalize the substance related problem under investigation. Substance use patterns of treated populations of offender are often not even described, let alone quantified. Nor is it typical for investigators or clinicians to apply any systematic classification or diagnostic criteria, like DSM-IV-R or other objective substance abuse measures in their selection or description of subjects. The treatment needs of a physically dependent morphine addict may be quite different from those of the property offender who uses marijuana "recreationally" on weekends. A failure to specify the type(s) of substance(s) used, or to describe the pattern of use, seriously limits inferences that can be drawn or generalizations that can be made from many treatment outcome studies. With these caveats in mind, we now examine the kinds of available data that estimate the nature and extent of substance abuse-problems in offenders.

WHAT IS THE EXTENT OF TREATMENT NEED?

Estimating the prevalence and severity of alcohol and drug problems in offender populations

A national survey of incarcerated American offenders (U.S. Bureau of Justice Statistics, 1983) found that one third of all inmates in State prisons drank heavily just prior to committing the offence for which they were convicted. Habitual offenders and persons convicted of assault, burglary and rape were more likely to be very heavy drinkers. With regard to drug use, approximately one third were under the influence of an illegal drug at the time they committed the offence for which they were incarcerated. In this survey, drug use was most frequently associated with a drug-related offence or burglary and least often with violent crimes. However, the U.S. Drug Use Forecasting Program found that 60% of parolees for violent crimes tested positive for a least one drug (Bureau of Justice Statistics, 1990). Violent "predatory offenders" and those who are high-frequency drug users were the most likely to commit many types of crime, including violent crime, at high rates. They are also most likely to use many different kinds of drugs, particularly heroin and/or cocaine, (Chaikin & Chaiken, 1990; Johnson et al. 1985). Gropper (1985) reported that drug-abusing offenders commit a high percentage of the reported violent crimes, and that drug addicts commit more crimes when addicted.

Surveys in Canadian offenders have found that approximately 80% of offenders report substance use on the day of their offence, most frequently a combination of alcohol and drugs, (Lightfoot & Hodgins, 1988). In our survey, we utilized objective measures (e.g., Alcohol Dependence Scale, Drug Abuse Screening Test) to provide quantitative estimates of the severity of alcohol and drug problems. Surprisingly, we found that relatively few offenders' scores indicated alcohol dependence (26%). However, 68% reported moderate to severe drug abuse scores. Using a Computerized Lifestyle Assessment at intake to Canadian federal correctional institutions, Weekes (1993) has assessed the level of severity of alcohol and drug problems in large samples of Canadian offenders and have described similar findings. Approximately 50% of offenders had no evidence of drug-related problems, and 50% reported no alcohol-related problems. Low levels of alcohol problems were more common than drug problems (35% vs. 20%), but larger percentages of offenders reported more severe drug-related problems (i.e., 12% moderate drugs vs. 9% moderate alcohol; 12% substantial drugs vs. 5% substantial alcohol; 4% severe drugs vs. 3% severe alcohol). Approximately 36 % of offenders had moderate to severe substance abuse problems, and were more likely than low severity offenders to have used a substance on the day of the current and previous offences. Assaultive offences were identified more frequently in moderately dependent alcohol users, and higher frequencies of drinking and levels of dependence were associated with incarceration for violent offences.

With regard to women offenders, in our survey of federally incarcerated women (Lightfoot & Lambert, 1991), women were less likely than incarcerated men to report symptoms of alcohol dependence. Approximately 65% of women reported some level of drug related problems, the majority (53%) at moderate to severe levels. Twenty-eight percent reported moderate to severe symptoms of alcohol dependence. Sanchez and Johnson (1987) found that women offenders who are habitual drug users committed lower rates of violent crime but had higher rates of prostitution and shoplifting than male offenders.

These data clearly show that there is a range of treatment severity in offender populations, with approximately 40% using at levels associated with a moderate to severe level of problems. These data also indicate that offenders with more severe substance abuse problems are in general, at higher risk to recidivate violently. These data imply that there is a need for a range of substance abuse interventions, geared to both risk and need characteristics, for offender populations.

Why are substance abuse and criminality linked?

The type of prevalence data described above has clearly established the correlation between substance use and crime. Attempts to explain this phenomenon in causal terms, struggle with the eternal "chicken and egg" question. Do substance use and abuse lead to or *cause* criminal behaviour, or is substance abuse just part of the generally deviant lifestyle characteristic of individuals with the propensity to anti-social behaviour? The answer appears to be that both phenomenons occur. Thus, individuals with Conduct Disorder are predisposed to abuse substances as well as to engage in criminal behaviour. This group might be characterized as "primary criminals". There is a second group, however, who develop a substance use disorder, and then begin

to engage in criminal behaviour to support their addiction. This group we might describe as primary substance abusers, with criminality or adult anti-social behaviour appearing secondarily. Rada (1973) has suggested this kind of distinction in his study of rapists. It is also significant in this regard, that a second "type" of Antisocial Personality Disorder (ASPD) has been identified in samples of substance abusers. Brooner and colleagues (1992), in a study of opiate injectors, found that 44% met the full criteria for DSM-III-R ASPD, and an additional 24% had the adult criteria but lacked the childhood conduct disorder criteria. Thus 68% would have been diagnosed ASPD if the childhood trajectory had been ignored. In a study of adult opiate injectors, 44% of men were classified as ASPD, and an additional 33% were classified as adult anti-social behaviour (AABO) only (i.e., did not meet childhood criteria). The rates for women were 27% ASPD, and 42% AABO (Cottler, Price, Compton, & Mager, 1995). Although the fully diagnosable group were more irritable and aggressive, and reported more adult criteria, drank more and were more likely to have been involved in treatment, they were indistinguishable in terms of the rates of substance abuse related problems, co-morbid psychiatric disorders, and type of adult anti-social behaviour demonstrated. Cottler et al. suggest that AABO may be the late-onset subtype of anti-social personality similar to the Type I or Type II alcohol disorder (Cloninger, 1987). It is important to state at this point that it is of more than an academic interest to determine what came first, criminality or addiction. The diagnosis of ASPD has been associated with particularly poor outcomes in substance abuse treatment (Rounsaville, Dolinsky, Babor, & Meyer, 1987). As will be argued later, treatment for substance abusers with antisocial personality may require additional, or different, specialized interventions, in order to be effective.

SUBSTANCE ABUSE TREATMENT: STAGES AND MODALITIES

Many therapeutic modalities have been employed in the treatment of substance abuse and dependence (Miller & Hester, 1986; Institute of Medicine, 1990). Table 14.1 provides a summary of the primary substance abuse interventions which have been described in the literature It should be noted at the outset that the development of most treatment interventions has been directly or indirectly related to an underlying etiological model. For example, proponents of biological models that emphasize the role of genetic and bio-physiological factors, search for and employ drug treatments and typically stress abstinence goals. In contrast, those who adopt a social learning (SL) framework emphasize the relationship between the individual and the environment. These treatments intervene by modifying the individuals behavioural coping skills and cognitive processes in order to improve the individuals ability to function in the environment. SL treatments tend to address deficits that are thought to be functionally related to the substance use disorder. Typically the goals of treatment in SL based treatments are multivariate, and reduction or elimination of substance abuse is only one of the desired outcomes. Sociocultural models acknowledge the impact of social and cultural influences on individual substance use behaviour, and have led to the development of interventions at the social policy level. These types of interventions include reducing the availability of substances through restricted access, interdiction and government taxation levies. Broad spectrum treatments often include a variety of treatment components reflecting several conceptual models. In the Community Reinforcement program, for example, drug treatments (Antabuse) is combined with contingency management and skill training (Azrin, Sisson, Meyer, & Godley, 1982).

Although we usually refer to treatment as a unitary entity, Ross and Lightfoot (1985) suggest that it can be usefully conceptualized as a complex process composed of a number of stages including:

- 1) Case Identification: (screening procedures to identify potential cases for intervention)
- Detoxification (procedures for safe withdrawal from substances)
- Assessment; (specification and quantification of substance use and related problems)
- Active Treatment (therapeutic activities deigned to achieve therapeutic goals which may address attitude, knowledge or skills)
- 5) Aftercare (therapeutic activities designed to maintain gains made in the active phase of treatment).

Most treatment outcome studies have tended to focus on the Active Treatment phase. Few have examined the other phases of treatment, or the interaction between interventions at different phases, despite the fact that increasingly, aftercare is being identified as at least a significant component of treatment as active treatment (Ito & Donovan, 1986). For some types of substance abusers, assessment alone can be an effective intervention (Edwards et al. 1976).

A few studies have empirically examined detoxification as a stand-alone intervention. They have not found detoxification alone to be related to long term behaviour change (Simpson & Savage, 1982). Detoxification is, therefore, usually considered only the first phase of a comprehensive treatment program, rather than a stand-alone intervention.

Despite the wide range of treatment interventions, the offender substance abuse treatment outcome literature deals primarily with three forms of treatment: Methadone Maintenance (MM), Therapeutic Communities (TC), and Outpatient Drug Free Treatment Programs (OP). Before reviewing studies related to these modalities, it is important to address the methodological issues confronted when conducting outcome studies.

TABLE 14.1 Types of offender alcohol and drug treatment

Pharmacotherapy	Outcome
Antidipsotropic Drugs:	NE alone
Antabuse, Temposil	
Serotonin Reuptake Inhibitors:	Preliminary
Zimelidine, Citropram,	
Fluoxetine, Desipramine	
Opiate Agonists:	P, reducing but not
Methadone	eliminating crime
Opiate Antagonists:	Preliminary
Naltrexone, Naloxone	
Acupuncture	NE
Social learning based treatments	
Aversion therapy:	
Electrical/Chemical	
Counter-conditioning	E
Covert Sensitization	E
Contingency management/	E
Contingency contracting	
Broad spectrum therapies	E
Individualized behaviour therapy	
Community reinforcement	
Behaviour self-control thinking	E
Relapse prevention	Р
Monitoring & Surveillance	E
Education	
Lectures	NE
Bibliotherapy	NE
Self-help	
Alcoholics Anonymous	NE
Narcotics Anonymous	
Al-Anon	
Adult Children of Alcoholics	
Psychotherapy	
Supportive	
Confrontational	NE
Therapy Community	E

 E
 - Effective in Quasi Experimental and/or Controlled Studies

 NE
 - No clear evidence of effectiveness from controlled studies

 Preliminary
 - Small Samples, uncontrolled designing

METHODOLOGICAL ISSUES IN EVALUATING SUBSTANCE ABUSE PROGRAMS

Reviews since the 1960s (e.g., Hill & Blane 1967) have demonstrated that outcome evaluation studies of alcohol and drug abuse have suffered from design problems, such as lack of standardized and operationally defined subject populations, lack of appropriate comparison or control groups, retrospective rather than prospective evaluation designs, inadequate pre-treatment baseline data, inadequate outcome measures, and insufficient follow-up periods (Acierno, Donohue, & Kogan, 1994; Breslin, Sobell, Sobell, & Sobell, 1997; Longabaugh, 1989; Goldstein, Surber, & Wilner, 1984). Methodology reviews indicate that drug abuse treatment outcome studies are weaker than alcohol treatment or mental health treatment outcome studies (Martin & Wilkinson, 1989).

Although the experimental design with random assignment to experimental and control groups has long been considered the "gold standard" in research, increasingly its limitations when applied to the field have been noted. Dennis (1990) identified six potential methodological problems when using randomized experiments to evaluate intervention programs under field (real world) conditions. These include: treatment dilution, treatment contamination, inaccurate caseflow and power estimates, violations of the random assignment process, changes in the environmental context, and changes in the treatment regimes. Dennis describes a number of methods to improve the quality of random field experiments, but he also suggests that we should acknowledge that field research is unlikely to ever be ideally implemented. Instead, he recommends methods for addressing these problems in order to improve estimates of treatment effects.

AN OVERVIEW OF TREATMENT EFFICACY

Expert reviews of the efficacy of substance abuse treatment (Institute of Medicine, 1990; Miller & Hester 1986) have consistently concluded that there is no "magic bullet" (i.e., single treatment), which is effective for all persons with a substance use disorder. In general, treatment has been found to be superior to no treatment with approximately two-thirds of treated clients demonstrating improvement in life functioning (Addiction Research Foundation, 1984; Institute of Medicine, 1990). Half of the improved clients are likely to abstinent or using at modest levels at follow-up. Controlled studies, with unselected treatment populations, have compared outpatient counselling to residential treatment and have found no significant overall differences in effectiveness (Annis, 1984; Institute of Medicine 1990). There is also some data indicating that providing more treatment than needed may reduce treatment effectiveness (Annis & Chan, 1983; Institute of Medicine 1990). This type of data has led managed care providers to seriously question the cost-effectiveness of the inpatient residential treatment program, when short-term outpatient treatment may be as effective. However, it is very important for our purposes to note that these data have been collected on mixed samples of substance abusers. There is some data that indicates that clients with more severe problems do better in residential treatment (Institute of Medicine, 1990). Although substantial percentages of clients in community substance abuse treatment programs have had some criminal involvement, they represent a different population than that typically seen in correctional settings.

One of the largest evaluations of treatment outcome, to carefully examine the role of criminal history variables, was the Drug Abuse Reporting Program (DARP) (Simpson & Sells, 1982). This program of research involved over 4,000 subjects participating in five different types of treatment including; methadone maintenance (MM), therapeutic community (TC), Outpatient Treatment, Outpatient Detoxification (OD) and Intake Only (no treatment). Clients with the greatest criminal involvement had the poorest outcome. MM, TC, and TF treatments did not differ significantly from each other, but were more favourable than those completing outpatient detoxification and intake only. Simpson et al. were unable to find an optimal match between post-hoc empirically derived client types and treatment types. However, the power of the statistical tests used was low and these results cannot be considered conclusive. McLellan and associates (1980) have found that pre-treatment level of legal problems (in addition to psychiatric status and employment) to be powerful predictors of negative treatment outcome.

These data suggest that criminality is a significant factor which independently affects treatment outcome. Specialized programs that are specifically designed for offender populations (where the levels of criminality will be significantly higher than in community programs) may have better outcomes than nonspecialized or generic substance abuse programs.

Indeed, research is accumulating which indicates that treatment efficacy may be enhanced by matching individuals to treatment on the basis of social, demographic, personality or cognitive variables. For example, there is some evidence that intensive treatment is more effective for individuals with more severe substance abuse problems (i.e., higher levels of dependence) (McLellan, Luborsky, Woody, O'Brien, & Druley, 1983). What do we know about substance abuse treatment and improvements in efficacy related to matching in offender populations? There are methodological and ethical problems that make matching and random assignment to treatment, problematic. This may in part account for the fact that most outcome studies with offenders have concerned themselves with evaluating a particular modality rather than exploring the interaction between offender and treatment types. As noted earlier, the modalities that have received the greatest amount of attention are therapeutic community treatments, and methadone outpatient (drug-free) treatment. Despite their proven effectiveness in controlled outcome studies (Miller & Hester, 1986) very few behavioural treatments have been applied to or evaluated in correctional populations, although some treatments may include behavioural components.

Therapeutic communities

Therapeutic communities typically involve a highly structured, long term (8 to 12 months), residential program which includes a highly confrontational form of group therapy, resocialization, progressive responsibility and gradual re-entry into the community. The use of recovering addict counsellors is considered an essential component of treatment. In their review of these programs, Gerstein and Harwood (1990) concluded that the Stay'n Out Program (New York), Cornerstone (Oregon State Hospital) and the California Addict Program, have demonstrated significantly reduced re-arrest rates for offenders who completed these programs. To date however, there has been no controlled evaluation of therapeutic community programs. Wexler, Falkin, and Lipton (1990) conducted a quasi-experimental evaluation of the Stay'n Out Program, a prison based therapeutic community program, and compared it to milieu therapy, counselling, and a no-treatment control group. The TC group had the lowest percent of re-arrested clients (17.8%), and the highest percent positively discharged from treatment as compared to controls. However, no statistical correction was made for the fact that the milieu therapy group had significantly higher pre-treatment levels of criminality than the TC group. Group differences' were not significant for the mean time until arrest, or for positive parole discharge. This study also included three women groups, including a TC group, a Counselling Group and a No treatment group. There were no significant differences in outcomes among the those three groups, however sample sizes were small and power was therefore limited.

One of the major issues addressed in the outcome of TC has been the relationship of time in treatment to outcome. Wexler et al. found that TC's effectiveness in reducing recidivism increased as time in program increased but tapered off after 12 months. No information was provided about changes in substance abuse, so it is very unclear whether the reductions in recidivism observed were related to changes in patterns of substance use.

Field (1985) evaluated the Cornerstone Program, a 10-12 month intensive residential program with a 6-month aftercare program. In addition to the usual elements of confrontation and peer counsellor involvement, skill training in the areas of basic education and life skills was included. There was no control group but graduates were compared to three comparison groups; program dropouts, Oregon parolees and Michigan parolees with some history of alcohol and drug use. A variety of outcomes were measured including changes in self-esteem, staff rated changes in psychiatric symptomatology, and increases in knowledge on a 78-item pre-post treatment instrument. Recidivism was measured retrospectively and addressed two variables : the number of offender not returned to prison during the 3 years after their parole (including revocations and new convictions), and the number not convicted of any crime in this time period. There was statistically significant differences between program graduates and Comparison Group II on both outcome variables with 54.2 % of graduates not convicted of any crime during follow-up and 70.8% not returned to prison vs. 36.3 and 62.9% in the comparison group. Changes in alcohol and drug use were not reported, nor were the demographic characteristics of comparison group subjects compared statistically to those of program graduates. Although it was asserted that the comparison group did not have the same degree of chronic substance abuse nor chronic criminality of the treated group, this was not demonstrated. In addition, the number of program dropouts (greater then 30 days) was not reported, and it is therefore not possible to determine if the outcomes were positively biased as a result.

A Multistage Therapeutic Community in Delaware was evaluated, which provided a "transitional" TC in the community for parolees. Six-month outcomes were analyzed in a sample of 457. Groups receiving transitional TC, and TC in prison and the community, had significantly lower rates of drug relapse and criminal recidivism (Martin, Clifford, & Inciardi, 1995). The authors suggest that these data support the value of a continuum of treatment in the treatment of heroin dependent offenders.

A major problem with TC's has been that program completion rates are low with only about 15-25% of admissions completing the full program, (Institute of Medicine, 1990). Those who remain in treatment show significant improvement at follow-up with rates approximating the average rates described above. The relatively higher costs combined with lower retention rates suggests that this treatment be reserved from those who with severe problems who have failed to benefit from less intensive interventions.

Methadone maintenance

Methadone represents only one, of a range of pharmacotherapies that have been used in the treatment of substance abuse disorders. It has been one of the most frequently researched treatment modalities with offenders. Methadone is a synthetic opiate agonist that occupies opiate receptors in the brain. It does not produce the same degree of euphoria as heroin, but because it is medically prescribed, it does provide the severely dependent heroin addict with a legal alternative to drug use. Methadone treatment programs have consistently been found to reduce the rates' of drug use in heroin-addicted offenders (Ball, Shaeffer, & Nurco, 1983; Gerstein & Harwood, 1990). Simpson and Savage (1982) identified two subtypes of methadone treatment; Adaptive and Change-Oriented. In Adaptive programs, drug abstinence is considered to be a long-term and often unrealistic goal. Individualizing and adapting treatment to the individual needs of the client is paramount. Change-oriented Methadone Maintenance program emphasized abstinence as a goal and the need to resocialize the client through rigid structure and a high level of intervention. Despite these differences in program emphasis, no differences in outcomes between these two forms of methadone treatment were found. In addition to the lower costs, higher retention rates, and greater appeal associated with methadone treatment, there is also evidence that injection drug use and risk of HIV infection is decreased by methadone treatment (Ball et al. 1988; Hubbard et al. 1988).

Drug-free outpatient treatment

The Drug Free Outpatient Treatment is the third type of treatment that has received a great deal of attention in the offender substance abuse literature. These programs are very diverse, ranging from highly structured individual or group therapy to very unstructured self-help programs and with rare exception, they have not been subjected to careful outcome analysis. Outpatient drug clients, in fact, may have different characteristics than those referred for methadone maintenance or TC treatment. An example of a Drug Free Outpatient Treatment program is the Kentucky Substance Abuse Program (KSAP) (Vito, 1989). KSAP provided "self-help" counselling sessions and referral to appropriate community agencies, to probation and parole clients on a service contract with a private provider. The nature and "dose" of treatment wasn't described. One-year outcomes were evaluated in a minimum 6-month follow-up by comparing graduates to a matched comparison group and to program dropouts. Clients were described as representing a "high risk" group based on risk scores and histories of severe alcohol abuse. Despite their poorer prognosis, KSAP graduates had significantly lower arrest, conviction and incarceration rates for new felonies than the comparison group. They also had a higher rate of arrest and conviction but not incarceration. Latessa (1988) found similar findings in a study of alcoholic probationers (Ohio-STOP program).

Moon and Latessa (1994) evaluated an outpatient drug treatment program, the Chemical Offender Program (COP) for felony offenders. This three-phase program was educational in nature but also had a 12-step component, and a drug-testing component. Acupuncture was also evaluated in one of the treatment conditions. Results indicated no differences in rates of arrest and conviction for misdemeanour and felony offences, but experimental subjects had fewer felony arrests and convictions. Acupuncture was not found to be effective. As the authors acknowledge, small samples, and short follow-up period limited this preliminary study.

Comprehensive evaluations of outpatient treatments in the DARP (Simpson & Sells, 1982), have found outpatient treatment to be equally effective to methadone maintenance, and therapeutic community programs.

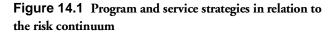
WHAT DOES IT ALL MEAN?

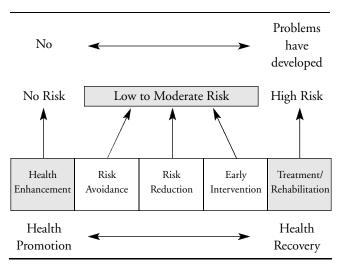
Our review of the substance abuse treatment outcome literature in offenders reveals some consistencies but also some differences from the results of reviews in unselected non-offender populations. Anti-social personality and criminality have consistently been related to poorer outcomes in all types of treatment. In general, while non-offenders do not have better outcomes in longer term or more intensive programs, offenders have been reported by some investigators to have better outcomes the longer they remain in treatment. Well designed studies with sophisticated statistical analyses indicate that offenders appear to benefit

equally from therapeutic community, milieu therapy and drug free outpatient treatment programs. While cognitive-behavioural treatments have been found effective in controlled outcome evaluation in non-offenders, these interventions are seldom used or evaluated in offenders. Methadone appears to be an effective treatment for opiate addicts in both offender and nonoffender populations. Miller and Hester (1986) have argued that there is no controlled empirical evidence that confrontation in therapy is an effective strategy to produce behaviour change, while advocates of the TC assert that it is an essential component of effective therapy. TC's advocate the use of peer counsellors (ex-offender/addicts). Empirical studies in the general psychotherapy literature and the substance abuse literature suggest that therapists who are judged more skilled and competent by peers and who have the ability to form a therapeutic alliance (Luborsky et al. 1985; Miller & Sovereign, 1989), tend to foster better client outcome.

DEVELOPMENT OF A HYBRID MODEL OF OFFENDER SUBSTANCE ABUSE TREATMENT

We have developed a hybrid model that incorporates findings from the criminological and substance abuse literature in order to develop a fresh and innovative approach to the treatment of substance abusing offenders. Expert panels in various jurisdictions (e.g., National Institute of Medicine, 1990; Ontario Ministry of Health, 1988) have sought to broaden the conceptualization of substance abuse problems to ensure a comprehensive and coordinated approach to substance abuse prevention, early identification, treatment and rehabilitation. As can be seen in Figure 14.1, the essential conceptual element of this model is that of the "Risk Continuum," which posits that as consumption of a psycho-active substance increases so does the probability of experiencing a health, social, or psychological problem. This model also acknowledges the emergence of problems related to acute





incidents of substance use, and not just to chronic high dose patterns of intake. The Risk Continuum model encourages the development of a range of interventions, to address the widely varying risk levels that individuals experience. Under this model, primary prevention activities are aimed at those individuals who are not consuming the substance or who are consuming at very low risk levels. Early intervention (secondary prevention) programs targets individuals who are just beginning to experience problems related to their substance use, while treatment and rehabilitation programs are directed only toward those who were experiencing serious health, psychological or social problems. The concept of matching individuals to level and type of treatment is fundamental to the development of a comprehensive cost-effective response to substance abuse problems.

DEVELOPING A TYPOLOGY OF SUBSTANCE ABUSING OFFENDERS

Hodgins and Lightfoot (1988), Lightfoot and Hodgins, (1993) have empirically developed a typology of substance abusing offenders. The purpose of trying to identify offender types is to allow for the development of treatment programs "tailor-made" to address the specific needs of these offenders. Hodgins and Lightfoot surveyed the literature to identify all potentially significant matching variables, and using cluster analysis were able to identify four "types" of offenders. One of the primary underlying dimensions of the typology was that of substance problem severity, the other was problem substance type. Thus some offenders reported problems primarily with alcohol, while others reported primarily illicit drug problems. Two other variables significantly differentiated groups; psychopathology and organic impairment.

Table 14.2 provides a brief overview of each of the offender types and the type of treatment that is suggested based on the characteristics of the type. The four types included a Drug Abuser (DA) Group, an Alcohol Abuser (AA) Group, an Emotionally Distressed Poly Drug Abuser (EDPD) Group, and an Organically Impaired Alcohol & Drug Dependent (OI) Group. This latter group was the most impaired with serious levels of alcohol and drug abuse combined with marital, family and leisure problems. In addition, this group had a lower mean IQ, and showed evidence of organic damage on neuropsycholgoical screening tests. A fifth group was identified that were basically free of alcohol and drug problems and who therefore did not require treatment. It is important to note that two variables, psychopathology, and cognitive impairment, which have been consistently identified as important predictors and matching variables from the outcome literature, were also identified with our offender sample as also highly important potential matching variables. Lightfoot and Hodgins have described how treatment for these four types could be matched to offender needs through the development and integration of treatment elements which address the special needs and skill deficits which each of the offender types presents.

 TABLE 14.2 Typology of substance abusing offenders

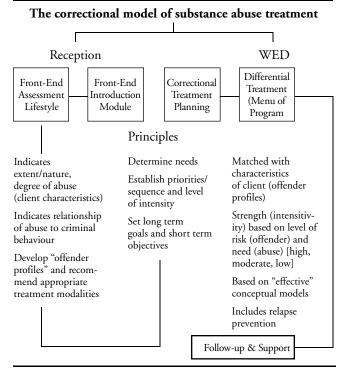
(Lightfoot & Hodgins, 1993)

Group 1: Non-Abusers More socially stable High employment stability Low role alcohol and drugs in crime 2.2 standard drinks/day 1.2 drug classes	20.9%
Group 2: Drug Abusers High DAST High need for assistance with drug problems, marital, family, and employment Use of 4.5 drug classes 50.8% wish to quit alcohol and drug use Low employment stability	25.2%
Group 3: Alcohol Abusers Average ADS in moderate range Consume 14 drinks/day 54% wish to quit High need for assistance with alcohol problems Lower DAST View alcohol and drugs as playing significant role in crime	23.0%
Group 4: Emotionally Distressed Polysubstance Abusers (Dual Diagnosis) Low social stability Low employment stability 45% wish to quit High need for assistance with alcohol, employment,and emotional 16 drinks/day 2.3 drug classes in month before charge Highest GHQ* (emotional distress)	13.0%
Group 5: Organically Impaired Alcohol and Drug Abusers Impaired intellectual function Substantial ADS and DAST Scores 21 drinks/day 4.1 drug classes Alcohol and drugs played major role in crime Lower WAIS and impaired TRIALS B High need for assistance in all areas 93% indicate desire to quit alcohol/drug use	17.6%
* CHO - Ceneral health questionnaire	

^{*} GHQ = General health questionnaire

Development of this typology has led to the development of three core programs to address the needs of offenders: the Offender Substance Abuse Pre-release Program (OSAPP) (Lightfoot, 1993a; 1993b; Lightfoot & Baker, 1989), the Choices Program (Lightfoot & Boland, 1993), and the Alcohol, Drugs, and Personal Choice Program (Lightfoot, 1995).

Figure 14.2



Developing a Model for the Provision of Substance Abuse Treatment. (1993) Ottawa: Correctional Service of Canada

In 1992, the Correctional Service of Canada (CSC) introduced a framework for the identification and treatment of substance abuse which is consistent with the Risk-Continuum approach described above. The CSC model, depicted in Figure 14.2, consists of five components that are designed to address the offenders needs from entry into the system until warrant expiry. Initial screening to identify substance abuse problems is made with the Computerized Lifestyle Assessment Instrument (Weekes et al. 1993) as part of a comprehensive front-end assessment. An alcohol and drug education induction module is provided to all new offenders, following which they are expected to participate collaboratively with their case manager in the identification of the most appropriate treatment based on their risks and needs. Offenders with "none to low" levels of substance abuse problems or who were involved in the sale and distribution of drugs are referred to Alcohol, Drugs and Personal Choice program (10 3-hour

sessions) (Lightfoot, 1995). The objectives of this program are to modify attitudes to drug and alcohol use. Clients with "low to moderate" problems are referred to Choices, a brief treatment program with 3-month follow-up. Those with moderate or higher levels of problems are referred to the more intensive Offender Substance Abuse Pre-release Program (OSAPP). Follow-up and support are then provided after the completion of treatment through participation in maintenance groups that are available in both the institution and the community.³

OFFENDER SUBSTANCE ABUSE PRE-RELEASE PROGRAM (OSAPP)

The Offender Substance Abuse Pre-release Program is an institutionally based, intensive treatment program designed to address offenders with intermediate to severe alcohol and drug problems. Offenders who participate in the program are usually within a year of release to the community. The program consists of 26 threehour group sessions, and three individual counselling sessions. The major units are: alcohol and drug education, self-management training, social skills training, substance use and work, leisure and lifestyle, and pre-release planning.

Treatment philosophy and conceptual model

It is well accepted in the addiction field that substance abusers "deny" that their substance use is a problem. Programs have typically attempted to break down denial by challenging and confronting the client. Miller et al. (1988) have suggested that motivation is a dynamic rather than a static characteristic of individuals. A primary premise of the OSAPP and Choices programs is, therefore, that motivation for change is an important initial target in treatment. In other words, it is the responsibility of the program to develop motivation in unmotivated clients, rather than a criterion for rejection from treatment involvement. This is obviously an very important issue in treating offenders, the majority of whom will be mandated to treatment rather than being voluntary participants. In these circumstances, the initial attitudes of participants range from indifferent to hostile.

Prochaska and DiClemente (1986) have proposed a transtheoretical model of the change process that incorporates a dynamic view of motivation and behaviour change.⁴ They note that different "processes" of change are involved at each stage and therefore require different interventions. The OSAPP and Choices programs thus employ sequential interventions designed to address each of the stages of change. Table 14.3 describes the goals of treatment and related program strategies, and an overview of the nine OSAPP program units is provided in Table 14.4. Both the substance abuse treatment literature (Miller & Hester, 1986), and the criminological literature (Gendreau & Ross, 1982; Andrews et al. 1990) have highlighted the superior efficacy of cognitive behavioural treatments with offenders.

³ Choices is available in English only. An alternative program, Alto, is offered in French.
⁴ For more details on this model, see also Chapter 8 of this *Compendium*.

Stage of change	Goal of intervention	Program strategy
Precontemplation	Increase Motivation	Assessment
Contemplation	Increase Awareness	Alcohol and Drug Education
Action	Learning Skills to Assist in Behaviour	Behavioural Self-Control Training
	Change Process	
Maintenance	Apply skills	Social Skill Training
		Employment Skills Refresher
		Leisure Planning
		Pre-Release Planning
Relapse	Learn Skills and Attitudes to Prevent or Reduce	Relapse Prevention
*	Severity and Frequency of Relapse	Relapse Management

TABLE 14.3 Components of the offender substance abuse pre-release program and stage of change

OSAPP interventions are therefore cognitive and behavioural, and include role-playing and rehearsal to facilitate skill acquisition. Both programs are delivered primarily in group format using the principles of "inductive" adult learning, rather than a didactic lecture format. Individual counselling sessions are also incorporated at strategic points in the treatment process. A detailed program curriculum manual provides specific protocols for each session. Group Facilitators must complete a comprehensive training program followed by clinical supervision until they reach the required level of competency. At this point, they are certified as facilitators but they continue to participate in a program of ongoing professional development to maintain their certification. These measures are intended to ensure the integrity of the treatment and to prevent program drift over time.

TABLE 14.4 Offender substance abuse pre-release program overview

Individual Assessment Interviews Unit I: Introduction — 2 Sessions

Individual Counselling Session I Unit II: Alcohol & Drug Education — 5 Sessions Unit III: Self Management Training — 7 Sessions Self-Control Training, Problem Solving, Assertion Training

Individual Counselling Session II Unit IV: Social Skills Training — 3 Sessions Unit V: Job Skills Refresher — 2 Sessions Unit VI: Leisure and Life Style — 1 Session Unit VII: Pre-release Planning — 2 Sessions Unit VIII: Relapse Prevention and Management — 2 Sessions Unit IX: Post-Testing and Graduation — 2 Sessions

Individual Counselling Session III

Evaluation has been built into the program from the outset. A comprehensive initial structured assessment, provides essential pretreatment data. Pretesting is followed by post-testing at the end of intensive treatment and again at the end of maintenance. A battery of measures targeting the knowledge, attitudes, and skill targets has been developed and refined during the preliminary stages of evaluation. Because of its developmental nature, our program evaluations to date have focused primarily on the extent to which these secondary treatment targets have been achieved.

Each offender presents with a unique pattern of strengths and deficits. Therefore, rather than simply looking at group change scores, we (Lightfoot & Barker, 1989; Lightfoot, 1993b) developed a methodology for examining the pattern of significant pre-post changes in individual participants, before aggregating and analyzing the change score data. Results of the preliminary evaluations demonstrated that most program participants improved significantly on two or more of the post-test measures. Efforts are ongoing to assess long term outcomes as well as the relationship of changes on secondary treatment targets to the ultimate treatment targets of substance use and recidivism. A 15-month follow-up study of 324 OSAPP treated offenders (Weekes, Millson, Porporino, & Robinson, 1994) found that most demonstrated significant improvements on the pre-post test measures. Over 90% of offenders who completed the program were released, and 30.2% of them were readmitted into custody within the 15-month follow-up period. Rates of readmission varied directly as a function of substance abuse severity level, with offenders demonstrating moderate to substantial substance abuse problems much more likely to be readmitted than those with low problem severity. In addition, readmission rates were also directly related to the number of pre-post measures on which offenders demonstrated improvement. Only 19% of offenders who improved on pre-post test measures reoffended, while 36% of those who showed no improvement were readmitted. These findings were also confirmed in a survival analysis. A large scale evaluation of OSAPP (September, 1999) included a sample of 2,731 offenders from 29 federal facilities between 1992 and 1997. A sample of 786 OSAPP participants were matched with offenders to form the pool of potential comparison cases. Twelve-month post release outcomes were examined and demonstrated statistically significant differences for overall readmissions and, reconvictions for violent offences, that 42% of OSAPP participants were readmitted compared to 49% of matched cases, a 14% reduction in recidivism (readmission). There was a 30.6% reduction in new convictions for violent offences.

THE CHOICES PROGRAM

Following the development of the OSAPP program, Lightfoot and Boland (1993) subsequently developed a brief treatment and relapse prevention program Choices for federal parolees. Choices is a brief intervention with a heavy emphasis on relapse prevention skills. This program was originally designed to be delivered to offenders released to the community on parole. More recently, it has been introduced into minimum security institutions and is also delivered to low to moderate severity offenders just prior to release from federal institutions. Parole officers refer potential participants for a structured interview and testing to assess suitability for the program. The initial assessment interview also provides an opportunity for the development of a therapeutic relationship with the Group Facilitator. A particularly novel aspect of the Choices program was that parole officers were given training in program delivery and they functioned as co-facilitators for the treatment and maintenance groups. To ensure consistency in our message and our approach, the Choices program was also developed around Miller's dynamic concept of motivation. Table 14.5 provides an overview of the Choices program. Session 1 has as its primary objective the development or enhancement of the participants' motivation to change their pattern of alcohol and drug use, through the discussion of the costs and benefits of drug and alcohol use. Participants complete a cost/benefit analysis (decisional matrix) of their personal substance use and this is intended to influence their goals and to increase their interest in treatment. As is the case with the OSAPP program, evaluation is built into the program and participants complete a battery of pre-tests designed to assess their current level of alcohol and drug related attitudes, knowledge and skills. Session 2 introduces the ABC learning model of addiction, and participants identify their triggers (A's) and payoffs for substance use (C's). In session 3, Problem Solving skills are introduced, followed by behavioural and cognitive coping skill training and practice. Sessions 4 and 5 address the process of relapse. Participants develop a specific relapse prevention and relapse management plans for dealing with their high risk situations. Post testing is also completed in Session 5 as well as individual interviews. In the second phase of the program, participants are required to attend weekly maintenance sessions for a minimum

of three months. It is well known that the period of time immediately following release is highly stressful and relapse to substance abuse is frequently observed, often followed by suspension or revocation of parole. It has also been well documented that the three-month interval following the completion of substance abuse treatment is the period of greatest risk of relapse (Marlatt & Gordon, 1985). Participants are therefore required to attend a minimum of 12 weekly maintenance sessions in order to consolidate and build on gains achieved in the intensive treatment phase.

Preliminary evaluation results with a sample of 95 federal parolees indicated that 80% had low-moderate levels of alcohol dependence while 61% had moderate to severe levels of drug related problems. Cocaine was the most frequently identified problem drug, followed by alcohol (28%) and heroin (11.6%). A secondary substance of abuse was identified by 38% of participants; alcohol and THC (12%) were the most frequently identified. The majority of participants identified abstinence as their goal for their primary substance of abuse, while the most frequently (26.3%) identified goal for secondary substances was moderation.

An evaluation of the Choices Program (CSC, 1999) indicated that Choices participants made positive gains on all of the six measures in the pre-post-test battery. Twelve-month conditional release outcomes for a sample of 436 Choices participants were compared to a matched group of offenders. Offenders who only completed the intensive phase of treatment had outcomes that were comparable to the matched comparison group. However, those offenders who also completed the 12-week maintenance phase of treatment had a reduction in the readmission rate of 29% compared to matched controls. There was a statistically significant 56% reduction in re-convictions for maintenance phase completers. Of particular interest was the finding that participation in both OSAPP and Choices had lower readmission rates

TABLE 14.5 Choices program overview

PHASE I

Individual Assessment Interview

PHASE	II —	BRIEF	TREATM	IENT
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- Session 1: Alcohol & Drug Knowledge: Developing Motivation for Change Pre-testing Session 2: Understanding and Managing Your Behaviour
- Session 3: Problem Solving
- Session 4: Relapse Prevention: Understanding and Preventing Slips
- Session 5: Understanding and Managing Slips Post Testing

PHASE III — MAINTENANCE AND GRADUATION Weekly Relapse Prevention Maintenance Sessions Graduation when compared to those completing only one of the core programs. Continuing the two programs also resulted in significantly lower reconviction rate. These findings tend to attest to the efficiency of providing continuity of care, from the institutional to the community setting. The results to date are encouraging and suggest that a comprehensive program of assessment and treatment can be effectively implemented and co-ordinated throughout the period of incarceration and community supervision.

CRITICAL ISSUES IN THE TREATMENT OF SUBSTANCE ABUSING OFFENDERS

Goal selection: Moderation or abstinence

Treatment goal selection is one of the most controversial areas in the substance abuse field (Miller, 1986; Peele, 1984, 1987; Wallace 1987a & b), particularly in the treatment of alcohol abuse/dependence (Sanchez-Craig & Lei, 1987). However, a similar controversy is evident in the treatment of other drug dependence disorders (Martin & Wilkinson, 1989). It is particularly important in the treatment of substance abusing offenders (Ross & Lightfoot, 1985). The controversy appears to emanate largely from the strong opposition by traditional (i.e., disease model) program proponents to the research which has indicated that controlled drinking (CD), or moderation is a feasible goal for some substance abusers.

Traditionalists hold that substance abuse disorders are progressive diseases, and that effective treatment requires a commitment to lifelong complete abstinence (Stockwell, 1986). Research, on the other hand, demonstrates that particularly for young single males, moderation goals are more likely to be complied with, and therefore more successful than are abstinence goals (Sanchez-Craig et al., 1984; Sanchez-Craig & Lei, 1987). Controlled drinking is usually defined as including some limit on the amount and frequency of consumption, and drinking which does not result in signs of physical dependence or social, legal, or health problems (Heather & Tebbut, 1989). In a review of the literature, Rosenberg (1993) concludes that controlled drinking outcomes are as frequent as abstinence outcomes in many populations. Sanchez-Craig and Wilkinson (1993) have reviewed the contraindications to moderate drinking goals and these include: health status, legal status, and personal preferences and beliefs. Others have suggested that degree of dependence is also an important consideration (Miller & Hester, 1986; Rosenberg, 1993), while post-treatment characteristics have recently been identified as important in predicting CD outcomes. This approach has been expanded to the drug use, and harm reduction goals for drug abusers are increasingly being acknowledged as more realistic and achievable for some chronic drug abusers than abstinence.

Within the correctional field this presents a dilemma to therapists who are concerned that they not be seen to condone illegal behaviour (i.e., drug use). In both the OSAPP and Choices program this issue is dealt with head on. We know that a significant proportion of offenders, when asked, identify moderation goals for their secondary substance of abuse, and some in fact identify moderation for their primary substance abuse problem. To deal with this, clients are required to state their substance use goals and they must then carefully consider the consequences (costs/ benefits) associated with their Choice. Using this strategy we have noted that substantial numbers of participants modify their goal choice after treatment, towards an abstinence goal.

Neuro-cognitive functioning

Deficits in neuropsychological functioning impairment are common sequelae of substance abuse (Miller & Saucedo, 1985; Parsons, Butters, & Nathan, 1987; Wilkinson & Carlen, 1981). Although severe organic deficits such as Wernicke-Korsakoff Syndrome, are relatively rare in the alcohol abusing population, less severe cognitive impairment can be found in up to 75% of an alcohol abusing population, and 67% of polysubstance abusers. These deficits include visio-spatial, visio-motor, learning, memory and abstract reasoning. Vocabulary and verbal skills are the least affected, thus cognitive impairment is often not easily suspected from conversation or clinical interviews. However, cognitive impairment may result in behaviour that is easily mistaken for other psychological problems such as personality disorder or denial. Therefore, comprehensive assessment and treatment planning for substance abusers, requires an assessment of cognitive function. Unfortunately, neuropsychological functioning is rarely addressed in substance abuse treatment, either with offender or non-offender populations. Treatment for this special needs population are only now being developed (Gordon, Kennedy, & McPeake, 1988). In our research (Lightfoot & Hodgins, 1988), this group of offenders was the most severely dependent and had the greatest range of treatment needs. The development and evaluation of treatment programs specifically designed to address the needs of substance abusing offenders with neurocognitive impairment is a pressing area for future research, and program development.

Criminality

Offenders who meet the criteria for the diagnosis of Antisocial Personality present a major challenge in substance abuse treatment. These individuals have the poorest outcomes and usually include the most severe cases of substance dependence, and criminal histories. Treatments for these individuals must specifically address anti-social cognitions and attitudes if they are to be effective. It may be that this is the group that requires the high level of treatment intensity provided in TC treatments.

Dual diagnosis

Dual Diagnosis offenders have a second major mental disorder (in addition to their substance use disorder) and represent another special need group identified in our research. This group is specifically addressed in another chapter of this publication and will therefore not be dealt with in any depth here. However, it is clear that unless concomitant psychopathology is addressed, treatment outcomes in dual diagnosis offenders will remain poor.

SUMMARY AND CONCLUSIONS

Substance abuse problems are prevalent in offenders, but offenders vary in regard to the severity of abuse dependence and related problems. The substances most frequently targeted in treatment are heroin and alcohol, although the high rates of cocaine and THC use, and poly drug use of offenders have been well documented. Conducting outcome research in corrections is an enterprise frought with methodological and ethical difficulties. Although methodological problems limit the validity of many studies, our review of the literature indicates that substance abuse treatment does reduce recidivism rates in offenders. Thus far there is no evidence to indicate that any one treatment modality is differentially effective with offenders. The three most frequently evaluated types of treatment, Methadone Maintenance, Therapeutic Communities, and Drug Free Outpatient Treatment, appear to have roughly equivalent outcomes. A range of cognitive behavioural interventions has proven effective in non-offenders, but has rarely been evaluated in offender groups. The development of typology of substance abusing offenders and the subsequent development and evaluation of the OSAPP and Choices programs suggests that cognitive behavioural interventions may be especially effective in addressing the needs of low to substantial severity offenders. Severely dependent, anti-social and cognitively impaired offenders await the development of effective treatments matched to their needs. Criminality and psychopathology significantly and negatively affect treatment outcomes. Improvements in treatment efficacy will require the careful matching of offender types to treatments.

REFERENCES

- Acierno, R., Donohue, B., & Kogan, E. (1994). Psychological interventions for drug abuse: A critique and summation of controlled studies. *Clinical Psychology Review*, 14(5), 417-442.
- Addiction Research Foundation. (1984). A structured addictions assessment interview for selecting treatment. Toronto, ON.
- Andrews, D. A., Zinger, I., Hoge, R., Bonta, J. Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Journal of Criminology*, 29, 369-404.
- Annis, H. M. (1984). Is inpatient rehabilitation of the chronic alcoholic costeffective? Con position. Paper presented at the NADAP Conference "Can traverses in alcoholism & Substance Abuse: The Scientific Approach." New York, NY.
- Annis, H. M., & Chan, C. S. (1983). The differential treatment model: Empirical evidence from a personality typology of adult offenders. *Criminal Justice* and Behaviour, 10, 159-173.
- Azrin, N. H., Sisson, R. W., Meyers, R., & Godley, M. (1982). Alcoholism treatment by disulfiram and community reinforcement therapy. *Journal of Behaviour Therapy and Experimental Psychiatry*, 13, 105-112.

- Ball, J. C., Shaeffer, J., & Nurco, D. N. (1983). The day to day criminality of heroin addicts in Baltimore: A study in community of offence rates. *Drug* and Alcohol Dependence, 12, 119-142.
- Ball, J. C., Lange, W. R., Myers, C. P., & Friedman, S. R. (1988). Reducing the risk of AIDS through methadone maintenance treatment. *Journal of Health* and Social Behaviour, 29, 214-226.
- Barton, W. (1980). Drug histories and criminality: Survey of inmates of state correctional facilities, January 1974. *The International Journal of the Addictions*, 15, 233-258.
- Barton, W. (1982). Drug histories and criminality of inmates of local jails in the United States (1978): Implications for treatment and rehabilitation of the drug abuser in a jail setting. *The International Journal of Addictions*, 17, 417-444.
- Breslin, F. C., Sobell, S. L., Sobell, L. C., & Sobell, M. B. (1997). Alcohol treatment outcome methodology: State of the art 1989-1993. Addictive Behaviors, 22(2), 145-155.
- Brooner, R. K., Schmidt, C. W., Felch, L. J., & Bigelow, G. E. (1992). Antisocial behavior of intravenous drug abuser: Implications for diagnosis of antisocial personality disorder. *American Journal of Psychiatry*, 149, 482-487.
- Bureau of Justice Statistics. (1990). Criminal victimization in the United States 1988: A national crime survey report. NCJ 122024. Washington, DC: Government Printing Office.
- Chaiken, J., & Chaiken, M. (1982). Varieties of criminal behavior. Santa Monica, CA: Rand.
- Chaiken, J., & Chaiken, M. (1990). Drugs and predatory crime. In M. Tonry & J. Q. Wilson (Eds.), *Drugs and crime* (pp. 203-239). Chicago, IL: University of Chicago.
- Cloninger, C. R. (1987). Neurogenetic adaptive mechanisms in alcoholism. *Science Journal*, 236, 410-416.
- Correctional Service of Canada (1999) An outcome evaluation of CSC Substance Abuse Programs: OSAPP, ALTO, and Choices. Ottawa, ON: T³ Associates.
- Cottler, L. B., Price, R. K., Comptom, W. M., & Mager, D. E. (1995). Subtypes of adult anti-social behaviour among drug abusers. *Journal of Nervous and Mental Disease*, 183(3), 154-161.
- Dennis, M. L. (1990). The validity of randomized field experiments: An example from drug abuse treatment research. *Evaluation Review*, 14(4), August, 347-393.
- Edwards, G., & Gross, M. M. (1976). Alcohol dependence: Provisional description of a clinical syndrome. *British Medical Journal*, 1, 1058-1061.
- Elliott, D. S., & Hunizinga, D. (1984). The relationship between delinquent behaviour and ADM problems. *National Youth Survey Report*, 26. Boulder, CO: Behavioural Research Institute.
- Elliott, D. S., Hunizinga, D., & Ageton, S. S. (1985). *Explaining delinquency* and drug use. Beverly Hills, CA: Sage.
- Field, G. (1985). The Cornerstone Program: A client outcome study. *Federal Probation*, 49, 50-55.
- Gendreau, P., & Ross, K. (1982). Current perspectives in the treatment of opiate addiction and polydrug abuse. Ottawa, ON: Correctional Service of Canada.
- Gerstein, D. R., & Harwood, U. J. (1990). *Treating drug problems*. Volume 1. Washington DC: National Academy Press.
- Goldstein, M. S., Surber, M., & Wilner, D. M. (1984). Outcome evaluations in substance abuse: A comparison of alcoholism, drug abuse, and other mental health interventions. *International Journal of the Addictions*, 19, 479-502.
- Gordon, S. M., Kennedy, B. P., & McPeake, J. D. (1988). Neuropsychologically impaired alcoholics: Assessments, treatment considerations and rehabilitation. *Journal of Substance Abuse*, 5, 99-104.
- Gropper, B. A. (1985). Probing the links between drugs and crime. Washington, DC: National Institute of Justice.
- Heather, N., & Tebbut, J. (1989). The effectiveness of treatment of alcohol and drug problems: An overview. Canberra: Australian Government Publishing Service.
- Hill, M. J., & Blane, H. T. (1967). Evaluation of psychotherapy with alcoholics: A critical review. *Quarterly Journal of Studies on Alcohol*, 28, 76-104.
- Hodgins, D. C., & Lightfoot, L. O. (1988). Types of male alcohol and drug abusing incarcerated offenders. *British Journal of Addictions*, 83, 1201-1213.
- Hubbard, R. L., Collins, J. J., Rachal, J. V., & Cavanaugh, E. R. (1988). The criminal justice client in drug abuse treatment. In C. G. Leukfeld & F. M. Tims (Eds.), Compulsory treatment of drug abuse: Research and clinical

practice (NIDA) Research Monograph, 86 (pp. 57-80). Rockville, MD: National Institute on Drug Abuse.

- Hubbard, R. L., Marsden, M. E., Cavanaugh, E., Rachal, J.V., & Ginzberg, H. M. (1988). Role of drug abuse treatment in limiting the spread of AIDS. *Review of Infectious Diseases*, 10(8), 377-384.
- Institute of Medicine. (1990). *Broadening the base of treatment for alcohol problems: Report of a study by a committee of the Institute of Medicine*. Washington, DC: National Academy of Science.
- Inciardi, J. A. (1979). Heroin use and street crime. *Crime and Delinquency*, 25, 335-346.
- Inciardi, J. A. (Ed.) (1981). The drugs-crime connection. Sage Annual Reviews of Drug and Alcohol Abuse, vol. 5. Beverly Hills, CA: Sage.
- Innes, C. A. (1988). Drug use and crime: State prison inmate survey, 1986. Bureau of Justice Statistics Special Report. Washington, DC: U.S. Department of Justice.
- Ito, J. R., & Donovan, D. M. (1986). Aftercare in alcoholism treatment: A review. In W. R. Miller & N. Heather (Eds.), *Treating addictive behaviours: Processes in change* (pp. 435-456). New York, NY: Plenum.
- Jellinek, E. M. (1960). *The disease concept of alcoholism*. Highland Park, NJ: Hillhouse Press.
- Johnson, B. D., Goldstein, P., Preble, E., Schmeilder, J., Lipton, D. S., Spunt, B., & Miller, T. (1985). *Taking care of business: The economics of crime by heroin abusers*. Lexington, MA: Lexington Books.
- Latessa, E. J. (1988). A follow-up evaluation of the Lucas County adult probation department's Sobriety Through Other People (STOP) Program. Unpublished manuscript. Cincinnati, OH: University of Cincinnati, Department of Criminal Justice.
- Lightfoot, L. O. (1993a). Substance abuse pre-release program for offenders: Treatment manual. Ottawa, ON: Education and Personal Resources, Correctional Service Canada.
- Lightfoot, L. O. (1993b). The offender substance abuse pre-release program: An empirically based model of treatment for offenders. In J. S. Baer, G. A. Marlatt, & R. J. McMahon (Eds.), *Addictive behaviours across the lifespan: Prevention, treatment and policy issues* (pp.203-224). New York, NY: Guildford Publications.
- Lightfoot, L. O. (1995). Alcohol drugs and personal choice: An alcohol and drug education program for federal offenders. Ottawa, ON: Correctional Programs Division, Correctional Service Canada.
- Lightfoot, L. O., & Barker, J. (1989). A field test of the revised substance abuse prerelease program: Joyceville Institution. Ottawa, ON: Correctional Service Canada.
- Lightfoot, L. O., & Boland, F. (1993). Choices: A community correctional brief treatment relapse prevention & maintenance program. Kingston, ON: Correctional Service Canada.
- Lightfoot, L. O., & Hodgins, D. (1988). A survey of alcohol and drug problems in incarcerated Canadian offenders. *International Journal of the Addictions*, 23(7), 687-706.
- Lightfoot, L. O., & Hodgins, D. (1993). Characteristics of substance abusing offenders: Implications for treatment programming. *International Journal* of Offender Therapy & Comparative Criminology, 37(3), 239-250.
- Lightfoot, L. O., & Lambert, L. (1991). Substance abuse treatment needs of federally sentenced women. Technical Report No. 1 & No. 2. Kingston, ON: Correctional Service Canada.
- Longabaugh, R. (1989). Recommended research priorities for the assessment of treatment outcomes. *Psychology of Addictive Behaviour*, 2(3), 131-141.
- Luborsky, L., McLellan, A. T., Woody, G. E., O'Brien, C. P., & Auberbach, A. (1985). Therapist success and its determinants. *Archives of General Psychiatry*, 42, 602-611.
- Marlatt, G. A., & Gordon, J. R. (1985). Release prevention: Maintenance strategies in the treatment of addictive behaviors. New York, NY: Guildford.
- Martin, G. W., & Wilkinson, A. D. (1989). Methodological issues in the evaluation of treatment of drug dependence. *Addictive Behaviour Research Therapy*, 11, 133-150.
- Martin, S. S., Clifford, A. B., & Inciardi, J. A. (1995). Assessment of a multistage therapeutic community for drug-involved offenders. *Journal of Psychoactive Drugs*, 27(1), 109-116.
- McLellan, A. T., Luborsky, L., Woody, G. E., & O'Brien, C. P. (1980). An improved diagnostic evaluation instrument for substance abuse patients. *Journal of Nervous and Mental Disease*, 168, 26-33.

- McLellan, A. T., Luborsky, L., Woody, G. E., O'Brien, C. P., & Druley, K. A. (1983). Increased effectiveness of substance abuse treatment: A prospective study of patient-treatment matching. *Journal of Nervous & Mental Disease*, 171, 597-605.
- Miller, W. R. (1986). Matching individuals with intervention. In R. K. Hester & W. R. Miller (Eds.), *Handbook of alcoholism treatment approaches* (pp. 261-271). New York, NY: Pergamon.
- Miller, W. R., & Hester, R. K. (1986). Treating "alcohol problems" towards an informed eclecticism. In W. R. Miller & N. Heather (Eds.), *Treating addictive behaviours: Processes of change*, (pp. 121-174). New York, NY: Plenum.
- Miller, W. R., & Saucedo, C. F. (1985). Assessment of neuropsychological impairment and brain damage in problem drinkers. In W. R. Miller (Eds.), *Alcoholism: Theory research and treatment*, (pp. 141-195). Lexington, MA: Ginn Press.
- Miller, W. R., Sovereign, R. G., & Krege, B. (1988). Motivational interviewing with problem drinkers: II. The Drinker's Check-up as a preventive intervention. *Behavioral Psychotherapy*, 16, 251-268.
- Miller, W. R., & Sovereign, R. G. (1989). The Check-up: A model for early intervention in addictive behaviors. In T. Loberg, W. R. Miller, P. E. Nathan, & G. A. Marlatt (Eds.), *Addictive behaviors, prevention and early intervention* (pp. 219-231). Amsterdam, Netherlands: Swets and Zeitlinger.
- Moczydlowski, K. (1980). Predictors of success in a correctional halfway house for youthful and adult offenders. *Corrective and Social Psychiatry and Journal of Behavior Technology Methods and Therapy*, 26(2), 59-72.
- Moon, M., & Latessa, E. J. (1994). Drug treatment in adult probation: An evaluation of an outpatient and acupuncture program. *Evaluation and Program Planning*. Cincinnati, OH: Department of Criminal Justice, University of Cincinnati.
- National Council on Crime and Delinquancy, National Probation and Parole Institutes. (1972, January). Uniform Parole Reports Newsletter.
- Nirenberg, T. D., & Maisto, S. (1990). The relationship between assessment and alcohol treatment. *The International Journal of the Addictions*, 25(11), 1275-1285.
- Ontario Ministry of Health. (1988). A framework for the response to alcohol and drug problems in Ontario. Toronto, ON.
- Orford, J., & Kedie, A. (1986). Abstinence or controlled drinking in clinical practice: A test of the dependence and persuasion hypothesis. *British Journal* of Addiction, 81, 495-504.
- Parsons, D. A., Butters, N., & Nathan, P. E. (1987). Neuropsychology of alcoholism: Implications for diagnosis and treatment. New York, NY: Guildford Press.
- Peele, S. (1984). The cultural context of psychological approaches to alcoholism. *American Psychologist*, 39, 1337-1351.
- Peele, S. (1987). Why do controlled drinking outcomes vary by investigator and by era? *Drug and Alcohol Dependence*, 20, 173-201.
- Prochaska, J. O., & DiClemente, C. C. (1986). Toward a comprehensive model of change. In W. R. Miller & N. Heather (Eds.), *Treating addictive behaviors: Processes of change*. New York, NY: Plenum Press.
- Rada, R. T. (1973). Alcoholism and forcible rape. American Journal of Psychiatry, 132, 444-446.
- Robins, L. N., & Regier, D. A. (1991). *Psychiatric disorders in America*. New York, NY: Free Press.
- Rounsaville, B. J., Dolinsky, Z. S., Babor, T. S., & Meyer, R. E. (1987). Psychopathology as a predictor of treatment outcome in alcoholics. *Archives of General Psychiatry*, 44, 505-513.
- Rosenberg, H. (1993). Prediction of controlled drinking by alcoholics & problem drinkers. *Psychology Bulletin*, 133(1), 109-139.
- Ross, R., & Lightfoot, L. O. (1985). Treatment of the alcohol abusing offender. C. C. Thomas, IL.
- Sanchez, J. E., & Johnson, B. D. (1987). Women on the drugs-crime connection: Crime rates and drug-abusing women at Rikers Island. *Journal of Psychoactive Drugs*, 19, 205-216.
- Sanchez-Craig, M., Annis, J. M., Bornet, A. R., & MacDonald, K. R. (1984). Random assignment to abstinence and controlled drinking. Evaluation of a cognitive-behavioural program for problem drinkers. *Journal of Consulting* and Clinical Psychology, 52, 390-403.
- Sanchez-Craig, M., & Lei, H. (1987). Disadvantages to imposing the goal of abstinence on problem drinkers: An empirical study. *British Journal* of Addiction, 81, 505-512.

- Sanchez-Craig, M., & Wilkinson, D. A. (1993). Guidelines for advising on the goals of treatment: Abstinence or moderation. In B. A. Howard, S. Harrison, V. Carver, & L. O. Lightfoot (Eds.), Alcohol and drug problems: A practical guide for counsellors (pp. 127-141). Toronto, ON: Addiction Research Foundation.
- Simpson, D. D., & Savage, J. L. (1981-1982). Client types in different drug abuse treatments: Comparisons of follow-up outcomes. *American Journal* of Drug Abuse Treatment, 8(4), 401-418.
- Simpson, D. D., & Sells, S. B. (1982). Evaluation of drug abuse treatment effectiveness: Summary of the DARP follow-up research. In *NIDA Treatment Research Report*. Rockville, MD: NIDA.
- Stockwell, T. (1986). Cracking an old chestnut: Is controlled drinking possible for person who has been severely alcohol dependent? *British Journal of Addiction*, 81, 455-456.
- United States Bureau of Justice Statistics. (1983). *Prisoners and alcohol.* Washington, DC: Government Printing Office.
- Vito, G. (1989). The Kentucky substance abuse program: A private program to treat probationers and parolees. *Federal Probation*, 53, March, 65-72.

- Wallace, J. (1987a). Waging the war for wellness (Part II). The attack on the disease model. *Professional Counsellor*, March/April, 21-27.
- Wallace, J. (1987b). Waging the war for wellness (Part I). The attack on the antitraditionalist lobby. *Professional Counsellor*, January/February, 21-39.
- Weekes, J. R. (1993). Assessment of substance abuse in offenders: The Computerized Lifestyle Assessment Instrument. Paper presented at the Annual Convention of the Canadian Psychological Association, Montreal, QC.
- Weekes, J. R., Millson, W. A., Porporino, F. J., & Robinson, D. (1994). Substance abuse program analyses rates of success. *Corrections Today*, 56, 86-89.
- Wexler, H. K., Falkin, G. P., & Lipton, D. S. (1990). Outcome evaluation of a prison therapeutic community for substance abuse treatment. *Criminal Justice and Behavior*, 17, 71-92.
- Wilkinson, D. A., & Carlen, P. L. (1981). Chronic organic brain syndromes associated with Alcoholism: Neuropsychological and other aspects. In Y. Isreal, F. B. Glaser, H. Kalant, R. E. Popham, & R. G. Smart (Eds.), *Research advances in drug and alcohol problems*, 6 (pp. 107-145). New York, NY: Plenum.

CHAPTER 15

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Self-control has been utilised extensively as an explanatory concept in the field of psychology and in forensic psychology in particular. A number of researchers and theorists have linked self-control, as often measured by impulsivity, risk-taking, failure to delay gratification, egocentrism, temper, and limited goal setting, with criminality (Ross & Fabiano, 1985; McCord & McCord, 1959; Wilson & Hernstein, 1985; Gottfredson & Hirshi,1990). Despite its extensive use, there remains a lack of consensus in the literature regarding the definition of self-control or the mechanisms of self-regulation. Instead, impulsivity, seen as a result of a deficiency in the self-regulation process, is frequently used as a catchword to clarify a wide variety of anti-social tendencies that otherwise lack sufficient explanation. In Blackburn's terms, the concept of impulsivity has become an *"explanation in need of a phenomenon"* (Blackburn, 1993, p. 196).

Recently, Barkley (1997a) has developed a hybrid model of self-regulation based on developments in the area of Attention Deficit Hyperactivity Disorder (ADHD) that could provide the necessary theoretical framework to advance the research in the area. The model accounts for the developmental features of ADHD and is consistent with empirical findings regarding children, adolescents and adults with the disorder. The theory provides an explicit and theoretically sound definition of selfcontrol and identifies the cognitive and behavioural problems in self-regulation that can be expected based on the model. The model is particularly useful because it points to a number of potential targets that could be addressed in treatment programs.

Barkley defines self-regulation as "any response or chain of responses by the individual that serves to alter the probability of the individual's subsequent response to an event and, in so doing, functions to alter the probability of a later consequence related to that event" (Barkley, 1997b, p. 68). According to Barkley, the primary self-regulatory act must be the inhibition of responding. In non-impaired individuals, this period of inhibition allows a delay in the decision to respond that is used for further selfdirected executive actions. Self-regulation allows for the direction and persistence of behaviour toward future goals and the ability to reengage in these activities if they have been disrupted. He reasons that this purposeful form of goal directed behaviour might function to maximise future consequences over immediate ones for the individual. Barkley's model (see Figure 15.1) illustrates that higher order executive functions may be disrupted because of an impairment in inhibition.

Barkley (1997a) argues that ADHD is a deficit in behavioural inhibition that affects the normal development of four neurophysiological functions: working memory, the self-regulation of affect and motivation and arousal, internalisation of speech and motor control and sequencing, and behavioural analysis and synthesis. Performance of the executive functions implicates self directed actions; the organisation of behavioural contingencies across time; the use of self directed speech, rules, or plans; deferred gratification; and goal-directed, future-oriented, purposive, or intentional actions.

Working memory

Working memory allows for individuals to hold several events in mind. This facilitates the cross-temporal organization of behaviour, that is, a linking of hindsight with the anticipation of the future (foresight). It contributes to an "anticipatory" set whereby consequences are anticipated based on past experience. Among offenders, some researchers have identified related problems in:

- means end thinking, a tendency to respond quickly without thinking;
- presentation orientation, that increases the chances they will engage in activities that earn them short term gains but have negative consequences in the longer term;
- conceptual rigidity, that inclines them toward a repetitive pattern of self defeating behaviour; and
- *poor critical reasoning*, that makes them vulnerable to the demand characteristics of the immediate situation.

(Barratt, Stanford, Kent, & Felthouse, 1997; Ross & Fabiano, 1985, Wilson & Herrnstein, 1985, Newman, Patterson, & Kosson, 1987)

Zamble and Quinsey's (1997) study of criminal recidivism among federal offenders illustrated how impulsively many recidivists engage in their reoffences. Over half of the offenders they interviewed reported that the commission of the offence was completed within one hour of deciding to do it.

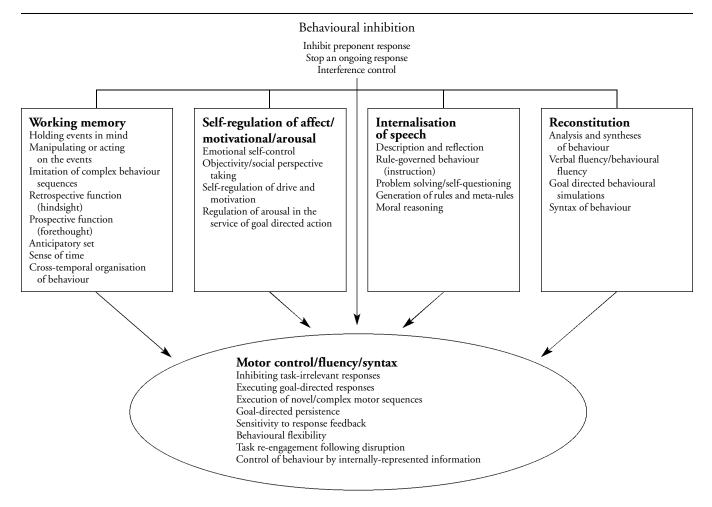
Self-regulation of affect/motivation/arousal

Self-regulation of affect/motivation/arousal allows for emotional self-control, objectivity and social perspective taking and regulation of arousal in the service of a goal-directed action. Impairments are associated with poor modulation of affect as well as lapses in motivation and lack of perseverance when faced with remote or uncertain rewards.

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Figure 15.1 Barkley's (1997) schematic configuration linking behavioural inhibition with the performance of executive functions



Internalisation of speech

Internalisation of speech allows for description and reflection, the development of rule-governed behaviour, problem solving and the development of moral reasoning. Self-talk or verbal regulation permits a means of sustaining behaviour across time gaps between the units of behaviour. With language, an individual can understand contingencies (the link between an event a response and consequences) and by formulating rules, he can construct novel complex behaviour chains. This allows him to delay immediate gratification and set longer term plans to reach ultimate goals. Lack of facility to anticipate and formulate rules about the future means that social relationships are impaired which in turn predicts problems in sharing and co-operation and adaptive behaviours such as taking health precautions that are predicated on the valuation of future social consequences over immediate ones. Impairment of these contingencies can lead to response preservation in spite of consequences, difficulty in maintaining motivation when engaged in repetitive tasks and

moral reasoning impairment. Among offenders who demonstrated a repetitive pattern of criminal behaviour, Ross and Fabiano (1985) identified problems with impulsivity associated with poor verbal self-regulation, concrete and egocentric thinking that impinged on their ability to appreciate the thoughts and feelings of other values that focussed on how their actions affect them instead of considering their effects on others and impaired interpersonal problem solving skills.

Reconstitution

The reconstitution function allows for an analysis and synthesis of behaviour. Problems would appear in the domain of verbal fluency and in the creation of novel response sequences and long term planning. Among delinquents, significantly higher scores on Performance over Verbal I.Q. subtests on omnibus intelligence measures is a robust finding (Lynam, Moffitt, & Stouthamer-Loeber, 1993). The reconstitution function underlies the ability to be able to learn from previous contingency arrangements and specify new courses of action in accordance to the contingencies already observed. This would be responsible for behavioural diversity and novelty. Problems with this executive function would relate to a lack of generation of alternative solutions to problems and inflexibility in behavioural repertoire. Chronic and psychopathic offenders are characterized in part by a repetitive pattern of anti-social acting out in spite of sanctions, that is, failing to learn from experience or to respond to negative feedback and punishment by adjusting behaviour or allying new behaviours (Newman, Patterson, & Kosson, 1987; Cleckley, 1964; Hare, 1991).

Impairments in self-regulation can be adopted to offer a powerful explanatory model of the mechanisms that predispose individuals to develop anti-social tendencies and allow criminal behaviour to persist over a life span. We propose that failure of the self-regulation process is a necessary, although not sufficient, condition for the development of most chronic anti-social behaviour (Rowe, 1997). It is argued that hyperactivity at a young age, and the self-regulation problems that ensue, are the foundation for later behavioural problems that can ultimately lead to chronic offending and/or psychopathy. The trajectory, however, can be changed, or mitigated, through attachment to prosocial institutions (family/school) and peers.

Extent of the problem among federal offenders

The population of serious offenders would be expected to be have high rates of problems with self-regulation. At admission into the federal correctional system, each offender undergoes a comprehensive assessment based on file review and interview. Among the items that compose the assessment, several pertain directly and indirectly to problems in self-regulation. Over 80% of federal offenders are assessed by intake officers as having one or more of the problems related to self-regulation included in Table 15.1. Research indicates that problems in self-regulation are associated with poorer outcomes. As the table highlights, offenders who reoffend within one year after release were significantly more likely to have problems in self-regulation. Conversely, an absence of any problems in the area of self-regulation reduces offenders' probability of reoffending within a year of release. Eighty-eight percent of offenders with no problems in self-regulation remain offence free after one year of release as compared to an expected rate (general survival rate) of 64.2%.

Measures of impulsivity

Tests have been constructed as a means to operationalize impulsivity without an explanation of the mechanisms underlying impulsivity. As such, impulsivity has become defined by the task or tests used to operationalize it. The reliance of the psychological literature on instruments that measure impulsivity without a consensus of definition and a lack of theory in the field is clearly problematic.

		Non	
OIA Indicators	Recidivists*	Recidivists	p
Lacks direction	75.2	59.9	0.001
Impulsive	80.5	67.2	0.001
Thrill seeking	37.5	27.3	0.001
Poor conflict			
resolution	75.6	67.4	0.001
Poor regard			
for others	62.6	52.5	0.001
Low frustration			
tolerance	53.6	43.7	0.001
Unrealistic			
goal setting	36.5	27.7	0.001
Non reflective	59.8	50.4	0.001
Poor problem			
solving	77.8	70.1	0.001
Unable to generate			
choices	67.7	60.6	0.001

 TABLE 15.1 Percentage of federal offenders identified

 with problems related to self-regulation

* Offenders who have reoffended within one year of release

In a review of the research on the impulsivity construct, Milich and Kramer (1984) listed three specific problems with the test-specific approach to defining and understanding impulsivity. First, up until the time of their publication, they found that most of the measures failed to offer any incremental validity beyond age and IQ in understanding impulsivity. Second, there was a lack of any empirical convergence in the literature. This suggested that many measures were tapping into different constructs and that some, or all, were failing to tap into the impulsivity construct. Third, there is a dearth of theory driven research. It would seem that the atheoretical nature of the construct of impulsivity is largely responsible for limiting progress in this area (Milich, Hartung, Martin, & Haigler, 1994).

There are a number of inventories in the literature that were specifically designed to assess impulsivity. One of the oldest is the Barratt Impulsiveness Scale (BIS; Barratt, 1994). Barratt's original scale published in 1959 was based on a unidimensional model of impulsiveness. Inaugural items appear to have been selected on the basis of face validity but later selected to be orthogonal to various measures of anxiety. Barratt conceptualized impulsivity as a third order dimension. He stated that impulsiveness includes second and first order dimensions of speed of responding, risk taking, acting without thinking, and inability to plan ahead. Moreover, the construct was hypothesized to be part of a more inclusive class of action-oriented personality pre-dispositions that included extraversion, sensation seeking, and a lack of inhibitory behavioural controls (Barratt & Patton, 1983).

As Barratt's (1983) research progressed, he concluded on an "a priori basis" that there were three main aspects of impulsivity: motor (acting without thinking), cognitive (quick decisions), and non-planning (present orientation). Original analyses (Barratt, 1985) empirically substantiated these three factors and a later factor analysis completed by Gerbing, Ahadi, and Patton (1987) also identified each of these three factors in their overall analysis.

Despite the originally promising findings, the results of the original analysis were not reliable. In particular, the cognitive subfactor alpha coefficient was weak and failed to confirm the existence of the cognitive subscale (Barratt, 1994; Luengo, Carillo-de-las-Peña, & Otero 1991). Barratt surmised that this sub-trait was difficult to measure with self-report questionnaires because cognition is always inferential and the extent to which impulsive persons can assess their own cognitive functions may be questionable.

In one of the first studies examining whether delinquents and non delinquent samples could be differentiated based on the measures of impulsivity, no significant findings were found in the expected direction on scales including the BIS-1 (Saunders, Reppucci, & Sarata, 1973). Using the BIS on an inmate sample, Barratt and his colleagues found that subjects diagnosed with Anti-social Personality Disorder could be differentiated from controls on the basis of their impulsiveness scores (Barratt, Stanford, Kent, & Felthous, 1997) while a study in 1992 found higher levels of impulsivity in more versatile criminal offenders (Stanford & Barratt, 1992). Interestingly, inmates could not be differentiated based on their violent pattern of offending (impulsive versus non-impulsive aggression).

In an earlier study, Presse (1984) determined that the BIS (version 10) could not differentiate between non psychopathic and psychopathic inmates, although there was a significant correlation between PCL ratings and the BIS-10. Hare and his colleagues used an earlier version of the Barratt Impulsiveness Scale and found that high scores were associated with high ratings of psychopathy (Hare & Cox, 1978). Wardell and Yeudall's (1980) findings supported this conclusion. Despite some evidence of differences among psychopaths and non-psychopaths on the Barratt scale, Hare did not feel that impulsivity differentiated between psychopathic and non-psychopathic inmates, but proposed that it is more likely to account for differences in criminals and non-criminals (Hare, 1982).

Impulsivity as measured through Eysenck's scale has been reported to differentiate male delinquents from controls (Eysenck & Eysenck, 1977; Eysenck & McGurk, 1980; Putnins, 1982). The scale has also been found to correlate with self-reported delinquency in both men and women adolescent delinquent samples (Silva, Martorell, & Clemente, 1986). In addition, the Eysenck I7 questionnaire was found to be significantly correlated with measures of violent behaviour including previous violent convictions (r = 0.50), psychopathy as measured by the PCL-R (r = 0.52; Seager, 1995), and anti-social behaviour in adults (Eysenck et al., 1985; Goma-i-Freixanet, 1995). The studies of the relationship between psychopathy and self-report measures of impulsiveness, however, suggest that the findings are dependent on the measures used (Presse, 1984).

A more recent addition to self-control measures is the selfreport measure developed by Grasmick et al. (1993). This measure was designed as an index of low self-control as defined by Gottfredson and Hirschi (1990). Original analysis (Grasmick et al., 1993) with this scale suggested that low self-control was a unidimensional trait. The authors reported that self-control was predictive of self-reported fraud and use of force but only in interaction with opportunity. That is, lack of self-control only had a significant impact when opportunity was high. Further research has not fully endorsed the use of this measure.

Longshore et al.'s (1996) attempted to validate the use of the Grasmick et al., (1993) self-control scale on a criminal population. Factor analysis identified five subscales that were reasonably consistent with current notions of the self-control construct. Notable is the fact that impulsivity was not isolated as a separate factor. The total scale, along with several subscales, was modestly associated with self-reported crimes of fraud and force. Overall, the self-control scale was no more closely related to crime than were subscales representing the more specific constructs of risk seeking, temper, and impulsivity/self-centeredness already established in the literature. As such, it appears that issues surrounding the measurement of self-control remain unresolved.

The literature reveals the following consistent problems with self-report inventories of impulsivity:

- Lack of external criterion measures and biological measures other than other questionnaire scales (Barratt & Patton, 1983).
- Questionnaire measures of impulsivity are at least significantly intercorrelated but have low order and often insignificant correlations with behavioural or cognitive measures of impulsivity (Barratt, 1983).
- At present, there is a lack of research into the dynamic nature of these instruments.

It is evident that many techniques that purport to measure impulsivity are not measuring the same construct. The circular nature of the debates will not end until measurement of the concept applies external criterion. Furthermore, a preliminary finding of moderate to high correlations (average r = 0.48) between measures of impulsivity/self control and an impression management inventory with a forensic population suggests that the utility of using self-reported measures of impulsivity is questionable. This also creates some reservations concerning the validity of using selfreported crimes as a criterion measure (Rowe, 2000). Despite some successes in differentiating forensic samples, it is still not clear what exactly self-report measures of impulsiveness are measuring other than correlations with other impulsivity measures or, perhaps, poor self-appraisal/impression management skills. A quick glance at item content indicates that self-report inventories are attempting to measure a stable trait. The utility of these instruments in assessing changes in self-regulation is likely severely limited. Therefore, the validity of using these self-report measures as reflections in selfregulation remains suspect.

BEHAVIOURAL MEASURES

Behavioural methods for the assessment of the impulsivity construct are also plentiful and diverse (see Kindlon et al., 1995). Most concentrate on reaction time type tasks, assessment of an ability to delay or inhibit responding, time perspectives, and interference control. The most recent behavioural measures have conceptualized impulsivity as a form of behavioural disinhibition.

The Matching Familiar Figures test (MFFT) was constructed in 1964 (Kagan, Rosman, Day, Albert, & Phillips, 1964) to measure the contrasting conceptual styles of impulsivity and reflection, but at best has only been able to marginally differentiate offender populations. Reaction time tasks have been used in attempts to measure the impulsivity construct. The concept that people who lack a sufficient self-regulation process make quick decisions or act without thinking has been central to many definitions of impulsivity (Parker, Bagby, & Webster, 1993). It would appear, however, that the relationship between impulsivity and psychomotor activity is quite complex as results from studies with offender populations have been mixed (Barratt, 1985).

One paradigm for the study of self-control is the assessment of the ability to defer a proximal or immediate reward for a greater reward that will be received at some point in the future. In a prospective study with delinquent males it was found that recidivists were more susceptible to choosing an immediate reward when assessed prior to their release than non-recidivists (Roberts et al., 1974). A study conducted with young children measuring the ability to postpone immediate gratification found that such measures predict patterns of competence in the fields of attentiveness and ability to plan ahead more than a decade later (Mischel, Shoda, & Peake, 1988). In addition, Newman's extensive research has consistently found that delay of gratification is useful in discriminating controls from adolescent and adult psychopaths (Patterson & Newman, 1993).

In Gerbing et al.'s report (1987), the average correlation between self-report and behavioural factors of self-regulation measures was 0.03. Helmers' study (Helmers, Young, & Pihl, 1995) also reported near zero correlations between self-report measures of impulsivity, such as Barratt's and Eysenck's scales, and behavioural measures such as the MFFT and go-no-go discrimination tasks. In fact, a composite factor score of selfreport impulsivity showed a significant relationship in the opposite direction than expected with some behavioural measures. The failure to find correlations between various impulsivity measures most likely reflects the lack of consensus in the literature about what constitutes impulsivity and the differences in the theoretical approaches to the construct (Parker & Bagby, 1997).

More recent factor analyses have incorporated a variety of new tasks and tests that have been specifically designed for the detection of extraversion, conduct disorder, delinquency, and psychopathy. In 1995, Kindlon et al. attempted to measure the psychometric properties of these types of impulsivity measures with normal and behaviourally disordered children. Most of the behavioural measures were able to differentiate impulsive children from normal controls, while controlling for the effects of age and intellectual aptitude. The study identified two dimensions of impulsivity: cognitive inhibitory control (inhibit a strong competing response) versus a motivational component (insensitivity to punishment/non reward). This confirmed an earlier factor analysis employing multiple tests and measures of impulsivity (White et al., 1994). Both studies emphasize the utility of a variety of newly developed instruments focused on behavioural inhibition and interference control to differentiate amongst delinquent youth. Specifically, the Kindlon et al. (1995) study showed that there was a group of objective impulsivity measures with psychometric properties necessary for longitudinal research that showed promise as revealing the developmental antecedents to juvenile delinquency and adult crime.

Future directions in the assessment of impulsivity

The literature has told us that assessment instruments in self-regulation should be:

- based on viable theories of self-regulation, behavioural inhibition, or self-control
- multi-dimensional
- validated with observable external criteria
- show temporal stability but be potentially dynamic in nature
- performance based or behavioural measures
- independent of impression management concerns or selfappraisal deficiencies.

The lack of consensus regarding the conceptualisation of impulsivity is indisputable. This inconsistency in the use of this concept has certainly found its way into the measurement of the construct. A strong theoretical orientation needs to be provided that can guide future efforts at scale construction in order to expose the links between impulsivity, its various manifestations, and anti-social conduct. For this reason we have turned to Barkley's (1997b) conceptualization of the self-regulation process. Barkley's model not only attempts to identify the mechanisms that serve the self-regulatory system but also specifically documents the nature of these systems and the structure in which they function.

There does not seem to be an overwhelming array of options to evaluate self-regulation processes of criminal offenders. Future instruments should attempt to measure the performance and abilities of individuals to inhibit task-irrelevant responses, executing goal-directed responses, execute novel/complex motor sequences, persist in goal-directed behaviour, respond appropriately to feedback, exhibit behavioural flexibility, re-engage in a task following disruption, and control their behaviour by internally-represented information. Recent hi-tech innovations in brain imaging provide precise modelling of the functions of the brain in response to stimuli. These advances could one day permit the biological criterion for components of self-regulation for both self-report and behavioural measures.

Treatment implications for adult offenders

If we accept that deficits in self-regulation linked to neurophysiological underfunction are present in chronic offender populations and are implicated in their repetitive anti-social behaviours, a medication regime similar to that prescribed for hyperactive children may be a logical treatment option for these adults as well. There is, however, limited evidence for the utility of any kind of medication to address problems in selfregulation among adult offender populations. Methodological problems of small sample size, lack of control groups and high rates of attrition plague most of the rare studies in the area. Two controlled pharmacological studies in the literature assessing the use of stimulants on adults with ADHD found a positive treatment response analogous to that of treated children, albeit a number of subjects experienced unpleasant side effects (Wender, Wood, & Reimherr, 1991; Greenhill, 1992). Other studies have treated impulsive adults with tranquillisers (Federoff & Federoff, 1992) and anticonvulsants (Barratt & Slaughter, 1998). Cocarro's work links impulsive aggression in adults with low serotonin levels. He and his team have reported on successfully treating impulsively aggressive adults with SSRIs and the non responders (to the SSRIs) with antimanic medications (Cocarro & Kavoussi, 1997).

Another intervention strategy is to directly train individuals in the cognitive and coping skills they have not developed due to impairments in inhibition. Meta-cognitive strategies for slowing down cognitive processes and training in the development of skills that less impulsive individuals use to achieve their goals (through self-regulation) are components of such intervention programs. Table 15.2 outlines the deficits that should be addressed in a program designed to treat problems in self-regulation. In addition to these, we have pointed out that problems in self-regulation often lead to an anti-social orientation and an endorsement of beliefs and a lifestyle that are supportive of crime and rejecting of prosocial conventions and values. For this reason, the *content* of offenders' thinking should be addressed as well as their thinking process.

Barkley does not speculate on treatment strategies for adults, but externalizing the self-control mechanisms by over-learning strategies such as self-regulatory self-talk and identifying behaviour contingencies, that is, the sequencing of behaviours that lead to an outcome, would be one approach.

Meichenbaums' (1977) early work on self-instructional learning pointed the way for those working with clients with problems in self-regulation. He proposed that self-instruction, composed of training in guided self-talk, assisted clients by allowing them to better perform five functions: direct their attention to relevant events; interrupt an automated response to environmental stimuli; search for and select alternative courses of action; use rules and principles to guide behaviour; and maintain a sequence of action in short term memory so that they can be enacted.

Over the last 15 years, cognitive-behaviour interventions that emphasize the training of self-regulatory skills have been identified as the treatment approach most often associated with reductions in offender recidivism (Gendreau & Ross, 1979; Izzo & Ross, 1990; Sherman et al., 1997; Vennard, Sugg & Hedderman, 1997). Reviews that have applied meta-analytic techniques to the evaluation of a large body of published, and in some cases, unpublished, research reports (Andrews et al., 1990; Antonowicz & Ross, 1994; Izzo & Ross, 1990; Lipton, 1998; Lösel, 1995; McGuire, 1995) find an average small (0.08 to 0.15), but significant, treatment effect size for correctional treatment with the cognitive behavioural interventions being cited as among the approaches consistently associated with positive outcomes. Although about 80% of the studies included in the meta-analyses involve juveniles, there are a number of studies involving adult subjects that point to a similar positive trend in the application of this approach. The most optimistic interpreters of the literature estimate that when "appropriate" interventions are applied, effects sizes above 0.30 can be expected (Andrews & Bonta, 1994). This translates into between 10 to 15% differences in recidivism rates between treated and untreated controls (for example, 40% recidivism rates as opposed to 50% or 55% (from McGuire, 1995).

A number of programs that teach thinking skills are now delivered in correctional settings. However, no one program has been so widely adopted as the Cognitive Skills Training or Reasoning and Rehabilitation program as it is also known was developed by Ross and Fabiano. Cognitive Skills has become a core program in the federal Canadian correctional system and it has been implemented world wide in such constituencies as the United States, Europe, Australia, New Zealand, and throughout the British Prison system and the Probation Service in the United Kingdom. The program is the base program in a menu of six Living Skills programs offered to federal offenders within the Correctional Service of Canada. The other programs are Anger and Other Emotions Management, Living Without Family Violence, Parenting Skills, Community Integration and Leisure Education. There are also community maintenance programs for the Cognitive Skills and Anger and Other Emotions programs.

Regulatory Behaviour Problems (Barkley)	Possible Treatment Options
1. Impairments in working memory. Symptoms problems	 Training to anticipate consequences Training to anticipate consequences
in means end thinking, external locus of control	 Training in problem solving to development a sense of self-control behaviour dictated by the immediate situation. rather than external control
	 Training in setting smaller realistic goals so that behaviour is not dictated by the "here and now"
2. Problems in emotional self-control and lapses	 Teaching counters to self control failure;
in motivation and lack of perseverance	 Self monitoring and other arousal reduction techniques; using verbal self regulation to "stop and think"
	• Developing personal goal setting to increase motivation to
	adhere to the use of the skills; managing distractions
	 Techniques for self reinforcement and self punishment
3. Impairment in the internalisation of speech and	 Teaching verbal self-regulation skills to help to identify the
consequentially poor self-regulation of behaviour	event→thinking→feeling→behaviour link and develop and use helpful self talk
	• Development of behavioural rules or strategies to approach inter- personal problems
	 Setting standards of conduct (generation of rules)
4. Poor analysis and synthesis of behaviour; failures	• Identifying the "behavioural chains" so that the sequence involved
to use response feedback	in the output behaviour is clarified (relapse prevention techniques)
	• Evaluating standards and rules and merging them with long term goals
	 Acquiring feedback
	Establishing environmental control

TABLE 15.2 Problems in self-regulation and treatment options to address the deficits

In the Cognitive Skills program each component area is addressed over several sessions with considerable overlap in material designed to provide adequate opportunity to over-learn the skills. The program, consisting of 35 2-hour sessions, is delivered to groups of 4 to 10 offenders, 2 to 4 times per week. The trainers' manual is highly organised and scripted to maximise the standardisation of the program. A key to the successful delivery of the program has been the selection of a variety of training techniques that create an enjoyable classroom experience for the participants. The program avoids a didactic presentation of material. Rather, the trainers — or coaches, as they are called — use role plays, video-taped feedback, modelling, group discussion, games, and practical homework review to teach the skills.

FUTURE DIRECTIONS

Although a generally effective intervention that addresses many of the deficits in self-regulation problems identified among high risk or chronic offenders, the Cognitive Skills program does not target all of them (see Table 15.2).

Treatment effectiveness may be enhanced for higher risk offenders by providing more intensive treatment and longer term follow-up

or by through efficient correctional planning. The Correctional Service of Canada (CSC) is fortunate in this regard in that there is an extensive menu of programs designed to address a number of treatment needs and most community parole offices are now funded to provide adequate community follow-up once offenders are released from the institutions. Recently CSC has developed standardized high intensity programs designed to address the treatment needs of the highest risk offenders. Although these programs each address different content areas (Violence Prevention, Family Violence Prevention, Substance Abuse Prevention (in development)), the core components of the programs are devoted to training offenders on most of the cognitive behaviour techniques contained in the Cognitive Skills program but allows for more time for offenders to overlearn the skills and more discussion time to help them understand the application of the techniques to their lives and circumstances. As outlined in Table 15.1, these newly implemented programs train offenders in the skills and strategies that Barkley's model suggests would be lacking in highly impulsive individuals. The high intensity programs train in an enriched range of skills that include many of those contained in the Cognitive Skills as well as:

- ◆ Teaching counters to self-control failure. This involves teaching offenders to observe their thinking that proceeds a violent or abusive act and to counter or replace it so that the thinking decreases instead of escalates the situation.
- Self-monitoring and other arousal reduction techniques. This involves externalising an awareness of physiological and psychological concomitants of arousal that lead to violence and aggression and training in self-control techniques to manage arousal.
- ◆ Techniques for self-reinforcement and self-punishment. This also involves the development of self-talk that participants are taught to use when they handle a "high risk situation" well and when they did not. The goal, however, is to maximise self-efficacy and therefore to highlight aspects of the coping response that were positive.
- ◆ Teaching verbal self-regulation skills to help to identify the event (A)→thinking (B)→ feeling or behaviour (C) link and develop and use helpful self-talk. This is the basis of the "ABC" model of Cognitive Therapy that has been transported into programs involving anger management, a modification of hostile schema or beliefs and attitudes that increase the risk for anti-social behaviours.
- Setting standards of conduct (generation of rules). In some programs this involves the modelling of prosocial attitudes and conduct by the facilitators while in others it will involve the actual generation of moral and ethical principles derived from group debate and the development and training in goal-directed behaviour consistent with these standards.
- Identifying the "behavioural chains" so that the sequence involved in the output behaviour is clarified. This involves the explicit sequencing of the offending process so that offenders see that it is not the uncontrollable unstoppable event they claim. At each point in the chain they are taught how they could have intervened to decrease the probability of the "outcome", that is the aggressive or illegal behaviour.
- Evaluating personal and societal standards and rules and merging them with long term goals. This involves the development of short and long term goals and the assessment of the goal, and progress toward them using set criteria.
- Environmental control. For the highest risk offenders the most appropriate intervention will include the imposition of external controls such as intensive supervision, halfway houses and the involvement of community and family supports. It would also include instruction on how to manage your environment. This can be accomplished through the application of self-monitoring behaviour and through self-observation skills, techniques for managing distractions, preparing for success, strategies to self-motivate, as well as techniques for antecedent control, self-reinforcement, and self-punishment.

With expected advances in pharmacological research, future interventions for chronic high risk offenders with diagnosed

problems in impulse control might benefit from combining high intensity cognitive behavioural treatment programs with a medication regime that could assist them in modulating their response to the environment.

REFERENCES

- Andrews, D. A., & Bonta, J. (1994). The psychology of criminal conduct. Cincinnati, OH: Anderson.
- Andrews, D. A., Zinger, I, Hoge, R. D. Bonta, J., Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology* 28(3), 369-404.
- Antonowicz, D., & Ross, R. R. (1994). Essential components of successful rehabilitation programs for offenders. *International Journal of Offender Therapy and Comparative Criminology*, 38(2), 97-104.
- Barkley, R. A. (1997a). ADHD and the nature of self-control. New York, NY: Guilford Press.
- Barkley, R. A. (1997b). Behavioural inhibition, sustained attention and executive functions: Constructing a unifying theory of ADHD. *Psychological Bulletin*, 121(1), 65-94.
- Barratt, E. S. (1983). The biological basis of impulsiveness: The significance of timing and rhythm disorders. *Personality and Individual Differences*, 4(4), 387-391.
- Barratt, E. S. (1985). Impulsiveness subtraits: Arousal and information processing. In J. T. Spence & C. E. Izard (Eds.), *Motivation, emotion, and personality*. North-Holland: Elsevier Science.
- Barratt, E. S. (1994). Impulsiveness and aggression. In J. Monahan & H. J. Steadman (Eds.), Violence and mental disorder: Developments in risk assessment. (pp. 61-79). Chicago, IL: University of Chicago Press.
- Barratt, E. S., & Patton, J. H. (1983). Impulsivity: Cognitive, behavioral, and psychophysiological correlates. In M. Zuckerman (Ed.), *Biological bases of* sensation seeking, impulsivity, and anxiety. (pp. 77-122). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Barratt, E. S., Stanford, M. S., Kent, T. A., & Felthous, A. (1997). Neuropsychological and cognitive psychophysiological substrates of impulsive aggression. *Biological Psychiatry*, 41, 1045-1061.
- Barratt, E. S., & Slaughter, L. (1998). Defining, measuring and predicting impulsive aggression: A heuristic model. *Behavioural Sciences and the Law*, 16, 285-302.
- Blackburn, R. (1993). The psychology of criminal conduct. Chichester, UK: John Wiley & Sons.
- Carillo-de-las-Peña, M. T., Otero, J. M., & Romero, E. (1993). Comparison among various methods of assessment of impulsiveness. *Perceptual and Motor Skills*, 77, 567-575.
- Cleckley, H. (1964). The mask of sanity. 4th ed. St. Louis, MI: Mosby.
- Cocarro, E. F., & Kavoussi, R. J. (1997). Fluoxetine and impulsive aggressive behaviour in personality disordered subjects. *Archives of General Psychiatry*, 54, 1081-1088.
- Eysenck, S. B. G., & Eysenck, H. J. (1977). Personality differences between prisoners and controls. *Psychological Reports*, 40, 1023-1028.
- Eysenck, S. B. G., & McGurk, B. J. (1980). Impulsiveness and venturesomeness in a detention center population. *Psychological Reports*, 47, 1299-1306.
- Eysenck, S. B. G., Pearson, P. R., Easting, G., & Allsop, J. F. (1985). Age norms for impulsiveness, venturesomeness and empathy in adults. *Personality* and Individual Differences, 6, 613-619.
- Federoff, J. P., & Federoff, I. C. (1992). Buspirone and paraphilic sexual behaviour. *Journal of Offender Rehabilitation*, 18(3/4), 89-108.
- Gendreau, P., & Ross, R. R. (1979). Effectiveness of correctional treatment: Bibliotherapy for cynics. *Crime and Delinquency*, 25, 463-489.
- Gerbing, D. W., Ahadi, S. A., & Patton, J. H. (1987). Towards a conceptualization of impulsivity: Components across the behavioral and self-report domains. *Multivariate Behavioral Research*, 22, 357-379.
- Goma-i-Freixanet, M. (1995). Prosocial and anti-social aspects of personality. *Personality and Individual Differences*, 19(2), 125-134.
- Gottfredson, M. R., & Hirschi, T. (1990). A general theory of crime. Stanford, CA: Stanford University Press.

Grasmick, H. G., Tittle, C. R., Bursik, R. J., & Arneklev, B. J. (1993). Testing the core empirical implications of Gottfredson and Hirschi's General Theory of Crime. *Journal of Research in Crime and Delinquency*, 30(1), 5-29.

- Greenhill, L. L. (1992). Pharmacologic treatment of Attention Deficit Hyperactivity Disorder. *Pediatric Psychopharmacology*, 15(1), 1-27.
- Hare, R. D. (1982). Psychopathy and the personality dimension of psychoticism, extroversion and neuroticism. *Personality and Individual Differences*, 3(1), 35-42.
- Hare, R. D. (1991). The Hare Psychopathy Checklist-Revised manual. Toronto, ON: Multi-Health Systems.
- Hare, R. D., & Cox, D. (1978). Clinical and empirical conceptions of psychopathy. In R. D. Hare & D. Schalling (Eds.), *Psychopathic behaviour: Approaches to research*. Toronto, ON: Wiley.
- Helmers, K. F., Young, S. N., & Pihl, R. O. (1995). Assessment of measures of impulsivity in healthy male volunteers. *Personality and Individual Differences*, 19(6), 927-935.
- Izzo, R. L., & Ross, R. R. (1990). Meta-analysis of rehabilitation programs for juvenile delinquents. *Criminal Justice and Behavior 17*, 134-142.
- Kagan, J., Rosman, B. L., Day, D., Albert, J., & Phillips, W. (1964). Information processing in the child: Significance of analytic and reflective attitudes. *Psychological Monographs*, 78(1), 578.
- Kindlon, D., Mezzacappa, E., & Earls, F. (1995). Psychometric properties of impulsivity measures: Temporal stability, validity and factor structure. *Journal* of Child Psychology and Psychiatry, 36(4), 645-661.
- Lipton, D. (1998). How do cognitive skills training programs for offenders compare with other modalities: A meta-analytic perspective. Paper presented at the Stop and Think Conference, York, England.
- Longshore, D., Turner, S., & Stein, J. A. (1996). Self-control in a criminal sample: An examination of construct validity. *Criminology*, 34(2), 209-227.
- Lösel. F. (1995). What recent meta-evaluations tell us about the effectiveness of correctional treatment. In G. Davies & S. Lloyd-Bostock (Eds.), *Psychology, law, criminal justice: International developments in research and practice.* Berlin, Germany: Walter DeGruyter.
- Luengo, M. A., Carillo-de-las-Peña, M. T., & Otero, J. M. (1991). The components of impulsiveness: A comparison of the I.7 Impulsiveness Questionnaire and the Barratt Impulsiveness Scale. *Personality and Individual Differences*, 12(7), 657-667.
- Lynam, D. R., Moffitt, T. E., & Stouthamer-Loeber, M. (1993). Explaining the relation between IQ and delinquency: Class, race, test motivation, school failure, or self-control. *Journal of Abnormal Psychology*, 102(2), 187-196.
- McCord, W., & McCord, J. (1959). Origins of crime: A new evaluation of the Cambridge-Somerville Study. New York, NY: Columbia University Press.
- McGuire, J. (1995). Community-based reasoning and rehabilitation programs in the UK. In R. R. Ross & R. D. Ross (Eds.), *Thinking straight: The reasoning and rehabilitation program for delinquency prevention and offender rehabilitation*. Ottawa, ON: Air Training and Publications.
- Meichenbaum, D. (1977). Cognitive-behaviour modification: An integrative approach. New York, NY: Plenum Press.
- Milich, R., & Kramer, J. (1984). Reflections on impulsivity: An empirical investigation of impulsivity as a construct. In K. Gadow & I. Bialer (Eds.), Advances in learning and behavioral disabilities (pp. 57-94). Greenwich, CT: JAI Press.
- Milich, R., Hartung, C. M., Martin, C. A., & Haigler, E. D. (1994). Behavioral disinhibition and underlying processes in adolescents with disruptive behavior disorders. In D. K. Routh (Ed.), *Disruptive behavior disorders in childhood* (pp. 109-138). New York, NY: Plenum Press.
- Mischel, W., Shoda, Y., & Peake, K. (1988). The nature of adolescent competencies predicted by preschool delay of gratification. *Journal of Personality* and Social Psychology, 54(4), 687-696.
- Newman, J. P., Patterson, C. M., & Kosson, D. S. (1987). Delay of gratification in psychopathic and nonpsychopathic offenders. *Journal of Abnormal Psychology*, 96, 145-148.

- Parker, J. D. A., Bagby, R. M., & Webster, C. D. (1993). Domain of the impulsivity construct: A factor analytic investigation. *Personality and Individual Differences*, 15(3), 267-274.
- Parker, J. D. A., & Bagby, R. M. (1997). Impulsivity in adults: A critical review. In C. D. Webster & M. A. Jackson (Eds.), *Impulsivity: Theory, assessment, and treatment*. New York, NY: Guilford Press.
- Patterson, M., & Newman, J. P. (1993). Reflectivity and learning from aversive events: Towards a psychological mechanism for the syndromes of disinhibition. *Psychological Review*, 100(4), 716-736.
- Presse, L. D. (1984). Cognitive factors in psychopathy: Attention control and impulsiveness. Doctoral Thesis, Queen's University, Kingston, ON.
- Putnins, A. L. (1982). The Eysenck Personality Questionnaires and delinquency prediction. *Personality and Individual Differences*, 3, 339-340.
- Roberts, A. H., Erikson, R. V., Riddle, M., & Bacon, J. G. (1974). Demographic variables, base rates, and personality characteristics associated with recidivism in male delinquents. *Journal of Consulting and Clinical Psychology*, 42(6), 833-841.
- Robinson, D. (1995). The impact of cognitive skills training on post release recidivism among Canadian federal offenders. Research Report R-41, Ottawa, ON: Correctional Service Canada.
- Ross, R. R., & Fabiano, E. 1985. *Time to think: A cognitive model of delinquency prevention and offender rehabilitation*. Johnson City, TN: Institute of Social Sciences and Arts.
- Rowe, R. C. (1997). *The nature of impulsivity and the development and persistence of anti-social behaviour*. Comprehensive examination submitted to Carleton University, Ottawa, ON.
- Rowe, R. C. (2000). Self-report measures of impulsivity in a federal offender sample. Unpublished manuscript. Ottawa, ON: Carleton University.
- Saunders, J. T., Reppucci, N. D., & Sarata, B. P. (1973). An examination of impulsivity as a trait characterizing delinquent youth. *American Journal of Orthopsychiatry*, 43(5), 789-795.
- Sherman, L. W., Gottfredson, D. C., MacKenzie, D. L., Eck, J., Reuber P., & Bushway, S. D. (1997). *Preventing crime: What works, what doesn't, what's promising*. Washington, DC: Office of Justice Programs, U.S. Department of Justice.
- Silva, F., Martorell, C., & Clemente, A. (1986). Socialization and personality: Study through questionnaires in a preadult Spanish population. *Personality* and Individual Differences, 7, 355-372.
- Stanford, M. S., & Barratt, E. S. (1992). Impulsivity and the multi-impulsive personality disorder. *Personality and Individual Differences*, 13(7), 831-834.
- Vennard, J., Sugg, D., & Hedderman, C. (1997). Changing offenders' attitudes and behaviour: What works? London, UK: Research and Statistics Directorate, Home Office.
- Wardell, D., & Yeudall, L. T. (1980). A multidimensional approach to criminal disorders: The assessment of impulsivity and its relation to crime. Advances in Behaviour Research and Therapy, 2(4), 159-177.
- Wender, P. H., Wood, D. R., & Reimherr, F. W. (1991). Pharmacological treatment of attention deficit disorder, residual type (ADD-RT) in adults. In L. L. Greenhill & B. B. Osman (Eds.), *Ritalin: Theory and patient management* (pp. 25-33). New York, NY: Mary Ann Liebert Inc.
- White, J. I., Moffitt, T. E., Caspi, A., Bartusch, D. J., Needles, D. J., & Stouthamer-Loeber, M. (1994). Measuring impulsivity and examining its relationship to delinquency. *Journal of Abnormal Psychology*, 103(2), 192-205.
- Wilson, J. Q., & Herrnstein, R. J. (1985). Crime and human nature. New York, NY: Simon & Schuster.
- Zamble, E., & Quinsey, V. L. (1997) The criminal recidivism process. Cambridge, UK: Cambridge University Press.

CHAPTER 16

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When attention is turned to work with offenders with mental disorder, the position regarding "what works" regrettably is much less clear. There are several possible reasons for this. Whilst there has been a great deal of research on the relationship between crime and mental disorder, the quantity of data available concerning treatment outcomes is much smaller. At the same time, the explanatory models required are significantly more complex. Recently however, a number of major reviews has appeared which have enabled some progress to be made in deciphering the complexities of the field.

The overall objective of this chapter is to review evidence concerning treatment of offenders with mental disorder, and its content is organized in three main sections. First, some definitions will be considered. The field under discussion is replete with conceptual confusions and it is essential to begin by clarifying key terms. It will also be useful to consider some of the difficulties that arise in researching this field and the issues that emerge when doing so.

The second section will focus on outcomes. Some of the data relevant to this has been obtained from retrospective studies of the long-term recidivism rates of offenders with mental disorder discharged from institutions. This work is closely inter-related with research on risk assessment and prediction with this group of offenders. The number of studies available concerning treatment itself is far lower than that relating to recidivism in general. Given some of its complexities it will be divided into separate sub-groups, though there is no satisfactory way of doing this without some inevitable overlaps.

In the third section we will turn our attention to the management of offenders with mental disorder and the general question of inter-agency and multi-disciplinary working in the provision of services to them. Finally, the overall implications of the research reviewed in the chapter will be summarized. Some tentative suggestions will be assembled regarding practice, policy and future research.

PROBLEMS OF DEFINITION

The criminological literature is replete with debates over how precisely to define *crime*. The recording of crime is an outcome of a complex series of decisions made by citizens, police officers, lawyers, and courts. Crime statistics are now viewed as only one indicator of the rate or distribution of crime in a society, that must be supplemented by other data such as victim surveys for a more comprehensive picture to be assembled. Some criminologists contend that the process of defining crime is itself an essential subject of study. According to this argument, the language and concepts that society employs to discuss crime create its boundaries and form part of the public conception of what society is.

Similarly, in the field of mental health and disorder there are controversies regarding how to define the basic phenomena under discussion. *Health* is itself an extremely elusive concept. The dominance of medicine and psychiatry in the study of mental health has resulted in the primary mode of definition in the field being the use of *diagnosis*. Emulating the process of diagnosis in physical medicine, in psychiatry it is intended to serve four main functions: description, classification, and taxonomy; provision of a causal model for understanding a disorder; prognosis, or the prediction of the likely progress and outcome of an illness; and decision-making with regard to therapeutic interventions (Eastman, 2000).

To accomplish such objectives, elaborate systems of classification have been established. Two are of paramount interest as they are pre-eminent in influencing the work of psychiatrists and allied professionals. These are the *Diagnostic and Statistical Manual* (DSM) of the American Psychiatric Association, and the *International Classification of Diseases* (ICD) of the World Health Organisation. Both have undergone processes of revision. The current version of the APA system, DSM-IV, was published in 1994; the most recent revision of the WHO system, ICD-10, was published in 1992. There are important differences between the final set of categories used in the two systems.

Undoubtedly, some types of mental disorder have a clear and well-established underlying organic pathology (for example, toxic confusional states; degenerative brain disease; seizure disorders; traumatic brain injury; see Lishman, 1997). However, it has frequently been pointed out that in many other cases, and especially with reference to the more prevalent "functional" disorders, this is not so: and that classification systems such as the DSM are not founded on a theoretical model of the disorders they subsume (Mechanic, 1999). Indeed for the majority of the conditions identified under DSM, there is simply no known organic aetiology (Pilgrim & Rogers 1993).

The process of applying diagnostic categories to mental health problems has been a matter of some controversy for many years. Critics have included psychiatrists themselves such as Szasz (1961)

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who questioned whether psychiatric illnesses could be said to "exist" in the way that the word might be used with reference to physical disease. More recently, the usage of diagnosis has been questioned on several grounds. For example, Kutchins and Kirk (1997) have commented on the over-inclusiveness of concepts involved in the DSM system. To objections of this kind, Wing, Sartorius, and Üstün (1998) have replied that description and classification are merely the first stages of scientific investigation of mental disorders, which in due course will yield findings concerning the causal factors responsible for the disease (at least for some kinds of disorder).

Clark, Watson, and Reynolds (1995) have forwarded other objections to DSM-IV as a nonsological system. These authors reviewed evidence showing a high degree of *comorbidity* of different DSM diagnoses. In general community survey samples, very high proportions of those diagnosed as suffering from generalized anxiety disorder, panic disorder, social phobia, schizophrenia, depression, and alcohol dependence had at least one comorbid condition. This problem occurs alongside considerable *heterogeneity* within diagnostic categories. Many classes of diagnosis contain a wide variety of symptom patterns and patient types. In other words, two patients with the same DSM-IV diagnosis may differ very significantly from one another. For borderline personality disorder, they may share nine different personality traits in common, or alternatively, only share one, and yet still meet the criteria for the diagnosis.

Blashfield and Fuller (1996) have analyzed the political and economic context from which the DSM approach has emerged. They illustrate their argument by attempting to predict some key characteristics of the next version of the system. Extrapolating from previous manuals, they predicted that DSM-V will contain 1,026 pages and run to 415,000 words. It will define 390 disorders, encompassing 1,800 diagnostic criteria, and will yield an income of US\$80 million for the American Psychiatric Association. Kutchins and Kirk (1997) have depicted the utilisation of DSM as a form of imperialist or expansionist exercise, in which virtually any behaviour might at some stage be classifiable as a form of mental disorder. Some psychiatrists such as Breggin (1991) have adduced evidence of links between the biomedical understanding of individual distress and the prescription of inappropriate somatic treatments which have given rise to major professional and ethical concerns.

An alternative approach that has been offered principally by clinical psychologists is the concept of *case formulation* (Bruch & Bond, 1998; Eels, 1997; Persons, 1989; Turkat, 1985). This refers to the development in individual cases of a theoretical model that will serve to explain the functional inter-connections between

background, personal, and situational variables on the one hand, and long-term problems and presenting symptoms on the other. However, critics have questioned whether this can genuinely provide an alternative to the use of syndromes as a method of classifying and thereby understanding the inter-relationships of disorders (Hayes & Follette, 1992).

The foregoing discussion has been included in order to emphasize that the use of terms in this area is fraught with dangers and sources of confusion. In practice, the majority of published research papers have adopted the use of psychiatric diagnosis as a means of defining study samples, and authors are likely to be criticised where this aspect of their work has not been made sufficiently clear.

Obstacles in research and evaluation

The reasons for the comparatively fewer number of outcome studies in this field probably reside in the sheer difficulty of conducting the required research. First, in almost any kind of research on interventions with offenders, locating appropriate comparison groups is problematic. Controlled trials are relatively uncommon. Quasi-experiments are much more typical, and many studies fall below that standard. This applies even more cogently with reference to obtaining comparative samples for groups of offenders with mental disorder. Second, mentally disordered offender clients almost by definition have severe and enduring disorders, and thus are often hospitalised for long periods. A lengthy follow-up period is therefore required for the efficacy of interventions to be judged. Third, the target behaviours of concern are acts of violence or other forms of extreme anti-social conduct. Though their impact is self-evidently very serious, they generally occur at a lower frequency than many other types of crime, and may do so only at widely dispersed intervals. In a follow-up of participants in the MacArthur Violence Risk Assessment Study, a multi-centre project in which data was collected on patients at 10-week intervals for a period of 12 months, Steadman, Mulvey, Monahan, Robbins, Appelbaum, Grisso, Roth, and Silver (1998) found that the rate of violence for study groups was no higher than that for comparison community samples in the same neighbourhoods.² Finally, there are ethical issues in the conduct of research that arise possibly with greater potency here than in many other spheres of research. These include questions of confidentiality; of obtaining informed consent for participation; and of compliance versus coercion in provision of treatment.

THE RELATIONSHIP BETWEEN MENTAL DISORDER AND CRIME

These difficulties notwithstanding, considerable effort has been expended in trying to clarify the relationship between mental disorder and crime. The fundamental question is: Does suffering from mental disorder represent an increased risk for committing acts of violence or other forms of crime? Surveys addressing this question have taken two approaches: measurement of the prevalence

² This pattern changed for patients with substance abuse problems. For patients with substance abuse problems and community members reporting substance abuse there was an increased rate of violence; and overall a higher proportion of patients reported substance abuse.

of mental disorder amongst those convicted of crimes, and of criminality amongst those diagnosed as mentally disordered.

Three caveats should be borne in mind when exploring the literature in this field. First, those who already come to the attention of the correctional or mental health services are unlikely to be representative of the community as a whole. This gives rise to a distinction used by epidemiologists between underlying or true rates of pathology, and treated rates (i.e., rates as officially reported in health clinics, or recorded by the criminal justice system). Research in this area has been plagued by sampling biases and errors (Blackburn, 1993). Second, epidemiological data showing overlapping categories or even statistically significant correlations between mental disorder and criminal acts must be interpreted cautiously, and cannot in itself demonstrate that the two are causally or functionally inter-connected. Third, it is not possible to extrapolate from large-scale, aggregate-level samples to individual-level data. Whether or not relationships between mental disorder and crime are found in surveys or other studies of prevalence, they must still be assessed on a case-bycase basis with individual offenders.

Numerous investigations have been conducted in attempting to resolve these issues, and to clarify the crime-mental disorder relationship, with conclusions that have varied somewhat at different points in time. Following what has been called the "first generation" of risk assessment studies (Melton, Petrila, Poythress, & Slobogin, 1998), there was a broad consensus to the effect that mental disorder posed little if any elevated risk for committing crime. This was reinforced in literature reviews, for example, Monahan and Steadman (1983) reviewed 200 studies bearing on this question. Their conclusion was that "...*rates of true and treated criminal behavior vary independently of rates of true and treated mental disorder...the correlates of crime amongst the mentally ill appear to be the same as the correlates of crime among any other* group: age, gender, race, social class, and prior criminality" (p. 181).

These findings run counter to a popular misconception concerning the "dangerousness" of persons suffering from mental disorders, which as a result of comparatively rare but widely publicized incidents, remains firmly entrenched in the public imagination. Paradoxically, in the United Kingdom for example, a recent retrospective analysis has shown that the number of killings by offenders with mental disorder has actually been steadily declining over a 38-year period (Taylor & Gunn, 1999). That psychiatric patients do not in general pose an increased risk of violence in the community is further supported by the findings of the MacArthur studies cited earlier (Steadman et al., 1998).

But during the 1990s, by contrast, new evidence led to some revision of these conclusions. Wessely and Taylor (1991) sought to discern the reasons for conflicting findings in the field by explaining them in terms of differing research strategies adopted within criminological and psychiatric frameworks respectively. These authors also reviewed studies showing that in the two weeks prior to admission to hospital, many patients subsequently diagnosed as suffering from psychosis had perpetrated acts of violence.

Taking the emerging evidence into account, Monahan (1993a) commented that the conclusions of his earlier review (Monahan & Steadman, 1983) were "...at least premature, and may well be wrong" (1993a, p.287). The key evidence influencing this came in the form of data from the Epidemiological Catchment Area studies, a large-scale survey of psychiatric morbidity (Swanson, 1994; Swanson, Holzer, Ganju, & Jono, 1990). This study employed a community sample of 10,059 respondents from three American cities. Participants were administered the Diagnostic Interview Schedule which included questions concerning whether they had engaged in any act of violence in the preceding 12 months. Whereas only 2.1% of sample members found to have no mental disorder reported violence, those diagnosed as suffering from schizophrenia reported a rate of 12.7%, and those with drug dependence 34.7%.

Further research by Link and his colleagues (Link, Andrews, & Cullen, 1992; Link & Stueve, 1993) showed that almost all the difference in rates of violence between patient and non-patient samples could be accounted for by psychotic symptomatology. The specific symptoms most closely associated with violence risk were paranoid delusions, and especially those in which individuals feel threatened because their own self-controls are being invaded by external forces. Link and Stueve (1993) called this pattern of phenomena threat/control-override (TCO) symptoms. When the basis of these perceptions and feelings was understood, the reasons why an individual might become violent became understandable. They called this the principle of rationalitywithin-irrationality. Quinsey and his colleagues (1998) also obtained evidence of temporal linkage between these symptoms and violent offences. Other research has shown that depending upon their content, and on aspects of the situation, command hallucinations may also be associated with the occurrence of acts of violence (McNiel, 1994).

The most recent and thoroughly conducted research suggests that mental disorder may pose an increased risk of some serious crimes, but only in specific ways or certain circumstances. As we will see in the next section, a clinical diagnosis of psychotic illness is unrelated to, and has been found to be negatively correlated with, risk of future general recidivism (Bonta, Law, & Hansen, 1998). Indeed globally, there is little evidence to suggest that a diagnosis of mental disorder in itself is clearly linked to increased occurrence of any specific type of crime. Furthermore, as pointed out by some authors, individuals suffering from schizophrenia are a significantly greater risk to themselves than to anyone else. But certain indicators of psychosis, most notably TCO symptoms, are associated with an increased risk of violence.

Although these kinds of findings pertain to symptoms of serious mental disorder and their links to criminal offending, in some respects they are not unlike other results obtained by Zamble and Quinsey (1997) from their study of recidivist offenders returning to Canadian prisons after a further re-conviction. Part of this work involved exploration of the circumstances of offenders across a period of one month prior to new offences. For the majority of the sample there was evidence of dysphoric states, personal instability, stressful events, and failure of coping mechanisms during that period, and particularly in the 48 hours leading up to the offence. If we accept that mental disturbance can be conceptualized as occurring on a continuum of severity, then personal and emotional upheaval due to stress or difficulties in coping can be considered as one point on it. The sense of personal disintegration that is characteristic of delusional states may be a more extreme manifestation of similar processes.

In a review of the most recent research in this area from a psychiatric standpoint, Crichton (1999) concluded that "...the relationship between mental disorder and crime is small and easily obscured by more influential criminological factors" (p. 670). There is evidence that a dual diagnosis of psychosis and substance abuse disorder is associated with an increased risk of violence (Swanson, Estroff, Swartz, Borum, Lachicotte, Zimmer, & Wagner, 1997). Beyond this, the causal links are likely to be highly specific: it is only certain symptoms of psychoses, such as persecutory delusions or command hallucinations, that are associated with heightened risk of violence (O'Kane & Bentall, 2000).

There is evidence that these links are moderated by social and contextual factors (See Hiday, 1997). In a recent follow-up study of rates of violence amongst patients discharged to different neighbourhoods differing in levels of affluence, Silver (2000) found that environment was a better predictor of violence risk than clinical or psychological variables. This study also clarified the interaction effects of ethnic group, neighbourhood and occurrence of violent incidents. Stratified by socio-economically equivalent neighbourhoods, there were no differences between ethnic groups (caucasian vs. black) in rates of violence. However, there were differences in rates of violence between neighbourhoods at different levels of affluence. As is often found, black populations were over-represented in more deprived neighbourhoods. The net effect of this was that when comparisons were made across the entire sample, a spurious relationship appeared between ethnic group membership and violence.

Mental disorder in offender populations

It is important in correctional services to have information concerning the mental health problems of offenders. Particularly in prison, stress may activate underlying problems or exacerbate existing ones, with accompanying risks of deterioration, and potentially of self-harm or even suicide. This is of course a major healthcare issue in its own right and should form part of a needs assessment in any correctional setting, quite apart from any relevance it may have for understanding potential mental disorder-crime relationships.

In studies carried out in custodial settings, numerous researchers have found sizeable levels of mental health problems amongst inmate populations. This has emerged in several North American studies. For example, amongst penitentiary inmates in Canada both Hodgins and Côté (1990), and Motiuk and Porporino (1991) found significant proportions of inmates suffering from major mental disorders. The latter study involved the administration of the Diagnostic Interview Schedule to a large, stratified and representative sample from institutions in each of the five regions of the Correctional Service of Canada. In Ontario, for example, proportions of those meeting DSM criteria for various disorders were as follows: psychosis, 8.6%; major depression, 11.9%; generalized anxiety disorder, 27.9%; drug dependence, 36.7%; anti-social personality disorder, 59.0%; and alcohol dependence, 69.1%. Note that here, as in other surveys of this type, and as indicated in broader context above, there was a sizeable degree of comorbidity within the samples studied.

Similar findings have been obtained in the United Sates. Steadman, Fabisiak, Dvoskin, and Holohean (1989) conducted a survey of 3,332 inmates in New York State. Of this group, 8% were found to suffer from severe psychiatric disorders, with an additional 16% being found to suffer from other disorders requiring less intensive but nevertheless periodic treatment. Amongst a random sample of 728 male admissions to a county jail, Teplin (1990) found that 6.4% met diagnostic criteria for major mental disorders such as schizophrenia, mania, or clinical depression. In a parallel study with women inmates, Teplin, Abram and McClelland (1996) found that an even higher rate (15%) met diagnostic criteria. Comparable findings have also been obtained in the United Kingdom, amongst both convicted inmates (Gunn, Maden, & Swinton, 1991) and those held on remand awaiting trial (Brooke, Taylor, Gunn, & Maden, 1996).

Lamb and Weinberger (1998) recently reviewed this field. Overall, these authors found that the proportion of inmates held in local US jails diagnosed as suffering from severe mental disorders ranged from 6% to 15%, with a still higher average proportion (10% to 15%) so diagnosed in state prisons. Further, several studies suggested that "...a large proportion of mentally ill persons who commit criminal offences tends to be highly resistant to psychiatric treatment" (1998, p. 487).

Inmates with mental disorders, particularly psychosis, appear to have fewer opportunities in their prospects of release. Porporino and Motiuk (1995) compared a group of mentally disordered inmates with a matched non-disordered group. Though their criminal histories were in other respects equivalent, the former group was given fewer opportunities for parole or early release. They were also more likely to have their parole revoked as a result of violating conditions of supervision; yet the non-disordered group were more likely to commit a new offence while under supervision.

In one sense, the question of whether there is a relationship between mental disorder and crime might seem to be of academic interest only. A prime concern of managers and practitioners in correctional services is with assessment and prediction of risk of future reoffending. Considerable effort has been expended in attempting to discern those features of offenders that may be used as indicators in this respect.

OUTCOME RESEARCH

Retrospective studies of long-term recidivism

Numerous retrospective studies have been reported which can be described as "naturalistic", in that they consisted of follow-up of samples of patients discharged from secure conditions. Their subsequent rates of "failure", defined as re-arrest, re-conviction, relapse, or re-admission to institutions (prison or hospital) were monitored for varying periods up to several years afterwards. In some instances, it has been possible to use multivariate statistics to disentangle factors predictive of differential outcomes.

In the United States, studies of this kind were undertaken of groups collectively known as the "Baxstrom" and "Dixon" patients. These were sizeable numbers of patients who, against psychiatric advice, were discharged from hospital following a 1966 ruling by the Supreme Court to the effect that Johnny Baxstrom, a resident of a long-stay hospital, had been wrongfully detained. Follow-up studies in several states (e.g., Steadman & Keveles, 1972; McGarry & Parker, 1974) showed the rates of re-arrest and re-incarceration of these groups were surprisingly low. Of a sub-sample followed up by Steadman and Keveles, only 17% had been arrested during a four-year period after discharge. Only 2.2% were returned to secure hospitals and less than one per cent to prison. Similar figures emerged from other studies of comparable patient groups.

However, the mean age of the Baxstrom sample was 47, while that of the proportion of the sample who reoffended was much lower. In Canada, Quinsey, Warneford, Pruesse, and Link (1975) obtained parallel findings from a sample of 91 patients released from Oak Ridge (a maximum security facility in Ontario) between 1967 and 1971. The mean age of these patients on discharge was 32. A total of 38% of the sample committed new crimes, though the proportion re-convicted of violent offences was 16.5%. Factors associated with greater likelihood of reconviction included being diagnosed as suffering from a personality disorder, and being unmarried. The only variable associated with subsequent violence was a history of prior violence. A broadly consistent pattern emerges from later follow-up studies of this type with respect to both men (Hodgins, 1983; Hodgins & Gaston, 1989) and women offenders (Hodgins, Hébert, & Baraldi, 1986) in Canada, and in studies with similar designs conducted elsewhere (Bieber, Pasewark, Bosten, & Steadman, 1988; Bogenberger, Pasewark, Gudeman, & Beiber, 1987; Pasewark, Bieber, Bosten, Kiser, & Steadman, 1982).

A total of eight follow-up studies of this kind has been carried out with patients discharged from high-security units (known as "special hospitals") in the United Kingdom (Bailey & MacCulloch, 1992a, 1992b; Black, 1982; Brewster, 1998; Buchanan, 1998; Dell, 1980; Gathercole, Craft, McDougall, Barnes, & Peck, 1968; Tennent & Way, 1984; and Tong & Mackay, 1958). In all these studies, the re-admission or reoffending rates amongst the samples studied are lower than might be expected, given what may be assumed to be the seriousness of offences which warranted incarceration, and the likely severity of other problems (including marked mental disorders) amongst the populations studied. When contrasted with criminological data concerning non-mentally disordered samples (for example, released inmates), the observed recidivism rates are comparatively low.

All these reports were published and based on data collected over a lengthy span of time between the 1950s and 1990s. Consequently, it is difficult to make valid comparisons between them, given the probable dissimilarities between the types of patients detained in secure hospitals during these successive decades. None of the studies incorporates an appropriate control group with which a meaningful comparison can be made, nor are there any predictor scales (as have been developed for general offending populations) with which the impact of hospitalization and treatment can be properly evaluated.

Yet some notable patterns emerged after further analyses. In the studies by Bailey and MacCulloch (1992a, 1992b), there are higher recidivism rates amongst those classified as suffering from psychopathic disorder; and the differences between members of this group given conditional and absolute discharges provides some indications concerning better and poorer risk categories for release and follow-up. The latter findings accord with others reviewed by Lösel (1998) concerning this category of clients.

Buchanan (1998) carried out a more elaborate analysis of data on a sample of 425 discharged patients followed for a period of up to 10 years. Overall, the findings suggested that those more likely to recidivate were younger, more heavily convicted prior to admission, and likely to be classed as suffering from psychopathic disorder in terms of relevant legislation (the *Mental Health Act*, 1983). There were weaker associations with gender (women less likely to be re-convicted) and discharge destination (reconviction rates were lower amongst those discharged to other hospitals than amongst those sent home or to a community setting).

Overall, when searching for evidence concerning factors associated with success or failure with this offender group, it is necessary to make inferences on the basis of retrospective analyses in which details of follow-up histories are linked to prior characteristics of samples. There are no well-designed, properly controlled prospective studies of treatment regimes or of mentally disordered offender-patients given different types of treatment whilst detained in secure settings. With regard to the overall debate on the feasibility of predicting recidivism and the accuracy with which this can be accomplished, Bonta, Law, and Hansen (1998) recently reported important findings. These authors conducted a meta-analytic review of long-term follow-up studies, to establish which factors were the best predictors of criminal and violent recidivism amongst this offender group. The set of studies they found incorporated 68 independent samples (a total sample size of 15,245). Predictors were classed into four groups: *demographic*; *criminal history, deviant lifestyle* and *clinical factors* (including psychiatric diagnosis). The general finding, as shown in Table 16.1, was that the most accurate predictors were demographic or criminal history variables: indeed the overall pattern obtained was a close parallel to that typically found with non-mentallydisordered offender populations.

TABLE 16.1 Predictors of recidivism amongst offenderswith mental disorder (from Bonta, Law, & Hansen, 1998)

Category of predictor	General recidivism	Violent recidivism
Demographic	0.12	0.12
Criminal history	0.08	0.15
Deviant lifestyle	0.07	0.08
Clinical	-0.02	-0.03

Bonta et al. also found that the poorest predictors of recidivism were clinical variables. Most notably, although a DSM diagnosis of anti-social personality disorder was associated with a greater risk of future criminality, no other diagnostic category, including that of psychosis, emerged as significant: the latter was in fact negatively correlated with future recidivism. If these findings are correct, the intervention approaches adopted in work with offenders in general may be equally applicable to clients with mental disorders. It is highly likely that such clients would also require further services in addition: including both therapies for other mental health problems, and potentially, additional treatments focused upon alcohol abuse (Rice & Harris, 1995), or on symptoms associated with risk of relapse (Greenwood, 1995; O'Kane & Bentall, 2000).

As noted earlier, the quantity of evidence with a direct bearing on treatment of offenders with mental disorder is considerably less than that available on offender treatment in general. Similarly, the amount of mental health outcome research with this group is also fairly limited. To make headway in addressing this problem, one possibility is that we attempt to chart the anticipated outcomes of treatment with this group of offenders through a process of "triangulation". Several sets of evidence might form the cornerstones of such an inquiry. They consist of evaluative studies of psychological therapies for treatment of mental health problems, including major mental disorders; the research literature on treatment of offenders and reduction of general recidivism; and a smaller quantity of direct evidence concerning the impact of interventions with this group. The latter however remains extremely difficult to interpret. The objective of this process is to extract any pattern of evidence that might provide indications as to "what works" with mentally disordered offenders.

General effectiveness of psychological therapies

Several major reviews have confirmed overall positive effects of psychological therapies for many types of mental health problems (Lambert & Bergin, 1994; Roth & Fonagy, 1996). In a panoramic review of 302 meta-analyses of outcome studies of psychological interventions, Lipsey and Wilson (1993) found positive mean effects for a large number of treatment methods with a wide range of specified targets. For many years it was believed that if psychotherapy did have effects, they were probably due to underlying common factors (such as the creation of a supportive therapeutic relationship) and no differential effects could be discerned to support a claim that some treatments were better than others. But more recent reviews of controlled-trial studies have indicated that it is possible to identify superior outcomes following application of some types of therapies with some types of clinical problems. This has led to the emergence of what have been called *empirically supported* treatments (Dobson & Craig, 1998; Nathan & Gorman, 1998; Kendall & Chambless, 1998). This term designates interventions that are supported by consistent evidence from controlled trials, and that could therefore be recommended to practitioners as "treatments of choice" for a given disorder. However, powerful counter-arguments have also been made against such claims. For example, it has been stated that the circumstances of treatment in most mental health clinics are so dissimilar to the conditions achieved in controlled trials that they render it almost impossible to translate the findings of such studies into practice. Therefore, the implications of research for delivery of therapy services in ordinary clinical settings remain highly controversial (Fishman, 1999; Persons & Silbersatz, 1998).

Treatment approaches with mentally disordered offenders

The standard and most widely used treatment approaches with many mental health problems involve psychopharmacological therapies. Since the discovery of the major tranquillizers (neuroleptics) in the 1950s, significant advances have been made in the development of chemical agents for reduction of symptoms amongst a wide range of clinical disorders. The use of medication for the treatment of anxiety, depression, obsessive-compulsive disorder, bipolar disorder, psychoses, substance abuse and many other mental health problems is now widespread. Reviews of outcome studies have indicated the value of these therapies for some major mental disorders. Neuroleptic medication is widely used for reduction of the more severe symptoms of psychosis, such as delusions, hallucinations, and thought disorder (Nathan & Gorman, 1998). Simultaneously, a meta-analytic review of 22 controlled trials has shown that there is no simple, direct relationship between severity of symptoms and dosage effects (Bollini, Pampallona, Orza, Adams, & Chalmers, 1994). This study showed that, beyond a certain dose level, there were no additional therapeutic benefits but a significant increase in unwanted side-effects (such as tardive dyskinesia). The new generation of neuroleptics (e.g., *Clozapine*) has more specific symptom-relieving effects and reduced risk of adverse reactions. These drug regimes however require careful, individualized modulation and a proportion of those administered them are "treatment-resistant".

Psychosocial methods have also been used for treatment of many of these problems and have met with considerable success. Often, patients prefer them as they do not have associated side effects, avoid risks of dependence and place more control in the hands of the service user. Successful psychological treatments include a number of behavioural, cognitive and cognitive-behavioural therapies; interpersonal therapy; family systems interventions and therapeutic communities. In the majority of work with mentally disordered offenders, the commonest pattern is for a mixture of pharmacological and psychological interventions to be employed.

Psychological treatment of psychotic symptoms

A number of treatment studies have shown that it is feasible to apply cognitive-behavioural interventions to the reduction of delusional belief, but most have entailed single-case experimental designs (Hartman & Cashman, 1983; Milton, Patwa, & Hafner, 1978; Watts, Powell, & Austin, 1973). However, some have reported on the application of such methods in group settings (Garety, Kuipers, Fowler, & Chamberlain, 1994; Tarrier, Beckett, Harwood, Baker, Yusupoff, & Ugarteburu, 1993). During the mid-1990s this literature was assembled with additional studies in the edited books by Fowler, Garety and Kuipers (1995) and Chadwick, Birchwood and Trower (1996).

The presence of paranoid symptomatology and feelings of being threatened or controlled is understandably associated with experience of anger, which may be a direct precursor of aggression and precipitation of acts of violence (Novaco, 1994; O'Kane & Bentall, 2000). Reviews of the relevant literature have also suggested that effective interventions exist or can be developed for individuals with low self-control of anger problems (Edmondson & Conger, 1996; Novaco, 1997). While indications have been given of the potential value of this intervention with mentally disordered offenders (Stermac, 1986), only limited outcome studies on the use of this strategy with mentally disordered offenders have appeared (Renwick, Black, Ramm, & Novaco, 1997). There is also firm evidence of treatment gains from the application of social skills training and allied methods to help overcome "negative" symptoms of schizophrenia such as social withdrawal and isolation, flatness of affect and emotional inexpressiveness. In a meta-analysis of 27 studies concerning this, Benton and Schroeder (1990) found a mean effect size of 0.76.

Community management of offenders with major mental disorders

The paucity of well-controlled treatment trials in this area does not mean that there is no evidence that might indicate the usefulness of interventions. Heilbrun and Griffin (1998) reviewed a series of 15 evaluative studies that fell roughly into two groups. The first included studies of community-based psychiatric treatment with mentally disordered offenders (patients found Not Guilty by Reason of Insanity). The second comprised evaluative studies of supervision of clients with mental disorders placed on probation or parole. The methodology in several of these studies consisted of post-hoc analyses of factors that appeared to be predictive of differential outcomes for patients. The principal criteria employed were re-arrest for new offences or re-admission to hospital; though other indicators too were sometimes utilized, such as symptom reduction, clinical progress, community adjustment, and rates of revocation of parole conditions. Eight of the studies included comparison groups. Heilbrun and Peters (2000) have reported an extension and updating of this review. In these reviews, the authors noted that the results that are available come from a relatively small number of sites; and only two studies were located that approximated the methodology of a controlled trial, so precluding the use of meta-analysis (Silver, Cohen, & Spodak, 1989; Wiederanders, 1992).

Some follow-up studies allowed the making of comparisons between discharged patients allocated to different forms or levels of intensity of community supervision (Bloom, Bradford, & Kofoed, 1988; Bloom, Rogers, Manson, & Williams, 1986; Bloom, Williams, & Bigelow, 1991; Bloom, Williams, Rogers, & Barbur, 1986; Tellefsen, Cohen, Silver, & Dougherty, 1992; Wiederanders, Bromley, & Choate, 1997). However the findings are often very difficult to interpret (McGuire, 2000). One reason is that in many evaluations, comparisons are made between dissimilar jurisdictions (for example, different American states) in which it is not known whether staff practices regarding case management and recall were equivalent. Another is that, in some instances in which patients are allocated to an Assertive Case Management service, there has been evidence that the case managers are more likely to re-incarcerate clients for less serious violations of their release conditions. From other, less well-controlled or single sample studies, some indications emerged that intensive case management has beneficial effects. Generally, re-arrest rates on conditional release were found to be comparatively low (ranging from 2% to 16%). An average of 3.9 reasons was given when clients were made subject to parole revocations (recalled to hospital).

In some respects these findings are not dissimilar to those obtained by Petersilia and Turner (1993) from their evaluation of intensive supervision programs in probation or parole. Higher levels of surveillance or scrutiny were associated with higher levels of technical violation and therefore resulted in higher apparent rates of failure amongst experimental samples. Despite such misgivings, for mentally disordered offenders the evidence concerning the usage of aggressive or assertive case management has been generally regarded as positive (Dvoskin & Steadman, 1994; Heilbrun & Peters, 2000).

Treatment as a variable

It is disappointing that, in their meta-analysis, Bonta et al. (1998) found only 14 studies that included treatment as an independent variable. There was no overall positive evidence of treatment effects on general recidivism within these studies; the mean effect size was just below zero (-0.03) based on a combined sample of 3,747 participants. Problems of design and methodology, for example the absence of appropriate comparison groups, once again made the findings difficult to interpret in this respect. Nevertheless, while some studies reported negative results, others obtained findings that showed institutionally-based intervention had positive effects. Such results have come from a number of countries including Italy (Russo, 1994), Sweden (Belfrage, 1991), the United Kingdom (Reiss, Grubin, & Meux, 1996) and the United States (Hartstone & Cocozza, 1983; Jew, Kim, & Mattocks, 1975). It remains problematic, however to give anything other than preliminary indications of what might contribute to "success" with this group. Research suggests that the most "likely-to-succeed" interventions will be broadly similar to those applied with non-disordered offender groups.

Offenders with personality disorders

The group of offenders who not uncommonly cause the greatest concern are those diagnosed as suffering from personality disorders, and especially anti-social personality disorder or psychopathy. This collection of attributes consistently emerges as one of the most accurate predictors of future risk of violence. Reviewers of relevant research have contended that some combined measure incorporating structured assessment of it " ... might be necessary for the prediction of violent recidivism" (Quinsey, Harris, Rice, & Cormier, 1998, p. 168). While there continues to be disagreement over the precise meaning of these labels and on the nature of any underlying clinical entity, a sizeable volume of evidence links the proposed features of such a syndrome to greater risk of recidivism. Serin (1995) has discussed issues of responsivity and treatment resistance with this group, but also noted longitudinal evidence concerning decreasing proportions of study samples that retain diagnostic features as time progresses. This is amplified in a recent study by Sanislow and McGlashan (1998) who reviewed 44 studies of the natural course of personality disorders including anti-social personality disorder. Rather than finding a fixed, immutable pattern as was previously expected, this review showed a pattern of changeability over time. These authors and others (Bateman & Fonagy, 2000; Blackburn, 2000; Lösel, 1998; Perry, Banon, & Ianni, 1999) have also reviewed available evidence concerning the possibility of effective treatment of this group. Most studies have focused on borderline or avoidant personality disorder where the average treatment effect sizes are much higher than anticipated (Perry, Banon, & Ianni, 1999). However, with reference to anti-social personality disorder, very few controlled evaluations could be found on which to base firm conclusions.

There are tentative suggestions that some behavioural, cognitive-behavioural, and therapeutic community programs may be successful in reducing anti-social behaviour amongst personality-disordered individuals. While to date, little evidence has been found of treatment effects with "primary psychopaths", this is an absence of pertinent data rather than a firm finding that "nothing works" with this group. Lösel (1998) recommends first, that much more and much better research is needed if the treatment issues in this area are to be clarified and advanced. Second, rather than identifying any preferred treatment approaches, he advocated instead the application of a set of principles based more broadly on the large-scale research findings on offender treatment in general, briefly cited above.

In a number of countries steps have been taken towards the identification of populations of offenders with severe personality disorders, thought to constitute a high risk of committing the most serious types of crime including homicide, or grievous physical or sexual assaults. This includes for example Canada's Dangerous Offenders Act (1997) which allows indeterminate detention of certain offenders; the advent of Sexual Predator Commitment legislation, enacted in a number of US states; and proposals for detention of Dangerous People with Severe Personality Disorder in the United Kingdom (Home Office, 1999). Most of these departures are based on the premise that, given the problems of treating such groups and the lack of any firm evidence concerning treatment effects, there is an identifiable clinical sub-group who for all practical purposes can be regarded as untreatable. According to this argument, the only option for their management is that of incapacitation.

Blackburn (2000) has reviewed evidence that calls into question the concept of untreatability of persons diagnosed as suffering from such disorders. Evidence is available from several studies suggesting that those designated as "psychopaths" are capable of forming therapeutic alliances; and are amenable to a number of treatments such that short-term improvements in mental health status have been observed. Longer-term treatment studies to test the hypothesis that the risk levels posed by this clinical group can be reduced, have simply not been carried out.

SERVICE DELIVERY AND INTER-AGENCY WORKING

Community-based services

As neither the technology of risk prediction nor the evidence from treatment research is yet sufficiently refined to allow precise guidance to be given, some agency practice focuses predominantly on the simple avoidance of catastrophe. Following upon the ramifications of the *Tarasoff* case, and the conflict between client-practitioner confidentiality and the duty to warn, Monahan (1993b) provided useful advice on risk containment. The proposed framework revolves around five principles: use of the best-validated procedures for risk assessment; provision of staff training in risk management; preparation of relevant documentation and standardization of practices concerning its usage; development and implementation of policies with respect to these initiatives; and when calamities occur, recourse to effective strategies for damage control.

The patterns which have emerged in attempting to provide effective community care can vary immensely between services, agencies, and localities, both within and between regions of one country, and across national boundaries. In the United Kingdom, the Care Programme Approach was developed to address the difficulty of combining community care with public safety and risk management. This comprises a set of principles and procedures for assessment of clients, setting targets, monitoring progress, recording goal achievement or the reverse, and communicating information between professionals involved in an individual's care. Its implementation is intended to avert many of the previously all too familiar problems of monitoring of risk and of obstacles to inter-agency communication of information. Properly enacted, it could enable agencies to work collaboratively to the maximum benefit of clients and the minimization of risk. Thus, it is widely felt amongst practitioners - and the findings of inquiries lend support to this expectation --- that the key to rehabilitation or community maintenance resides not in individually focused interventions, but in the assembly and delivery of well co-ordinated support services.

Such a development underlines the potentially immense importance of multi-disciplinary teams. Recently Tyrer, Coid, Simmonds, Joseph, and Marriott (1999) have reported on an extensive review of available literature on the impact of *Community Mental Health Teams* (CMHTs) on persons with comorbid severe mental illness and personality disorders. Though initially identifying a potential 1,200 studies for review, only five satisfied inclusion criteria. Within these studies, there was tentative evidence of some positive impact of the teams in reducing suicide rates and hospital re-admissions. By contrast, no conclusions were permissible regarding the effects of teams on clinical indicators such as mental state or social functioning of clients. It was concluded some time ago that "...the keys to reducing the risk of violence by persons with mental disorder in the community are aggressive case management and a comprehensive array of support services" (Dvoskin & Steadman, 1994, p. 684). Other evidence underlines the importance of both of these elements being present in any comprehensive package of community based care services.

For regrettably, innovations in services alone do not appear to be conducive to effectiveness in the absence of sound clinical intervention with individual clients. There are several well-documented studies of intervention projects in which considerable extra resources were invested in services for clients with long-term mental health problems (Bickman, 1996; Lehman, Postrado, Roth, McNary, & Goldman, 1994; Morrissey, Calloway, Bartko, Ridgeley, Goldman, & Paulson, 1994). In these studies, services were designed such that significant changes were made in the their mode of delivery and in the degree of integration between them. Planned improvements in service functioning were systematically monitored; the evidence so obtained showed they had been effectively established and maintained. There was therefore clear evidence of what should have been meaningful improvement in service systems.

However, controlled comparisons failed to discover measurable "client-level improvements" on such indicators as subjective well being, symptom levels, or community adjustment. Reviewing these experiments, Morrissey (1999) held that enhanced case management and allied service improvements were "...a necessary but not sufficient condition for positive outcome effects for clients" (p. 462). Perhaps disappointingly then, integration is an essential feature of good services; but it does not in itself appear to be enough to result in a genuine impact on clients' psychological welfare. All the contributing services or constituents of them must also be of high quality (Morrissey, 1999). Whilst services clearly cannot meet clients' requirements where resources are inadequate, it appears that re-organisation of services alone will be insufficient unless it also contains well-tested clinical input.

Implications of research for practice and policy

Changes in systems of care such as those just discussed have been associated with a number of well-publicized difficulties. Given their complexity, it is impossible to disentangle any clear links between causes and effects. In the United Kingdom the transfer of large numbers of patients to community care raised concerns that vulnerable and potentially dangerous persons were inadequately supervised. When tragedies such as homicides occurred, they received possibly disproportionate media attention, and in 1994 following a particularly horrific murder public inquiries into such incidents were placed on a mandatory footing by the Department of Health. Between then and the year 2000 there were approximately 90 such inquiries, costing an estimated average of £1 million each. Recently commentators on this field have suggested that there is little more to be learned from such inquiries (Peay, 1996; Reith, 1998).

Whatever the details of the national or local framework, several pressures have remained constant. One is to conduct more thorough assessments of individuals such that they may be directed towards the most appropriate channels of the mental health, criminal justice, or community care systems. Such work should have both a clinical and a forensic focus. Clinical assessment should include direct interviews, structured assessments using, for example, the Minnesota Multiphasic Personality Inventory, the Millon Inventories, or Symptom Check List (SCL-90) and scrutiny of available reports from all professionals involved. Forensic assessment will focus on risk using instruments such as the Psychopathy Check List (PCL-R), the HCR-20, or the Violence Risk Appraisal Guide but should also take account of anticipated destinations of clients and associated situational factors. Useful source texts providing background that will assist this process include the books by Melton, Petrila, Poythress, and Slobogin (1998); Quinsey, Harris, Rice, and Cormier (1998); and Rogers and Shuman (2000). Assessment and any resultant recommendations are not value-free processes and attention must be paid to ethical dimensions arising in such work (Grisso & Appelbaum, 1992; Zinger & Forth, 1998).

A second demand is to develop improved methods of risk assessment and prediction. Broadly speaking, risk assessment strategies have traditionally been classified into two principal types: actuarial or empirically-driven (involving measurement of a specified set of factors derived from an systematic research base); and *clinical* (founded on the subjective judgement of individual clinicians drawing on their own experience). A lengthy history of research clearly demonstrates the superiority of the former over the latter for purely predictive purposes. Yet clinical judgement still has a valuable contribution to make (Monahan, 1997). Thus it has been argued that a focus on the distinction between static and dynamic risk factors, and on the relation between statistical and clinical prediction, could enhance our ability to conduct systematically informed risk assessments (Monahan, 1997; Serin, 1993). To the two long-standing approaches Melton, Petrila, Poythress, and Slobogin (1997) have suggested adding a third, which has been entitled anamnestic risk assessment. This entails compilation of a checklist of risk factors on an actuarial basis, supplemented by clinical judgement. That information is then conjoined to the assembly of an inventory of situations in which individuals may be at risk of manifesting the target problem behaviour, together with a set of procedures for estimating the probabilities of such circumstances occurring.

The search for empirically supported treatments for offenders with mental disorder is evidently fraught with difficulty. In the absence of clear and definitive findings concerning the dimensions of effective interventions with offenders with mental disorder, a number of authors have resorted instead to the provision of a tentative framework or set of service guidelines. These currently represent the best advice that can be given to service providers until fuller, more detailed and better validated conclusions are available from systematic research.

Frameworks such as these are inevitably a form of compromise. That may sound fairly negative; looked at more positively, they comprise a synthesis of three sets of ideas. The first is findings from available research evidence, to the extent that these show consistent trends. The second consists of lessons that can be distilled from practitioner experience (including, for example, reports of public inquiries or service audits). The third is a set of principles concerning ethically acceptable practice. The objective is to resolve issues of community safety and appropriate risk assessment and management with a concern for the civil rights of individuals subject to mental health legislation.

Heilbrun and Griffin (1998; Heilbrun & Peters, 2000) have forwarded a set of such principles for effective community-based forensic services, combining guidelines for sound ethical practice with such recommendations as can be extracted from the limited evidence base. They include an emphasis on the importance of communications between agencies; an explicit balance between individual rights, the need for treatment, and public safety; an awareness of the range of treatment needs of clients; the usage of a demonstration model in assessing risk of harm and treatability; clarification of legal requirements such as confidentiality and duty to protect; application of sound risk management procedures; and the practice of principles for promoting healthcare adherence.

These principles are valuable in providing a framework for service delivery within agencies, and as such they are also resonant of guidelines for risk containment proposed earlier by Monahan (1993b). It is unfortunate that the research base is not yet available to furnish more specific directions in which to develop or arrange provision of treatment and support.

CONCLUSIONS

There are many studies on the prevalence of mental disorders amongst persons found guilty of crimes, and conversely of criminality amongst persons diagnosed as mentally disordered. There are also numerous follow-up studies of such groups following their discharge from institutions. Similarly, much research has been reported on the outcomes of psychological therapies for mental health problems, and on reduction of offender recidivism. In sharp contrast, there are far fewer studies with a direct bearing on the question of effective treatment for mentally disordered offenders. It might therefore be concluded that we know very little about how to work with this client group.

On the other hand, this could appear to be a much larger problem than it actually is. It only seems insurmountable if the target group is regarded as somehow categorically different from other groups of offenders, or from other groups of persons with mental health problems. That offenders with mental disorder are perceived as forming a distinct group may be a by-product of popular stigma, or of the medicalisation of this field and its location within the domain of psychiatry.

As an alternative, consider that offenders with mental disorder are basically (and self-evidently) persons who manifest two types of problems: respectively, mental disorder and criminal behaviour. Obviously in relation to both, many questions remain to be answered. At an individual level, the connection between the two has to be assessed and understood. But our knowledge of effective interventions in adjoining fields has advanced considerably in recent years. Rather than seeking a new solution that will somehow be uniquely applicable to this group, provision of proper correctional services for them entails a focus on both types of problems they present, with realistic expectations regarding outcomes for each.

Based on the very limited treatment literature that is available, no specific conclusions are possible regarding the efficacy of any specific type of intervention with any specific array of problems posed by offenders with mental disorder. However, given consistent linkages found with adjacent fields of treatment in which there are sizeable volumes of positive evidence, there are no reasons why those interventions that have proved beneficial with other groups should not be offered to this group also. On the contrary, there are strong reasons for research and evaluation studies employing similar types of programs as are used elsewhere in correctional services. They would, of course be targetted upon factors linked to recidivism, without any expectation that they would reduce problems arising from mental disorder. Adaptations of materials and methods may be necessary to address responsivity issues, and additional help should be available to focus on symptoms of mental disorder per se. For ethical and practical reasons such work should be organized through and conducted within healthcare rather than penal settings. But in terms of its basis in background research, treatment of offenders with mental disorder has much to gain from being more effectively integrated with the field of correctional intervention as a whole.

REFERENCES

- American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington DC: Author.
- Bailey, J., & MacCulloch, M. J. (1992a). Characteristics of 112 cases discharged directly to the community from a new Special Hospital and some comparisons of performance. *Journal of Forensic Psychiatry*, 3, Part 1, 91-112.
- Bailey, J., & MacCulloch, M. J. (1992b). Patterns of reoffending in patients discharged directly to the community from a Special Hospital: Implications for after-care. *Journal of Forensic Psychiatry*, 3, Part 4, 445-461.
- Bateman, A. W., & Fonagy, P. (2000). Effectiveness of psychotherapeutic treatment of personality disorder. *British Journal of Psychiatry*, 177, 1138-1143.
- Belfrage, H. (1991). The crime preventive effect of psychiatric treatment on mentally disordered offenders in Sweden. *International Journal of Law and Psychiatry*, 14, 237-243.

- Benton, M. K., & Schroeder, H. E. (1990). Social skills training with schizophrenics: A meta-analytic evaluation. *Journal of Consulting and Clinical Psychology*, 58, 741-747.
- Bickman, L. (1996). A continuum of care: More is not always better. American Psychologist, 51, 689-701.
- Bieber, S. L., Pasewark, R. A., Bosten, K., & Steadman, H. J. (1988). Predicting criminal recidivism of insanity acquittees. *International Journal of Law* and Psychiatry, 11, 105-112.
- Black, D. A. (1982). A 5-year follow-up study of male patients discharged from Broadmoor Hospital. In J. Gunn & D. P. Farrington (Eds.), *Abnormal offenders*, *delinquency, and the criminal justice system*. Chichester, UK: John Wiley, & Sons.
- Blackburn, R. (1993). The psychology of criminal conduct. Chichester, UK: John Wiley & Sons.
- Blackburn, R. (2000). Treatment or incapacitation? Implications of research on personality disorders for the management of dangerous offenders. *Legal and Criminological Psychology*, 5, 1-21.
- Blashfield, R. K., & Fuller, A. K. (1996). Predicting the DSM-V. Journal of Nervous and Mental Disease, 184, 4-7.
- Bloom, J. D., Bradford, J. M., & Kofoed, L. (1988). An overview of psychiatric treatment approaches to three offender groups. *Hospital and Community Psychiatry*, 39, 51-158.
- Bloom, J. D., Rogers, J. L., Manson, S. M., & Williams, M. H. (1986). Lifetime police contacts of discharged Psychiatric Security Review Board clients. *International Journal of Law and Psychiatry*, 8, 189-202.
- Bloom, J. D., Williams, M. H., & Bigelow, D. A. (1991). Monitored conditional release of persons found not guilty by reason of insanity. *American Journal of Psychiatry*, 148, 444-448.
- Bloom, J. D., Williams, M. H., Rogers, J. L., & Barbur, P. (1986). Evaluation and treatment of insanity acquitees in the community. *Bulletin of the American Academy of Psychiatry and Law, 14*, 231-244.
- Bogenberger, R. P., Pasewark, R. A., Gudeman, H., & Beiber, S. L. (1987). Follow-up of insanity acquitees in Hawaii. *International Journal of Law and Psychiatry*, 10, 283-295.
- Bollini, P., Pampallona, S., Orza, M. J., Adams, M. E., & Chalmers, T. C. (1994). Antipsychotic drugs: Is more worse? A meta-analysis of the published randomized control trials. *Psychological Medicine*, 24, 307-316.
- Bonta, J., Law, M., & Hansen, K. (1998). The prediction of criminal and violent recidivism amongst mentally disordered offenders: A meta-analysis. *Psychological Bulletin*, 123, 123-142.
- Breggin, P. R. (1991). Toxic psychiatry. Drugs and electroconvulsive therapy: The truth and the better alternatives. London, UK: Harper Collins.
- Brewster, S. (1998). A follow-up study of all patients who left Ashworth Hospital in 1992 with a discussion of Special Hospital 'populations' and a view of PD patients. Unpublished report, Ashworth Hospital.
- Brooke, D., Taylor, C., Gunn, J., & Maden, A. (1996). Point prevalence of mental disorder in unconvicted male prisoners in England and Wales. *British Medical Journal*, 313, 18-21.
- Bruch, M., & Bond, F. W. (1998). Beyond diagnosis: Case formulation approaches in CBT. Chichester, UK: John Wiley & Sons.
- Buchanan, A. (1998). Criminal conviction after discharge from special (high security) hospital: Incidence in the first 10 years. *British Journal of Psychiatry*, 172, 472-476.
- Chadwick, P., Birchwood, M., & Trower, P. (1996). *Cognitive therapy for delusions, voices and paranoia*. Chichester, UK: John Wiley & Sons.
- Clark, L. A., Watson, D., & Reynolds, S. (1995). Diagnosis and classification of psychopathology: Challenges to the current system and future directions. *Annual Review of Psychology*, 46, 121-153.
- Crichton, J. (1999). Mental disorder and crime: Coincidence, correlation and cause. Journal of Forensic Psychiatry, 10, 659-677.
- Dell, S. (1980). Transfer of Special Hospital patients to the NHS. British Journal of Psychiatry, 136, 222-234.
- Dobson, K. S., & Craig, K. D. (Eds.) (1998). Empirically supported therapies: Best practice in professional psychology. Thousand Oaks, CA: Sage Publications.
- Dvoskin, J. A., & Steadman, H. J. (1994). Using intensive case management to reduce violence by mentally ill persons in the community. *Hospital and Community Psychiatry*, 45, 679-684.

- Eastman, N. L. G. (2000). Psycholegal studies as an interface discipline. In J. McGuire, T. Mason, & A. O'Kane (Eds.), *Behaviour, crime and legal* processes: A guide for forensic practitioners. Chichester, UK: John Wiley & Sons.
- Edmondson, C. B., & Conger, J. C. (1996). A review of treatment efficacy for individuals with anger problems: Conceptual, assessment, and methodological issues. *Clinical Psychology Review*, 16, 251-275.
- Eels, T. D. (Ed.) (1997). Handbook of psychotherapy case formulation. New York, NY: The Guilford Press.
- Fishman, D. B. (1999). *The case for pragmatic psychology*. New York, NY, and London, UK: New York University Press.
- Fowler, D., Garety, P., & Kuipers, E. (1995). Cognitive behaviour therapy for psychosis. Chichester, UK: John Wiley & Sons.
- Garety, P. A., Kuipers, L., Fowler, D., & Chamberlain, F. (1994). Cognitive behavioural therapy for drug-resistant psychosis. *British Journal of Medical Psychology*, 67, 259-271.
- Gathercole, C., Craft, M., McDougall, J., Barnes, H., & Peck, D. (1968). A review of 100 discharges from a Special Hospital. *British Journal of Criminology*, 8, 419-424.
- Greenwood, A. (1995). Forensic mental health treatment: Do we really know what we are talking about? *Forum on Corrections Research*, 7(3), 27-29.
- Grisso, T., & Appelbaum, P. S. (1992). Is it unethical to offer predictions of future violence? *Law and Human Behavior*, *16*, 621-633.
- Gunn, J., Maden, A., & Swinton, M. (1991). Treatment needs of prisoners with psychiatric disorders. *British Medical Journal*, 303, 338-341.
- Hartman, L. M., & Cashman, F. E. (1983). Cognitive-behavioural and psychopharmacological treatment of delusional symptoms: A preliminary report. *Behavioural Psychotherapy*, 11, 50-61.
- Hartstone, E., & Cocozza, J. (1983). Violent youth: The impact of mental health treatment. *International Journal of Law and Psychiatry*, 6, 207-224.
- Hayes, S. C., & Follette, W. C. (1992). Can functional analysis provide a substitute for syndromal classification? *Behavioral Assessment*, 14, 345-365.
- Heilbrun, K., & Griffin, P. A. (1998). Community-based forensic treatment. In R. M. Wettstein (Ed.), *Treatment of offenders with mental disorders* New York, NY: The Guilford Press.
- Heilbrun, K., & Peters, L. (2000). The efficacy of community treatment programs in preventing crime and violence. In S. Hodgins & R. Muller-Isberner (Eds.), Violence, crime and mentally disordered offenders: Concepts and methods for effective treatment and prevention. The Hague, Netherlands: Kluwer Academic Publishers.
- Hiday, V. A. (1997). Understanding the connection between mental illness and violence. *International Journal of Law and Psychiatry*, 20, 557-572.
- Hiday, V. A. (1999). Mental illness and the criminal justice system. In A. V. Horwitz & T. L. Scheid (Eds.), A Handbook for the study of mental health: Social contexts, theories and systems. Cambridge, UK: Cambridge University Press.
- Hodgins, S. (1983). A follow-up study of persons found incompetent to stand trial and/or not guilty by reason of insanity in Quebec. *International Journal* of Law and Psychiatry, 6, 399-411.
- Hodgins, S. (1993). The criminality of mentally disordered persons. In S. Hodgins (Ed.), *Mental disorder and crime*. Newbury Park, CA: Sage Publications.
- Hodgins, S., & Côté, G. (1990). The prevalence of mental disorders among penitentiary inmates. *Canadás Mental Health*, 38, 1-5.
- Hodgins, S., & Gaston, L. (1989). Patterns of recidivism and relapse among groups of mentally disordered offenders. *Behavioral Sciences and the Law*, 7, 551-558.
- Hodgins, S., Hébert, J., & Baraldi, R. (1986). Women declared insane: A follow-up study. *International Journal of Law and Psychiatry*, 8, 203-216.
- Home Office (1999). Managing dangerous people with severe personality disorder: Proposals for policy development. London, UK: Author.
- Jew, C. C., Kim, L. I. C., & Mattocks, A. L. (1975). Effectiveness of group psychotherapy with character disordered offenders. Sacramento, CA: Research Division, Department of Corrections, State of California.
- Kendall, P. C., & Chambless, D. L. (Eds.) (1998). Special Section: Empirically supported psychological therapies. *Journal of Consulting and Clinical Psychology*, 66, 3-167.
- Kutchins, H. A., & Kirk, S. A. (1997). *Making us crazy: DSM: The psychiatric bible and the creation of mental disorders.* Glencoe, IL: The Free Press.

- Lamb, H. R., & Weinberger, L. E. (1998). Persons with severe mental illness in jails and prisons: A review. *Psychiatric Services*, 49, 483-492.
- Lambert, M. J., & Bergin, A. E. (1994). The effectiveness of psychotherapy. In A. E. Bergin & S. L. Garfield (Eds.), *Handbook of psychotherapy and behavior change*. New York, NY: John Wiley & Sons.
- Lehman, A., Postrado, L., Roth, D., McNary, S., & Goldman, H. (1994). An evaluation of the continuity of care, case management, and client outcomes in the Robert Wood Johnson program on chronic mental illness. *The Milbank Quarterly*, 72, 105-122.
- Link, B. G., Andrews, H. A., & Cullen, F. T. (1992). The violent and illegal behavior of mental patients reconsidered. *American Sociological Review*, 57, 275-292.
- Link, B. G., & Stueve, A. (1993). Psychotic symptoms and the violent/illegal behavior of mental patients compared to community controls. In J. Monahan & H. J. Steadman (Eds.), *Violence and mental disorder: Developments in risk* assessment. Chicago, IL: University of Chicago Press.
- Lipsey, M. W., & Wilson, D. B. (1993). The efficacy of psychological, educational, and behavioral treatment: Confirmation from meta-analysis. *American Psychologist*, 48, 1181-1209.
- Lishman, W. A. (1997). Organic Psychiatry. 3rd edition. Oxford, UK: Blackwell.
- Lösel, F. (1998). Treatment and management of psychopaths. In D. Cooke, A. E. Forth, & R. A Hare (Eds.), *Psychopathy: Theory, research and implications* for society (pp. 303-354). Amsterdam, Netherlands: Kluwer Academic Publishers.
- McGarry, A. L., & Parker, L. L. (1974). Massachusetts' Operation Baxstrom: A follow-up. Massachusetts Journal of Mental Health, 4, 27-41.
- McGuire, J. (2000). Commentary on 'The efficacy and effectiveness of community treatment programs in preventing crime and violence in those with severe mental illness in the community'. In S. Hodgins & R. Muller-Isberner (Eds.), Violence, crime and mentally disordered offenders: Concepts and methods for effective treatment and prevention. The Hague, Netherlands: Kluwer Academic Publishers.
- McNiel, D. E. (1994). Hallucinations and violence. In J. Monahan & H. J. Steadman (Eds.), Violence and mental disorder: Developments in risk assessment. Chicago, IL: University of Chicago Press.
- Mechanic, D. (1999). Mental health and mental illness: Definitions and perspectives. In A. V. Horwitz & T. L. Scheid (Eds.), A Handbook for the study of mental health: Social contexts, theories and systems. Cambridge, UK: Cambridge University Press.
- Melton, G., Petrila, J., Poythress, N., & Slobogin, C. (1998). Psychological evaluations for the courts: A handbook for lawyers and mental health practitioners. 2nd edition. New York, NY: Guilford Press.
- Milton, F., Patwa, V. K., & Hafner, R. J. (1978). Confrontation vs. belief modification in persistently deluded patients. *British Journal of Medical Psychology*, 51, 127-130.
- Monahan, J. (1993a). Mental disorder and violence: Another look. In S. Hodgins (Ed.), Mental disorder and crime. Newbury Park, CA: Sage Publications.
- Monahan, J. (1993b). Limiting therapist exposure to Tarasoff liability: Guidelines for risk containment. American Psychologist, 48, 242-250.
- Monahan, J. (1997). Clinical and actuarial predictions of violence. In D. Faigman, D. Kaye, M. Saks, & J. Sanders (Eds.), West's companion to scientific evidence. St.Paul, MN: West Publishing Company.
- Monahan, J., & Steadman, H. J. (1983). Crime and mental disorder: An epidemiological approach. In N. Morris & M. Tonry (Eds.), *Crime* and justice: An annual review of research. Chicago, IL: University of Chicago Press.
- Morrissey, J. P. (1999). Integrating service delivery systems for persons with a severe mental illness. In A. V. Horwitz & T. L. Scheid (Eds.), A handbook for the study of mental health: Social contexts, theories and systems. Cambridge, UK: Cambridge University Press.
- Morrissey, J. P., Calloway, M., Bartko, W. T., Ridgeley, M. S., Goldman, H. H., & Paulson, R. J. (1994). Local mental health authorities and service system change: Evidence from the Robert Wood Johnson program on chronic mental illness. *Milbank Quarterly*, 72, 49-80.
- Motiuk, L. L., & Porporino, F. J. (1991). The nature and severity of mental health problems among federal inmates in Canadian penitentiaries. Research Report R-4. Ottawa, ON: Correctional Service of Canada.

- Nathan, P. E., & Gorman, J. M. (Eds.) (1998). A guide to treatments that work. New York, NY: Oxford University Press.
- Novaco, R. W. (1994). Anger as a risk factor for violence among the mentally disordered. In J. Monahan & H. J. Steadman (Eds.), *Violence and mental disorder: Developments in risk assessment*. Chicago, II: University of Chicago Press.
- Novaco, R. W. (1997). Remediating anger and aggression with violent offenders. Legal and Criminological Psychology, 2, 77-88.
- O'Kane, A., & Bentall, R. P. (2000). Psychosis and offending. In J. McGuire, T. Mason, & A. O'Kane (Eds.), *Behaviour, crime and legal processes: A guide for forensic practitioners*. Chichester, UK: John Wiley & Sons.
- Pasewark, R. A., Bieber, S., Bosten, K. J., Kiser, M., & Steadman, H. J. (1982). Criminal recidivism among insanity acquitees. *International Journal of Law* and Psychiatry, 5, 65-374.
- Peay, J. (Ed.) (1996). Inquiries after homicide. London, UK: Duckworth.
- Persons, J. B. (1989). Cognitive therapy in practice: A case formulation approach. New York, NY: Norton.
- Persons, J. B., & Silbersatz, G. (1998). Are the results of randomized controlled trials useful to psychotherapists? *Journal of Consulting and Clinical Psychology*, 66, 126-135.
- Perry, J. C., Banon, E., & Ianni, F. (1999). Effectiveness of psychotherapy for personality disorders. *American Journal of Psychiatry*, 1156, 1312-1321.
- Petersilia, J., & Turner, S. (1993). Intensive probation and parole. *Crime and Justice*, 17, 281-335.
- Pilgrim, D., & Rogers, A. (1993). A sociology of mental health and illness. Buckingham, UK: Open University Press.
- Porporino, F. J., & Motiuk, L. L. (1995). The prison careers of mentally disordered offenders. *International Journal of Law and Psychiatry*, 18, 29-44.
- Quinsey, V. L., Harris, G. T., Rice, M. E., & Cormier, C. A. (1998). Violent offenders: Appraising and managing risk. Washington, DC: American Psychological Association.
- Quinsey, V. L., Warneford, A., Pruesse, M., & Link, N. (1975). Released Oak Ridge patients: A follow-up study of Review Board discharges. *British Journal* of Criminology, 15, 264-270.
- Reiss, D., Grubin, D., & Meux, C. (1996). Young "psychopaths" in Special Hospital: Treatment and outcome. *British Journal of Psychiatry*, 168, 99-104.
- Reith, M. (1998). Community care tragedies: A practice guide to mental health inquiries. Birmingham, UK: Venture Press.
- Renwick, S. J., Black, L., Ramm, M., & Novaco, R. W. (1997). Anger treatment with forensic hospital patients. *Legal and Criminological Psychology*, 2, 103-116.
- Rice, M. E., & Harris, G. T. (1995). Psychopathy, schizophrenia, alcohol abuse, and violent recidivism. *International Journal of Law and Psychiatry*, 18, 333-342.
- Rogers, R., & Shuman, D. W. (2000). Conducting Insanity evaluations. 2nd edition. New York, NY: Guilford Press.
- Roth, A., & Fonagy, P. (1996). What works for whom? A critical review of psychotherapy research. New York, NY: Guilford Press.
- Russo, G. (1994). Follow-up of 91 mentally ill criminals discharged from the Maximum Security Hospital in Barcelona P.G. *International Journal of Law* and Psychiatry, 17, 279-301.
- Sanislow, C. A., & McGlashan, T. H. (1998). Treatment outcome of personality disorders. *Canadian Journal of Psychiatry*, 43, 237-250.
- Serin, R. C. (1993). Decision issues in risk assessment. Forum on Corrections Research, 5(2), 22-25.
- Serin, R. C. (1995). Treatment responsivity in criminal psychopaths. Forum on Corrections Research, 7(3), 23-26.
- Silver, E. (2000). Race, neighbourhood disadvantage and violence among persons with mental disorders: The importance of contextual measurement. Paper delivered at the biennial conference of the American Psychology-Law Society, New Orleans.
- Silver, S. B., Cohen, M. I., & Spodak, M. K. (1989). Follow-up after release of insanity acquittees, mentally disordered offenders, and convicted felons. *Bulletin of the American Academy of Psychiatry and Law*, 17, 387-400.
- Steadman, H. J., Fabisiak, S. Dvoskin, J., & Holohean, E. J. (1989). A survey of mental disability among state prison inmates. *Hospital and Community Psychiatry*, 38, 1086-1090.
- Steadman, H. J., & Keveles, G. (1972). The community adjustment and criminal activity of the Baxstrom patients: 1966-1970. American Journal of Psychiatry, 129, 304-310.

- Steadman, H. J., Mulvey, E. P., Monahan, J., Robbins, P. C., Appelbaum, P. S., Grisso, T., Roth, L. H., & Silver, E. (1998). Violence by people discharged from acute psychiatric inpatient facilities and by others in the same neighbourhoods. *Archives of General Psychiatry*, 55, 393-401.
- Stermac, L. (1986). Anger control treatment for forensic patients. Journal of Interpersonal Violence, 1, 446-457.
- Swanson, J. W. (1994). Mental disorder, substance abuse, and community violence: An epidemiological approach. In J. Monahan & H. J. Steadman (Eds.), Violence and mental disorder: Developments in risk assessment. Chicago, Il.: University of Chicago Press.
- Swanson, J. W., Estroff, S., Swartz, M., Borum, R., Lachicotte, W., Zimmer, C., & Wagner, R. (1997). Violence and severe mental disorder in the clinical and community populations: The effects of psychotic symptoms, comorbidity and lack of treatment. *Psychiatry*, 60, 1-22.
- Swanson, J. W., Holzer, C. E., Ganju, V. K., & Jono, R. T. (1990). Violence and psychiatric disorder in the community: Evidence from the Epidemiological Catchment Area surveys. *Hospital and Community Psychiatry*, 41, 761-770.
- Szasz, T. S. (1961). The myth of mental illness: Foundations of a theory of personal conduct. New York, NY: Harper & Row.
- Tarrier, N., Beckett, R., Harwood, S., Baker, A., Yusupoff, L., & Ugarteburu, I. (1993). A trial of two cognitive-behavioural methods of treating drugresistant residual psychotic symptoms in schizophrenic patients: I. Outcome. *British Journal of Psychiatry*, 162, 524-532.
- Taylor, P. J., & Gunn, J. (1999). Homicides by people with mental illness: Myth and reality. British Journal of Psychiatry, 174, 9-14.
- Tellefsen, C., Cohen, M. I., Silver, S. B., & Dougherty, C. (1992). Predicting success on conditional release for insanity acquittees: Regionalized versus nonregionalized hospital patients. *Bulletin of the American Academy of Psychiatry and Law, 20*, 87-100.
- Tennent, G., & Way, C. (1984). The English Special Hospital A 12-17 year follow-up study: A comparison of violent and non-violent reoffenders and non-offenders. *Medicine, Science and Law, 24*, 81-91.
- Teplin, L. A. (1990). The prevalence of severe mental disorder among male urban jail detainees: Comparison with the Epidemiological Catchment Area program. *American Journal of Public Health*, 80, 663-669.
- Teplin, L. A., Abram, K. M., & McClelland, G. M. (1996). Prevalence of psychiatric disorders among incarcerated women. *Archives of General Psychiatry*, 53, 505-512.
- Tong, J. E., & Mackay, G. W. (1958). A statistical follow-up of mental defectives of dangerous or violent propensities. *British Journal of Delinquency, IX*, 276-284.
- Turkat, I. D. (Ed.) (1985). Behavioral case formulation. New York, NY: Plenum Press.
- Tyrer, P., Coid, J., Simmonds, S., Joseph, P., & Marriott, S. (1999). Community mental health teams for people with severe mental illnesses and disordered personality. *The Cochrane Library, Issue 2*, 1-23.
- Watts, F., Powell, G. V., & Austin, C. V. (1973). The modification of abnormal beliefs. *British Journal of Medical Psychology*, 46, 359-363.
- Wessely, S., & Taylor, P. J. (1991). Madness and crime: Criminology versus psychiatry. Criminal Behaviour and Mental Health, 1, 193-228.
- Wiederanders, M. (1992). Recidivism of disordered offenders who were conditionally versus unconditionally released. *Behavioral Sciences and the Law*, 10, 141-148.
- Wiederanders, M., Bromley, D. L., & Choate, P. A. (1997). Forensic conditional release programs and outcomes in three states. *International Journal* of Law and Psychiatry, 20, 249-257.
- Wing, J. K., Sartorius, N., & Üstün, T. B. (1998). Diagnosis and clinical measurement in psychiatry. Cambridge, UK: Cambridge University Press.
- World Health Organisation (1992). International Classification of Diseases (ICD-10). Geneva: Author.
- Zamble, E., & Quinsey, V. L. (1997). *The criminal recidivism process*. Cambridge, UK: Cambridge University Press.
- Zinger, I., & Forth, A. E. (1998). Psychopathy and Canadian criminal proceedings: The potential for human rights abuses. *Canadian Journal of Criminology*, July, 237-276.

CHAPTER 17

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PREVALENCE OF SEXUAL OFFENDING

The true prevalence of sexual offending can only be estimated. It is clear, for example, that many victims of sexual offending do not report the crime to the police or, all too often, to anyone at all (Koss & Harvey, 1991; Russell, 1984, 1986). The Committee on Sexual Offences Against Children and Youth (1984) reported the results of Canadian national surveys. They found that one-half of women and one-third of men reported being subjected to some form of sexual abuse during their lives, with 70% of the men and 62% of the women indicating that it occurred prior to pubescence. There is, therefore, a pressing need to develop a comprehensive social response to this very serious social problem.

One aspect to this response should include not only the treatment of identified offenders, but also the development of an understanding of these offenders; what features need to be addressed in treatment; how these features should be assessed; and the generation of an actuarial basis for estimating risk to reoffend and response to treatment. Of course, if treatment is implemented, we must also evaluate its effectiveness. This chapter will attempt to address these issues.

For the past 26 years, the Correctional Service of Canada (CSC) has been at the forefront of the development of assessment and treatment for incarcerated sexual offenders. Over the last 10 years, CSC has expanded and refined its programs for sexual offenders so that it now funds numerous institutional programs and community-based follow-up treatment for released sexual offenders. While much of what follows in this chapter is derived from research and treatment conducted within CSC, we also draw on data, observations and theories generated by various researchers and clinicians around the world. For the most part, programs that have proliferated in all Western societies over the past 10 years have adopted the "cognitive behavioural/relapse prevention" approach developed in North America (for examples of such programs, see Marshall, Fernandez, Hudson, & Ward, 1998). This is also the approach adopted by CSC from the first systematic application of sexual offender treatment in 1973. We will, therefore, primarily focus on that approach, although we will also acknowledge the value, as adjunctive features of treatment, of various medications in assisting in the rehabilitation of sexual offenders.

In considering treatment, cognitive behaviourists who adhere to the early form of relapse prevention take the view that sexual offending cannot be "cured" and claim the offender can be taught to "control" his propensity to abuse. To some extent, this is more a semantic issue than is suggested by the claim. For example, if a sexual offender completes treatment and does not ever again offend, is it reasonable to say he has simply been controlling his deviant urges, particularly when there is no evidence he still has such urges and he denies they are present. The language of "cure" and "control" is a mixture of medical and correctional perspectives. The language of research into learning processes, upon which cognitive behavioural/relapse prevention approaches are said to be founded, would, on the other hand, simply suggest that in the hypothetical client described above, the deviant urges have extinguished and been replaced by prosocial urges. A learning analysis would indicate that care should be exercised both by the offender and his supervisors upon his release back into the community, since spontaneous resumption of well-practised behaviours is to be expected. However, it would also indicate that once a competing set of behaviours (i.e., prosocial courtship and adult consenting sexual and relationship behaviours) is established, vigilance by both the client and supervisor could be reduced. While this is the approach CSC has been using effectively in the community management of released sexual offenders, the advocates of relapse prevention (e.g., Marques, 1984; Pithers, 1990), and those who consider treatment to be ineffective (Quinsey, 1996) encourage far more intensive post-release supervision, extending for up to 10 years. There is, however, no evidence that such supervision reduces the risk of reoffending; indeed, there are reasons to suppose that such extensive supervision may counteract treatment benefits (Marshall, Anderson, & Fernandez, 1999).

MEASUREMENT

Measurement is a critical feature of any program. Assessments are done for various reasons, and the types of measures chosen should be guided both by what is known about the problem in question (in the present case, sexual offending), and why testing is being done. In prison settings, assessments of sexual offenders may be used to determine the treatment needs of sexual offenders; their security needs; the effects of treatment; and the offenders' risk to reoffend upon release. Such comprehensive evaluations can provide a basis for all the above decisions except, of course, that it would be necessary to repeat the assessment package after treatment was complete to determine the degree to which treatment targets have been met. In community settings, the same

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issues might be relevant, although hopefully the within-prison evaluations, if they are recent enough, should provide most of this information. In addition, community programs may be asked to provide an evaluation to assist in determining whether or not an offender is ready to return to his family or to some other setting where access to victims may occur.

Certainly over the past 30 years there has been a shift in assessment and treatment away from the strictly sexual aspects of sexual offending to more social and cognitive elements. These changes in focus have not always been driven by research findings, but quite often by clinical intuition that is subsequently empirically evaluated, or by developments in other fields. An example of the latter was the decision to examine the relevance for sexual offenders of intimacy deficits after these problems had been incorporated into the treatment of various other disorders. Approaches to the assessment and treatment of sexual offenders over the past several years attempted to maintain an empirical basis so that, as new information emerges, programs can be adjusted accordingly.

The first concern clinicians should have when planning assessment is to determine the domains that need to be assessed. Once the targets of assessment have been identified, a search can be made for the best measures of each target.

Measures relevant to treatment

Several instruments have been developed to measure the principal issues in the treatment of sexual offenders. Table 17.1 presents a list of the principal issues and some of the measures used to assess them.

TREATMENT

Conceptual model

The first thing to note about treatment for sexual offenders is that group therapy is the chosen approach (Hall, 1995). Borduin, Henggeler, Blaske, and Stein (1990) have shown that group treatment is far more effective than individual one-on-one therapy for sexual offenders. However, the recidivism rate for the individual therapy in this study was high (75%), and consequently, we should treat the findings with some scepticism. Nevertheless, there can be no doubt about the superior efficiency of group therapy, allowing, as it does, the possibility of treating far more clients in the same amount of time.

Responsivity

Setting

Although some writers suggest that treating an offender in the community is superior to treating him in prison, there seems no reason to force a choice between settings. The National Strategy described by Williams, Marcoux-Galarneau, Malcolm, Motiuk, Deurloo, Holden, and Smiley (1996) involves a continuum of services that are initiated during the incarceration phase at an intensity level commensurate with risk and needs, and continues into the community as less intensive, but equally important, maintenance. It seems reasonable to provide the most intensive phase of treatment while the offender is incarcerated, and reinforce what he has already learned once he is reintegrated into the larger community. This strategy also provides more structured maintenance treatment for sexual offenders at higher risk on release, and may involve placement in a supervised halfway house.

A relatively small number of sexual offenders are considered intellectually challenged, while others have identifiable psychiatric disorders such as schizophrenia and depression. Some have also been diagnosed as learning disabled. Among the lower risk sexual offenders, the aging process may be accompanied by memory deficits, language problems related to stroke, and an overall decrement in the ability to learn and retain new information. These deficits require a slower, more concrete, and simpler approach to the material covered in treatment. Boer et al. (1995) describe a program that presents information and role-plays in a manner consistent with these responsivity-based difficulties. In Canada's Atlantic Region, the Challenge Program allows sexual offenders with similar learning difficulties to assimilate information at a more comfortable pace.

Contraindications

Most programs exclude offenders who are suffering from an acute psychiatric disorder because they are unlikely to gain from treatment and are a disruptive influence. However, as soon as the illness can be managed effectively (e.g., via medication), such sexual offenders should be permitted to join a suitable treatment program. Their offence chain should incorporate those idiosyncratic internal or external stimuli which may be part of the relapse process.

For all sexual offenders, management difficulties may arise in the course of treatment. These may include refusal to participate, breaking confidentiality, or disruptiveness during groups. All efforts should be made to engage the offender in the treatment process, but if individual counselling, peer confrontation, or, as a last resort, behavioural contracting, is ineffective, the group needs should take precedence over the individual. Removal from therapy may be necessary in persistently disruptive or otherwise problematic cases. Some programs adopt the tactic of removing clients from a group context and offering individual treatment to reduce the threat, or fear, of discussing issues before a large audience. However, there is no evidence that individual therapy is conducive to changes in sexual offenders, and providing the option of one-on-one treatment may discourage the offender from discussing critical issues in group sessions.

Denial, or lack of motivation, may be exclusionary criteria. However, the CSC's *Standards and Guidelines for Provision of*

Issues	Measures	Authors
Cognitive Distortions	Abel's Child Molester Cognitions Scale	Abel et al., 1989
•	Molest Scale	Bumby, 1996
	Rape Scale	Bumby, 1996
	Rape Myth Acceptance Scale	Burt, 1980
	Hostility Toward Women Scale	Check, 1984
Empathy	Empathy for Children	Hanson & Scott, 1995
	Empathy for Women	Hanson & Scott, 1995
	Child Molester Empathy Measure	Fernandez <i>e</i> et al., 1999
	Rapist Empathy Measure	Fernandez & Marshall, 1999
	Interpersonal Reactivity Test	Davis, 1983
Social Functioning	Social Self-esteem Inventory	Lawson et al., 1979
C C	Problem solving	D'Zurilla & Goldfried, 1971
	Social Support Inventory	Flannery & Wieman, 1989
Assertiveness	Social Response Inventory	Keltner et al., 1981
	Rathus Assertiveness Scale	Rathus, 1973
Anger	Buss-Durkee Hostility Inventory	Buss & Durkee, 1957
8	State-Trait Anger Expression Inventory	Spielberger, 1988
Anxiety	State-Trait Anxiety Inventory	Spielberger et al., 1970
,	Fear of Negative Evaluations Scale	Watson & Friend, 1969
	Social Avoidance and Distress Scale	Watson & Friend, 1969
Relationships	UCLA Loneliness Scale	Russell et al., 1980
1	Miller's Social Intimacy Scale	Miller & Lefcourt, 1982
Sexual Interest	Clarke Sexual History Questionnaire	Langevin, 1983
	Multiphasic Sexual Inventory	Nichols & Molinder, 1984
	Laws Card Sort	Laws, 1986
	Wilson Sex Fantasy Questionnaire	Wilson, 1978
Psychopathy	Psychopathy Checklist-Revised	Hare, 1991
Relapse Prevention	Self-monitoring Procedure	McDonald & Pithers, 1989
I	STEP Measures of Offence Chain	Beckett et al., 1994
	Situational Competency Test	Miner et al., 1989
	Coping Inventory for Stressful Situations	Endler & Parker, 1990
	Sex as a Coping Strategy	Cortoni & Marshall, 1996
Recidivism	Level of Service Inventory-Revised	Andrews & Bonta, 1995
	Violence Risk Assessment Guide	Harris et al., 1993
	Minnesota Sex Offender Screening Tool	Epperson et al., 1995
	Rapid Risk Assessment for Sexual Offence Recidivism	Hanson, 1997
Social Desirability	Marlow-Crowne Social Desirability Scale	Crowne & Marlow, 1960
colui Dechiability	Paulhaus Balanced Inventory of Desirable Responding	Paulhaus, 1991

 TABLE 17.1
 Measures relevant to treatment

Services to Sex Offenders (Williams et al., 1996) states that denial should be considered a treatment target. Motivation can be enhanced and denial issues can be dealt with as part of the cognitive distortions component. Development of a therapeutic alliance can also reduce the degree of denial. In any case, there is evidence (Hanson & Bussière, 1998) that denial does not increase risk to reoffend sexually.

Program timing

There is some debate regarding the best time to provide sexual offender treatment programs. Some suggest treatment should occur just prior to release into the community. Others suggest that treatment should occur at the earliest opportunity in order to capitalize on motivation and on a more vivid recollection of the offence and its impact on all those affected by it. Often the timing of treatment is related to availability of treatment services. By matching risk and need to treatment intensity, resources can be directed to the programs serving the largest populations. Because high intensity programs are expensive, lengthy, and cover numerous modules, the waiting list tends to be long. Extreme care must be taken to identify those clients whose risk and needs best match high intensity treatment. However, some effort should be made to deal with the problem of offenders who have very long sentences and are unlikely to enter a fully-fledged program for several years.

Program sequencing

Programs which target thinking styles, impulsivity, educational upgrading, employment skills, alcohol and drug abuse, as well as family violence, could be provided while the higher risk sexual offender is awaiting specialized treatment. These programs could prepare the offender by addressing general therapeutic issues such as group processes, confidentiality, trust, openness, and by exposing offenders to specific strategies such as videotaping. Introduction to learning principles such as competing behaviours, immediacy of reinforcement, generalization, and cognitive mediators can be transferred from one treatment program to another, and should reduce the time required to address these issues early in the group process. However, for moderate and lower risk offenders, access to adjunct programs should not take priority over specialized sexual offender treatment.

Special applications

Women make up a very small percentage of the total population of sexual offenders under federal jurisdiction in Canada (0.3%), and they recidivate at a low rate (3.8% over 6 years). A recent study by Kleinknecht, Williams, and Nicholaichuk (1999) identified only 70 convicted women sexual offenders who had served federal sentences between 1972 and 1998. However, there has been an increase in this population over these three decades. Over the past decade, a broader definition of sexual assault (any form of non-consensual sexual contact) has resulted in increased prosecution of women.

Atkinson (1995) suggests that the assessment of women sexual offenders can utilize self-report, collateral sources, and psychological tests, as well as actuarial tools for predicting general recidivism and violence. However, the use of measures with women that have been standardized on men, is a questionable practice. Women sexual offenders are more likely than men offenders to be coperpetrators, and are most likely to offend against young girls within their own family (Mathews, Mathews, & Speltz, 1993; McCarty, 1986; Syed & Williams, 1996), which typically describes motivational as opposed to offence-based characteristics.

Kleinknecht et al. (1999), surveying all women offenders incarcerated since 1972, found that their primary characteristics were consistent with those of women offenders in general. They had little education, minimal or no employment history, and patterns of alcohol or drug abuse. The majority described childhood and adult histories of being emotionally, physically, and sexually abused. Many had diminished self-esteem, assertiveness deficits, relationship problems, and mental health concerns, such as depression, post-traumatic stress disorder, and eating disorders. Of those who had a criminal history, most involved acquisitive, drugrelated, or prostitution offences.

For repeat offenders whose assault history involved extrafamilial children or adults, and who describe deviant fantasies, treatment with women offenders should focus on fantasy control and victim awareness, as well as enhancing self-esteem, social skills, and anger or impulse management. However, in many cases, the primary focus of intervention will be mental health issues, educational upgrading, employment skills, family violence and substance abuse. Determining the chain of behaviours culminating in sexual offending is essential since it allows the offender to intervene more adaptively prior to the occurrence of a relapse. At this time, the number of women sexual offenders in any single location is extremely low, and this makes it difficult to establish group therapy. As a result, when specific sexual offender treatment is provided for women, it is likely to be individualized.

Aboriginal sexual offenders comprise 12% of federal admissions, 19% of provincial admissions, but only 2.5% of the Canadian population. In 1996, the Offender Management System identified 17% of federal sexual offenders as Aboriginal, with the largest number in the Prairie Region.

From 1995 to 1997, the Aboriginal Advisory Committee, from CSC, and the National Committee on Sex Offender Strategy agreed that treatment should be Aboriginal-specific, as mandated by law (Correctional and Conditional Release Act, Section 81). Programs for these offenders attempt to provide a cognitive behavioural approach within a spiritually appropriate context. This involves the use of spiritual Elders and Aboriginal facilitators whenever possible. Specific issues, such as residential school experiences, parental abandonment, and alcohol abuse are given additional weight. In the programs described by Buller (1997), and Ellerby and Stonechild (1998), healing through the use of teachings, rituals, and ceremonies are given equal weight to modules which are an integral aspect of "Western" treatment: victim awareness, development of communication skills, anger/emotion management, control of deviant arousal and fantasy, and relapse prevention strategies. The acceptance and retention rates for these programs have been high and feedback has generally been positive. Preliminary data suggest that Aboriginal sexual offenders who complete this form of treatment have similar recidivism rates to non-Aboriginal sexual offenders.

TREATMENT FEATURES

Therapist requirements

The only evidence currently available on the influence of therapist features in the treatment of sexual offenders comes from two studies by Beech and his colleagues in England (Beech, 1999; Beech & Fordham, 1997). They found, in both community and prison programs, that therapists who treated clients with respect, challenged supportively, and displayed empathy toward clients, generated far greater behavioural change than did more authoritarian, confrontative, and unempathic therapists. The importance of therapist characteristics or style has been neglected, yet it is a seemingly important feature of sexual offender treatment that needs to be addressed. A joint project between the English Prison Service and Canadian researchers is underway to examine the influence of both therapists' behaviours and offenders' responsivity in the effectiveness of treatment with sexual offenders (Marshall et al. 1999). To date, this study has demonstrated that a number of therapist features can be reliably identified (Mulloy, Serran, & Marshall, 1999), and that these are related to beneficial changes in the clients' targeted behaviours, thoughts, and feelings (Fernandez et al., 1999).

It is important to note that the standard for treatment providers is necessarily linked to the manner in which treatment programs operate. Viewing treatment as a set of psycho-educational components, where the operation of each component is specified in detail and must be followed rigorously, lends itself more readily to the provision of treatment by personnel with limited qualifications rather better than does a more process-oriented way of delivering treatment. The latter requires more therapeutic skill and greater basic psychological knowledge, particularly about group processes, than can be expected of prison officers even with specialized training.

Mode of delivery

Most treatment programs for sexual offenders in North America, Great Britain, Australia, and New Zealand are based on a cognitive behavioural model incorporating relapse prevention strategies. These models lend themselves to the specification of treatment procedures. Indeed, the advent of behavioural therapy (which was the precursor of cognitive behavioural treatment) was characterized both by a rejection of all that was identified with traditional psychotherapy and a determination to be scientific. This latter feature led to an effort to specify procedures and a corresponding, although in retrospect an unfortunate, rejection of concern for process (i.e., the way in which treatment is delivered, including the skills of the therapist and the effective engagement of the clients). It is only in recent years that concerns about process variables and their influence has been given any attention in the cognitive behavioural literature (Schaap, Bennun, Schindler, & Hoogduin, 1993).

Decisions about how important process is to treatment effectiveness have direct effects on decisions about the mode of treatment delivery. Viewing treatment as psycho-educational is not necessarily identical with adopting a cognitive behavioural model, although it does all but exclude adopting a more process-oriented approach. Therapy can be cognitive behavioural and procedures can be broadly specified while still allowing for an emphasis on process. A psycho-educational component approach not only constrains the influence of therapist characteristics and group processes, it also limits the full and active participation of the clients and restricts the possibility of running open or rolling groups.

Open groups allow clients to complete the program at their own pace so that when one finishes, another replaces him. This means that these groups are composed, at any one point in time, of clients who may be at different stages of treatment. This essentially excludes the possibility of operating a program as a set of psycho-educational components, and requires the therapist to focus more on the process of treatment delivery and behaviour change in the clients. There are virtues to this way of providing treatment. For example, waiting lists are more flexible and accommodation can be made for clients who need to be immediately included in treatment. Also, the more senior participants in such an open group can assist the newer clients since they have already dealt with the earlier issues. This helps the therapists judge the degree to which these senior members have truly assimilated the earlier issues. Finally, open groups allow each client to continue in treatment until he has achieved all his treatment goals. However, not all therapists are comfortable with the looser structure of open groups and, at the moment, there is no evidence available on which to choose between open and closed groups. In addition, open groups do allow the possibility that clients will spend far too much time in treatment, thereby wasting resources. Some therapists find it hard to discharge clients from open groups until they feel certain the client has become almost perfect on each issue of importance. This, combined with a client's reluctance to leave the group, can easily lead to a very low turnover of clients that is, again, a waste of resources.

Closed groups, where clients start at the same time, go through the same components together, and finish at the same time, lend themselves far better to a psycho-educational approach that is guided by a detailed treatment manual. This clearly reduces therapist uncertainty, guarantees uniformity across settings, and may make some clients feel more comfortable. Furthermore, all clients necessarily finish within a reasonable time frame, although anyone deemed to need more treatment must be recycled through the program. The disadvantages to closed groups are essentially the reciprocals of the advantages to open groups.

There are three dimensions on which group therapy for sexual offenders may vary: it may be psycho-educational or more psychotherapeutic in approach; it may involve discrete components that are procedurally specified in detail, or it may simply set targets and be more process-oriented; and groups may be open or closed. Presently we have no evidence that would allow us to decide between these alternatives, so it seems therapist preference should be the deciding factor.

Level of treatment

It would be both pointless and a waste of resources to provide the same level of treatment to all sexual offenders. Although this seems obvious, CSC is among the few systems that actually adjusts the intensity and extensiveness of treatment to the level of need among its clients. CSC quite sensibly attempts to match treatment needs with differing intensities of treatment. In order to meet the needs of a heterogeneous population of sexual offenders, Williams et al. (1996) developed a National Strategy for Canadian sexual offenders under the jurisdiction of the Correctional Service of Canada. This strategy uses a specialized sexual offender assessment in conjunction with the offender intake assessment to determine the risk, need, and responsivity factors for each sexual offender. Thorough evaluations permit the identification of three levels of need: high, moderate, and low.

High needs offenders need more time to reach acceptable levels of functioning for each of the targets of treatment, and they will almost certainly need programming additional to sexual offender specific treatment (e.g., cognitive skills, living without violence, substance abuse). Moderate needs offenders require somewhat less time in a less intensive sexual offender program, and may be accommodated in lower security level institutions. They should also need fewer additional programs. Low needs offenders require less intensive sexual offender treatment and minimal additional programs.

To prepare all incarcerated sexual offenders for treatment, and to facilitate placement in security levels optimal for their treatment, it is appropriate to provide preparatory treatment at the Induction Centre. Since January 1997, it is available in the Ontario Regional Induction Centre (Millhaven Institution), and has allowed most low needs offenders to be placed in minimum-security institutions; and offenders with high-moderate needs to be placed in a medium security prison where their needs can best be met.

Related to the issue of determining the intensity of treatment for the various offenders is the decision about what constitutes optimal weekly involvement in treatment. According to Williams et al., high need offenders should be in treatment for 6-8 months, and should attend five 3-hour sessions per week. It should be noted that there is no evidence to assist us here, but it would seem that such a schedule might be counterproductive. Involvement in treatment by offenders and therapists is an emotionally rigorous endeavour that would seem to suggest that by the fourth, and certainly by the fifth, session of the week, both might be at best emotionally tired, and at worst, exhausted. Indeed, if they are not, then treatment may not be initiating the emotional responses thought to be necessary to entrench, at a deeper than superficial level, the desired changes in attitudes, beliefs, perceptions, and behaviours. Treatment may, therefore, be more effective if limited to three 3-hour sessions per week. This, of course, may require more extended treatment, although it should be possible to reach acceptable levels of change within

6-8 months for the high needs offenders. For the moderate needs offenders, Williams et al. recommend 4-5 months at 10-hours per week. Again, there is no evidence to guide us, but experience at Bath Institution, in Ontario, suggests that two 3-hour sessions per week for four months should produce satisfactory gains. For the low needs offenders, William et al. suggest 8-12 weeks at 5 hours per week; this seems satisfactory. These suggested requirements refer only to the sexual offender-specific programs. Sexual offenders, as we noted, should be involved in other programs to address the other problematic features of their behaviour.

Timing of treatment

Many sexual offenders, upon completion of their required treatment programs, wait several months, and sometimes years, before they are deemed ready for release. This means that most high and moderate need offenders, at least, will remain in prison for some time after satisfactory completion of a treatment program. For some, this results in being recycled through the same, or a similar, program. For high needs offenders, this should involve them cascading to a moderate needs program at a lower security level, while the moderate needs offenders should move to minimum security. Maintenance programs (often falsely described as "relapse prevention programs") can meet the needs of those offenders who have completed treatment, but who either cannot be transferred to the next level or who need just a maintenance program. These maintenance programs should aim at improving those areas that the previous program report indicated need enhancing, as well as refining relapse prevention plans and detailing release plans. Williams et al. indicate that biweekly 3-hour sessions should suffice, with offenders remaining in treatment until it is evident that there is no further gain.

TREATMENT TARGETS

Williams et al. (1996), and Hanson and Harris (1998) have described a number of targets that should be addressed in a comprehensive sexual offender treatment program. These include: cognitive distortions, empathy and awareness of victim harm, social functioning and relationship issues, deviant sexual preferences, as well as knowledge of the chain of events culminating in offending behaviours and methods for effective prevention of risk. This latter component is referred to as "relapse prevention" (Laws, 1989). Marshall et al. (1999) have distinguished what they call "offence-specific" treatment targets from what are called "offence-related" targets. The latter include, but are not restricted to, anger management, substance abuse, cognitive skills, and conflict resolution. The offence-related targets are identified at initial assessment on an individual basis and offenders are referred to appropriate programs. These offence-related problems are important, but since programs provided by CSC are dealing with them, it is not necessary to include them in the sexual offender programs.

Cognitive distortions

Cognitive distortions involve attitudes, beliefs, and perceptions that are considered to be important underpinnings of deviant sexual behaviour and are, therefore, reasonable treatment targets (Ward et al. 1997). Hanson and Harris (1998) have reported that stable attitudes which justify sexual crimes are predictive of sexual recidivism (r = 0.37). Others have found that acceptance of interpersonal violence, sexual conservatism, and hostility toward women are related to the enactment of violence (Malamuth, Heavey, & Linz, 1993; Marshall & Hambley, 1996).

Initially each offender is required to provide a disclosure of his offence(s), detailing the chain of events, and his thoughts and feelings that led to the offence, as well as the actual offending behaviours. The therapist questions the offender to extract more details, and provides a model for the other group participants to challenge, in a firm but supportive manner, the evident distortions. Therapists should have in their possession official documentation of the crime so that they can effectively challenge the offender.

Empathy training

Marshall and Fernandez (2000), and Pithers (1994) have described the typical procedures used to enhance empathy in sexual offenders. The aim here is to sensitize offenders to the harm they have done. The evidence suggests that most sexual offenders are not generally unempathic, but rather, withhold empathy for their victim. Accordingly, treatment initially assists them to come to an understanding of the harm that typically befalls victims of sexual abuse, and then attempts to transfer this to their specific victim. Provision of didactic materials, such as films or videos of victims (real or enacted) recounting their distress and problems, or victim impact statements, encourages the acceptance of more accurate perceptions of harm. Having each offender either describe the harm his victim has suffered can follow this or by having him write a hypothetical letter from the victim to himself outlining how he/she feels. Rewriting this letter until the group is satisfied that it is a reasonably accurate reflection of the probable harm typically serves to sensitize the offender to the damage he has done. He may then be required to write a hypothetical response to the victim indicating that he is taking responsibility for the offence, apologizing for the abuse, and acknowledging the victim's pain.

Social functioning

Relationship skills, self-confidence, assertiveness, and empathy deficits are considered to be criminogenic factors because they influence the offender's ability to initiate and maintain the prosocial relationships necessary to overcome the isolation, loneliness, and maladaptive relationships that may impel a sexual offender to abuse a victim (Marshall, Anderson, & Fernandez, 1999). Marshall, Bryce, Hudson, Ward, and Moth (1996) have described procedures for enhancing intimacy skills and reducing emotional loneliness. Issues such as assertiveness, communication, attitudes toward others, jealousy, human sexuality, and dealing with being alone, are targeted within a group discussion format and, where necessary, role-playing is employed. Marshall et al. (1996) demonstrated that these procedures were effective in achieving the goals of providing sexual offenders with the skills necessary to meet their intimacy needs in prosocial settings.

Similarly, various tactics are employed to increase selfconfidence. The context within which therapy is conducted with sexual offenders appears to influence their self-esteem. Educational upgrading, increased social contacts, and scheduled pleasurable activities have been shown to increase selfesteem (Marshall, Anderson, & Champagne, 1996). However, specific procedures individually tailored for each offender are also important in enhancing a sense of self-worth. It is important to note that increasing self-esteem facilitates changes in all other targets of treatment (Marshall et al., 1997), including the reduction of deviant sexual preferences (Marshall, 1997).

Deviant sexual preferences

Deviant sexual preferences are generally associated with increased risk of recidivism (Hanson & Harris, 1998). Because of this association, deviant arousal is considered a criminogenic factor.

Electric aversive conditioning, although very popular in the 1970s and still utilized in some programs, has been abandoned by most clinicians. Quinsey and Earls (1990) expressed some puzzlement at this, since they considered there was no empirical reason for foregoing electric aversion. However, there are significant practical and ethical problems with its use, and this seems to have been the driving factor. Olfactory aversion, on the other hand, continues to be used, although not apparently by many practitioners. It involves pairing a noxious odour with the deviant fantasy. There is some controversy about how well these procedures generalize to the real world and how appropriate fantasies can be maintained. It should be stressed that these techniques are only one facet of a comprehensive treatment program focussing on cognitive restructuring, skills enhancement, and relapse prevention strategies. Covert sensitization associates erotic images or fantasies with aversive thoughts or consequences.

Masturbatory reconditioning requires the client to substitute appropriate sexual fantasies in place of deviant thoughts during masturbation to orgasm. Satiation involves repeated rehearsal of deviant images during the post-orgasmic refractory period until decreases are achieved in arousal to the sexually deviant stimuli.

In addition to the behavioural methods outlined above, various medications have been effectively employed to increase control over deviant tendencies. However, this should not be seen as effective treatment on their own, but rather as adjunctive treatments to comprehensive cognitive behavioural programs.

Relapse prevention

Relapse prevention is the overarching framework for most sexual offender treatment programs. It not only places responsibility for offending behaviour squarely on the offender's shoulders, it also situates offending behaviour as the last link in a chain of behaviours, some of which may appear to be innocuous (Pithers, 1990). This chain may involve poor choices as well as some behaviour that Ward (1999) has described as "automatic". Helping the offender to identify the choices that lead to offending behaviour can produce a set of more adaptive and prosocial methods of coping with what are described as high-risk situations.

In addition, a variety of risk factors (e.g., depressive mood, relationship problems, use of intoxicants) and risky situations that might facilitate a return to offending are identified. For each of these risk factors, the offender is required to list plans to avoid them or deal with them should they arise. Offenders are warned that they must be vigilant upon release back into the community if they are to avoid reoffending. These relapse prevention plans are meant to assist this process, as are a set of warning signs generated by the offenders that include both internal and external features of his behaviour that suggest he is moving back to patterns of behaviour that precede offending.

TREATMENT EFFECTIVENESS

There are several aspects to determining the value of treatment, although the typical approach with sexual offenders has been to look at reductions in post-discharge recidivism. While this latter index is critical, even if recidivism is significantly reduced, a treatment program would be of little value if either few candidates entered treatment, or most withdrew or remained but were non-compliant. Thus, treatment refusals, dropouts, or failure to effectively comply are relevant indices of the utility of a treatment program. These variables can all be considered to be features of treatment participation.

Participation

Abel, Mittleman, Becker, Rathner, and Rouleau (1988) reported that 34.9% of their clients had dropped out by the third week of treatment. One of the primary reasons for this high rate of dropouts was the lack of any leverage to pressure them to remain in treatment. The leverage CSC clients' experience (i.e., less likelihood of parole for failure to effectively participate) may therefore account for the relatively low dropout rate in CSC programs. They also noted that the majority of those who dropped out of treatment were at greater risk to reoffend. California's evaluation program (Marques, 19984) has high refusal rates. Oddly enough, the outcome evaluations revealed that refusers are only marginally, if at all, more likely to recidivate than those who volunteer for treatment.

Sexual offenders in Canadian penitentiaries are well aware that refusal to enter, or withdrawal, from treatment are both likely to result in parole denial. Not surprisingly, a relatively small number of sexual offenders within the Correctional Service of Canada institutions refuse an offer of treatment, withdraw from a program, or fail to meet reasonable level of treatment compliance.

TREATMENT OUTCOME

There are two aspects to outcome evaluations. The first concerns an evaluation of whether or not participants meet the goals of treatment. This is assessed by evaluating changes from pre- to post-treatment on measures that assess functioning on each of the targets (or components) of treatment. If a treatment program aims at increasing self-esteem, correcting cognitive distortions, enhancing empathy, improving social and relationship skills, eliminating deviant sexual preferences, and generating clear offence chains and relapse prevention plans, then measures of these targets must demonstrate change. While this is obviously true for individual participants, it must also be shown that the overall program reaches its goals.

Treatment providers must first demonstrate that the procedures and processes they use typically generate the anticipated changes, otherwise it is unfair to hold any individual offender responsible for not having reached the expected goals. A series of studies have demonstrated that the procedures outlined above produce the desired changes in self-esteem, empathy, denial, minimization, loneliness and intimacy. On the other hand, several reviews have come to rather gloomy conclusions about the general effectiveness of procedures aimed at reducing deviant sexual preferences. However, there are tentative reports suggesting that deviant preferences may be changed as a result of other features of an overall program without actually targeting the preferences themselves (Marshall, 1997). These reports, however, need replication before any firm conclusions can be made.

Recidivism studies

One of the problems that beset those who attempt to evaluate treatment effectiveness is the low base rate of reoffending among untreated sexual offenders. As Barbaree (1997) points out, this low base rate increases the probability that we may falsely reject the hypothesis that treatment has beneficial effects, simply because we do not have the statistical power to discern real effects. Quinsey and his colleagues (1993), on the other hand, have expressed concern that we may too hastily conclude that treatment is effective when in fact properly designed studies may subsequently reveal no effects for treatment. To date, no resolution has been reached on the best way to deal with these problems.

One possible solution to the low base rate problem, might be to count the number of victims resulting from reoffences rather than just recidivism. Marshall and Barbaree (1988), for example, found that on average sexual reoffenders abuse two victims each. Counting victims as the index of failure, then, would double the base rate over simple recidivism thereby giving more room to demonstrate reductions due to treatment. The number of victims is also a more socially meaningful index since reducing the number of innocent people victimized by sexual offenders is presumably the real goal of treatment.

Quinsey et al.'s declaration that it is only a random-design study that can demonstrate the effectiveness or otherwise of treatment for sexual offenders fits with his concern that we do not overestimate the value of treatment. However, this design requires that we randomly allocate those sexual offenders who wish to enter treatment to either a treatment or a no-treatment condition. As Marshall (1993), and Marshall and Pithers (1994) point out, when parole is contingent upon satisfactory treatment completion (as is the case for sexual offenders in CSC institutions), no sensible sexual offender would volunteer for such a study. This is not to deny the value of the ideal treatment study; it is simply to note the practical restrictions on implementing such a study within CSC.

On the other hand, Canada is one of the few places in the world where outcome studies with sexual offenders can be conducted, because our national database (Canadian Police Information Centre) identifies all persons who have been charged or convicted of criminal offences. There are few other countries in the world where researchers can access such accurate and comprehensive recidivism data (England and New Zealand appear to have similar databases). Because of the difficulties in the United States in accessing information on recidivism that occurs outside the state boundaries of each treatment program, most, if not all, treatment outcome studies are flawed. In all studies from the United States reported to date, the recidivism data are almost certainly incomplete. For example, in Marques' (1998, personal communication) most recent report of her outcome evaluation of the treatment of sexual offenders selected from California prisons, only 6% of those rapists who refused treatment were identified as recidivating. In light of recidivism data from other countries, including Canada, this seems to be an absurdly low base rate. Accordingly, we cannot know whether the resultant data reported for the treated and untreated volunteer groups are accurate reflections of the true differences between these groups.

As a result of these various problems with treatment outcome studies, we have chosen to report data from studies in Canada plus one from New Zealand. Table 17.2 describes the comparative recidivism from these studies. We have chosen only the studies that report a reasonably well-matched comparison group of untreated sexual offenders where differences between treated and untreated subjects have been statistically evaluated. Those reports listed as having negative outcomes found no significant benefits for treatment, while those listed as having positive outcomes reported statistically significant benefits for treatment. In all cases, it should be noted, the comparison untreated groups are simply convenience groups. For example, in the Kingston Sexual Behaviour Clinic's (KSBC) outpatient program study, the untreated offenders were those who admitted their offences and sought treatment, but lived too far away from KSBC to regularly attend treatment. For the prisonbased programs, the convenience samples are untreated sexual offenders extracted from archival records and then matched to the treated sample on offence history and demographic variables. This use of convenience samples does detract from the methodological elegance of the studies but, given the practical limitations previously noted in doing ideal studies, we think they provide the best basis for deciding whether or not treatment is effective. In this respect, we leave it to the reader to come to his/her own conclusions about whether treatment for sexual offenders is effective by studying the data in Table 17.2 or by reading the reports in their original form.

TABLE 17.2 Treatment outcome studies

	Treated*	Untreated
A. Studies with negative findings		
Rice et al., 1991	38	31
Hanson et al., 1993	44	38
Marques (personal		
communication, March 1998)		
Rapists (volunteers)	11	18
Rapists (non volunteers)		6
Child molesters (volunteers)	11	13
Child molesters		
(non volunteers)		15
B. Studies with positive findings		
Marshall & Barbaree, 1988**		
Child molesters		
women victims	18	43
men victims	13	43
incest offenders	8	22
Looman et al. 1998		
Pre-1989 (most serious		
offenders)	28	52
Post-1989 (least serious		
offenders)	7	25
Nicholaichuk et al., 1998		
Rapists	14	42
Child molesters	18	62
Bakker et al., 1998		
Child molesters	8	21
Proulx et al., 1998		
Child molesters	6	33
Rapists	39	71

* All figures are sexual offence recidivism rates rounded to the nearest whole number. ** All data for the Marshall studies are derived from unofficial and official records combined.

As the reader will note from Table 17.2, there are reports of treatment failure, although they are outnumbered by reports of treatment success. Marshall, Anderson, and Fernandez (1999) offer detailed analyses of what they view as serious limitations in those programs that failed to produce treatment benefits. It is worth noting that, to date, most reviewers have concerned themselves primarily with considerations about features of the client population as well as treatment content, duration and intensity when trying to explain why some programs are effective and others are not. Therapist characteristics or style, therapist-client relationships, and the client's participation in the treatment process, have all but been ignored as potential influences on the effectiveness of treatment with sexual offenders. These are, however, potentially important issues that urgently need research attention.

It is somewhat incomplete to determine the benefits of treatment solely in terms of reducing future victimization. This, of course, ought to be our main concern, but we also have to be fiscally responsible; that is, it may be possible to provide effective treatment, but the cost may be beyond society's willingness to pay for such benefits. This may be particularly so if reductions in recidivism are statistically significant but not remarkable.

While overall the presently available data may not convincingly demonstrate to all readers the benefits of treating sexual offenders, we are inclined to believe that, at the very least, they encourage optimism about the value of treatment.

REFERENCES

- Abel, G. G., Gore, D. K., Holland, C. L., Camp, N., Becker, J. V., & Rathner, J. (1989). The measurement of the cognitive distortions of child molesters. *Annals of Sex Research*, 2, 135-152.
- Abel, G. G., Mittleman, M., Becker, J. V., Rathner, J., & Rouleau, J. L. (1988). Predicting child molesters' response to treatment. *Annals of the New York Academy of Sciences*, 538, 223-234.
- Andrews, D. A., & Bonta, J. (1995). The Level of Service Inventory-Revised. Toronto, ON: Multi-Health System.
- Atkinson, J. (1995). *The assessment of female sex offenders*. Ottawa, ON: Correctional Service of Canada.
- Bakker, L., Hudson, S. M., Wales, D., & Riley, D. (1998). An evaluation of the Kia Marama Treatment Programme for child molesters. Christchurch, New Zealand: New Zealand Department of Justice.
- Barbaree, H. E. (1997). Evaluating treatment efficacy with sexual offenders: The insensitivity of recidivism studies to treatment effect. Sexual Abuse: A Journal of Research and Treatment, 9, 111-129.
- Beckett, R., Beech, A., Fisher, D., & Fordham, A.S. (1994). Community-based treatment of sex offenders: An evaluation of seven treatment programmes. Home Office Occasional paper. London, UK: Home Office.
- Beech, A. (1999, September). Relationship between treatment change and thempeutic climate in sex offender treatment programs. Paper presented at the 18th Annual Research and Treatment Conference of the Association for the Treatment of Sexual Abusers, Orlando, FL.
- Beech, A., & Fordham, A. S. (1997). Therapeutic climate of sexual offender treatment programs. Sexual Abuse: A Journal of Research and Treatment, 9, 219-237.
- Boer, D. P., Gauthier, C. M., Watson, D. R., Dorward, J., & Kolton, D. J. C. (1995, March). The assessment and treatment of intellectually disabled sex offenders: The Regional Psychiatric Centre (Pacific) "Northstar" treatment and relapse prevention program. Paper presented at Toward a National Strategy: Conference on Intervention with Sex Offenders, Toronto, ON.
- Borduin, C. M., Henggeler, S. W., Blaske, D. M., & Stein, R. J. (1990). Multisystemic treatment of adolescent sexual offenders. *International Journal* of Offender Therapy and Comparative Criminology, 34, 105-113.
- Buller, E. (Ed.) (1997). Aboriginal peoples collection. Ottawa, ON: Solicitor General of Canada.

- Bumby, K. M. (1996). Assessing the cognitive distortions of child molesters and rapists: Development and validation of the MOLEST and RAPE Scales. Sexual Abuse: A Journal of Research and Treatment, 8, 37-54.
- Burt, M. R. (1980). Cultural myths and supports for rape. Journal of Personality and Social Psychology, 38, 217-230.
- Buss, A. H., & Durkee, A. (1957). An inventory for assessing different kinds of hostility. *Journal of Consulting Psychology*, 21, 343-349.
- Check, J. V. P. (1984). The Hostility Towards Women Scale. Unpublished dissertation, University of Manitoba, MB.
- Committee on Sexual Offences against Children and Youths (1984). Report of the Committee on Sexual Offences against Children and Youths: Vols. 1-11, and summary (Badgely Report; Cat. No. J2-50/1984/E, Vols. 1-11, H74-13/1984-1E, Summary). Ottawa, ON: Department of Supply and Services.
- Cortoni, F., & Marshall, W. L. (1996, August). Juvenile sexual history, sex and coping strategies: A comparison of sexual and violent offenders. Paper presented at the International Congress of Psychology, Montreal, QC.
- Crowne, D. P., & Marlow, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349-354.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44, 113-125.
- D'Zurilla, T. J., & Goldfried, M. R. (1971). Problem solving and behavior modification. *Journal of Abnormal Psychology*, 78, 107-126.
- Ellerby, L., & Stonechild, J. (1998). Blending the traditional with the contemporary in the treatment of aboriginal sexual offenders: A Canadian experience. In W. L. Marshall, Y. M. Fernandez, S. M. Hudson, & T. Ward (Eds.), *Sourcebook* of treatment programs for sexual offenders (pp. 399-415). New York, NY: Plenum Press.
- Endler, N. S., & Parker, J. D. A. (1990). Multidimensional assessment of coping: A critical evaluation. *Journal of Personality and Social Psychology*, 8, 844-854.
- Epperson, D. L., Kaul, J. D., & Huot, S. J. (1995 October). Predicting risk for recidivism for incarcerated sex offenders: Updated development on the Sex Offender Screening Tool (SOST). Paper presented at the 14th Annual Research and Treatment Conference of the Association for the Treatment of Sexual Abusers, New Orleans, LA.
- Fernandez, Y. M., & Marshall, W. L. (1999). Violence, empathy, social self-esteem and psychopathy in rapists. Submitted for publication.
- Fernandez, Y. M., Marshall, W. L., Lightbody, S., & O'Sullivan, C. (1999). The Child Molester Empathy Measure. Sexual Abuse: A Journal of Research and Treatment, 11, 17-31.
- Fernandez, Y. M., Serran, G., & Marshall, W. L. (1999, September). The reliable identification of therapist features in the treatment of sexual offenders. Paper presented at the Annual Research and Treatment Conference for the Association for the Treatment of Sexual abusers, Orlando, FL.
- Flannery, R. B., & Weiman, D. (1989). Social support, life stress, and psychological distress: An empirical assessment. *Journal of Clinical Psychology*, 45, 867-872.
- Hall, G. C. N. (1995). Sexual offender recidivism revisited: A meta-analysis of recent treatment studies. *Journal of Consulting and Clinical Psychology*, 63, 802-809.
- Hanson, R. K. (1997). The development of a brief actuarial risk scale for sexual recidivism. Ottawa, ON: Solicitor General of Canada.
- Hanson, R. K., & Bussière, M. T. (1998). Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology*, 66, 348-362.
- Hanson, R. K., & Harris, A. (1998). *Dynamic predictors of sexual recidivism* (User Report 96-04). Ottawa, ON: Solicitor General of Canada.
- Hanson, R. K., & Scott, H. (1995). Assessing perspective taking among sexual offenders, non sexual criminals and non offenders. Sexual Abuse: A Journal of Research and Treatment, 7, 259-277.
- Hanson, R. K., Steffy, R. A., & Gauthier, R. (1993). Long-term recidivism of child molesters. *Journal of Consulting and Clinical Psychology*, 61, 646-652.
- Hare, R. D. (1991). Manual for the Revised Psychopathy Checklist. Toronto, ON: Multi-Health Systems.
- Harris, G. T., Rice, M. E., & Quinsey, V. L. (1993). Violent recidivism of mentally disordered offenders: The development of a statistical prediction instrument. *Criminal Justice and Behavior*, 20, 315-335.

- Keltner, A., Marshall, P. G., & Marshall, W. L. (1981). Measurement and correlation of assertiveness and social fear in a prison population. *Corrective* and Social Psychiatry, 27, 41-47.
- Kleinknecht, S., Williams, S. M., & Nicholaichuk, T. (1999). Characteristics of Canada's convicted adult female sex offender population (1972-1998). Unpublished manuscript.
- Koss, M. P., & Harvey, M. P. (1991). The rape victim: Clinical and community interventions (2nd ed.). Newbury Park, CA: Sage Publications.
- Langevin, R. (1983). Sexual strands: Understanding and treating sexual anomalies in men. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Laws, D. R. (1986). Sexual deviance card sort. Tampa, FL: Florida Mental Health Institute.
- Laws, D. R. (1989). Relapse prevention with sex offenders. New York, NY: Guilford Press.
- Lawson, J. S., Marshall, W. L., & McGrath, P. (1979). The Social Self-esteem Inventory. *Educational and Psychological Measurement*, 39, 803-811.
- Looman, J., Abracen, J., & Nicholaichuk, T. (2000). Recidivism among treated sexual offenders and matched controls: Data from the Regional Treatment Centre (Ontario). *Journal of Interpersonal Violence*, 15, 279-290.
- Malamuth, N. M., Heavey, C. L., & Linz, D. (1993). Predicting men's antisocial behavior against women: The interaction model of sexual aggression. In G. C. N. Hall, R. Hirschman, J. R. Graham, & M. S. Zaragoza (Eds.), Sexual aggression: Issues in the etiology, assessment and treatment (pp. 63-97). Washington, DC: Taylor & Francis.
- Marques, J. K. (1984). An innovative treatment program for sex offenders: Report to the Legislature. Sacramento, CA: California Department of Mental Health.
- Marshall, W. L. (1993). The treatment of sex offenders: What does the outcome data tell us? A reply to Quinsey et al. *Journal of Interpersonal Violence*, 8, 524-530.
- Marshall, W. L. (1997). The relationship between self-esteem and deviant sexual arousal in non familial child molesters. *Behavior Modification*, 21, 86-96.
- Marshall, W. L., Anderson, D., & Champagne, F. (1996). Self-esteem and its relationship to sexual offending. *Psychology, Crime & Law*, 3, 81-106.
- Marshall, W. L., Anderson, D., & Fernandez, Y. M. (1999). Cognitive behavioural treatment of sexual offenders. London, UK: John Wiley & Sons.
- Marshall, W. L., & Barbaree, H. E. (1988). Long-term evaluation of a behavioral treatment program for child molesters. *Behaviour Research and Therapy*, 26, 499-511.
- Marshall, W. L., Bryce, P., Hudson, S. M., Ward, T., & Moth, B. (1996). The enhancement of intimacy and the reduction of loneliness among child molesters. *Journal of Family Violence*, 11, 219-235.
- Marshall, W. L., Champagne, F., Sturgeon, C., & Bryce, P. (1997). Increasing the self-esteem of child molesters. *Sexual Abuse: A Journal of Research and Treatment*, 9, 321-333.
- Marshall, W. L., & Fernandez, Y. M. (2000). Empathy training for sexual abuser assessment and treatment. Brandon, VT: Safer Society Press.
- Marshall, W. L., Fernandez, Y. M., Hudson, S. M., & Ward, T. (Eds.) (1998). Sourcebook of treatment programs for sexual offenders. New York, NY: Plenum Press.
- Marshall, W. L., & Hambley, L. S. (1996). Intimacy and loneliness, and their relationship to rape myth acceptance and hostility toward women among rapists. *Journal of Interpersonal Violence*, 11, 586-592.
- Marshall, W. L., & Pithers, W. D. (1994). A reconsideration of treatment outcome with sex offenders. *Criminal Justice and Behavior*, 21, 10-27.
- Marshall, W. L., Thornton, D., Mulloy, R., Serran, G., Mann, R., Anderson, D., & Fernandez, Y. M. (1999). Process research in sexual offender treatment. Study in progress.
- Mathews, R., Mathews, J. K., & Speltz, K. (1993). Female sexual offenders: An exploratory study. Orwell, VT: Safer Society Press.
- McCarty, L. M. (1986). Mother-child incest: Characteristics of the offender. Child Welfare, 65, 447-458.
- McDonald, R. K., & Pithers, W. D. (1989). Self-monitoring to identify highrisk situations. In D. R. Laws (Ed.), *Relapse prevention with sex offenders* (pp. 96-104). New York, NY: Guilford Press.
- Miller, R. S., & Lefcourt, H. M. (1982). The assessment of social intimacy. Journal of Personality Assessment, 46, 514-518.

- Miner, M. H., Day, D. M., & Nafpaktitis, M. K. (1989). Assessment of coping skills: Development of a Situational Competency Test. In D. R. Laws (Ed.), *Relapse prevention with sex offenders*, (pp. 127-136). New York, NY: Guilford Press.
- Mulloy, R., Serran, G., & Marshall, W. L. (1999, June). Group therapy processes with sex offenders. Paper presented at the Canadian Psychological Association Annual Convention, Halifax, NS.
- Nicholaichuk, T., Gordon, A., Andre, G., Gu, D., & Wong, S. (1998). Outcome of the Clearwater Sex Offender Treatment Program: A matched comparison between treated and untreated offenders. Submitted for publication.
- Nichols, H. R., & Molinder, I. (1984). *Multiphasic Sex Inventory*. Tacoma, WA: Authors.
- Paulhaus, D. L. (1991). Measurement and control of response bias. In J.P. Robinson, P. R. Shaver, & L. S. Wrightman (Eds.), *Measures of personality* and social psychological attitudes (pp. 17-59). New York, NY: Academic Press.
- Pithers, W. D. (1990). Relapse prevention with sexual aggressors: A method for maintaining therapeutic change and enhancing external supervision. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *The handbook of sexual assault: Issues, theories and treatment of the offender* (pp. 363-385). New York, NY: Plenum Press.
- Pithers, W. D. (1994). Process evaluation of a group therapy component designed to enhance sex offenders' empathy for sexual abuse survivors. *Behaviour Research and Therapy*, 32, 565-570.
- Proulx, J., Ouimet, M., Pellerin, B., Paradis, Y., McKibben, A., & Aubut, J. (1998). Posttreatment recidivism in sexual aggressors. Submitted for publication
- Quinsey, V. L. (1996). A retrospective evaluation of the Regional Treatment Centre Sex Offender Program. Paper presented at the International Congress of Psychology, Montreal, QC.
- Quinsey, V. L., & Earls, C. M. (1990). The modification of sexual preferences. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook* of sexual assault: Issues, theories and treatment of the offender (pp. 279-295). New York, NY: Plenum Press.
- Quinsey, V. L., Harris, G. T., Rice, M. E., & Lalumière, M. L. (1993). Assessing treatment efficacy in outcome studies of sex offenders. *Journal of Interpersonal Violence*, 8, 512-523.
- Rathus, S. A. (1973). A 30-item schedule for assessing assertive behavior. *Behavior Therapy*, 4, 398-406.
- Rice, M. E., Quinsey, V. L., & Harris, G. T. (1991). Sexual recidivism among child molesters released from a maximum security psychiatric institution. *Journal of Consulting and Clinical Psychology*, 59, 381-386.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The Revised UCLA Loneliness Scale. Journal of Personality and Social Psychology, 39, 472-480.
- Russell, D. E. H. (1984). Sexual exploitation: Rape, child sexual abuse and workplace harassment. Thousand Oaks, CA: Sage Publications.
- Russell, D. E. H. (1986). The secret trauma: Incest in the lives of girls and women. New York, NY: Basic Books.
- Schaap, C., Bennun, I., Schindler, L., & Hoogduin, K. (1993). The therapeutic relationship in behavioural psychotherapy. New York, NY: Wiley.
- Spielberger, C. D. (1988). State-Trait Anger Expression Inventory (STAXI) professional manual. Odessa, FL: Psychological Assessment Resources.
- Spielberger, C. D., Gorsuch, R. L., & Lushene, R. E. (1970). Manual for the State-Trait Anxiety Inventory. Palo Alto, CA: Consulting Psychologists Press.
- Syed, F., & Williams, S. M. (1996). Case studies of female sex offenders in the Correctional Service of Canada. Ottawa, ON: CSC document.
- Ward, T. (1999). A self-regulation model of the relapse process in sexual offenders. In B. K. Schwartz (Ed.), *The sex offender: Theoretical advances, treating special populations and legal developments* (pp. 6.1-6.8). Kingston, NJ: Civic Research Institute.
- Ward, T., Hudson, S. M., Johnston, L., & Marshall, W. L. (1997). Cognitive distortions in sex offenders: An integrative review. *Clinical Psychology Review*, 17, 479-507.
- Watson, D., & Friend, R. (1969). Measurement of social-evaluative anxiety. Journal of Consulting and Clinical Psychology, 33, 448-457.
- Williams, S. M., Marcoux-Galarneau, R., Malcolm, P. B., Motiuk, L., Deurloo, B., Holden, R., & Smiley, C. (1996). *Standards and guidelines for the provision* of services to sex offenders. Ottawa, ON: Correctional Service of Canada.
- Wilson, G. D. (1978). The secrets of sexual fantasy. London, UK: J. M. Dent.

RALPH C. SERIN and DENISE L. PRESTON¹

The preoccupation with violent offenders has heightened following the emphasis on risk appraisal over the past decade. It is therefore not surprising that in addition to changes in sentencing and policy, correctional jurisdictions are now attending to the treatment and management of high-risk and violent offenders. This chapter focuses on interventions and programs for violent offenders that are intended to reduce the likelihood of post-treatment reoffending. It is important, therefore, to define violence as distinct from criminality so that interventions for violent offenders can be linked to their specific treatment needs, not offending in general. As such, interventions for delinquency and criminality are not considered to be sufficient for violent offenders, either in terms of treatment targets or theoretical underpinnings. This is not to imply, however, that the management of violent offenders cannot be informed by the risk/need principles reflected in the psychology of criminal conduct (Andrews & Bonta, 1999).

For the purpose of this chapter, violent offending is considered the intentional and malevolent physical injuring of another without adequate social justification, resulting in conflict with the criminal justice system (Blackburn, 1993). Within this definition there is provision for perpetrators to be anger-motivated or goal-oriented (Buss, 1961; Zillman, 1979). Anger is therefore not a prerequisite to offender violence (Novaco & Welsh, 1989), but it is a common antecedent. While threats and psychological injury are not specifically included in this definition, this is not intended to mitigate their harmful effects on victims. It should also be noted that this definition excludes both sexual violence and self-injurious behaviour that is prevalent among offenders (Sherman & Morschauser, 1989) as these are addressed in other chapters of this Compendium.

DEFINING VIOLENT OFFENDERS

Confusion over the definition of violent offender has been a major impediment in their treatment. Perhaps related to this is the failure to recognize violent individuals as being heterogeneous (Serin & Preston, 2001). Violent offenders are usually defined in terms that are not mutually exclusive such as criminal convictions (e.g., assaults), attitudes (e.g., hostility), emotions (e.g., anger), and victim selection (e.g., spousal assault). The failure to specifically delineate types of violent offenders has obscured the identification of treatment needs and confounds program effectiveness research (Serin, 1994). For example, predominantly instrumentally aggressive clients are unlikely to show substantive gains in an arousal managementbased anger control program. Further, even observable and measurable changes by an offender, (e.g., knowledge of anger principles), may well be unrelated to reductions in future violence simply because the domain was not criminogenic for that particular offender. Upon evaluation, such a program might then be considered to be ineffective. More accurately, however, it should be considered ineffective for certain types of violent offenders.

While not as sophisticated as the typology research with sex offenders (Knight & Prentky, 1990), there have been efforts to develop typologies for violent offenders that might then inform programming efforts. Some have included offence types (Dietz, 1987) and others have reflected detailed clinical reviews (Toch, 1969). More recently, cognitive style has been described as potentially useful in differentiating among violent offenders (Novaco & Welsh, 1989). This work is similar to research by Crick and Dodge, (1994) who described social informationprocessing deficits in violent juveniles. Tolan and Guerra (1994) distinguished adolescent violent offenders according to patterns of their use of violence. They determined four distinct types - situational, relationship, predatory, and psychopathological. Most importantly, they suggest that these different types of violence can be distinguished in terms of their prevalence, stability, cause, and preferred intervention. Situational violence incorporates setting, environmental cues, and social factors. Relationship violence reflects interpersonal conflict and incorporates psychological and social factors. Predatory violence denotes instrumental or goal-oriented violence, often in the context of criminality and gang activities. Finally, psychopathological violence, the least prevalent, reflects repetitive violence across settings, mainly because of the individual's neuropsychological deficits.

The scheme proposed by Tolan and Guerra (1994) extends earlier research attempting to define violent individuals by linking type of violence to type of intervention. Their work illustrates the utility of differentiated intervention, noting that violent offenders will not have the same onset, antecedents, treatment needs, and treatment response. Although lacking empirical support, it provides an important focus that was previously lacking in the treatment literature on violent offenders.

¹ Correctional Service of Canada

INCIDENCE

The Correctional Service of Canada (CSC), receives all adult offenders serving sentences of two years or more, regardless of offence type. Based solely on admitting offence, the stock population in 1995 for the Service was comprised of 78% (n = 10,983) violent offenders (offences include robbery, murder, assault, sexual assault) (Correctional Service of Canada, 1997). In 1994, CSC implemented a systematic, automated assessment strategy for all new admissions. The purpose of this initiative was to assist in the risk assessment of offenders, their treatment planning, and corporate policy development. The database now contains more than 16,000 completed intake protocols for consecutive admissions. These data permit us to refine our definition of violence to reflect history, not just index offence. Restricting the definition to persistently violent offenders, that is, those with three or more victims in their criminal history, the prevalence drops from 78% to 35.4%. Further, considering variables from seven domains of treatment needs that have been identified in the literature as related to risk of violence (i.e., impulsivity, poor empathy, age of onset, lifestyle stability, weapon use, use of threats, escape risk), a persistently violent offender index was calculated (Motiuk, Nafekh, & Serin, 1998). A cut-off for the index of one standard deviation above the mean was utilized to distinguish a high score, putatively indicative of risk. Preliminary analyses with a sample of 764 offenders indicate this index accurately predicts violent recidivism (serious assaults, armed robbery, manslaughter, or murder), with higher scores on the index (persistently violent) having recidivism rates of 50.5% versus 15.4% for the low scores.

The more important contribution, however, is the identification of treatment needs for a group of 2,214 persistently violent offenders (PVO). These data suggest that it is possible to identify chronic or persistently violent offenders whom have greater treatment needs and a higher likelihood of recidivism. Relative to other offenders, they show significantly greater need in the areas of employment, family, associations, substance abuse, community functioning, personal/emotional skills, and criminal attitudes. Table 18.1 presents these data.

TREATMENT NEEDS/TARGETS

Literature reviews of risk factors in chronically violent or aggressive individuals yield such problems as:

- hostility (Megargee, 1976)
- ♦ impulsivity (Henry & Moffitt, 1997)
- ◆ substance abuse (Pihl & Peterson, 1993)
- ◆ major mental disorders acute symptoms (Monahan, 1997)
- ♦ anti-social personality, psychopathy (Hart & Hare, 1997)
- social information-processing deficits (Dodge & Schwartz, 1997)
- experience of poor parenting (Patterson, Reid, & Dishion, 1992)
- ♦ neglect as a child (Widom, 1997).

TABLE 18.1	Proportion of offenders with considerabl	e
difficulties/ass	sets by treatment domain $(n = 12,093)$	

Need Domain	Non PVO (n = 1967)	Other (n = 7912)	PVO (n = 7912)
	Problem/ Assets	Problem/ Assets	Problem/ Assets
Employment	11.8/22.4	28.4/5.6	40.8/1.3
Marital/Family relationships	6.5/27.9	22.2/8.0	40.4/1.7
Associations	12.4/ <i>21.5</i>	29.6/6.7	40.9/1.5
Substance Abuse	8.4/0	49.1/0	81.1/0
Community Functioning	5.0/21.1	11.9/6.6	22.7/3.3
Personal/ Emotional	23.7/ <i>32.2</i>	61.0/7.7	88.7/1.9
Criminal Attitudes	16.2/ <i>21.7</i>	30.2/78.0	48.8/2.6

As well, follow-up studies (Zamble & Quinsey, 1997) and problem surveys (Rice, Harris, Quinsey, & Cyr, 1990) point to anger as an important proximal risk factor for violence. These results illustrate the complexity of factors that must be considered in developing a general theory of violent offending, in formulating a theory about individual cases, and in responding to violence through intervention.

These factors or treatment targets can be organized into domains and compared among different types of violent offenders to demonstrate the need for matching offenders' treatment needs with program content. Table 18.2 illustrates five domains or problem areas from the literature on violent offenders that are related to their expression or inhibition of violent behaviour. These domains are:

- competence (social skills and empathy)
- ♦ arousal (anger)
- schema (aggressive beliefs and hostile attributions)
- ◆ self-regulation (impulsivity)
- ◆ anxiety (neuroticism).

By using the offender types proposed by Tolan and Guerra (1994), we can observe that one treatment program cannot adequately address the needs of all violent offenders, given their heterogeneity. Specifically, predatory offenders, (e.g., armed robbers), are considered to have deficits in terms of competence, schema, and self-regulation, but not arousal and anxiety. Therefore, gains in the areas of arousal and anxiety should not be expected to result in the inhibition of violence for these offenders. That is, according to this model, anger-based intervention for predatory offenders

TABLE 18.2	Domains and trea	atment needs for	types of violent	offenders

	Competence (social skills, empathy)	Arousal (anger)	Schema (aggressive beliefs, hostile attributions)	Self regulation (impulsivity, hostile attributions)	Anxiety (neuroticism)
Predatory	+/?	+	-	-	+
Relationship	+	+/?	-	-	+
Situational	-/?	-	-	-/?	-
Psychopathological	-/?	-	-	-	-/?

Note. For illustrative purposes only, requires empirical validation. Targeting a domain is hypothesized to increase the expression of violence (+), decrease its expression (-), or have an unknown effect (?).

should fail to yield reductions in violent recidivism because arousal and anxiety are unrelated to their use of violence. Similar conclusions may be extrapolated for the other types represented in the model, however, this conceptual framework requires validation.

ASSESSMENT OF TREATMENT NEED

Since the assessment typically reflects the treatment targets inherent in that program, it is somewhat difficult to describe the assessment of treatment needs independent of the type of program. Predominantly, the treatment of violent offenders has focused on anger control. This approach views violence as resulting from an offender's inability to identify and manage anger. As noted previously, however, anger is neither a necessary nor sufficient antecedent to violence. Increasingly in addition to self-report aspects of anger (severity, duration, frequency, behavioural expression, triggers), psychological tests of anger deal with cognition and interpersonal interactions (Novaco, 1994). Other common tests used in violent offender programs to determine treatment needs include measures of aggression (Buss & Perry, 1992), social desirability to control for response set (Paulhus, 1998), impulsivity (Eysenck, Pearson, Easting & Allsop, 1985), and assertiveness (McCormick, 1984). More recently, measures of treatment readiness, cognitive style in the form of hostile attribution biases, social problem solving, and relapse prevention knowledge and skills have been incorporated into violent offender assessments (Preston & Serin, 1999). This is consistent with the view that violent offenders are heterogeneous and that violence is multi-faceted.

RISK AND TREATMENT INTENSITY

The strategy for determining treatment intensity for violent offenders is not well defined. The work in the general area of treatment of offenders (Andrews, Zinger, Hoge, Bonta, Gendreau, & Cullen, 1990; Rice & Harris, 1997) provides some specific guidelines. For instance, the broader correctional treatment literature equates intensity with risk (McGuire, 1995), such that higher risk offenders require more intensive intervention for effective programming (Andrews & Bonta, 1999). This matching of treatment intensity to risk underscores the importance of reliable and valid risk assessments as part of the pre-treatment evaluation.²

Treatment intensity must balance frequency of sessions, duration of sessions, and program integrity. Clinicians' resilience and mental health must also be considered in determining treatment intensity because violent offenders are a challenging group. The setting in which treatment is provided also complicates the issue of the intensity of a program, as it is far more difficult to provide higher intensity programs in the community than in institutions or residential programs.

The range and severity of the treatment needs, then, not criminal convictions should determine the ideal length of a program for violent offenders. Central to this question is the use of intermediate measures of treatment outcome to determine effectiveness (VanVoorhis, Cullen, & Applegate, 1995). Typically, however, operational requirements rather than a consideration of the research determine these decisions. Finally, there are not accepted guidelines for what duration or dosage of intervention constitutes high intensity for violent non-sexual offenders. Currently the range in duration of such programs is 4 to 6 months with a minimum of 135 hours programming, although some programs provide 240 hours of combined group and individual treatment.

RESIDENTIAL VERSUS COMMUNITY-BASED PROGRAMS

Poor attendance is a key issue in community-based intervention. Demanding more intensive treatment, then, would be problematic. Also, consultants who have other work demands usually provide treatment. Further, offenders have family and employment requirements that limit their availability. Interestingly in Multi-Systemic Therapy (MST) the family is engaged to facilitate rather than hinder intervention. Not surprisingly, non-compliance with respect to program attendance and homework completion in community sessions is markedly higher (Michenbaum & Turk, 1987). A final concern for community programs is how to deal with

² See Quinsey, Harris, Rice, & Cormier (1998) for a scholarly review of assessment issues germane to violent offenders.

high-risk violent offenders, particularly if their program participation is essentially involuntary, their program performance is marginal, or the agency cannot refuse the offender.

Conversely, residential programs provide increased control to clinicians. Compliance is higher, although attendance and punctuality are far from perfect. Programming can be more flexible, (e.g., longer programs are more easily accommodated, as are programs that require more frequent sessions or morning or afternoon sessions). Residential programs can also utilize milieu treatment and/or token economies which specifically address offender motivation (Agee, 1979). Also, institutional programs increasingly seem to focus on high-risk situations as an important aspect of treatment. The application of relapse prevention to violent offender treatment is appealing, but there is little empirical evidence for its uncritical use with the different types of violent offenders.

One disadvantage of residential or in-patient programs is that treatment effects seldom generalize across settings (Quinsey et al., 1998). Thus, an advantage of community or outpatient treatment is the opportunity to practice, in vivo, new skills. Perhaps for this reason, in other types of programming, community sites have yielded greater results (Robinson, 1996) while also being less costly.

TREATMENT RESISTANCE

A final consideration in developing interventions for violent offenders relates to their interpersonal characteristics. In discussing treatment intensity, it was noted that violent offenders are a challenging group. In particular, persistently violent offenders tend to be described as treatment resistant.³ Offender noncompliance and attrition present practical and methodological problems and have implications for treatment efficacy. Accordingly, those who intervene with persistently violent offenders must make every effort to motivate them to commit themselves to treatment. Related to this is the delivery of treatment in ways that will maximize the likelihood that these individuals will make significant behavioural changes.

In order to assist clients to shift their "motivational balance" in favour of the benefits of change versus those of the status quo, therapists should challenge clients' views and the likely consequences of maintaining their current behaviour and potential advantages of changing. This could be done by completing a cost-benefit analysis of the short-term and long-term advantages and disadvantages of completing versus not completing a violent offender treatment program. This analysis should include the perspectives of offenders, their families and significant others, friends, victims, victims' families and significant others, and society in general. This helps offenders to see the discrepancy between their current behaviour and important personal goals (Preston & Murphy, 1997). The use of disclosure and thinking reports have also proved to be important with violent offenders, but these are often resisted when initially introduced.

THERAPIST ISSUES

In addition to the general and accepted characteristics of good program staff as being fair but firm (Andrews & Bonta, 1999), recent research with offenders highlights that therapist characteristics do have an impact on treatment performance and outcome (Fernandez, Serran, & Marshall, 1999). These researchers found that empathy and related characteristics in therapists predicted whether an offender accepted responsibility for his crime. Further, style of delivery and therapists' skills predicted group participation. Although preliminary, these data are encouraging because they indicate that therapists' attributes and skills are related to different aspects of positive treatment effects. As well, linking the risk/need profiles of offenders to therapists' skills is the central tenet to responsivity.⁴ Lastly, delivering programs to violent, resistant offenders is emotionally draining and some consideration must be given to staff selection and training, staff retention, and maintenance of their skills for high treatment integrity and program effectiveness.

TREATMENT PROGRAMS

It should be clear from the review thus far that interventions for chronic or persistently violent offenders must be multi-modal and reflect proximal (individual) and distal (societal, cultural, familial) risk factors for violence. The distal factors imply primary and secondary interventions while proximal factors have been addressed by tertiary-level interventions. Tolan and Guerra (1994) provide an excellent review of primary and secondary interventions for violent juveniles. Accordingly, only a review of tertiary level pharmacological and psychological programs will be provided.

PHARMACOLOGICAL INTERVENTIONS⁵

At this time, no medication has been developed or approved specifically for the treatment of violent behaviour. Several classes of psychotropic medications, however, have been utilized with some success with specific types of violent individuals. Antidepressants have been used to treat children and adolescents diagnosed with depression, agitation and attention deficit/hyperactivity disorder, and adults who are violent as a result of depression, personality disorders, brain injury, dementia, and schizophrenia. There have been cases, however, where patients have shown an increase in suicidality or aggression following treatment with anti-depressants.

Lithium, used primarily in the treatment of bipolar disorder, has been shown to reduce violence in children and adolescents with conduct disorder and episodic dyscontrol and in children,

³ For more information on treatment resistance, see Chapters 7 and 8 of this *Compendium*. ⁴ See Chapter 5 of this *Compendium*.

⁵ See Corrigan, Yudofsky, & Silver (1993), and Karper & Krystal (1997) for comprehensive reviews of pharmacological interventions for violent behaviour. This section is a summary of these two reviews.

adolescents, and adults who are developmentally delayed. It has also reduced violence in adults who are brain-injured, personality disordered, and schizophrenic, as well as those diagnosed with schizoaffective and organic mood disorders.

Anti-psychotics, because of their sedative effects, are used primarily for the acute management of violent behaviour, usually resulting from a psychotic episode. Such violence may be related to delusions, hallucinations, or thought disorders. Anti-psychotics are not recommended for the long-term management of violent behaviour because prolonged sedation profoundly affects patients' quality of life, may exacerbate dyscontrol, rage, and violence, and are associated with serious neurological side effects. The latter is associated with patient non-compliance with medication.

Anti-anxiety or sedative medications are also used primarily for the acute management of violent behaviour. Because they increase seizure thresholds and are associated with few side effects, they are often the medication of choice in emergency situations. They have been shown to be effective with those demonstrating violent behaviour as a result of alcohol withdrawal and acute psychosis as well as those exhibiting manic agitation and episodic temper outbursts.

Anti-hypertensive medications have reduced aggressiveness and impulsivity in children and adolescents with intermittent explosive disorder, conduct disorder, and attention-deficit disorder. They have also been effective with adults with neurological impairments, chronic organic brain syndromes, and mental retardation. They have fewer neurological side effects than anti-psychotic medications thus they may be better tolerated by those with organic mental disorders.

Anti-convulsant medications have been shown to have an impact on the aggressive behaviours of those with brain damage, particularly those with abnormal electroencephalograms. They have reduced aggression in some patients with dementia, some who are developmentally delayed and some that have organic mental disorders or impulse control problems.

While positive reports about the impact of medication on violent behaviour are encouraging, this literature is plagued with numerous methodological problems, including small sample sizes, lack of control groups, failure to utilize double-blind procedures, issues of non-compliance, and poor diagnostic accuracy. As well, although medication may have an impact on certain biological causes of violent behaviour, on its own it is rarely effective in reducing violence over the long-term. This is primarily because medication cannot eliminate the numerous psychosocial causes of violence. Clearly, for those whose violence can be partially attributed to biology, an integrated approach utilizing both pharmacological and psychological interventions would be most effective. The vast majority of violent offenders, however, would neither require nor benefit from pharmacological treatment. For them, psychological interventions should have some utility.

PSYCHOLOGICAL INTERVENTIONS

Evidence from juvenile and adult studies with offenders consistently underscore the relative importance of behaviour modification, cognitive-behavioural training and social skills training to reduce anti-social behaviour, and in some cases, violence. Psychotherapy and social casework have not proved effective at reducing anti-social behaviour (Kazdin, 1993; Quinsey et al., 1998). In the juvenile literature, multidimensional programs such as those involving family systems have had the greatest impact, but the results are often confounded by such factors as intensity and caseload level (Tolan & Guerra, 1994).

When provided, descriptions of programs for violent offenders lead one to conclude that different clinicians label similar interventions differently. For instance, some programs are described as social skills training, yet target several different components, for example, assertion, self-control (arousal reduction), and social anxiety. Within these studies there are assumptions that theoretically relate patients' poor social skills to violent behaviour. While it is likely that these targets all fall within a cluster of interactional skill deficiencies, it is not clear that all violent offenders are equally deficient in these areas (Henderson, 1989).

The most common category of programming for violent offenders is that of anger management or anger control. While the specific treatment components vary somewhat across programs and settings, components typically address arousal levels and rehearse alternative thinking. Both stress inoculation (Novaco, 1975) and irrational beliefs (Rational Behaviour Therapy — Ellis, 1977) have been incorporated into these programs, although it is uncertain which contributes greatest to treatment gain, or the manner in which they may interact.

Stress inoculation programs consider:

- awareness of hierarchy of individual anger cues
- ♦ relation between self-statements and anger level
- model of anger and measurement of parameters (intensity, duration, frequency, behavioural outcome)
- reappraisal of anger situations
- ♦ self-instructional coping aids
- relaxation training to reduce arousal level and facilitate selfcontrol
- ♦ skills practice

All of these strategies are aimed at reducing the arousal level of an individual. The view is that increased arousal equals decreased anger control. Arousal reduction involves systematic relaxation, distraction, or imagery techniques (although our experience is that offenders feel awkward about practicing to mastery). Learning to recognize and control arousal decreases the likelihood of aggressive responses in perceived conflict situations. Increasingly, communication and assertion skills have been incorporated into this approach, although the core elements are cognitive preparation, skill acquisition, and practice.

The Rational Behaviour Therapy approach more specifically emphasizes the role of cognitions, notably irrational beliefs, in the provocation and maintenance of anger levels. Offenders are taught that their irrational beliefs result in increased arousal (anger) and that their arousal precipitates aggressive behaviour. Intervention targets the link between thoughts and feelings, challenging offenders to refute irrational beliefs, presumably decreasing the likelihood of aggressive responses.

Implicit in the proliferation of anger control programs is that violent offenders are angry and that their level of anger exceeds that of non-violent offenders. Accordingly, reduced levels of anger are anticipated to result in less frequent and optimally less violent behaviour. This is a curious notion in that violence is relatively infrequent, unreliably measured, and often appears to be motivated for reasons other than anger (Henderson, 1984). Recent programs now include skills practice in the areas of social skills, assertion, problem solving, and empathy.

In order to develop working models for assessment and intervention, treatment efforts have been organized as either relating to self-regulation and cognitive processing. These two approaches imply that most violence can be attributed to either high arousal/poor self-regulation or poor problem-solving skills in the context of conflict situations.

Self-regulation strategies

Some authors have incorporated several of the following components into a more comprehensive package (Goldstein & Keller, 1987), however, the key treatment targets are:

- ♦ arousal reduction techniques (Levey & Howells, 1990)
- interpersonal skill acquisition, (e.g., social skills, assertion, problem-solving) (Guerra & Slaby, 1990)
- ◆ cognitive distortions (Ellis, 1977; Rokach, 1987)

Cutting across various prison settings and populations, evidence exists to support the application of relaxation training or stress inoculation to anger control issues (Hughes, 1993; Hunter, 1993; Kennedy, 1990; Rokach, 1987; Schlichter & Horan, 1981; Serin & Kuriychuk, 1994; Stermac, 1987). It is not clear, however, that arousal reduction strategies are necessarily superior to skill acquisition (social interactions, problem solving, or cognitive coping skills). Further research is required before conclusions can be made regarding the differential treatment effects of components of typical anger control programs.

Some programs target impulsivity, yet these appear to reflect a problem-solving strategy with a delay or pause feature comparable to self-instructional training (Camp, Blom, Herbert, & Van Doorninck, 1977). One novel application has been Rokach's (1987) use of a forced delay feature as part of a process reviewing simulated social situations such that pausing may inhibit expression of negative thoughts and facilitate the generation of alternative coping responses.

Cognitive processing strategies

Novaco and Welsh (1989) describe the importance of appraisals and expectations in viewing potentially provocative events and promoting an aggressive response. Prior beliefs or cognitive schema influence automatic processing of information, which is but one form of cognitive processing. Research with adult offenders has demonstrated irrational beliefs (Ford, 1991) and attributional biases (Serin, 1991) in violent offenders. As well, Meloy (1988) has distinguished between affective and predatory violence, the latter implying schema or information processing deficits. Research in the area of juvenile violence has highlighted the critical role information-processing deficits play in determining and maintaining aggressive behaviour (Crick & Dodge, 1994). Aggressive juvenile offenders have been found to be deficient in social problem-solving skills and to espouse many beliefs supporting aggression. Specifically, they tend to define problems in hostile ways, adopt hostile goals, seek less confirmatory information, generate fewer alternative solutions, anticipate fewer consequences for aggressive solutions, and choose less effective solutions.

While several examples of these efforts can be found in the developmental literature for aggressive and delinquent youth (Feindler, Marriot, & Iwata, 1984; Hains, 1989), the most ambitious effort with juvenile offenders described the utility of a problem-solving strategy that targeted biased thinking skills (Guerra & Slaby, 1990). The cognitive mediation training specifically targeted the deficits noted previously by Slaby and Guerra (1988). Those familiar with the psychology of criminal conduct (Andrews & Bonta, 1999) will note this is a specific application of targeting the thinking that maintains violent criminal behaviour.

PROGRAM EFFECTIVENESS

Several studies have examined the efficacy of cognitivebehavioural interventions for aggressive adult offenders. Hunter (1993) offered a 10-week anger management program to 28 incarcerated male offenders who had a propensity for interpersonal violence, using a control group of 27 inmates. The intervention included relaxation therapy, stress management, conflict resolution, and cognitive therapy, the latter targeting errors in thinking (hostile and aggressive thoughts), irrational beliefs, and negative self-talk. Offenders in both groups completed pre- and post-treatment self-report measures pertaining to personality, cognitions, behaviour, and social desirability and researchers recorded other behavioural indices including institutional infractions. Hunter found that treated offenders showed significant gains relative to non-treated offenders across self-report and behavioural ratings. No follow-up data are available, however, and the total sample is only 55 offenders.

Hughes (1993) provided a 12-week anger management program to 52 incarcerated adult offenders and attempted to compare them to a control group of 27 offenders. The latter were men who either dropped out of the program after one or two sessions, or who opted not to participate in the program for a variety of reasons. The program, described as both educational and experiential, consisted of relaxation therapy, assertiveness training, moral reasoning, problem-solving, and rational emotive therapy. Offenders in the treatment group completed a number of self-report measures pre- and post-treatment. Also for the treatment group, Hughes completed behavioural ratings of role-plays pre- and post-treatment. Offenders in the control group completed pre-treatment self-report measures only. Hughes attempted to gather post-treatment data from the control group, but few of them agreed to complete the tests. Finally, four years after program completion he gathered staff ratings of treated offenders' ability to cope with anger, anxiety, and various problem situations and obtained recidivism data. Hughes found that treated offenders reported post-treatment gains regarding anger scores, irrational beliefs, and in role-plays. However, there was no difference in recidivism rates between the treated and non-treated groups.

Kennedy (1990) compared the relative efficacy of stress inoculation treatment to a behavioural skills treatment with a sample of 37 incarcerated adult offenders. Offenders completed several self-report measures both pre- and post-treatment. As well, Kennedy completed pre- and post-treatment behavioural ratings of structured role-plays, and reviewed offender files for relevant incident reports. She found that offenders showed post-treatment gains on several of the measures. However, she also completed an interim assessment of treatment gain and found that order of presentation of treatment had no effect. The greatest treatment gain occurred in the initial phase of treatment regardless of which treatment was offered initially.

An intensive two year correctional program in Vermont that focuses on criminal thinking in violent offenders has demonstrated a reduction in violent recidivism relative to an untreated group (Bush, 1995). Some innovations in the program include the use of a therapeutic milieu, the utilization of "thinking reports", and the use of paraprofessional staff (trained correctional officers). The program has now been delivered for nine years and has incorporated a complementary community aftercare component.

Guerra and Slaby's (1990) intervention consisted of 120 aggressive adolescents, equally divided by gender, being randomly assigned to a 12-week cognitive mediation training, attention control, or no-treatment control. Pre- and post-treatment assessment incorporated measures of social cognition (beliefs about aggression), behaviour ratings, and self-report. Post-treatment gains for the treatment group were noted in terms of increased skills in solving social problems, reduced support of aggressive beliefs, and reduced aggressive behaviours (based on blind raters). The follow-up period was 24 months for the recidivism analyses. The inference is that these socio-cognitive factors regulate aggressive behaviour, yet recidivism rates for the treated subjects, although reduced, were not significantly lower than the controls.

The Correctional Service of Canada has begun the evaluation of an Anger and Emotions Management Program (Dowden, Blanchette, & Serin, 1999). Recidivism data for a matched sample (on risk, age and major admitting offence) of 110 male offenders who completed the program indicate it was effective. Greatest effects were noted for higher-risk offenders, with a 69% reduction in non-violent recidivism and 86% reduction in violent recidivism, although the two groups differed with respect to time at risk. Further, change scores on several self-report measures were significantly related to outcome. Subsequent analyses (Dowden & Serin in press) have indicated that treatment dropouts have violent failure rates 8 times that of the treatment group (40% versus 5%) and twice that of the controls (40% versus 17%). A newly created program performance factor was significantly correlated with recidivism (r = 0.32, p < 0.01), and approached statistical significance in a regression analysis. Finally, a comparison of 41 matched (age, risk, past program performance) pairs of offenders indicated that the controls had rates of recidivism 3 times that of the treated group, but this difference was not statistically significant.

Lastly, in 1996 the Correctional Service of Canada developed an intensive treatment demonstration program for incarcerated persistently violent adult offenders (Serin, 1995). The treatment program is intense, involving four group sessions and one individual session per week for 16 weeks. Treatment is provided by two staff - a doctoral level registered psychologist and a bachelor's level therapist. Based on a review of the literature, treatment targets include motivation for treatment and behaviour change, aggressive beliefs, cognitive distortions, arousal management, impulsivity, conflict resolution, problem-solving, assertiveness, empathy enhancement, and relapse prevention. An exhaustive multi-method assessment protocol has been developed and preliminary data are available (Preston & Serin, 1999) that support modest gains, as measured by the test battery and behavioural ratings with more detailed analyses in terms of outcome to be forthcoming. This protocol is summarized in Table 18.3. The conceptual framework for this program has also been adapted for implementation in a large number of sites within the Service under the auspices of a Violence Prevention Program (Bettman, 1999).

An overview of these programs is presented in Table 18.4. It should be noted that *all* programs report *some* treatment effects, but few provide the rigor, (i.e., control groups), to conclude that intervention for violent adults reduces violent recidivism. Also, the relationship between response to treatment and subsequent dangerousness has yet to be demonstrated empirically. Suggestions

Domain	Scale	Type of Assessment	Pre or Pre & Post)	Format: Group or Individual
Intelligence	Shipley Institute of Living Scale	Self-report	Pre	Group
Risk	SIR	File-based	Pre	N/A
Motivation	URICA	Self-report	Pre & Post	Group or Individual
Motivation	Treatment Readiness	Behavioural rating	Pre & Post	Individual
Anger	Reactions to Provocation Scale	Self-report	Pre & Post	Group or Individual
Anger	Reactions to Hostile Situations	Self-report	Pre & Post	Group or Individual
Aggression	Reasons for Aggression	Self-report	Pre & Post	Group or Individual
Aggression	Aggression Questionnaire	Self-report	Pre & Post	Group or Individual
Aggression	Vignettes	Behavioural rating	Pre & Post	Individual
Impulsivity	Eysenck I7	Self-report	Pre & Post	Group or Individual
Anxiety	Welsh Anxiety Scale	Self-report	Pre & Post	Group or Individual
Attachment	Relationship Style Questionnaire	Self-report	Pre & Post	Group or Individual
Empathy	Empathy Skills	Behavioural rating	Pre & Post	Individual
Empathy	Interpersonal Reactivity Index	Self-report	Pre & Post	Group or Individual
Social Desirability	Paulhus Deception Scales	Behavioural rating	Pre & Post	Group or Individual
Personality	Personal Reaction Questionnaire	Self-report	Pre & Post	Group or Individual
Personality	Interpersonal Style	Behavioural rating	Pre & Post	Individual
Criminality	Criminal Attribution Inventory	Self-report	Pre & Post	Group or Individual
Treatment Gain	Treatment Performance	Behavioural rating	Post	Individual

TABLE 18.3 Assessment protocol for treatment needs of violent offenders (from PVO program)

have been made that treatment should be re-conceptualized as a mechanism for enhanced risk management through continuing intervention in the community (Serin, 1998).

MEASUREMENT OF TREATMENT GAIN, AND PROGRAM EVALUATION (OUTCOMES)

One major shortcoming of this literature on the treatment of violent offenders is the over-reliance on self-report measures of treatment gain. The reality is that intervention is often accepted under duress and less than favourable post-treatment reports have significant negative consequences for offenders. Hence, efforts to control for social desirability and/or intelligence appear warranted. Related to this concern about self-report instruments is that many have been developed for non-offender populations, they lack validity scales, and often have such transparent items that interpreting post-treatment improvement without corroborating indices of gain may be at best speculative. An additional concern is that violent offenders inconsistently report higher scores post-treatment, and therefore greater problems, on self-report measures of anger, aggressiveness, and hostility (Novaco, 1994; Serin & Kuriychuk, 1994). Baseline measures or within subjects comparisons therefore appear warranted so that individual offender's improvement may be considered.

The use of recidivism rates as a measure of treatment gain has been debated (Blackburn, 1993), yet for offender populations the expectation of increased community safety and reduced violent recidivism is often their *raison d'être*. Multiple outcome measures are also recommended to detect partial successes that may be obscured by dichotomous success/fail definitions, as are survival analyses to control for unequal release times (Chung, Schmidt, & Witte, 1991).

Treatment outcome should be measured in a number of ways (Van Voorhis et al., 1995). For residential or institutional settings, intermediate measures of treatment gain include reductions in the frequency and severity of institutional infractions, especially verbal threats and physical assaults. An increase in the number of participants seeking and maintaining institutional employment post-treatment would also be an intermediate gain. So too, would improved compliance with correctional treatment plans, transfers to reduced security institutions, and the granting of parole or discretionary release. For community or outpatient settings, intermediate measures of treatment gain include seeking and maintaining employment, and compliance with community supervision. Finally, long-term measures of outcome include increased time to re-offence, reduction in the severity of re-offences, and reduction in violent recidivism rates.

Further, some of the intermediate targets may assist clinicians to respond to questions about the effectiveness of a new program before longer-term outcome data are available. For instance, after the completion of two PVO groups, program staff was able

TABLE 18.4 Summary of adult violent offender treatment outco	ome studies
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Study	Subjects	Treatment Attributes	Evaluation	Outcome
Rokach (1987)	51 treated incarcerated men offenders, 44 controls with violent criminal history & self-report anger problems	Anger management, cognitive-behavioural, short term (27 hrs), group format	Non random referrals, partially matched controls, pre/post test self-reports, non-blind post treatment interviews, no recidivism data	Positive within treatment effects, no recidivism data
Stermac (1987)	Offenders remanded to METFORS [*] for psychiatric assessment, 20 treated & 20 controls with anger problem	Anger management, cognitive-behavioural, short term(12 hours), group format	Randomly assigned, control group, pre/post self-report measures, no recidivism data	Some positive within treatment effects, no recidivism data
Kennedy (1990)	Canadian provincially incarcerated men referred for anger management, 19 treated and 18 controls	Anger management, cognitive-behavioural, short term (60 hours), group format	Non random, unmatched delayed treatment control group, pre/post self-report measures, blind behavioural ratings of role plays, 2 month follow-up assessing institutional misconducts	Positive within treatment effects and mixed findings regarding institutional misconducts
Rice, Harris, & Cormier (1992)	176 treated mentally disordered men offenders & 146 matched controls with violent histories	Intensive 2 year therapeutic community therapy, group therapy, 80 hours per week	Non random, matched controls, retrospective 10-year follow-up measuring general & violent recidivism	No significant overall treatment effects but treated psychopaths exhibited higher failure rates than untreated psychopaths
Hughes (1993)	Federally incarcerated men offenders, 52 treated and 27 controls with violent criminal histories	Cognitive behavioural, anger management, short term (24 hours), group format	Referrals served as non-random, not matched controls, pre/post self-report measures, role plays, coping ability ratings, 4-year follow-up assessing time to re-arrest, and recidivism.	Positive within treatment effects, mixed results regarding effects on recidivism
Hunter (1993)	Federally incarcerated men, 28 treated, 27 controls with violent histories	Cognitive behavioural anger management, short term (10 weeks), group format	Non random, unmatched waiting list controls, pre/post self-report measures, 2 months follow-up assessing institutional misconducts	Positive within treatment effects and post treatment effects
Smiley, Mulloy, & Brown (1995)	134 treated federally incarcerated men offenders with violent index offence, 14,500 controls	Cognitive Behavioural Violent offender personality disorder program, group therapy, 8 months	Non random, control group not matched, unspecified follow-up period, recidivism: success or failure on conditional release	No post treatment effects
Bush (1995)	81 treated violent male offenders and 287 men controls, both from Vermont Department of Corrections	Cognitive Self Change Program, targets attitudes, beliefs & thoughts supportive of violence, group format, 6 month- 2 year institution component & 1 year community component	Non random, control group not matched, 1-3 year post community treatment follow-up period, recidivism: arrest or parole violation	Positive treatment effects; recidivism rate was twice as high for untreated group than for treated group (more than 7 months in treatment).
Dowden, Blanchette, & Serin (1999)	110 treated violent male offenders and matched controls.	Anger & Emotions Management Program, targets anger & aggression, managing arousal, thinking patterns, assertiveness, other emotions	Non random, control group matched (age, risk, admitting offence), 2-3 year post community treatment follow-up period, recidivism: non violent (NV) & violent (V)	Positive treatment effects; recidivism rate was three (NV) to six times (V) higher for control group than for treated group

* Metropolitan Toronto Forensic Service

to report a 50% reduction in institutional infractions, relative to the previous six months. Other notable outcomes for the program included improved employment post-treatment and transfers to reduced security (Preston & Murphy, 1997). It remains to be determined whether such intermediate gains are predictive of recidivism.

Pre-post treatment changes on self-report measures are also important intermediate indices of treatment gain, yet they have not proved particularly effective predictors of outcome with offender populations (Rice & Harris, 1997). Social desirability, transparency of items, and predominantly historical items all contribute to concerns about reliance on offenders' self-report as indices of treatment gain. With this in mind, alternative strategies for use by clinicians to assess treatment readiness, interpersonal style, and treatment performance have been developed (Serin & Kennedy, 1998).

DIFFERENTIAL TREATMENT

The theme throughout this chapter is the heterogeneity of violent offenders. It should be apparent, then, that the current array of interventions reviewed fail to adequately address the requirement for a range of treatment needs. It is also a clinical reality that few settings have the resources to provide multiple programs for different types of violent offenders. Also, although appealing from a methodological viewpoint, the operational juggling required to match offenders to specific treatment modules, from an inventory, and based on pre-treatment assessment, is quite arduous. Such a strategy also necessitates the use of open groups and this might interfere with the group dynamics and cohesion, because not all offenders would receive all treatment components. Notwithstanding these problems, improvements in the prescription of programs to better match the treatment needs of different violent offenders' remains an important goal.

From the treatment responsivity research (Kennedy & Serin, 1997), it is clear that program effectiveness will be increased according to the extent to which programs are prescriptively applied to offenders. Perhaps utilizing a more comprehensive assessment protocol to determine different types of violent offenders and their specific treatment needs will lead to more differentiated programming. If offenders are inappropriately assigned to a specific treatment program, then demonstration of treatment effectiveness will be markedly impaired. Therefore the issue is more what type of program works for which offender(s) than does a program reduce violent recidivism.

FUTURE DIRECTIONS

Notwithstanding the concern about violent offenders, there exists a surprisingly small body of literature describing effective treatment efforts, particularly in contrast to other groups such as sexual offenders and spousal abusers. Most published studies do report treatment gains, but this has mainly been restricted to self-reports and has not generalized to improved recidivism rates. To date, measurement of treatment efficacy has been confounded by this over-reliance on self-report questionnaires, the absence of control groups, and problems in the definition of violent offenders.

Efforts should be initiated to better incorporate best practices from the juvenile literature into treatment programs for violent adult offenders. The juvenile literature also places greater emphasis on skill acquisition in the areas of family dynamics and problem solving than the emphasis with adults on arousal management, although this appears to be changing. Conceptual models, then, that integrate arousal level, self-regulation, and cognitive style may prove helpful as clinicians strive to provide programs for an array of different types of violent offenders. It appears that this is the direction the field is moving as various correctional jurisdictions de-emphasize arousal-based anger control programs.

What are the implications for incorporating treatment into risk management strategies for violent offenders? In those programs that focus on relapse prevention, the offence cycle provides a mechanism to discover antecedents or proximal factors to an offender's use of violence. Also, in those programs that utilize comprehensive risk appraisals, treatment provides an opportunity to comment on the intensity and nature of community aftercare and supervision. Explicit decision rules to assist clinicians against unbridled optimism might be advantageous in incorporating treatment performance into risk management strategies (Serin, 1998).

Lastly, there is increasing consensus regarding the "correct" components for a treatment program, methods to address treatment resistance, and methodology to demonstrate treatment gain and treatment effectiveness. Equally importantly, these are increasingly being applied to the specific target of violent offending.

REFERENCES

- Agee, V. L. (1979). Treatment of the violent incorrigible adolescent. Lexington, MA: Lexington Books.
- Andrews, D. A., & Bonta, J. (1999). The psychology of criminal conduct. Cincinnati, OH: Anderson Publishing.
- Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology*, 28, 369-404.
- Bettman, M. D. (1999). Violence Prevention Program. Ottawa, ON: Correctional Service of Canada.
- Blackburn, R. (1993). The psychology of criminal conduct. Chichester, UK: John Wiley & Sons.
- Bush, J. (1995). Teaching self-risk management to violent offenders. In J. McGuire (Ed.), What works: Reducing reoffending: Guidelines from research and practice (pp. 139-154). Chichester, UK: John Wiley & Sons.
- Buss, A. H. (1961). The psychology of aggression. New York, NY: Wiley.
- Buss, A. H., & Perry, M. (1992). The Aggression Questionnaire. Journal of Personality and Social Psychology, 63, 452-459.
- Camp, B. W., Blom, G. E., Herbert, F., & Van Doorninck, W. J. (1977). "Think aloud»: A program for developing self-control in young aggressive boys. *Journal of Abnormal Child Psychology*, 5, 157-169.
- Chung, C. F., Schmidt, P., & Witte, A. D. (1991). Survival analysis: A survey. Journal of Quantitative Criminology, 7, 59-98.
- Correctional Service of Canada. (March 1997). *Basic facts about corrections in Canada*. 1997 edition. Ottawa, ON: Public Works and Government Services Canada.

- Corrigan, P. W., Yudofsky, S. C., & Silver, J. M. (1993). Pharmacological and behavioral treatments for aggressive psychiatric inpatients. *Hospital and Community Psychiatry*, 44, 125-133.
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin*, 1, 74-101.
- Dietz, P. E. (1987). Patterns in human violence. In L. E. Hales & A. J. Francis (Eds.), *Psychiatry update: APA annual review*, Vol. 6. Washington, DC: APA.
- Dodge, K. A., & Schwartz, D. (1997). Social information processing mechanisms in aggressive behaviour. In D. M. Stoff, J. Breiling, & J. D. Maser (Eds.), *Handbook of anti-social behavior* (pp. 171-180). New York, NY: John Wiley & Sons.
- Dowden, C. Blanchette, K., & Serin, R. C. (1999). Anger management programming for federal male inmates: An effective intervention. Research Report R-82. Ottawa, ON: Correctional Service of Canada.
- Dowden, C., & Serin, R. C., (in press). Anger management programming for federal male inmates: The impact of dropout and other program performance variables on recidivism. Ottawa, ON: Correctional Service of Canada.
- Ellis, A. (1977). Anger How to live with and without it. Secaucus, NJ: Citadel Press.
- Eysenck, S. B. G., Pearson, P. R., Easting, G., & Allsop, J. F. (1985). Age norms for impulsiveness, venturesomeness, and empathy in adults. *Personality and Individual Differences*, 6, 613-619.
- Feindler, E. L., Marriott, S. A., & Iwata, M. (1984). Group anger control training for junior high school delinquents. *Cognitive Therapy and Research*, 8, 299-311.
- Fernandez, Y. M., Serran, G., & Marshall, W. L. (1999). The reliable identification of therapist features in the treatment of sexual offenders. Paper presented at the Association for Treatment of Sexual Abusers annual conference. October, Orlando, FL.
- Ford, B. D. (1991). Anger and irrational beliefs in violent inmates. *Personality* and Individual Differences, 12, 211-215.
- Gacono, C. (Ed.), The clinical and forensic assessment of psychopathy. Erlbaum: NJ.
- Goldstein, A. P., & Keller, H. (1987). Aggressive behavior: Assessment and intervention. New York, NY: Pergamon.
- Guerra, N. G., & Slaby, R. G. (1990). Cognitive mediators of aggression in adolescent offenders: Intervention. *Developmental Psychology*, 26, 269-277.
- Hains, A. A. (1989). An anger-control intervention with aggressive delinquent youths. *Behavioral Residential Treatment*, 4, 213-230.
- Hart, S. D., & Hare, R. D. (1997). Psychopathy: Assessment and association with criminal conduct. In D. M. Stoff, J. Breiling, & J. D. Maser (Eds.), *Handbook* of anti-social behavior (pp. 22-35). New York, NY: John Wiley & Sons.
- Henderson, M. (1984). Prison inmates' explanations for interpersonal violence: Accounts and attributions. *Journal of Consulting and Clinical Psychology*, 52, 789-794.
- Henderson, M. (1989). Behavioral approaches to crime. In K. Howells & C. R. Hollin (Eds.), *Clinical approaches to violence* (pp. 25-37). London, UK: John Wiley & Sons.
- Henry, B., & Moffitt, T. E. (1997). Neuropsychological and neuroimaging studies of juvenile delinquency and adult criminal behavior. In D. M. Stoff, J. Breiling, & J. D. Maser (Eds.), *Handbook of anti-social behavior* (pp. 280-288). New York, NY: John Wiley & Sons.
- Hughes, G. V. (1993). Anger management program outcomes. Forum on Corrections Research, 5(1), 5-9.
- Huizinga, D., Loeber, R., & Thornberry, T. P. (1994). Urban delinquency and substance abuse. Washington, DC: Office of juvenile justice and delinquency prevention, U.S. Department of Justice.
- Hunter, D. (1993). Anger management in the prison: An evaluation. Forum on Corrections Research, 5(1), 3-5.
- Jenkins, A. (1990). Invitations to responsibility: The therapeutic engagement of men who are violent and abusive. Adelaide, South Australia: Dulwich Centre Publications.
- Kanfer, F. H., & Schefft, B. K. (1988). Guiding the process of therapeutic change. Champaign, IL: Research Press.
- Karper, L. P., & Krystal, J. H. (1997). Pharmacotherapy of violent behavior. In D. M. Stoff, J. Breiling, & J. D. Maser (Eds), *Handbook of anti-social behaviour* (pp. 436-444). New York, NY: John Wiley & Sons.

- Kazdin, A. E. (1993). Treatment of conduct disorder: Progress and directions in psychotherapy research. *Development and Psychopathology*, 5, 277-310.
- Kennedy, S. M. (1990). Anger management training with adult prisoners. Unpublished manuscript.
- Kennedy, S. M., & Serin, R. C. (1997). Treatment responsivity: Contributing to effective correctional programming. *International Community Corrections Association Journal*, 7, 46-52.
- Knight, R. A., & Prentky, R. A. (1990). Classifying sexual offenders: The development and corroboration of taxonomic models. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *The handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 27-52). New York, NY: Plenum.
- Levey, S., & Howells, K. (1990). Anger and its management. *Journal of Forensic Psychiatry*, 1, 305-327.
- McCormick, I. A. (1984). A simple version of the Rathus Assertiveness Schedule. Behavioral Assessment, 7, 95-99.
- McGuire, J. (Ed.). (1995). What works: Reducing reoffending: Guidelines from research and practice. Chichester, UK: John Wiley & Sons.
- Megargee, E. I. (1976). The prediction of dangerous behavior. *Criminal Justice and Behavior*, *3*, 3-21.
- Meloy, J. R. (1988). The psychopathic mind: Origins, dynamics, and treatment. Northvale, NJ: Jason Aronson Inc.
- Meloy, J. R. (1995). Treatment of anti-social personality disorder. In G. Gabbard (Ed.), *Treatments of psychiatric disorders: The DSM-IV Edition* (pp. 2273-2290). Washington, DC: American Psychiatric Press.
- Michenbaum, D., & Turk, D. C. (1987). Facilitating treatment adherence: A practioner's guidebook. New York, NY: Plenum.
- Miller, W. R., & Rollnick, S. (1991). Motivational interviewing: Preparing people to change addictive behavior. New York, NY: Guilford Press.
- Monahan, J. (1997). Major mental disorders and violence to others. In D. M. Stoff, J. Breiling, & J. D. Maser (Eds.), *Handbook of anti-social behavior* (pp. 92-100). New York, NY: John Wiley & Sons.
- Motiuk, L. L., Nafekh, M., & Serin, R. C. (1998). Systematic assessment of treatment needs of persistently violent offenders. Unpublished manuscript.
- Murphy, C. M., & Baxter, V. A. (1997). Motivating batterers to change in the treatment context. *Journal of Interpersonal Violence*, 12, 607-619.
- Novaco, R. W. (1975). Anger control. Toronto, ON: D. C. Heath.
- Novaco, R. W. (1994). Anger as a risk factor for violence among the mentally disordered. In J. Monahan & H. J. Steadman (Eds.), *Violence and mental disorder: Developments in risk assessment*. Chicago, IL: University of Chicago Press.
- Novaco, R. W., & Welsh, W. N. (1989). Anger disturbances: Cognitive mediation and clinical prescriptions. In K. Howells & C. R. Hollin (Eds.), *Clinical approaches to violence* (pp. 39-60). London, UK: John Wiley & Sons.
- Ogloff, J. R. P., Wong, S., & Greenwood, A. (1990). Treating criminal psychopaths in a therapeutic community program. *Behavioral Sciences and the Law*, 8, 181-190.
- Patterson, G. R. (1986). Performance models for anti-social boys. American Psychologist, 41, 432-444.
- Patterson, G. R., Reid, J. B., & Dishion, T. J. (1992). Antisocial boys: A social interactional approach, Vol. 4. Eugene, OR: Castalia.
- Paulhus, D. L. (1998). Paulhus Deception Scales (PDS): The Balanced Inventory of Desirable Responding-7. Toronto, ON: Multi-Health Systems Inc.
- Pihl, R. O., & Peterson, J. B. (1993). Alcohol/drug use and aggressive. In S. Hodgins (Ed.), *Mental Disorder and Crime*. Newbury Park, CA: Sage.
- Preston, D. L., & Murphy, S. (1997). Motivating treatment-resistant clients in therapy. Forum on Corrections Research, 9(2), 39-43.
- Preston, D. L., & Serin, R. C. (1999). Case file: Persistently violent (non-sexual) offender treatment program. Ottawa, ON: Correctional service of Canada
- Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of the structure of change. In Y. Klar, J. D. Fisher, J. M. Chinsky, & A. Nadler (Eds.), *Self-change: Social psychological and clinical perspectives*. New York, NY: Springer-Verlag.
- Quinsey, V. L., Harris, G. T., Rice, M. E., & Cormier, C. A. (1998). Violent offenders: Appraising and managing risk. Washington, DC: American Psychological Association.

- Rice, M. E., & Harris, G. T. (1997). The treatment of adult offenders. In D. M. Stoff, J. Breiling, & J. D. Maser (Eds.), *Handbook of anti-social behavior* (pp. 425-435). New York, NY: John Wiley & Sons.
- Rice, M. E., Harris, G. T., & Cormier, C. A. (1992). An evaluation of a maximum-security therapeutic community for psychopaths and other mentally disordered offenders. *Law and Human Behavior*, 16, 399-412.
- Rice, M. E., Harris, G. T., Quinsey, V. L., & Cyr, M. (1990). Planning treatment programs in secure psychiatric facilities. In D. N. Weisstub (Ed.), *Law* and mental health: International perspectives, (Vol.5, pp. 162-230). New York, NY: Pergamon press.
- Robinson, D. (1996). Factors influencing the effectiveness of cognitive skills training. Forum on Corrections Research, 8 (3), 6-9.
- Rokach, A. (1987). Anger and aggression control training: Replacing attack with interaction. *Psychotherapy*, 24, 353-362.
- Schlichter, K. J., & Horan, J. J. (1981). Effects of stress inoculation on the anger and aggression management skills of institutionalized juvenile delinquents. *Cognitive therapy and research*, 5, 359-365.
- Serin, R. C. (1991). Psychopathy and violence in criminals. *Journal of Interpersonal Violence*, 6, 423-431.
- Serin, R. C. (1994). Treating violent offenders: A review of current practices. Research Report R-38. Ottawa, ON: Correctional Service of Canada.
- Serin, R. C. (1995). Persistently violent (non-sexual) offenders: A program proposal. Research Report R-42. Ottawa, ON: Correctional Service of Canada.
- Serin, R. C. (1998). Treatment responsivity, intervention and reintegration: A conceptual model. Forum on Corrections Research, 10(1), 29-32.
- Serin, R. C., & Kennedy, S. (1997). Treatment readiness and responsivity: Contributing to effective correctional programming. Research Report R-54. Ottawa, ON: Correctional Service of Canada.
- Serin, R. C., & Kennedy, S. (1998). Treatment readiness, responsivity and gain: Assessment protocol. Unpublished paper. Ottawa, ON: Correctional Service of Canada.

- Serin, R. C., & Kuriychuk, M. (1994). Social and cognitive processing deficits in violent offenders: Implications for treatment. *International Journal of Law* and Psychiatry, 17, 431-441.
- Serin, R. C., & Preston, D. L. (2001). Managing and treating violent offenders. In J. B. Ashford, B. D. Sales, & W. Reid (Eds.). *Treating adult and juvenile offenders with special needs*. (pp. 249-272). Washington, DC: American Psychological Association.
- Sherman, L. G., & Morschauser, P. C. (1989). Screening for suicide risk in inmates. Special issue: Jail suicide: A comprehensive approach to a continuing national problem. *Psychiatric Quarterly*, 60, 119-138.
- Slaby, R. G., & Guerra, N. G. (1988). Cognitive mediators of aggression in adolescent offenders: 1. Assessment. *Developmental Psychology*, 24, 580-588.
- Smiley, W. C., Mulloy, R., & Brown, C. (1995). Treatment outcome with violent offenders: Does intervention make a difference? Paper presented at the Canadian Psychological Association annual conference. June, Charlottetown, PEI.
- Stermac, L. E. (1987). Anger control treatment for forensic patients. Journal of Interpersonal Violence, 1, 446-457.
- Toch, H. (1969). Violent men. Chicago, IL: Aldine.
- Tolan, P., & Guerra, N. (1994). What works in reducing adolescent violence: An empirical review of the field. Boulder, CO: The Centre for the study and prevention of violence, Institute for behavioral sciences, University of Colorado.
- Van Voorhis, P., Cullen, F. T., & Applegate, B. (1995). Evaluating interventions with violent offenders: A guide for practitioners and policymakers. *Federal Probation*, 59, 17-28.
- Widom, C. S. (1997). Child abuse, neglect, and witnessing violence. In D. M. Stoff, J. Breiling, & J. D. Maser (Eds.), *Handbook of anti-social behavior* (pp. 159-170). New York: John Wiley & Sons.
- Zamble, E., & Quinsey, V. L. (1997). The criminal recidivism process. New York, NY: Cambridge University Press.
- Zillman, D. (1979). Hostility and aggression. Hillsdale, NJ: Erlbaum.

CHAPTER 19

JOSEPH E. COUTURE¹

The presence of Elders and Native Liaison Workers (NLW) in federal correctional institutions dates back approximately twenty years. General institutional opinion tends to vary regarding the validity, usefulness and potential of Elders and NLWs in Aboriginal correctional programming. The opinion of Elders and other Aboriginal workers of their work and role within federal corrections, however, is more positive. This chapter will outline the orientation and strategy of the Elders who work in Correctional Service Canada institutions in the Prairie region. This chapter is based on an unpublished document written by Joseph E. Couture entitled Aboriginal Offenders and Programs that Work. Elements of Promise.

Correctional Service Canada continues to develop strategies for culturally appropriate service and care for the Aboriginal offenders under its jurisdiction. In particular, through the improvement of needs assessment and program provision by Elders and NLWs, the Service is attempting to foster the positive influence of traditional healing attitude and approaches to Aboriginal inmate need(s).

"An Elder is any person recognized by an Aboriginal community as having knowledge and understanding of the traditional culture of the community, including the physical manifestations of the culture of the people and their spiritual and social traditions. Knowledge and wisdom, coupled with the recognition and respect of the people of the community, are the essential defining characteristics of an Elder. Some Elders may have additional attributes, such as those of traditional healer. Elders may be identified as such, only by Aboriginal communities."²

The native liaison worker provides a support role to Elders, and assists in providing leadership, teaching, cultural awareness, counseling and general service to Aboriginal offenders.

HISTORY AND TRADITION

Contemporary Aboriginal understanding of traditional views and approaches is driven by a keen sense of cultural history and current conditions. Canadian Aboriginal history is embodied in and expressed through Elders in the form of Oral Tradition. Oral Tradition hinges primarily on learning-by-doing modalities for acquisition of knowledge and development of skills. Oral Tradition embraces all areas of living life.

Aboriginal tradition mirrors a salutary humanism and humaneness, a forever expanding awareness of all that is. It is the source of criteria and standards, and expresses the characteristic features of healing processes and meanings. Tradition proposes an operational, balanced model, anchored in historically shaped, cultural priorities. It deliberately addresses strengths, as well as weaknesses and outright dysfunction. Elders in light of Tradition explain Aboriginal behaviour and attitudes. History and tradition provide the fundamental backdrop of Elder intervention.

A HOLISTIC APPROACH

Traditional healing strategy is literally holistic; that is, it confronts simultaneously all dimensions of the individual. It is holistic in that it avoids exclusive reliance on verbal mediation and didactic method — notwithstanding a predilection for and importance of story-telling; preferring rather to engage the client in multi-experiencing, e.g., through listening, hearing, seeing, touching, feeling, thinking, speaking, singing, dancing, praying, fasting, etc.

Healer diagnosis and prescription encompasses a person's uniqueness and mystery within an ancient, enduring, unfolding and evolving matrix. In other words, traditional approaches are full-bodied and inclusive. They address what may seem to be fragments of a broken life, bringing together bits and pieces of self-knowledge into a meaningful whole, thereby instilling a fresh sense of identity and direction.

The basic concepts, which derive directly and clearly from traditional healing principles, include notions of connection and mutuality. These concepts are deemed as crucial variables in the formation of individual and collective, socio-centric identity, experienced and understood as inseparable from personal and social responsibility.

DIAGNOSIS

Diagnosis brings an inmate towards and into problems of social restructuring, cognitive distortion and manipulation, angers and hurts, and towards examining and changing the anti-socializing influences of family, associates, community, and prison culture.

Whether by Aboriginal or non-Aboriginal staff, the challenge of behavioural identification and description and of program prescription stands at several junctions in the criminal justice system. It is a standing challenge because mislabelling can and does occur at each juncture, most likely due to a tendency to misconstrue. This does seem attributable to a lack of knowledge of the profound shaping influence of culture. Understandably, intervenors can and do misconstrue Aboriginal behaviours,

Athabasca University, Department of Psychology
 ² Commissioner's Directive Aboriginal Programming, Definition 2

attributing inappropriate meanings to these with discouraging, dire, if not tragic consequences for an individual inmate.

CULTURAL COMPETENCE

Broad behavioural and attitudinal differences exist between and within each of the Native groupings across the country, influenced by outcomes over time of such elements as geographic separation, languages, regional and local histories, and impacts of contact with Europeans.

Cultural competence, as a core component of general clinical competence, is warranted in Canada. Inter-cultural competence is expressed through a style of service delivery that is perceived by the consumer client and community as credible and giving, effective and trustworthy. Community insight, expectation, and influence are essential to the Native-related assessment enterprise. Service can be provided in keeping with traditional core cultural standards.

PROGRAMS

Characteristically, culture-based programs comprise those that are exclusively delivered by traditional people. Learning activities pivot on teachings and ceremonies which feature a range of Circles, e.g., Talking/Healing Circles (including one-on-one counseling), Smudging, Pipe, Sweat Lodge, Fasts, Sun Dance, Elder-assisted parole hearings, and community-based hearings. The greatest part of a given Elder's time is given to encounter, the offender in an informal setting, in order to spark motivation, to foster enlightenment, to nudge the individual into a "response-able" self-help mode.

Usually the Healer's immediate concern is both to establish a trusting relationship and to explore identity needs. In doing so, in due time specific needs are identified and dealt with. A Healer has the capacity to customize traditional activity, to zero in on individual need. A deep-rooted optimism and longestablished attitude and approach to the healing of mistakes (not crimes), prevails overall.

Traditional "measurement" of behaviour and attitude rides on honed skills of observation, of "listening" and "seeing" the needs of the client and of "tuning in" through a combination of experience and trained intuition. Many regard these as subjective, i.e., non-objective measurement techniques. Nonetheless, years of apprenticeship are necessary to acquire and sharpen these skills. While formal, mainstream certification is not involved, reputation in the eyes of one's home community, based on close scrutiny of ability and of the degree to which one is "walking the talk" are essential.

Problems of criteria and standards relative to traditional measurement activities must be addressed. Accreditation standards that the Correctional Service of Canada is bringing to bear on program quality, hopefully will be sufficiently flexible to expand its views to accommodate the richness and stringent demands of traditional ways and values.

The possibilities of innovation also remain untapped. Healers are often underutilized in terms of their skills and the necessary time required of them to provide their services. Healers are reluctant to assure the "right" time and space in an institution to engage themselves fully in their healing requirements as this can inhibit their creativity in an institutional environment. Traditional approaches hold promise of cost-benefits through days saved, as a function of Native healing processes.

KELLEY BLANCHETTE¹

Until recently, there was a dearth of knowledge regarding what constitutes effective corrections for women. Indeed, women offenders were commonly considered "correctional afterthoughts" due to the lack of research to guide strategies for intervention with this group. As a result, correctional services for women were markedly poorer in quality, variety, and availability than those for their male counterparts (Ross & Fabiano, 1985). Currently, some authors continue to note that facilities and services offered to women inmates are derived from men models of corrections (Chesney-Lind, 1997; Garcia-Coll, Miller, Fields, & Mathews, 1997).

The Canadian federal correctional system has begun to address this problem; the past decade has ushered in a *new philosophy* of women's corrections in Canada. In brief, the *new philosophy* sets out standards of practice that are based on research that is sensitive to the unique situation of women offenders. Moreover, virtually every aspect of the post-sentence correctional process has been amended to reflect the distinctive needs *and* abilities of women. Particular modifications range from a physical decentralization and restructuring of the correctional environment (Construction Policy and Services, 1992) to creating a separate program strategy for women (Federally Sentenced Women Program, 1994; Office of the Deputy Commissioner for Women, 2000).

The particular results of the "new philosophy" are discussed in more detail later in this chapter. First, a brief history of women's corrections in the Canadian federal system will be presented. This will be followed by a discussion of issues germane to women offender assessment as well as qualities of effective programs for women, focusing explicitly on the principles of risk, need, and responsivity. Finally, the chapter will include a very brief discussion of factors that are particularly salient to the evaluation of correctional programs for women.

While the knowledge base regarding effective corrections for women offenders still lags behind that for their male counterparts, researchers and practitioners have been working diligently to fill the information gap. In short, the icon of the woman offender as "correctional afterthought" is slowly dissipating. Research evidence regarding what constitutes effective correctional practice with women offenders is beginning to accumulate; and forms the basis for this chapter.

THE EVOLUTION OF WOMEN'S CORRECTIONS IN CANADA

The first Canadian federal correctional facility for women, the Prison for Women, opened in Kingston, Ontario in 1934. Within four years of its opening, the Archambault Commission became the first of many commissions to recommend its closure (Arbour, 1996; Vachon, 1994). The institution was repetitively criticized on numerous grounds, including: overly austere security measures, poor programming, and inability to adequately address the needs of Aboriginal and Francophone women. Indeed, between 1938 and 1990, at least fifteen government reports had identified serious deficiencies in the services provided to women inmates (Arbour, 1996) The Prison for Women was the only federal prison for women offenders.² This was the subject of fundamental and widespread concern; many federally sentenced women were isolated from their families and social support networks and had greater difficulty preparing for release and reintegration into the community. Despite these concerns, the Prison for Women remained the only Canadian women's federal correctional facility for well over half a century. The last inmate was transferred out of the Prison for Women in May; it was officially closed on July 6, 2000.

Fortunately, correctional practice with women offenders has changed dramatically over the past decade. Many of the progressive developments can be attributed to recommendations put forth by the *Task Force on Federally Sentenced Women* (1990). In brief, the Task Force was established in the late 1980s to address longstanding concerns with the inequitable treatment of women offenders. Its principle mandate was to develop a comprehensive strategy for the management of federally sentenced women.

The research and consultation conducted by the Task Force was largely qualitative and included surveys of both staff and women offenders, as well as comprehensive literature reviews. It was the first time in the Correctional Service of Canada's (CSC) history that the voices of women offenders were afforded such serious consideration in the development of strategic policy direction (Stableforth, 1999). In 1990, the Task Force published its report: *Creating Choices*. It represented a new definition of effective corrections for women offenders, reached through consensus by a broad range of correctional practitioners and government/ non-government agencies. *Creating Choices* was, and continues to be, considered exceptional in its advent of a woman-centered approach to corrections.

The Task Force developed a holistic approach to corrections for women using five guiding principles:

¹ Correctional Service of Canada

² Beginning in 1972, the federal government entered into Exchange of Services Agreements (ESAs) with the provinces. ESAs provide an opportunity, under certain conditions, for federally sentenced offenders to serve their sentences in provincial institutions.

- ♦ Empowerment,
- meaningful and responsible choices,
- respect and dignity,
- supportive environment, and
- shared responsibility.

These principles drove specific recommendations to replace the Prison for Women with four regional facilities and an Aboriginal healing lodge. Importantly, it was recommended that these facilities be constructed and operated using a "community-living" model, where the women offenders would reside in houses and be responsible for their daily meals, laundry, cleaning, and leisure time. The Task Force further called for the development of womencentered interventions, including survivors of abuse therapy and mother-child programming. Finally, it was strongly suggested that an effective community strategy, enhancing resources and support networks, be established for women offenders.

While some dissidents maintain that CSC has improperly interpreted the recommendations of the Task Force (see, for example, Hannah-Moffat, 1995), others argue that the Service has now operationalized a fundamentally distinct concept of effective corrections for women offenders (Stableforth, 1999). In accordance with the Task Force proposals, CSC opened five new facilities for federally sentenced women, as previously described.

Pursuant to Task Force recommendations, operations and programming both within the institution and post-release have been amended. In particular, the implementation of a Women Offender Program Strategy (Federally Sentenced Women Program, 1994; Office of the Deputy Commissioner for Women, 2000) has provided an opportunity for participants to benefit from programs that were developed specifically to meet women's needs and styles of learning. For instance, a mother-child program is operational at all regional facilities, allowing young children to reside with their mothers on a full-time basis, while older children are permitted part-time residency. In recognition of the pervasive and disparate mental health needs of women offenders, a separate, gender-specific Mental Health Strategy has also been developed and implemented (Laishes, 1997). Additionally, in late 1999, an Intensive Intervention Strategy (IIS) was introduced for women offenders. The strategy provides a protocol for safe and secure accommodation for maximum-security women and women with special needs, while emphasizing intensive staff intervention, programming, and treatment.

A comprehensive *Community Strategy for federally sentenced women* has been established (Women Offender Sector, 1998). It includes a variety of residential alternatives for post-incarceration community living, such as: community correctional centers and community residential centers, satellite apartments, private home placements, and day reporting centers. To date, the Strategy has been implemented successfully at the regional level.

Research is the cornerstone for the innovations that we have witnessed in the Canadian women's federal correctional

system. Fortunately, the importance of a gender-sensitive research paradigm is being increasingly recognized. Investigators have reached consensus on the importance of using multi-method approaches in data collection and analysis. While the value of empirical research will always be recognized, it is equally necessary within the context of women's corrections, to conduct qualitative studies. This ensures that the data include the views of individual women and staff. In addition, the Service regularly consults with community partners, advocacy groups, and external experts in the "Women Offender" domain. Consequently, studies with women offenders are becoming both more abundant and more feminist-oriented.

Correctional program evaluation research is increasingly responsive to methodological limitations common to most studies on women offenders. Problems include the small and dispersed population of federally sentenced women and lack of a sound, gender-specific, program theory. Proper evaluation research will mitigate these effects through consideration of the contextual framework and views of the participants, usage of a multimethod approach, and attending to structural or environmental issues such as management support for the program.

Research in the area of actuarial tool development is becoming more gender-specific. In particular, the importance of recruiting samples comprised *solely* of women offenders to develop *separate and unique* classification instruments for women is now recognized. Although these efforts require considerable resources, they are crucial to the attainment of equity for women in conflict with the law.

Over the past decade, the Service has evolved considerably in its treatment of federally sentenced women. The correctional environment has changed in terms of both structure and philosophy. Progressive, woman-centered programs have been implemented and innovative research methodologies are being used to evaluate those programs. Similarly, new actuarial tools are being designed to reflect the unique characteristics of the women offender population.

It is acknowledged, however, that the parameters of effective correctional practice for women offenders are still not extremely well defined. Sustained research efforts will continue to address this issue. Prospective investigations will more solidly demonstrate what is "effective correctional practice" for women offenders, while recognizing the heterogeneity of this group.

EFFECTIVE CORRECTIONAL PROGRAMS FOR WOMEN

Although there has recently been increased attention to women offender issues, some argue that still *"little is known about the program elements [for women] that promote successful outcomes such as economic and social independence, family reunification, and reduced involvement in the criminal justice system.*" (Koons, Burrow, Morash, & Bynum, 1997, p. 513). Perhaps because the overwhelming majority of offenders are men, the services offered to women inmates have traditionally been based on models derived from their male counterparts. Accordingly, past research which examined the ability of programming to meet the needs of women offenders suggested that treatment for women was both inappropriate and unavailable (Dauvergne-Latimer, 1995; Gray, Mays, & Stohr, 1995; Task Force on Federally Sentenced Women, 1990). It is important to note, however, that studies of programs conducted *after* full implementation of CSC's woman-centered model of corrections have shown more promise (Blanchette & Eldjupovic-Guzina, 1998; Dowden & Blanchette, 1999).

Studies of gender specific correctional interventions are essential because the law in Canada mandates distinctive programming for women offenders. Section 77 of the *Corrections and Conditional Release Act (CCRA; 1992)* directs that the Correctional Service of Canada:

- a) Provide programs designed particularly to address the needs of female offenders.
- b) Consult regularly about programs for female offenders with i) appropriate women's groups, and ii) other appropriate persons and groups with expertise on, and experience in working with, female offenders.

The disparate treatment needs of women, and the Service's obligation to properly address those, was emphatically restated in Justice Arbour's *Commission of Inquiry into Certain Events at Prison for Women* (1996). The publication of the Commission of Inquiry rekindled efforts to more strictly adhere to the ideology espoused in *Creating Choices*.

Correctional programming for women has thus evolved from "gender sensitive" to the contemporary "gender specific". While the current approach is more palatable for feminists, Bloom (1998) aptly noted that "*it is often difficult to understand how effective women-specific services differ from effective services in general*" (p.32). There is mounting evidence to suggest that the basic principles of "what works" for men offenders are also applicable to women offenders (Dowden & Andrews, 1999). However, results of some studies suggest that additional or unique parameters should be applied to optimize correctional treatment for women (Austin, Bloom, & Donahue, 1992; Bloom, 1998; Covington, 1998a, 1998b; Doherty, 1998). As such, in discussing effective practice for women offenders, it is necessary to consider elements common to treatment for men, as well as deviations from, and supplements to the standard male model.

Assessment

Individualized assessment is necessary to match women offenders' needs to treatment resources. In Canada this is accomplished at

intake, through the Offender Intake Assessment (OIA) process (Motiuk, 1997). The OIA is an integrated process that incorporates a variety of methodologies. It was designed with the intention of providing a pragmatic, consumer friendly evaluation measure, with good predictive validity. In addition, the assessment process incorporates multiple methods to yield both qualitative and quantitative data (Motiuk & Blanchette, 1998). Therefore, the OIA process is appropriate for use with a variety of populations.³ Data derived from the case-specific OIA process is input into an automated system (Offender Management System; OMS) to contribute to an electronic database for Canada's entire federal offender population. As such, OIA information provides both individual and aggregate (e.g., institutional population profiles) assessment information.

Group and individual assessment is necessary for effective correctional programming. Accordingly, most correctional researchers concur that effective correctional treatment addresses the principles of risk, need, and responsivity. While there is good empirical evidence to support these principles (Andrews, Zinger et al., 1990; Andrews & Bonta, 1998; see also Andrews, Chapter 2 in this *Compendium*), the substantiating data are based largely on samples of male offenders. As a result, some authors question their applicability to women (Hannah-Moffat, 1999; Hannah-Moffat & Shaw, 2000; Kendall, 1998).

Risk principle

The *risk principle* posits that level of treatment should be matched to the risk level of the offender. More specifically, intensive services should be provided to higher risk offenders, while lower risk offenders fare better with minimal or no intervention. As mentioned, while there is ample empirical support for the risk principle (Andrews, 1989; Andrews & Bonta, 1998; Andrews, Bonta, & Hoge, 1990; Andrews, Zinger et al., 1990), the research is based almost entirely on samples of men offenders. Accordingly, some authors argue that the concept of risk is "gendered" and "racialized" and should not be applied to minority groups (Hannah-Moffat, 1999).

Recent meta-analytic⁴ research by Dowden and Andrews (1999) examined the validity of the risk principle for women offenders. The authors included treatment studies that met the following criteria:

- the study was composed predominantly or entirely of women offenders;
- the study included a follow-up period;
- the study compared offenders who had received some form of intervention to a control group who did not receive the primary intervention; and
- the study included a measure of recidivism (reconviction, rearrest, parole failures).

Dowden and Andrews' meta-analysis tested the risk principle by coding studies as treating "high risk" or "low risk" women.

³ While the OIA is used at intake, it is important to note that a successful multi-evaluation process, the Reintegration Potential Reassessment, co-exists for women offenders under community supervision.

⁴ Meta-analysis is a statistical method to aggregate data across numerous studies, providing an "average" result.

Specifically, treatment groups were categorized as high risk if "*the majority of those [participants] in the study had penetnated the justice system at the time of the study and/or had a previous criminal offence*" (p. 442). Alternatively, treatment groups that had no criminal offences or had been diverted from the justice system were coded as low risk.

Results revealed that treatment services were more effective with the higher-risk offenders. Specifically, the data (45 effect sizes) generated a 19% reduction in recidivism for high-risk groups, and no treatment effect for low-risk groups. Moreover, when the authors narrowed the focus to include *exclusively* women treatment studies (rather than *predominantly* women treatment studies), this effect was even more pronounced, and a 24% reduction in recidivism was observed for the high-risk group. The authors concluded that these data support the risk principle for effective intervention with women offenders.

While the study by Dowden and Andrews provides valuable preliminary insight into the applicability of the risk principle for women, some limitations to their research should be acknowledged. Recall that the basic tenet of the risk principle matches level of service to level of risk. However, Dowden and Andrews' meta-analysis does not fully address this issue, as treatment "dosage", was not reported. Rather, the authors described reductions in recidivism for treated (versus untreated) groups. Also, the method of partitioning treatment studies into "high" and "low" risk groups was questionable. Specifically, those with a current involvement in the criminal justice system (the high-risk groups) are much more likely to enjoy reductions in recidivism than their low-risk counterparts because they have higher base rates of offending at the outset.

It is important to note, however, that classification of women offenders into "high" and "low" risk groups will continue to present a challenge in prospective studies. In particular, available risk classification schemas, developed on samples of men, lose validity and reliability when applied to women (Blanchette, 1996; Bonta, Pang, & Wallace-Capretta, 1995; Hann & Harman, 1989; Salekin, Rogers, & Sewell, 1997).

The principle pre-release risk assessment instrument used by CSC is the Statistical Information on Recidivism (SIR) scale (Nuffield, 1982). Used primarily for parole decision-making in Canada, the Statistical Information on Recidivism score provides an estimate of the probability that an individual will reoffend within three years after release. Each offender's total score on the SIR scale is a simple summation of (15) item scores, with total scores ranging from -30 (very high risk) to +27 (very low risk). SIR scores have been shown to accurately predict release outcome for non-Aboriginal men offenders (Hann & Harman, 1988; Motiuk & Porporino, 1989). While research results have suggested that the SIR scale is somewhat predictive of release risk for women, its power is considerably less than that for men (Blanchette, 1996; Bonta et al., 1995; Hann & Harman, 1989). Given these results, the SIR scale is not currently used for the evaluation of risk for women offenders.

Assessment of "psychopathy" is also routinely completed for the evaluation of risk in offender populations. In brief, psychopathy refers to a constellation of affective, interpersonal and behavioural traits associated with a marked absence of compassion and a lack of personal integrity. The Psychopathy Checklist- Revised (PCL-R; Hare, 1991) is currently the most widely accepted measure of psychopathy. The PCL-R consists of 20 items, scored on a 3-point scale, on the basis of a semi-structured interview with the offender and institutional file information. Items on the checklist are summed to provide a total score and two sub-scale scores. The first sub-scale (Factor 1) is defined by interpersonal and affective characteristics and is labelled "callous, selfish, and remorseless use of others". Factor 2 is defined by behavioural traits indicative of a "chronically unstable and anti-social lifestyle".

Average PCL-R scores derived from women samples are generally lower than those obtained with men samples. The prevalence of psychopathy amongst women offenders, based on PCL-R diagnosis across 5 studies, ranges from 11-31% (Mailloux, 1999); the median rate is 16% (Salekin et al., 1997). Typically, the prevalence rate in men offender samples ranges between 25% and 30% (Hare, 1991); although percentages as low as 11% have been reported (Simourd & Hoge, 2000).

The construct of psychopathy has been developed, and largely defined according to the characteristics of men forensic samples. Research on the PCL-R with women offenders has shown some gender differences in the factor structure; the discrepancy more apparent within factor 2 (behavioural) items (Salekin et al., 1997). Moreover, the applicability of certain PCL-R items to women has been questioned, specifically: grandiose sense of self worth, failure to accept responsibility, revocation of conditional release, and juvenile delinquency (Salekin, Rogers, Ustad, & Sewell, 1998).

To date, only two published studies have examined the predictive utility of the PCL-R with women offenders. The results of one study indicated that the measure is a relatively weak predictor of recidivism for women offenders (Salekin et al., 1998). Conversely, based on a sample of 80 released federal women offenders, Loucks and Zamble (1999) argue that *"psychopathy is as important in predicting general offending in female serious offenders as it is in serious male offenders"* (p.28). Collectively, the research suggests that there is not currently enough evidence to support the use of the PCL-R in clinical risk assessment of women offenders.

Another standard risk assessment instrument for correctional populations is the Level of Service Inventory- Revised (LSI-R; Andrews & Bonta, 1995). Based on social learning theory, the LSI-R consists of 54 individual items that measure the following risk/need domains: criminal history, education/employment, financial, family/marital, accommodation, leisure/recreation, companions, alcohol/drug problems, personal/emotional, and attitudes. Scoring for the LSI-R is based on a semi-structured interview with the offender and institutional file information. Each item is scored in a dichotomous fashion (0 or 1), where 1 indicates the presence of a risk or need factor. Individual items are then added to provide a composite score; higher overall scores suggest higher risk of recidivism and need for correctional intervention.

The LSI-R is probably the most extensively researched risk classification instrument in North America. The original LSI (Andrews, 1982) was constructed with a development sample of mostly men offenders. Importantly, however, norms were established based on a large sample of both men and women (n = 1,414 women) (Andrews & Bonta, 1995). Moreover, there is a growing body of empirical evidence demonstrating the predictive accuracy of the LSI-R for women offenders in particular (Coulson, Ilacqua, Nutbrown, Giulekas, & Cudjoe, 1996; Gendreau, Goggin, & Smith, 1999; Rettinger, 1998; McConnell, 1996).

The research literature supporting the predictive utility of the LSI-R (and its predecessor, the LSI) has been based predominately on samples of provincial incarcerates and probationers. There is one published study reporting good psychometric properties for the LSI with a sample of federally sentenced offenders (Loza & Simourd, 1994). Based on a sample of 161 *men* federal offenders, the authors reported that the LSI possesses acceptable psychometric properties and demonstrates convergent validity with measures of relevant criminogenic constructs (SIR scale, PCL-R). Also, while the authors provided good preliminary evidence to support the use of the LSI with federal offenders in terms of its psychometric properties, its utility as a risk prediction measure for this particular population was not examined.

To date, there are no published reports exploring the efficacy of the LSI/LSI-R with federally sentenced women. In an unpublished Honour's thesis, McConnell (1996) tested the predictive ability of the LSI with a sample (n = 50) of federal women offenders. The LSI was scored retrospectively based on file information, and recidivism was defined as conviction for a new offence within three years of release. While the LSI total score accounted for an impressive proportion (36%) of the variance in outcome, subsequent analyses revealed that only two (criminal history, companions) of the ten LSI subscales contributed significantly to the prediction of recidivism. More research using the LSI with samples of federally sentenced women is necessary before firm conclusions regarding its psychometric properties and utility as a risk prediction measure can be drawn.

The Historical Clinical Risk Scheme (HCR-20; Webster, Douglas, Eaves & Hart, 1997; Webster, Eaves, Douglas, & Wintrup, 1995) is a 20-item violence risk assessment instrument that conceptually aligns risk markers into past, present, and future. The ten historic (H) variables consider past behaviour and functioning; they are static or unchangeable. The five clinical (C) items reflect current, dynamic correlates of violence. Finally, the five risk management (R) items concern the future, focusing attention on situational post-assessment factors that may either aggravate or mitigate risk (Douglas, 1999). The HCR-20 has demonstrated robust psychometric properties and research results have been favourable in terms of its utility as a risk prediction measure for both men and women. However, the vast majority of these studies have drawn samples from civil psychiatric settings (Douglas, Ogloff, & Nicholls, 1997; Douglas, Ogloff, Nicholls, & Grant, 1999; Klassen, 1996; Nicholls, Ogloff, & Douglas, 1997; Ross, Hart, & Webster, cited in Douglas, 1999) or forensic psychiatric (Belfrage, 1998; Dernevik, 1998; Douglas et al., 1998; Grann, Belfrage, & Tengström, 2000).

To date, there have been only two published studies using the HCR-20 risk assessment scheme with regular offender samples (Belfrage, Fransson, & Strand, 2000; Douglas & Webster, 1999). Recently, Belfrage et al. (2000) documented the HCR-20's ability to predict institutional violence in a sample of 41 men in Swedish maximum-security prisons. Douglas and Webster (1999) coded the HCR-20 for a sample of 75 Canadian male maximum-security inmates. Data from their postdictive research offered strong support for the use of the HCR-20 in assessing/classifying risk for violence. Collectively, the results of these studies offer good preliminary support for the use of the HCR-20 for predicting risk (especially violent) in *men maximum-security* inmates. There is currently no evidence to suggest that the HCR-20 would be as valuable in measuring risk in women offender populations.

The Violence Risk Appraisal Guide (VRAG; Harris, Rice, & Quinsey, 1993) was designed to predict risk of violent recidivism among mentally disordered offenders. The construction sample consisted of 618 men admitted to a maximum-security psychiatric facility between 1965 and 1980. The 12-items VRAG measures a variety of static risk factors including demographic, childhood, criminal history, and victim information data. Items are weighted and added together to derive a composite score, ranging from -27 to +35; higher scores reflect a greater probability of violent recidivism.

Similar to the HCR-20, research support for the VRAG is largely derived from samples of male offenders in psychiatric settings (Grann et al., 2000; Rice & Harris, 1997). There are studies demonstrating sound psychometric properties (Loza & Dhaliwal, 1997) and predictive efficacy in sex offender (Bélanger & Earls, cited in Quinsey, Harris, Rice, & Cormier, 1998) and violent offender (Kroner & Mills, 1997) samples. Again, however, all substantiating data are based entirely on samples of men. As such, the VRAG is currently not appropriate as a risk classification/prediction instrument for women offenders.

In summary, the most well researched and commonly used risk assessment instruments for offender populations in Canada include: the SIR scale (Nuffield, 1982), PCL-R (Hare, 1991), LSI-R (Andrews & Bonta, 1995), HCR-20 (Webster et al., 1995) and the VRAG (Harris et al., 1993). Unfortunately, there is currently not sufficient evidence to support the use of any of these measures with federal women offenders. Thus, concerns with the method by which Dowden and Andrews (1999) classified their sample according to risk cannot be easily addressed. This limitation is a consequence of the scarcity of relevant empirical data on women offenders.

While Dowden and Andrews provided a preliminary contribution to research on the applicability of the risk principle for women offenders, more empirical evidence is needed for confirmation. As published studies on women offenders continue to accumulate, it is hoped that two critical elements will be addressed in future meta-analyses. First, prospective studies should include detailed descriptions of their treatment groups. This will allow meta-analytic researchers to more accurately code treatment intensity (also called "dosage" or "level"). Second, a risk assessment instrument with strong substantiating data is required to accurately classify federally sentenced women into "low", "moderate", and "high" risk groups.

This review has highlighted the need to test the reliability and validity of existing risk assessment instruments for women. However, it would be even more judicious to develop and validate a *gender-specific* model of risk assessment for women. A recently published study indicated that risk factors for women differ substantially from those for men. As well, separate (gender-specific) risk assessment instruments were noted to improve the prediction of reoffending, especially for women (Funk, 1999).

Need principle

The *need principle* distinguishes between criminogenic and noncriminogenic needs. Andrews and Bonta (1998) offer a clear definition: "Criminogenic needs are a subset of an offender's risk level. They are dynamic attributes of the offender that, when changed, are associated with changes in the probability of recidivism. Noncriminogenic needs are also dynamic and changeable, but these changes are not necessarily associated with changes in recidivism" (p. 243). Clearly, criminogenic needs are a subset of risk: noncriminogenic needs are not. Still, some authors claim that "there is slippage between the terms risk and need" (Hannah-Moffat & Shaw, 2000, p. 58; see also Canadian Elizabeth Fry Societies, 1998). More precisely, there is overlap between the concepts of "risk" and "need", as explained above.

Fundamentally, the need principle asserts that in order to reduce recidivism, treatment services should target criminogenic needs. Promising targets for intervention include: anti-social attitudes and feelings, anti-social associates, poor self-control, self-management, and/or problem-solving skills, substance abuse problems, lack of education and/or vocation, lack of familial ties or dysfunctional family relationships, and poor use of recreational/ leisure time (Andrews & Bonta, 1998; Motiuk, 1997). The general acceptance of these dynamic factors as *criminogenic* is based on a considerable body of research (Andrews et al., 1990; Andrews & Bonta, 1998; Andrews, Dowden, & Gendreau, 1999; Lösel, 1995). However, the need principle's applicability to women has been disputed in the correctional literature. Again, the scepticism derives from the fact that the supporting research is based on samples of men offenders.

Regarding women offenders, it is not the need principle *per se* that has been subject to scrutiny. Rather, the debate is focused on the specific nature of *which* needs are criminogenic for this particular group. Based on a review of the current literature, Howden-Windell and Clark (1999) concluded *"it is evident from the empirical evidence currently available that the criminogenic factors associated with male offenders are relevant to female offenders but their level of importance and the nature of association may differ"*. There is some research to support this suggestion (Dowden & Andrews, 1999; Research Branch, 2000; Simourd & Andrews, 1994), though the strength of the evidence varies, dependent on the dynamic factor in question.

A recent study conducted by CSC's Research Branch (2000) demonstrated that a variety of dynamic factors, assessed at intake, could reliably predict recidivism in released women offenders. All women evaluated through the OIA process and released before December 1997 were included in the representative sample (n = 420). The average follow-up period was approximately one year, with a range from one day to 3.5 years. The dynamic factors assessed by the OIA include: employment/education, marital/family, associates, substance abuse, attitudes, community functioning, personal/emotional orientation. Analyses revealed a consistent relationship between need level rating and recidivism rate. As expected, women with higher need level ratings were more likely to recidivate than those with lower need level ratings: this was true for all seven need domains. These findings suggest that the seven dynamic factors assessed at intake can be classified as criminogenic needs for women offenders. However, corroborative research in most of these need domains is either conflicting or non existent.

While there are a few studies examining the relationship between employment/education needs and women offender recidivism, results of these are inconsistent. With a large sample (n = 441)of women offenders, Rettinger (1998) identified education/ employment as an important contributor to the prediction of recidivism. Similarly, in their meta-analysis on the correlates of female delinquency (n = 34 effect sizes), Simourd and Andrews (1994) found that 'educational difficulties' were moderately to strongly related to delinquent behaviour in girls. In contrast, Dowden and Andrews' (1999) recent meta-analysis revealed that programs targeting school/work (n = 7 effect sizes) for women offenders showed a non-significant negative correlation with reductions in recidivism. Finally, using a large representative sample (n = 136) of released federal women offenders, Bonta et al. (1995) showed that employment was not significantly related to recidivism. Thus, while there is evidence to suggest that education/employment variables predict recidivism in samples of men offenders (Gendreau,

Goggin, & Gray, 2000), the results are still equivocal in regards to whether this domain is criminogenic for women.

Even considering the more abundant literature based on men offenders, researchers are "far from elucidating the causal relationship between family life and adult criminality" (Oddone-Paolucci, Violato, & Schofield, 1998; p. 20). However, some authors have suggested that family issues are important treatment targets for women offenders in particular (Austin et al., 1992; Bloom, 1998; Federally Sentenced Women Program; cited in Hannah-Moffat, 1997). Recent research supports this contention. Based on a review of the literature, Leschied, Cummings, Van Brunschot, Cunningham, and Saunders (2000) reported that dysfunctional family processes and family dynamics are instrumental in promoting and maintaining aggressive behaviour in adolescent girls. In their meta-analysis, Dowden and Andrews (1999) found that programs treating family process issues (n = 9 effect sizes) yielded the strongest reductions in reoffending for women samples. Simourd and Andrews (1994) reported that a poor parent-child relationship (attachment and supervision) was a moderate correlate of offending behaviour among female youths. However, the same authors noted no significant association between family structure or parental problems and criminality.

In one of the few studies looking at family variables as criminogenic needs for adult women, Bonta et al. (1995) reported that, while having dependants was not associated with postrelease outcome, single-parents showed significantly higher recidivism rates than those with partners. Rettinger's (1998) research results confirmed that parenthood was not predictive of recidivism, though contrary to findings by Bonta et al., the data also showed no association between single-parenthood and outcome. Results of Rettinger's study did suggest, however, family or marital conflict was predictive of violent recidivism. These results were not supported by data presented by Loucks and Zamble (1999). Based on a sample of 80 released federally sentenced women, these authors reported that family cohesiveness did not contribute to the prediction of recidivism.

There is a lack of consensus regarding whether family variables constitute important criminogenic needs for women. It is suggested that conflicting research results might be derived from the use of diverse definitions and measures for the "marital/family" construct. Still, while there is some disagreement between research findings, the greater evidence suggests that family variables warrant further investigation as a potential criminogenic need area for women.

The dynamic factor of anti-social associates is routinely hailed as among the most potent predictors of recidivism, and therefore a priority treatment target (Andrews & Bonta, 1998; Andrews et al., 1999; Andrews, Zinger et al., 1990). Although the majority of the evidence is based on samples of men offenders, research on women offenders can be considered conclusive: anti-social associates represents an important criminogenic need domain for women. Dowden and Andrews (1999) reported a strong positive association between correctional programming in this area and reduced reoffending for women. Similarly, Simourd and Andrews (1994) noted that anti-social peers or attitudes comprised the greatest risk factor for female youths. Based on a sample of 81 released federally sentenced women, Blanchette and Motiuk (1995) demonstrated that "criminal associates" was a powerful predictor of violent recidivism. Rettinger (1998) replicated those results with a larger sample (n = 441) of provincially sentenced women.

Antisocial attitudes are also considered amongst the most valuable treatment targets to reduce recidivism in offender populations (Andrews & Bonta, 1998; Andrews et al., 1999; Andrews, Zinger et al., 1990). Compared to their women counterparts, anti-social attitudes are more prevalent among men offenders (Motiuk, 1997). Notwithstanding that, research evidence suggests that this dynamic factor discriminates between women inmates by security level (Blanchette, 1997a) and is criminogenic in nature, regardless of gender. Simourd and Andrews' (1994) meta-analytic results suggested that anti-social attitudes (and peers) are the most important risk factors for female youths. Dowden and Andrews (1999) demonstrated that targeting antisocial attitudes in treatment renders significant reductions in reoffending for women samples. Finally, Rettinger's (1998) study showed that anti-social attitudes/peers predicted violent recidivism for women offenders.

The relationship between substance abuse and criminal activity is well documented: about two-thirds of offenders experience some degree of substance abuse problems (Boland, Henderson, & Baker, 1998). A recent review by Weekes, Moser, and Langevin (1998; cited in Dowden & Brown, under review) concluded that there is a consistent positive association between substance abuse and various forms of general and violent criminal activity. This conclusion supports results of other studies and theoretical arguments which suggest that substance abuse is a criminogenic need (Andrews & Bonta, 1998; Andrews, Zinger et al., 1990). However, there is no consensus in the literature regarding whether substance abuse constitutes a criminogenic need for women offenders in particular.

Based on results of a large sample study with adult inmates (1,030 men and 500 women), McClellan, Farabee, and Crouch (1997) reported that substance abuse problems were stronger predictors of criminal activity for women than men. Rettinger (1998) found that substance abuse was predictive of both general and violent recidivism for women offenders. Similarly, results of a study by Dowden and Blanchette (1999) revealed that treated women substance abusers were significantly less likely to reoffend than their untreated counterparts.

It appears however, that for every study that identifies substance abuse as a criminogenic need for women, there is another to negate those findings. For instance, results of Dowden and Andrews' (1999) meta-analysis suggested that substance abuse is not a valuable treatment target for women offenders (n = 5 effect sizes). Similarly, Bonta et al. (1995) found that substance abuse was not predictive of post-release outcome for their sample of federal women offenders. In a recent meta-analysis on the role of substance abuse in predicting recidivism, Dowden and Brown (under review) reported that alcohol abuse was a weak predictor, while drug abuse was a moderately strong predictor for women offenders (n = 7 effect sizes). However, Loucks and Zamble (1999) reported that drug abuse was not a significant predictor of recidivism in their sample (n = 80) of released women offenders.

Blanchette (1996) found that varying the definition/method of measurement for "substance abuse problem" affected the data accordingly. Specifically, with a sample of 76 federally sentenced women offenders, analyses revealed that meeting diagnostic criteria for substance abuse disorder was not predictive of recidivism. However, when the variable was re-defined according to whether or not the offender had consumed alcohol/drugs prior to the commission of her original offence, "substance abuse" was predictive of recidivism. This suggests that, of women offenders who meet diagnostic criteria for substance abuse or dependence disorders, there is a subset for which the need is criminogenic. For other women offenders, their substance abuse problems do not represent a criminogenic need.

Measures of community functioning include leisure, accommodation, finance, support, deportment, and health. According to the results of a recent meta-analysis, the research support for "community functioning" as a criminogenic need is moderate, at best (Gates, Dowden, & Brown, 1998). The authors identified 20 studies that yielded 79 effect sizes pertaining to community functioning variables. An overall weighted mean effect size of 0.10 was obtained.⁵ While the majority of the effect sizes were based on studies of men, the second author desegregated the data by gender and found 12 effect sizes in studies of exclusively women offenders. The weighted mean effect size of "community functioning" variables for women only was 0.09 (Dowden, August 15, 2000, personal communication). While there is no clear evidence that the broad area of "community functioning" is criminogenic for women, there is a strong possibility that particular subcomponents of this domain might be appropriate treatment targets. For instance, Gates, Dowden, and Brown (1998) showed that "leisure" produced a very strong effect size (0.24). Rettinger (1998) reported that "accommodation" was a strong predictor of both general and violent recidivism in her sample of 441 provincial women offenders. Unfortunately, there is currently not enough empirical data to reinforce these findings or to examine the predictive utility of other subcomponents of this domain for women.

With a sample of 420 released federal women offenders, CSC's Research Branch (2000) demonstrated a strong correlation between a global measure of personal/emotional orientation (assessed at intake) and recidivism. Specifically, within the average one-year post-release follow-up, 11% of those assessed as having "no difficulty" were returned to custody. Twenty-two percent of those assessed as having "some difficulty" recidivated, compared to 34% of those assessed as having "considerable difficulty". These findings were partially supported⁶ by Robinson, Porporino, and Beal (1998), though the authors stressed that "the state of the literature on personal/emotional needs factors remains under-developed particularly with respect to the predictors of recidivism" (p. 77). The problem with the lack of literature is greatly increased when one considers women-specific research. As such, there is little information with respect to which (if any) specific components of the personal/emotional domain are criminogenic in nature. Notwithstanding that, Dowden and Andrews (1999) showed that programs targeting anti-social cognition and self-control deficits in women (n = 8 effect sizes) reduced recidivism, on average, 32%. Similarly, a measure of anti-social thinking - the Psychological Inventory of Criminal Thinking Styles (PICTS) — was found to be moderately successful in predicting institutional adjustment and post-release outcome for women offenders (Walters & Elliott, 1999).

It is apparent from the above review of seven specific dynamic factors that there is a lack of predictive research with samples of women offenders. Moreover, what little is available is often inconsistent and therefore collectively provides only modest insight into *which* particular needs are criminogenic for women offenders. While there is compelling evidence to suggest that "anti-social associates" and "anti-social attitudes" are valuable treatment targets for women, the status of other dynamic factors including education/employment, marital/family, substance abuse, community functioning, and personal/emotional orientation remains equivocal.

Several authors have suggested that women offenders have additional criminogenic needs, though more research is required to confirm the relationship of these variables to recidivism (Federally Sentenced Women Program, 1994; cited in Hannah-Moffat, 1997; Jackson & Stearns, 1995; Koons et al., 1997; Leschied, Cummings, VanBrunschot, Cunningham, & Saunders, 2000). Dynamic factors that are commonly cited as womenspecific criminogenic needs can be generally subsumed in the "personal/emotional" domain, and include low self-esteem, past and current victimization, and self-injury/attempted suicide.

Based on research evidence with men samples, most empiricists believe that self-esteem is not criminogenic (Andrews & Bonta, 1998; Andrews et al., 1990; Gendreau, Little, & Goggin, 1996). However, qualitative research by others has suggested that self-esteem is a promising treatment target for women offenders (Koons et al., 1997). Although relevant gender-specific empirical data are scarce,

 $^{^{5}}$ An overall effect size of 0.10 translates into an approximate 10% reduction in recidivism for treated groups.

⁶ Some components of the Personal/Emotional domain were supported (e.g., self-control, problem-solving deficits, lack of interpersonal skills) as criminogenic needs, while others (e.g., mental ability, mental health problems) were not.

there is some evidence to support results by Koons and her colleagues. Simourd and Andrews' (1994) meta-anlaysis of the correlates of delinquency found an effect size of 0.10 for women and 0.09 for men (n = 14 studies each) for a predictor domain labelled "personal distress". The applicability of these findings to self-esteem research, however, is limited; "personal distress" also included effect sizes relating to anxiety and psychopathology. Larivière (1999) referenced several studies correlating low self-esteem to acts of violence against weaker, vulnerable victims (as in spousal abuse and child abuse). Moreover, he cited six studies linking low self-esteem *in women* to acts of child abuse (5 studies) and neglect (1 study).

Larivière's own research also supports this position. Using meta-analytic techniques, he reviewed 39 studies containing 80 effect sizes pertinent to self-esteem. Results revealed a significant overall effect (r = -0.17), suggesting a strong association between self-esteem and anti-social behaviour (general delinquency, aggression, and violence). Notably, the magnitude of the effect more than doubled (r = -0.38) when the focus was narrowed to women offenders (n = 13 studies). Larivière argues that this finding is not surprising, since women tend to express more guilt about criminal and aggressive behaviours, experience more anxiety about the harm they have caused, and demonstrate less support for the use of violence (Campbell, 1995; cited in Larivière, 1999). The author cautioned, however, that women samples included in the meta-analysis were over-represented by subjects who had engaged in child abuse, possibly resulting in an increased effect size. Notwithstanding that, these results have important implications for treating women offenders; particularly those convicted of child neglect or abuse.

Compared to men inmates, women inmates report significantly more victimization experiences (McClellan et al., 1997). It is now incontestable that there is a strong correlation between experiences of abuse and criminal behaviour (Howden-Windell & Clark, 1999), with the vast majority of women offenders having been victimized at some point in their lives (Blanchette, 1996; Owen & Bloom, 1995; Shaw, 1991a; 1991b). One study revealed self-reported victimization rates as high as 82% among Canadian women offenders (Task Force on Federally Sentenced Women, 1990). Moreover, in comparison to both the general population of women, and to men offenders, women offenders are more likely to have experienced victimization that is violent, sexual, incestuous, committed by numerous perpetrators, and extended over a long period of time (Task Force on Federally Sentenced Women, 1990).

The appallingly high incidence of abuse reported by the Task Force has been supported by independent Canadian research. Tien, Lamb, Bond, Gillstrom, and Paris (1993) noted that 81% of their sample of women offenders reported experiencing some form of abuse (sexual, physical, or psychological) in their current relationship. More recently, these findings were supported by Bonta et al. (1995), where 61% of their federal women offender sample reported past physical abuse, and 54% reported past sexual abuse. Similarly, in Blanchette's (1996) sample of federal women offenders, 61% were identified as victims of childhood abuse, and 59% were identified as victims of abuse in adulthood. Data from U.S. women inmate samples is comparable, with about 60% reporting childhood victimization, and about 75% reporting experiencing abuse as an adult (McClellan et al., 1997). Thus, there is a well-documented link between victimization experiences, both in childhood and adulthood, and criminal behaviour in women. The exact nature of this relationship, however, remains nebulous.

Although research by Koons et al. (1997) suggests that past victimization represents an important treatment target for women offenders, the authors do not necessarily suggest that "victimization" represents a need that is criminogenic. Loucks (1995) examined the nature of the association between victimization experiences and anti-social behaviour in a sample of federally sentenced women inmates (n = 100). Results of his study revealed that pre-adolescent sexual abuse correlated positively with both institutional convictions and violence (criminal and institutional), while post-adolescent physical abuse correlated positively with institutional convictions and criminal violence. However, when the victimization variables were entered into a prediction equation with other variables, their value was negligible.

In an investigation into the predictors of recidivism among Canadian federally sentenced women, Bonta et al. (1995) reported that victimization experiences were not statistically predictive, with the exception of physical abuse as an adult. Importantly, those who had experienced physical abuse as an adult were actually less likely to reoffend than their counterparts. These findings were supported by Blanchette (1996), who, controlling for time at risk in the community, noted no relationship between victimization experiences and recidivism. Moreover, these results were sustained regardless of how 'recidivism' was defined.⁷ Similar to findings reported by Bonta et al., a negative association (r = -0.24) was reported between abuse in adulthood and criminal (new conviction) recidivism; the correlation approached statistical significance. Finally, results presented by Rettinger (1998) also suggest that abuse experiences are not statistically predictive of recidivism or of violent recidivism in women offenders.

Collectively, the research to date suggests that victimization, although very common amongst women offenders, is not a criminogenic need. Despite this, the astonishingly high prevalence of survivors in the correctional system signals a requirement for service providers to address this issue. Many women suffer from posttraumatic symptoms that can impede progress in addressing criminogenic need areas. In Canada, this has been recognized, and

⁷ Various definitions of "recidivism" were used, including: return to custody for any reason, revocation for technical violation, new criminal conviction, and new violent criminal conviction.

"Survivors of Abuse and Trauma" has been incorporated into core⁸ programming for federal women offenders.

Women in prison show much more frequent mental health problems than women in general, men in general and incarcerated men, including higher levels of depression, suicidal and self-injurious behaviour (Blanchette, 1996; Blanchette, 1997b; Loucks & Zamble, 1994). Studies of Canadian federal women offenders report that about 54 to 59% have engaged in some form of self-injurious behaviour such as head banging, cutting, burning, or slashing (Heney, 1990; Loucks, 1995). Rates of attempted suicide among federal women offenders are reported at 48% (Loucks & Zamble, 1994), with a range of 20 to 71%, depending on security level (Blanchette, 1997b).

With a sample of 100 federal women offenders, Loucks (1995) examined the relationship between self-harm and criminal behaviour. The researcher used a broad definition of self-harm, including any intentional action that resulted in physical harm to the self; he did not distinguish between actions that were intended to commit suicide and those that were for other reasons (e.g., attention seeking). Results revealed that 54% of the sample reported engaging in at least one incident of self-harm at some point in their life. Moreover, self-harm was found to be positively correlated with both criminal convictions (r = 0.25) and criminal violence (r = 0.24).

While the prediction research in this area is not copious, those studies that do exist suggest that self-injury/attempted suicide is criminogenic in nature. Bonta et al. (1995) found that selfinjury was predictive of general recidivism (new convictions or parole revocations) in a sample of federal women offenders; 78% of those with a history of self-injurious behaviour recidivated, versus 25% of those with no such history. Blanchette and Motiuk (1995), reported that a history of attempted suicide was a potent predictor of violent recidivism (r = 0.47; p<0.001) in a sample of 81 federally sentenced women. Statistical analyses further revealed that, together with two other variables (expectations about incarceration, associates), a history of attempted suicide accounted for 45% of the variance in violent recidivism. These findings were replicated with a larger sample of provincially sentenced women offenders (n = 441), where a history of self-injury was predictive of violent recidivism (Rettinger, 1998).

It is apparent from this review of the literature that, as suggested by Dowden and Andrews (1999), the need principle is applicable to women offenders. What is more contentious is whether the traditional⁹ criminogenic needs are also applicable to women, or whether women have unique criminogenic needs. The research suggests that both are true: while some of the traditional dynamic factors, such as anti-social attitudes and associates are criminogenic for women, there is also some evidence that they have unique criminogenic needs, such as propensity to self-injure or attempt suicide. Prospective prediction studies on self-esteem will more firmly determine whether it is a gender-specific criminogenic need for women offenders.

Responsivity principle

The responsivity principle suggests delivering treatment services in a style and mode that is conducive to the ability and learning style of the offender (Andrews & Bonta, 1998). Responsivity considerations are both general and specific.

The general responsivity principle refers to broad treatment strategies (and their theoretical foundations): it suggests that the most powerful approaches to produce change are behavioural/social learning/cognitive behavioural styles of service. Within the general correctional literature, there is very strong evidence to support the general responsivity principle (Andrews, Zinger et al., 1990; Izzo & Ross, 1990; Lösel, 1995). While most of the relevant research has used men samples, there is also preliminary evidence to suggest that behavioural/social learning/cognitive behavioural approaches are most effective for women's correctional interventions (Austin et al., 1992; Dowden & Andrews, 1999).

Specific responsivity factors consider individual offender characteristics such as education level/literacy, mental health, interpersonal anxiety, race, and gender. By identifying specific responsivity issues, treatment services can be better matched to the offender. Prendergast, Wellisch, & Falkin (1995) highlighted the importance of specific responsivity factors: *"whether women offenders obtain the services they need depends not only on the availability of services but also on the ability of programs to identify their clients' needs and match them to appropriate services"* (p. 252).

Consideration of the demographics and history of the women offender population is vital in the development of genderresponsive programming. Some authors have suggested that an understanding of the unique life experiences of women, the context in which they live, and their pathways to crime, are essential in gender-specific program planning and delivery (Bloom, 1998; Chesney-Lind, 1998, Covington, 1998b). Having said that, however, it has been noted that *"there is no uniform procedure or instrument for identifying women's needs, nor is there a commonly accepted theory-based method for matching clients to programs and services"* (Prendergast, Wellisch, & Falkin, 1995, p. 252). Thus, while few would argue that gender specific issues should be reflected in the development and delivery of women-centred programs, there are still no quantitative empirical studies examining gender as a specific responsivity consideration.

An increasing number of theoretical reports and qualitative evidence is suggesting that adherence to particular programming principles increases treatment efficacy for women offenders. The

⁸ Core programs are priority interventions that must be widely available to offenders in institutions and the community. CSC's *Correctional Strategy* supports four core programs for women: living skills (e.g., cognitive skills, anger management, parenting), literacy and continuous learning, substance abuse, and survivors of abuse and trauma.

⁹ Traditional criminogenic needs are those based largely on research with men offenders, including: employment/education, marital/family, associates, substance abuse, attitudes, community functioning, personal/ emotional orientation

research conducted by the *Task Force on Federally Sentenced Women* (1990) suggested five basic principles should drive correctional programming for women. These include: empowerment, meaningful and responsible choices, respect and dignity, supportive environment, shared responsibility.

- *Empowerment* is the process through which women gain insight into their personal situation, identify their strengths, and are supported and challenged to take positive action to gain greater control of their lives. There is independent research evidence to suggest that the empowerment model of skill building helps develop competencies and enables women to achieve independence (Austin et al., 1992; Blanchette & Eldjupovic-Guzina, 1998).
- Meaningful and responsible choices provide women with options that allow them to make responsible choices that relate to their needs, past experiences, culture, values, spirituality, abilities and skills. A history of dependence (e.g., alcohol/drugs, men, financial assistance) has denied many federally sentenced women the opportunity and/or ability to make meaningful and responsible choices in their lives (Blanchette & Eldjupovic-Guzina, 1998; Office of the Deputy Commissioner for Women, 2000).
- Respect and dignity refers to the reciprocal respect that is needed among offenders, staff, and between the two. It is expected that the new philosophy of women's corrections will engender more respect and dignity with the dynamic security, communityliving model. For instance, Primary Workers, who work with the women to establish and address treatment goals, have replaced "correctional officers". These initiatives are important progressions because it has been suggested that women are more relationship-oriented and that treatment should be provided accordingly (Covington, 1998a; Garcia *et al.*, 1997).
- Supportive environment is required to promote physical and psychological health and personal development for women offenders. The importance of a supportive environment in programming for all offenders is highlighted in CSC's Correctional Strategy.
- *Shared responsibility* refers to the suggestion that all levels of government, corrections, volunteer organizations, businesses, private sector services and the community have a role to play in the development of support systems and continuity of service for federally sentenced women.

As noted earlier, the five basic principles of appropriate treatment for women were developed based primarily on qualitative research findings. The principles have been accepted as genderspecific responsivity elements, and are incorporated into current practice with federal women offenders. It is hoped that prospective quantitative data will provide corroborative evidence for their effectiveness in treatment for women offenders.

Other suggested responsivity considerations in programming for women include using ethnically diverse staff (Austin et al., 1992) including a balance of professionals and ex-offenders for role modeling. In Canada, it is particularly important to include Aboriginal staff and program facilitators in programming for women. While Aboriginal people comprise less than three percent of the Canadian population, they represent over 20% of women inmates. Compared to non-Aboriginal inmates, Aboriginal inmates are younger, less educated, and assessed as higher risk and having more intensive treatment needs (Finn, Trevethan, Carrière, & Kowalski, 1999). These issues should also be attended to for optimal treatment effectiveness.

Possibly the most important feature of gender-specific responsivity is recognition of the fact that *equality* does not mean *sameness*. To provide the most effective interventions, services within the correctional system must be responsive to the unique needs and learning styles of women offenders. Treatment should be comprehensive, woman-centred, and holistic in nature. Intervention should be coordinated with an appropriate continuum of care and resources to bridge between institutional and community settings.

PROGRAM EVALUATION

It is well documented that programs for women offenders are sorely lacking in solid outcome evaluation data. This is true in both Canada (Kendall, 1998) and the United States (Austin et al., 1992; Koons et al., 1997). Current program development strategies should include "built-in" assessment into their treatment paradigm. This means that the collection of data related to treatment effectiveness would be an integrated component of the program. Moreover, ongoing process and impact evaluation data will provide an opportunity for continuous improvement of program content and service delivery methods.

Evaluation is particularly challenging for women's programs, as a number of unique challenges are presented. Women offenders issues are situated in a highly visible context. Sound, genderspecific program theory is non-existent, and researchers continue to debate the most appropriate methodology to use in evaluative studies. The small, heterogeneous, and geographically dispersed population of federally sentenced women further impedes the collection of both qualitative and quantitative data.

Creative approaches are required to mitigate disadvantages in evaluating services for women offenders. As mentioned at the beginning of this chapter, theses include consideration of the contextual framework and views of the participants, usage of a multi-method approach, and attending to structural or environmental issues such as management support for the program. In quantitative research using standardized measures, it is paramount to ensure that there are normative and validity data available for women offenders.

Evaluation of new approaches and programs for women offenders is especially important to gauge their success against the more traditional programs, which have been developed primarily for men. Despite additional obstacles in assessing services for women offenders, researchers and practitioners are continuing to identify and refine the most effective strategies for service development and delivery.

CONCLUSIONS

Canada is leading a new era of correctional services for women offenders. CSC now has good descriptive data profiling the women offender population; this is maintained and updated on an ongoing basis. In recognition of the lower risk levels and unique needs and responsivity issues of women offenders, gender-specific policies and strategic planning tactics have been implemented. The Service has begun to introduce women-centred classification and treatment paradigms; the practice of offering traditional "gender-neutral" services is dissipating. As reflected in Section 77 of the *Corrections and Conditional Release Act*, it is no longer acceptable to "add women and stir".

At the federal level, a new philosophy of corrections for women is operational. The mother-child and peer support¹⁰ programs are just two examples of how the system is adapting to respond to the distinctive needs of women. The closure of Prison for Women and construction of the regional facilities has begun to address needs related to linguistic and cultural diversity in the small federal women offender population. The communityliving style accommodations at the regional facilities is the first step in a reconciliation of the incongruity between a justice system that inevitably fosters dependence and a women population that needs to become more independent.

While progress has been both swift and substantial, there is still room for improvement in delivering effective correctional services to women offenders. Amelioration will result from rigorous evaluation (including cost-benefit analysis) of new womencentred programs. Austin and colleagues (1992) noted the same deficiency in the United States, where *"information on the long-term effectiveness of …gender-specific correctional treatment strategies for women is non existent"* (p. 21).

There is some preliminary evidence regarding the criminogenic needs of women offenders. However, much more research is required before confident conclusions can be drawn. It is important to note, as well, that many women have non-criminogenic needs that may prevent them from successfully participating in correctional programs. As discussed earlier, victimization issues are important treatment targets in this context. In community treatment programs, addressing specific non-criminogenic needs is particularly important. For instance, lack of transportation or lack of appropriate childcare arrangements may prevent women from attending programs addressing true criminogenic needs. As such, these are important considerations in program development for women offenders in the community (Bloom, 1998). In conclusion, a review of the research suggests that the qualities of effective programs in general are also qualities of effective programs for women. More specifically, programs should attend to the principles of risk, need, responsivity. There are several caveats, however. First, there is still no firm support for the ability of any actuarial tool to predict risk for both federal and provincial women offenders. Also, the criminogenic nature of many need areas for women remains unclear. Finally, more research is needed to examine gender as a specific responsivity factor.

The importance of recognizing the distinctive qualities of women offenders is inestimable. While there are many similarities in the social characteristics of men and women offenders, there are also considerable gender differences that must continue to be reflected in the development of women-centered correctional interventions.

REFERENCES

- Andrews, D. A. (1982). The Level of Supervision Inventory (LSI): The first followup. Toronto, ON: Ontario Ministry of Correctional Services.
- Andrews, D. A. (1989). Recidivism is predictable and can be influenced: Using risk assessments to reduce recidivism. Forum on Corrections Research, 1(2), 11-18.
- Andrews, D. A., & Bonta, J. (1995). LSI-R: The Level of Service Inventory Revised. Toronto, ON: Multi-Health Systems.
- Andrews, D. A., & Bonta, J. (1998). The psychology of criminal conduct. Cincinnati, OH: Anderson Publishing Company.
- Andrews, D. A., Bonta, J., & Hoge, R. D. (1990). Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice and Behavior*, 17, 19-52.
- Andrews, D. A., Dowden, C., & Gendreau, P. (1999). Clinically relevant and psychologically informed approaches to reduced reoffending: A meta-analytic study of human service, risk, need, responsivity and other concerns in justice contexts. Manuscript submitted for publication.
- Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology*, 28, 369-404.
- Arbour, L. (1996). Commission of inquiry into certain events at the Prison for Women in Kingston. Ottawa, ON: Public Work and Government Services Canada.
- Austin, J., Bloom, B., & Donahue, T. (1992). Female offenders in the community: An analysis of innovative strategies and programs. Washington, DC: National Institute of Corrections.
- Belfrage, H. (1998). Implementing the HCR-20 scheme for risk assessment in a forensic psychiatric hospital: Integrating research and clinical practice. *Journal of Forensic Psychiatry*, 9, 328-338.
- Belfrage, H., Fransson, G., & Strand, S. (2000). Prediction of violence within the correctional system using the HCR-20 Risk Assessment Scheme. *Journal* of Forensic Psychiatry, 11(1), 167-175.
- Blanchette, K. (1996). The relationship between criminal history, mental disorder, and recidivism among federally sentenced female offenders. Unpublished master thesis, Ottawa, ON: Carleton University.
- Blanchette, K., (1997a). Risk and need among federally sentenced female offenders: A comparison of minimum-, medium-, and maximum-security inmates. Research Report R-58. Ottawa, ON: Correctional Service of Canada.
- Blanchette, K. (1997b). Maximum-security female and male federal offenders: A comparison. Research Report R-53. Ottawa, ON: Correctional Service of Canada.
- Blanchette, K., & Eldjupovic-Guzina, G. (1998). Results of a pilot study of the peer support program for women offenders. Research Report R-73. Ottawa, ON: Correctional Service of Canada.
- Blanchette, K. & Motiuk, L. L. (1995). Female offender risk assessment: The case management strategies approach. Poster presented at the Annual Convention of the Canadian Psychological Association, Charlottetown, Prince Edward Island.

¹⁰ For more information on the Peer Support program, see Blanchette, K., & Eldjupovic-Guzina, G. (1998).

- Bloom, B. (1998). Beyond recidivism: Perspectives on evaluation of programs for female offenders in community corrections. *The ICCA Journal on Community Corrections*, p. 32-35.
- Boland, F., Henderson, K., & Baker, J. (1998). Case need domain: Substance abuse assessment review. Forum on Corrections Research, 10(3), 32-34.
- Bonta, J., Pang, B., & Wallace-Capretta, S. (1995). Predictors of recidivism among incarcerated female offenders. *The Prison Journal*, 75, 277-294.
- Canadian Elizabeth Fry Societies (1998). Position paper regarding the classification and carceral placement of women classified as maximum security prisoners. Ottawa, ON: unpublished report.
- Chesney-Lind, M. (1997). The female offender: Girls, women, and crime. Thousand Oaks, CA: Sage Publications.
- Chesney-Lind, M. (1998). What to do about girls? Promising perspectives and effective strategies. Paper presented at the 6th Annual International Community Corrections Association (ICCA) Research Conference in Arlington, Virginia.
- Construction Policy and Services/National Implementation Committee (1992). *Regional facilities for federally sentenced women: Operational plan.* Ottawa, ON: Correctional Service of Canada.

Corrections and Conditional Release Act (1992). C-20.

- Coulson, G., Ilacqua, G., Nutbrown, V., Giulekas, D., & Cudjoe, F. (1996). Predictive utility of the LSI for incarcerated female offenders. *Criminal Justice and Behavior*, 23(3), 427-439.
- Covington, S. (1998a). The relational theory of women's psychological development: Implications for the criminal justice system. In R.T. Zaplin (Ed.), *Female offenders: Critical perspectives and effective interventions* (pp. 113-132). Gaithersburg, MD: Aspen Publishers.
- Covington, S. (1998b). Creating gender-specific treatment for substance-abusing women and girls in community correctional settings. Paper presented at the 6th Annual International Community Corrections Association (ICCA) Research Conference in Arlington, Virginia.
- Dauvergne-Latimer, M. (1995). Exemplary community programs for federally sentenced women: A literature review. Report submitted to Federally Sentenced Women Program. Ottawa, ON: Correctional Service of Canada.
- Dernevik, M. (1998). Preliminary findings on reliability and validity of the Historical-Clinical-Risk Assessment in a forensic psychiatric setting. *Psychology*. *Crime, and the Law*, 4, 127-137.
- Doherty, J. (1998). Power-belief theory: Female criminality and the dynamics of oppression. In R.T. Zaplin (Ed.), *Female offenders: Critical perspectives and effective interventions* (pp.133-160). Gaithersburg, MD: Aspen Publishers.
- Douglas, K. S. (1999). HCR-20 Violence risk assessment scheme: Overview and annotated bibliography. Unpublished manuscript.
- Douglas, K. S., Klassen, C., Ross, D., Hart, S. D., Webster, C. D., & Eaves, D. (1998, August). Psychometric properties of HCR-20 Violence Risk Assessment Scheme in insanity acquitees. Poster presented at the Annual meeting of the American Psychological Association, San Francisco, CA.
- Douglas, K. S., Ogloff, J. R., & Nicholls, T. L. (1997, June). Assessing the risk for inpatient psychiatric violence. Paper presented at the Annual Convention of the Canadian Psychological Association, Toronto, ON.
- Douglas, K. S., Ogloff, J. R., Nicholls, T. L., & Grant, I. (1999). Assessing risk for violence among psychiatric patients: The HCR-20 risk assessment scheme and the Psychopathy Checklist: Screening version. *Journal of Consulting and Clinical Psychology*, 67(6), 917-930.
- Douglas, K. S., & Webster, C. D. (1999). The HCR-20 Violence Risk Assessment Scheme: Concurrent validity in a sample of incarcerated offenders. *Criminal Justice and Behavior*, 26(1), 3-19.
- Dowden, C., & Andrews, D. A. (1999). What works for female offenders: A meta-analytic review. *Crime and Delinquency*. 45, 438-452.
- Dowden, C., & Blanchette, K. (1999). An investigation into the characteristics of substance-abusing women offenders: Risk, need, and post-release outcome. Research Report R-81. Ottawa, ON: Correctional Service of Canada.
- Dowden, C., & Brown, S. L. The role of substance abuse factors in predicting recidivism: A meta-analysis (manuscript under review).
- Federally Sentenced Women Program (1994). Correctional program strategy for federally sentenced women. Ottawa, ON: Correctional Service of Canada.

- Finn, A., Trevethan, S., Carrière, G., & Kowalski, M. (1999). Female inmates, Aboriginal inmates, and inmates serving life sentences: A one-day snapshot. Catalogue 85-002-XIE Vol. 19, no. 5. Ottawa, ON: Ministry of Industry.
- Funk, S. J. (1999). Risk assessment for juveniles on probation: A focus on gender. Criminal Justice and Behavior, 26(1), 44-68.
- Garcia-Coll, C., Miller, J. B., Fields, J. P., & Mathews, B. (1997). The experiences of women in prison: Implications for services and prevention. *Women* and Therapy, 20(4), 11-28.
- Gates, M., Dowden, C., & Brown, S. L. (1998). Case need domain: Community functioning. *Forum on Corrections Research*, 10(3), 35-37.
- Gendreau, P., Goggin, C., & Gray, G. (2000). Case needs review: Employment domain. Research Report R-90. Ottawa, ON: Correctional Service of Canada.
- Gendreau, P., Goggin, C., & Smith, M. (1999, May). Is there an actuarial measure that is demonstrably superior to all others? Paper presented at the 60th Annual Convention of the Canadian Psychological Association. Halifax, NS.
- Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult offender recidivism: What works! *Criminology*, 34(4), 575-607.
- Grann, M., Belfrage, H., & Tengström, A. (2000). Actuarial assessment of risk for violence: Predictive validity of the VRAG and the Historical part of the HCR-20. *Criminal Justice and Behavior*, 27, 97-114.
- Gray, T., Mays, G. L., & Stohr, M. K. (1995). Inmate needs and programming in exclusively women's jails. *The Prison Journal*, 75(2), 186-202.
- Grove, W. M., & Meehl, P. E. (1996). Comparative efficiency of informal (subjective, impressionistic) and formal (mechanical, algorithmic) prediction procedures: The clinical-statistical controversy. *Psychology, Public Policy, and Law, 2*(2), 293-323.
- Hann, R., & Harman, W. (1988). Release risk prediction: A test of the Nuffield Scoring System. Ottawa, ON: Ministry of the Solicitor General of Canada.
- Hann, R., & Harman, W. (1989). Release risk prediction: A test of the Nuffield Scoring System for native and female inmates. Ottawa, ON: Ministry of the Solicitor General of Canada.
- Hannah-Moffat, K. (1995). Feminine fortresses: Women-centered prisons? The Prison Journal, 75(2), 135-164.
- Hannah-Moffat, K. (1997). From christian maternalism to risk technologies: Penal powers and women's knowledges in the governance of female prisons. Unpublished Doctoral Thesis, Toronto, ON: Centre of Criminology, University of Toronto.
- Hannah-Moffat, K. (1999). Moral agent or actuarial subject: Risk and Canadian women's imprisonment. *Theoretical Criminology*, 3(1), 71-94.
- Hannah-Moffat, K., & Shaw, M. (2000). 'Taking risks' Gender, diversity, security classification and risk/needs assessment with Canadian federally sentenced women (Draft Final Report). Ottawa, ON: Status of Women Canada.
- Hare, R. D. (1991). Manual for the Revised Psychopathy Checklist. Toronto, ON: Multi-Health Systems.
- Harris, G. T., Rice, M. E., & Quinsey, V. L. (1993). Violent recidivism of mentally disordered offenders: The development of a statistical prediction instrument. *Criminal Justice and Behavior*, 20, 315-335.
- Heney, J. (1990). Report on self-injurious behaviour in the Kingston Prison for Women. Ottawa, ON: Correctional Service of Canada.
- Howden-Windell, J., & Clark, D. (1999). Criminogenic needs of female offenders. HM Prison Service. London, UK: Unpublished report.
- Izzo, R. L., & Ross, R. R. (1990). Meta-analysis of rehabilitation programs for juvenile delinquents: A brief report. *Criminal Justice and Behavior*, 17(1), 134-142.
- Jackson, P. G., & Stearns, C. A. (1995). Gender issues in the new generation jail, *The Prison Journal*, 75(2) 203-221.
- Kendall, K. (1998). Evaluation of programs for female offenders. In R.T. Zaplin (Ed.), *Female offenders: Critical perspectives and effective interventions* (pp. 361-378). Gaithersburg, MD: Aspen Publishers.
- Klassen, C. (1996). Predicting agression in psychiatric inpatients using 10 historical risk factors: Validating the "H" of the HCR-20. Unpublished Honour's Thesis, Burnaby, BC: Simon Fraser University.
- Koons, B. A., Burrow, J. D., Morash, M., & Bynum, T. (1997). Expert and offender perceptions of program elements linked to successful outcomes for incarcerated women. *Crime and Delinquency*, 43(4), 512-532.
- Kroner, D. G., & Mills, J. F. (1997, February). *The VRAG: Predicting institutional misconduct in violent offenders*. Paper presented at the Annual Convention of the Ontario Psychological Association, Toronto, ON.

- Laishes, J. (1997). Correctional Service of Canada Mental Health Strategy for Women Offenders. Ottawa, ON: Correctional Service Canada.
- Larivière, M. (1999). The relationship between self-esteem, criminality, aggression, and violence: A meta-analysis. Unpublished comprehensive examination, Ottawa, ON: Carleton University.
- Leischied, A. W., Cummings, A., Van Brunschot, M., Cunningham, A., & Saunders, A. (2000). Female adolescent aggression: A review of the literature and the correlates of aggression. Ottawa, ON: Public Works and Government Services Canada.
- Lösel, F. (1995). The efficacy of correctional treatment: A review and synthesis of meta-evaluations. In J. McGuire (Ed.), *What works: Reducing reoffending* (pp. 79-111). Chichester, UK: John Wiley & Sons.
- Loucks, A. D. (1995). Criminal behaviour, violent behaviour, and prison maladjustment in federal female offenders. Unpublished Doctoral Thesis. Kingston, ON: Queen's University.
- Loucks, A. D., & Zamble, E. (1994). Some comparisons of female and male serious offenders. *Forum on Corrections Research*, 6(1), 22-24.
- Loucks, A. D., & Zamble, E. (1999). Predictors of recidivism in serious female offenders. *Corrections Today*, 61(1), 26-32.
- Loza, W., & Dhaliwal, G. K. (1997). Psychometric evaluation of the Risk Appraisal Guide (RAG): A tool for assessing violent recidivism. *Journal of Interpersonal Violence*, 12, 779-793.
- Loza, W., & Simourd, D. (1994). Psychometric evaluation of the Level of Supervision Inventory (LSI) among male Canadian federal offenders. *Criminal Justice and Behavior*, 21(4), 468-480.
- Mailloux, D. L. (1999). Victimization, coping and psychopathy as plausible explanations for violent behavior among female offenders. Unpublished Master Thesis. Ottawa, ON: Carleton University.
- McClellan, D. S., Farabee, D., & Crouch, B. M. (1997). Early victimization, drug use, and criminality: A comparison of male and female prisoners. *Criminal Justice and Behavior*, 24(4), 455-476.
- McConnell, B. (1996). The Prediction of female federal offender recidivism with the Level of Supervision Inventory. Unpublished Honours Thesis. Kingston, ON: Queen's University.
- Motiuk, L. L. (1997). Classification for correctional programming: The Offender intake assessment (OIA) process. *Forum on Corrections Research*, 9(1), 18-22.
- Motiuk, L. L., & Blanchette, K. (1998). Assessing female offenders: What works. Paper presented at the 6th Annual International Community Corrections Association (ICCA) Research Conference in Arlington, Virginia.
- Motiuk, L. L., & Porporino, F. (1989). Offender risk/needs assessment: A study of conditional releases, Report R-01. Ottawa, ON: Correctional Service of Canada.
- Nicholls, T. L., Ogloff, J. R., & Douglas, K. S. (1997, June). Comparing risk assessments with female and male psychiatric inpatients: Utility of the HCR-20 and Psychopathy Checklist: Screening version. Paper presented at the 57th Annual Convention of the Canadian Psychological Association, Toronto, ON.
- Nuffield, J. (1982). Parole decision-making in Canada: Research toward decision guidelines. Ottawa, ON: Communications Division.
- Oddone Paolucci, E., Violato, C., & Schofield, M. (1998). Case need domain: Marital and family. *Forum on Corrections Research*, 10(3), 20-23.
- Office of the Deputy Commissioner for Women (2000). *Correctional program strategy for women offenders*. Unpublished draft. Ottawa, ON: Correctional Service of Canada.
- Owen, B., & Bloom, B. (1995). Profiling women prisoners: Findings from national surveys and a California sample. *The Prison Journal*, 75(2), 165-185.
- Pendergast, M. L., Wellisch, J., & Falkin, G. P. (1995). Assessment of and services for substance-abusing women offenders in community and correctional settings. *The Prison Journal*, 75(2), 240-256.

- Quinsey, V. L., Harris, G. T., Rice, M. E., & Cormier, C. A. (1998). Violent offenders: Appraising and managing risk. Washington, D.C: American Psychological Association.
- Research Branch (2000). The Dynamic Factor Identification and Analysis Instrument (DFIA) and women offenders: What does the research say? Field Consultation Document: Unpublished draft. Ottawa, ON: Correctional Service of Canada.
- Rettinger, J. L. (1998). A recidivism follow-up study investigating risk and need within a sample of provincially sentenced women. Unpublished doctoral thesis. Ottawa, ON: Carleton University.
- Robinson, D., Porporino, F., & Beal, C. (1998). A Review of the literature on personal/emotional need factors. Research Report R-76. Ottawa, ON: Correctional Service Canada.
- Rice, M. E., & Harris, G. T. (1997). Cross validation and extension of the Violence Risk Appraisal Guide for child molesters and rapists. *Law and Human Behaviour*, 21, 231-241.
- Ross, R. R., & Fabiano, E. A. (1985). Correctional afterthoughts: Programs for female offenders. (User Report 1985-18). Ottawa, ON: Ministry of the Solicitor General of Canada.
- Salekin, R. T., Rogers, R., & Sewell, K. W. (1997). Construct validity of psychopathy in a female offender sample: A multitrait-multimethod evaluation. *Journal of Abnormal Psychology*, 106, 576-585.
- Salekin, R. T., Rogers, R., Ustad, K. L., & Sewell, K. W. (1998) Psychopathy and recidivism among female inmates. *Law and Human Behavior*, 22, 109-127.
- Schram, P. J. (1998). Stereotypes about vocational programming for female inmates. *The Prison Journal*, 78(3), 244-270.
- Shaw, M. (1991a). Survey of federally sentenced women: Report to the Task Force. (User Report 1991-4). Ottawa, ON: Ministry Secretariat, Solicitor General Canada.
- Shaw, M. (1991b). The release study: Survey of federally sentenced women in the community. (User Report 1991-5). Ottawa, ON: Ministry Secretariat, Solicitor General Canada.
- Simourd, L., & Andrews, D.A. (1994). Correlates of delinquency: A look at gender differences. *Forum on Corrections Research*, 6(1), 26-31.
- Simourd, D., & Hoge, R. (2000) Psychopathy A risk need perspective. Criminal Justice and Behavior, 27(2), 256-272.
- Stableforth, N. L. (1999). Effective corrections for women offenders What is it and how has research assisted in its development? *Forum on Corrections Research*, 11(3), 3-5.
- Task Force on Federally Sentenced Women (1990). *Report of the Task force on federally sentenced women: Creating Choices.* Ottawa, ON: Ministry of the Solicitor General.
- Tien, G., Lamb, D., Bond, L., Gillstom, B., & Paris, F. (1993). Report on the needs assessment of women at the Burnaby Correctional Centre for Women. Burnaby, BC: BC Institute on Family Violence.
- Vachon, M. M. (1994). It's about time: The legal context of policy changes for female offenders. Forum on Corrections Research, 6(1), 3-6.
- Walters, G. D., & Elliott, W.N. (1999). Predicting release and disciplinary outcome with the psychological inventory of criminal thinking styles: Female data. *Legal and Criminological Psychology*, 4, 15-21.
- Webster, C. D., Eaves, D., Douglas, K. S., & Wintrup, A. (1995). The HCR-20 Scheme: The Assessment of dangerousness and risk. Burnaby, BC: Simon Fraser University.
- Webster, C. D., Douglas, K. S., Eaves, D., & Hart, S. D. (1997). HCR-20: Assessing risk for violence (Version 2). Burnaby, BC: Simon Fraser University.
- Women Offender Sector (1998). Community strategy for women on conditional release. Draft discussion paper. Ottawa, ON: Correctional Service of Canada.

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As the "What Works" agenda gains momentum as a general theme for the effective management of offenders, it is important to identify factors that impact on correctional outcomes and to provide a context to better understand their role. In an increasingly complex correctional environment, staff (clinicians, administrators and policy makers) is challenged to make judicious decisions regarding the selection of assessment instruments and programming models in order to contribute to public safety concerns. Importantly, the past decade has seen significant gains in our understanding about offender assessment and programming. From both theoretical and meta-analytic reviews there is increasing consensus regarding the utility of risk, need and responsivity principles to inform offender classification and intervention decisions (Andrews & Bonta, 1998). Nonetheless, even an informed selection of assessment and classification processes and their application to programming can be compromised if key factors are ignored. One such key factor is that of staff.

This chapter highlights the contribution that staff makes in the delivery of effective correctional services and in influencing correctional outcomes throughout the criminal justice process. In this manner, staff is considered to represent an important resource that, when well managed by correctional agencies, can enhance correctional practices and results. It is our contention, their selection, training, support and retention are as important to effective corrections as the choice of assessment instruments, programming modules, and supervision strategies. This is a synergistic relationship, good staff (skills, knowledge, characteristics) enhances good programs. Unfortunately, however, good staff cannot rescue poor programs (atheoretical, low integrity). Further, poor staff impedes the impact of even very good programs.

FRONTLINE STAFF AND THE REHABILITATIVE IDEAL

Andrews in his chapter on the Principles of Effective Correctional Programs details the elements that comprise effective correctional programming. Several principles (9, 15, 16, and 17) posit staff theoretically as playing an important role when intervening with offenders. Specifically principle 16 stipulates that correctional staff interventions when dealing with offenders should be in accordance to social learning approaches and reflect the general responsivity principle. Andrews also mentions that effective program

deliverers should engage in a set of Core Correctional Practices (CCP), as further detailed in his chapter, namely: relationship factors, skill factors, effective reinforcement, effective disapproval, problem-solving, structured learning, effective modeling, effective use of authority and advocacy/brokerage. He provides empirical support by way of a large meta-analysis review, which indicates that the selection of staff according to core correctional practices is positively linked to treatment outcome (i.e., reduced rate of reoffending). Dowden and Andrews (in press) further explore the complementary nature of core correctional practices with the principles of effective correctional programming elements. The influence of CCP is particularly strong with programs that are consistent with the principles of risk, need and responsivity. The mean effect sizes for treatment that adhered to CCP were significantly enhanced for higher risk cases (0.22 versus 0.09 when CCP techniques were not used), and for programs that predominantly targeted criminogenic needs (0.24 versus 0.15 where CCP techniques were not targeted). Programs adopting clinically appropriate cognitive behavioural (0.26) rather than inappropriate treatment non-cognitive behavioural (0.18) also demonstrated a higher success rate. Even though staff are integral to core correctional practices, very few of the studies reported in Dowden's and Andrews meta-analysis mentioned staff characteristics specifically. Skill factors, problem-solving and advocacy/brokerage were the most reported staff attributes (16% of the studies) compared to effective disapproval (3%).

Gillis in her chapter on offender employment highlights the importance of staff specifically in this context. She presents evidence suggesting specific staff characteristics have a role to play in offenders' acquisition and/or development of new skills, their change in attitudes toward work and concrete behaviour outcomes as it relates to employment. Serin and Preston also describe the importance of staff skills in their chapter on violent offender programming.

Arguments supporting the influence of staff in the rehabilitation of offenders are presented below. This includes reviews in the areas of motivating offenders and the impact of staff attitudes.

THE ROLE OF STAFF IN MOTIVATING OFFENDERS FOR TREATMENT

Motivation has long been regarded in social psychology as a key precondition for therapy (Prochaska & DiClemente, 1982) and as an important factor in treatment (Karoly, 1980; Keithly, Samples, & Strupp, 1980). Clinicians and researchers traditionally viewed motivation for treatment as a relatively fixed personality

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trait. The conceptual thinking evolved to that of a dynamic model that considers the client, environment, and therapist influences on the probability of treatment compliant behaviours. Motivation for treatment is now considered a dynamic client characteristic, which can be influenced by the client himself/herself, the environment, and the therapist. In this model the role of the therapist is to act as an instigator and assist clients to actively seeking change (Davies, 1979; Goldstein & Kanfer, 1979; Miller & Rollnick, 1991).

In correctional psychology motivation for treatment has been conceptualized as either a dynamic risk factor (i.e., need factor), a specific responsivity factor, or as a treatment integrity element (i.e., relating to staff characteristics). Treatment integrity assumes that risk, needs and responsivity principles are considered in the delivery of treatment by well trained and well supervised therapists (Andrews, 1997). In other words, staff may contribute to an offender's motivation in the context of treatment. That is, effective staff can enhance motivation, but alternately ineffective staff may increase treatment resistance (see Chapter 8).

An examination of the research literature reveals a lack of a systematic approach to conceptualizing motivation for treatment. There is a scarcity of studies, which explore the factors that influence motivation and the influence of motivation on treatment. This makes it difficult to determine the importance and meaningfulness of motivation in the context of treatment of offenders. The research findings of the few studies that have looked at motivation for treatment point to a relationship between motivation and treatment outcome, release outcome, staff characteristics and other factors that appear to be linked with offender motivation. It appears that only one study has looked specifically at staff characteristics and offender motivation. Gillis, Getkate, Robinson, and Porporino (1995) studied the impact of supervisor characteristics (leadership behaviour and perceived credibility) on offenders' work motivation. The assessment incorporated measures obtained from work supervisors, managers and offenders. Thirty-five work supervisors, 7 program managers and 143 offenders from 7 federal penitentiaries completed self-report questionnaires. The results suggest that supervisor leadership style and perceived credibility differentially influenced offenders reported work motivation. Transformational leadership style resulted in an increased motivation by offenders, as evidenced by work performance (see Chapter 11).

Another study on offender motivation is worthy of mention even though it does not directly investigate the link between staff characteristics and motivation. Gillis and Grant (1999) conducted a study to determine the relationship between offender motivation for treatment and performance on conditional release. They assessed the motivation of 1,100 randomly selected federal offenders of the 3,800 who were released on day parole during 1990 and 1991. The offenders were divided into three groups: motivated, changed and unmotivated. Initial rating on prognosis and motivation level during day parole were completed. Subsequent, change in motivation was determined by comparing parole officers' ratings of the offenders' motivation upon entry to the institution and during day parole. The follow-up period started from day parole completion to March 1994. The results show that motivation was associated with successful sentence completion. Of the group of offenders rated as motivated, 83% completed their day parole successfully. This is in contrast to the group of unmotivated offenders of whom 53% failed to complete their day parole. Offenders in the changed group have had a success rate of 78%. The results of the recidivism rates after day parole completion follow a similar trend. Offenders who were motivated had the highest success rates post day parole. Sixteen percent of this group of offenders failed, compared to 42% for the unmotivated offenders. This provides an indication that motivation is potentially a factor that may contribute to reintegration. These results are promising and require further investigation especially regarding the factors that contributed to the change in offender motivation. Of interest is whether the parole officers' attributes had a role to play in contributing to the offender's motivation level and release outcome.

STAGES OF CHANGE AND MOTIVATION

Recently, Tellier (1999) proposed a dynamic and multiconstruct model for motivation for change to better understand the role of offender motivation in the context of treatment and in the process of criminal offending. The theoretical framework is based on Prochaska's and DiClemente's stages of change, which stem from 20 years of supportive research. The six distinct well-defined stages (precontemplation, contemplation, preparation, action, maintenance, termination) are progressive and characterize a fluctuating state of motivation to engage in the process behaviour change. As part of the stages of change model, motivation for change is conceptualized as progressing, regressing and fluctuating from one stage to another and can vary according to an individual, time and situation. Tellier's model situates motivation as offenders' level of readiness to change, the reasons why some individuals change and others continue their maladaptive behaviour, the source of the underlying reasons for change (extrinsic and intrinsic), their commitment to change, and their sense of self-efficacy. These various motivational considerations function differently across the different stages. They appear to shift in both intensity and type as the offender progresses through the stages of change. The reasons for changing a problematic behaviour, which is measured in terms of the pros versus the cons of behaviour change (i.e., decisional balance), are found to be more important in the stages prior to action. Commitment to change becomes a more relevant consideration of motivation once an offender has initiated attempts at the preparation stage toward changing the problematic behaviour. The sources of change, whether extrinsic or intrinsic, are pertinent during the entire process of change. External sources of motivation

are more prevalent in the earlier stages of change, and internal sources are more present during the later stages.

This model suggests that staff interventions should be aimed at motivating the offender to engage in treatment; to progress by gaining the full benefits, and to eventually be able to sustain behaviour change. The model does not exclude unmotivated or poorly motivated offenders but is able to determine where a person is in the cycle of change to assist them in the change process. Staff interventions should vary in intensity, duration and type in accordance with an offender's different level and type of motivation. Offenders in the earlier stages of change prior to action would require less intensive and more extensive and structured types of programs (i.e, cognitive). Offenders at the later stages would benefit from more intensive, shorter, action oriented intervention (i.e., behavioural). Current research strongly supports the importance of the stages in understanding the process of behaviour change (Prochaska, DiClemente, & Norcross, 1992). Although the model recognizes that motivation for change is comprised of these factors, their applicability is still in its infancy in corrections. Further exploration of the proposed model will be investigated by the Correctional Service of Canada's Research Branch in the context of a large multi-longitudinal study. Job motivation, as a potential predictor of change in correctional officer recruits attitudes, towards offenders, corrections (rehabilitation, custody, deterrence, punitiveness) and correctional work, will be investigated.

Motivational interviewing (MI) is an example of a successful intervention designed to increase the motivation for alcohol abusers to change (Miller, 1985, 1989; Miller & Rollnick, 1991; Garland & Dougher, 1991; DiClemente, 1991). Motivational interviewing as applied to substance abuse increases problem recognition and personal responsibility for drinking; elicits concern about drinking; resolves ambivalence about changing drinking behaviour; and establishes commitment to change drinking behaviour (Miller, 1996). Ginsburg, Weekes and Boer (2000) in the first controlled study reports benefits of motivational interviewing with offenders. This study tested the effectiveness of using MI with male offenders in a correctional assessment centre. Eightythree volunteers were randomly assigned to MI or a control group. Treatment motivation defined as the stage of change was measured pre and post to a 1.5 hours intervention. The findings support MI in enhancing problem recognition and increasing thinking about changing drinking behaviour. Even though the study did not include a measure of the contribution of staff characteristics, the principles of MI requires that staff express empathy, develop discrepancy, avoid argumentation, roll with resistance, and support self-efficacy.

This literature review supports the contention that staff can be influential in motivating offenders. Nonetheless very little systematic research has been conducted in the area of staff characteristics and offender motivation. Further research is needed to identify the differential effects of program components and staff characteristics.

STAFF ATTITUDES TOWARDS OFFENDERS AND TREATMENT

Over the years the social psychology literature has devoted a vast amount of attention to attitudes and the prediction of behaviour (Ajzen & Fishbein, 1980; Allport, 1935; Eagly & Chaiken, 1993). The focus in correctional staff attitudes arose principally from a theoretical interest in understanding the relationship between attitudes and human behaviour. The measurement of attitudes permits predicting and understanding individual behaviour (Ajzen, 1985, 1988; Ajzen & Fishbein, 1980; Eagly & Chaiken, 1993; Fishbein & Ajzen, 1975). A popular approach to the study of this relationship is the theory of reasoned action (Azjen & Fishbein, 1980). According to their theory individuals consistently assess the implications of their actions prior to making a decision to engage in a particular behaviour. Their theory posits the belief that the performance of that behaviour will lead to favourable or negative outcomes. The attitudes are mediated by an individuals' intentions to perform a certain behaviour. Also, the level of importance given to specific individuals or groups about the expected behaviour is a factor. In response to the various criticisms of the theory of reasoned action, Ajzen (1985, 1988) put forth the theory of planned behaviour to take into account the extent to which an individual has control over the behaviour to be performed. Gillis and Andrews (1977) integrated the theory of planned behaviour and the Personal, Interpersonal and Community-Reinforcement (PIC-R) perspective on criminal behaviour. She incorporated in this causal pathway the assessment of the density of costs and rewards following criminal behaviour, the role of personality (i.e., impulsivity) and past behavioural factors. The intent of the integration of these two models was to explore whether the theory of planned behaviour can apply to the effective prediction of criminal behaviour. Currently empirical exploration of the proposed model is being conducted to predict employment stability and its relationship with offender community reintegration. Gillis' (2001) preliminary findings demonstrate that workrelated attitudes, values, beliefs, self-efficacy and social support for employment are linked to offender community employment stability (e.g., number of weeks employed since release) and quality of employment (e.g., type of occupation). Ultimately the model will be tested in the prediction of future criminal behaviour (Gillis, 1998). To further empirically explore the link between attitudes and behaviour, the above model will be revised to inform research on the relationship between correctional officers' attitudes, their behaviour and that of offenders. This study will be briefly described in a subsequent section.

Theoretically it can be argued that the correctional environment provides staff with ample occasion to positively affect offender behaviour in pro-social ways. The potential influence of staff can be realized by those who possess the requisite positive attitudes necessary for rehabilitation (Farkas, 1999; Larivière & Robinson, 1996). As previously explained in Andrews' chapter, core correctional practices entails that frontline staff appropriately model and reinforce anticriminal attitudes and behaviours. The underlying goal of this approach is that offenders will learn prosocial and anticriminal attitudes, cognitive, as well as behavioural patterns from their regular interactions with staff.

The assessment of staff attitudes towards inmates, rehabilitation, and human service orientation is important because it is presumed to influence inmates responses to programming. Positive attitudes in these areas are particularly relevant to treatment providers (Wahler & Gendreau, 1985). According to several authors (Simourd, 1997; Poole & Regoli, 1980; Paboojan & Teske 1997), the success of treatment programs are also dependent on the support and reinforcement of correctional officers. They not only represent the largest group of correctional staff but they are also among those who interact the most with offenders (Guenther & Guenther, 1974; Jurik & Musheno, 1986). Because correctional officers play such a crucial part in carrying out correctional objectives, an expansion of the correctional officers' role to include elements of treatment and rehabilitation has been suggested (Lombardo, 1985; Hepburn & Knepper 1993). Currently, in many correctional jurisdictions around the world, in addition to the custodial functions, correctional officers have also a human service role.

Although it has not yet been demonstrated empirically, it is surmised that these attitudes will influence treatment effectiveness. It seems reasonable therefore that the attributes of the individual officers should be examined in an effect to determine those desired qualities, which yield a positive acceptance and promotion of treatment programs (Teske & Williamson, 1979). Attitudes held by correctional officers will undoubtedly affect the quality of their support towards offender's participation in programs, the reinforcement of treatment gains, and the adherence to the Service's goals.

Research on correctional staff has identified numerous individual (e.g., age) and job-related characteristics (e.g., tenure) that are correlated with their attitudes towards offenders and treatment. Interestingly, few researchers ask staff about their attitudes towards treatment per se. Various studies use similar yet different measures of the construct of attitudes towards treatment. For example, Shamir and Drory (1981) inquired about staff beliefs with respect to the rehabilitative potential of prisoners. Similarly, Cullen, Latessa, Burton, and Lombardo (1993) surveyed staff on how much emphasis should be given to rehabilitation.

The majority of the studies reviewed profile correctional officers. Rarely do authors report on program deliverers and parole officers working in the prison. Unless otherwise specified most of the findings will apply to correctional officers' attitudes. Results regarding the relationship between many of the correlates and attitudes towards inmates and treatment are contradictory.

It appears from this review of the literature that age was considered by several authors an important factor with respect to correctional officers' attitudes. Older correctional officers hold more positive attitudes towards inmates (Jurik, 1985; Jurik & Winn, 1987; Larivière & Robinson, 1996; Plecas & Maxim, 1987) and are more supportive of rehabilitation and programming (Cullen, Lutze, Link, & Wolfe, 1989; Farkas, 1999; Jackson & Ammen, 1996; Larivière & Robinson, 1996, Simourd, 1997; Shamir & Drory, 1981; Teske & Williamson, 1979). Their interest in human services roles also increases with age (Klofas, 1986; Toch & Klofas, 1982). Notably, only one study reported the opposite findings that older correctional officers held more negative attitudes towards inmates (Jurik & Musheno, 1986).

The findings surrounding the relationship between gender and attitudes seem unclear. In several studies gender was not linked with attitudes towards inmates (Jurik, 1985; Jurik & Halemba, 1984; Jurik & Musheno, 1986; Larivière & Robinson, 1996). An exception was a study conducted by Plecas and Maxim (1987), who reported that women generally held significantly lower opinions of inmates than their men counterparts. It has been reported that women are significantly more likely to support rehabilitation than men (Farkas, 1999; Larivière & Robinson, 1996; Simourd, 1997), however, Cullen et al. (1989) did not find this relationship.

The literature reviewed with respect to race also depicts contradictory results. Some authors found race was unrelated to attitudes towards offenders (Hepburn & Knepper, 1993; Jurik & Musheno, 1986) or rehabilitation (Cullen et al., 1989; Farkas, 1999). Others report the contrary, race is positively correlated with attitudes towards inmates (Jurik & Winn, 1987) and rehabilitation (Jackson & Ammen, 1996). Specifically, Jackson and Ammen found the attitudes of African American officers to be significantly more positive than those of Caucasian and Hispanic officers.

Educational level has also been investigated for its potential benefits in the rehabilitation of offenders. Agreement as to the influence of educational attainment has not been unanimous. In all the studies reviewed, the correctional officers' education level was not correlated with their attitudes towards inmates (Jurik, 1985; Jurik & Musheno, 1986; Jurik & Winn, 1987; Plecas & Maxim, 1987). In the majority of these studies education levels was not significantly correlated with attitudes towards rehabilitation (Cullen et al., 1993; Cullen et al., 1989; Farkas, 1999; Shamir & Drory, 1981). However, some authors (Robinson, Porporino, & Simourd, 1996, Simourd, 1997; Teske & Williamson, 1979) reported that correctional officers with higher education levels held more positive attitudes towards rehabilitation. This positive relationship could be attributed to the methodology. Most studies used years of education to measure educational attainment. Robinson et al.,(1996) however, defined education

as a continuous variable by dividing it into three increments (high school or less, some post-secondary and university graduates).

Studies examining the link between tenure and attitudes portray conflicting results. Two studies report that the longer the number of years of service, the more negative the attitudes towards inmates and rehabilitation (Jurik , 1985; Jurik & Winn, 1987). Conversely, Larivière and Robinson (1996), and Farkas (1999) found a curvilinear relationship (U shape) — most junior (one year or less) and the most senior (25 years and over) held more positive attitudes towards inmates and rehabilitation (as well as Cullen et al., 1993). Jurik and Musheno (1986) found no relationship between attitudes towards inmates and tenure. Numerous authors (Bazemore & Dizler, 1984; Cullen et al., 1989; Robinson, Porporino, & Simourd, 1996; Simourd, 1997; Shamir & Drory, 1981) report none with rehabilitation.

The majority of studies suggest a strong relationship between occupational group and attitudes. Larivière & Robinson (1996) looked at correctional officers' level of empathy toward inmates and their support for rehabilitation. Relative to five other correctional worker groups they found that correctional officer attitudes were significantly more negative. Similarly, Tellier and Robinson (1995) in comparing a large sample of 1,750 correctional officers to 976 service providers (parole officers, health care professionals, correctional programmers, chaplains, and correctional managers) found them to be significantly less empathic toward inmates and less supportive of rehabilitation. Teske and Williamson (1979) reported that lower ranking correctional officers viewed treatment more positively than higher ranking officers as opposed to Larivière and Robinson (1996) who found a positive correlation between rank and attitudes toward treatment. Hogue (1993) conducted a study to replicate and validate a scale to measure general attitudes toward prisoners held by four occupational groups. The expected patterns of results were obtained, with police and prison officer groups showing more negative attitudes towards prisoners than probation officers and psychologists. Shamir & Drory (1981) reported no differences between occupational groups in the attitudes held toward inmates.

Studies that have looked at the relationship between prison security levels and attitudes are more or less consistent. Research conducted by Jurik (1985), and Larivière and Robinson (1996) reveals that correctional officers working in minimum-security institution held significantly more positive attitudes towards offenders. They were also more supportive of rehabilitation than their counterparts working at higher security levels. These findings were not reported for institutional security levels and attitudes towards offenders (Plecas & Maxim, 1987) or rehabilitation (Cullen et al., 1989; Cullen et al., 1993).

The findings relating to correctional officers' job satisfaction and attitudes towards inmates are consistent in showing a positive relationship. The majority of studies stated that correctional officers who were more satisfied with their work expressed more positive attitudes (Cullen, Link, Wolfe & Frank, 1985; Jurik & Winn, 1987; Jurik & Halemba, 1984). Only one study showed no significant correlation between job satisfaction and the attitudes held by correctional officers (Jurik & Musheno, 1986).

Job motivation variables relating to the reasons for seeking correctional officer work appears to be linked to attitudes. An intrinsic interest in the job (human service or security) is positively correlated with attitudes towards inmates, while officers with extrinsic interests (e.g., job security, benefits, salary) are more likely to have negative attitudes toward inmates (Jurik, 1985; Jurik & Musheno, 1986). The results suggest that individuals that apply to be correctional officers primarily for their interest in security work are less intrinsically motivated than those that are human service oriented. Latulippe and Vallière (1993) studied the differences between correctional officers and case management officers as to their source of motivation. Interestingly they noted that case management officers and correctional officers were more extrinsically motivated, even though case management officers displayed significantly higher levels of intrinsic motivation than the correctional officers.

The findings surrounding job stress and correctional officers' attitudes are also inconclusive. Several studies note that correctional officers who reported greater stress expressed a lower level of endorsement for rehabilitation and supportive of the punitiveness of prison conditions (Larivière & Robinson, 1996; Robinson, Porporino & Simourd, 1993; Simourd, 1997; Tellier & Robinson, 1995). A recent meta-analysis (Dowden & Tellier, in press), which examined the predictors of job stress in correctional officers, corroborates these findings in a more detailed way by systematically aggregating the results of different studies. It was also found that positive (i.e., human service/rehabilitation orientation) and negative (punitiveness, custody orientation and corruption) attitudes yielded a significant relationship with job stress. Correctional officers who possessed positive attitudes experienced less job stress than those who supported punitive/ custodial approaches to dealing with offenders. Tellier and Robinson (1995) found that correctional program staff was significantly less stressed than the other five occupational groups reported in their study. Correctional officers reported the second highest levels of stress only second to case management officer. Despite the importance of these findings more data in the context of another study would be required in order to conclude about the reasons for these differences. Numerous studies have failed to find a significant relationship between job stress and correctional officer attitudes (Bazemore & Dizler, 1994; Cullen et al., 1989; Whitehead, Lindquist, & Klofas, 1987; Farkas, 1999). A recent study conducted by Kelloway, Desmarais, and Barling (2000) explores absenteeism as a proxy to stress. During the three fiscal years examined (1997-98, 1998-99, 1998-1999), they report that correctional officers' absenteeism levels were significantly higher than most of the other occupational groups.

Two other job-related determinants have been examined and found to be related to attitudes. Jurik and Winn (1987) reported that correctional officers who perceived themselves as contributing to policy decisions held more positive attitudes about offenders. Also, Jurik and Musheno (1986) studied the phenomenon of social distance from inmates. They reported that correctional officers who were less socially distant held more positive views about inmates.

Finally, research has shown that correctional officers with favourable or human services attitudes toward inmates also have a more satisfying occupational experience (Cullen et al., 1985). Other job-related variables that were stated as being unrelated to attitudes towards inmates are attitudes towards supervisors, attitudes towards co-workers, perceived working conditions (Jurik & Winn, 1987), and frequency of contact with inmates (Jurik, 1985).

Although it is still growing, an examination of the literature reveals little agreement regarding the correlates of staff attitudes towards offenders and treatment. The existing literature is fragmented, inconsistent, and even contradictory. While an array of scales exist, single items are often used to measure concepts, and very few accepted normative measures have emerged in this research on staff attitudes. The construct of attitudes is seldom defined and appears to be used interchangeably with opinions, perception, beliefs, and values. When it is defined an agreement rarely exists as to which items should be included to comprise a specific measure. For example items relating to attitudes towards rehabilitation may be included in a measure on attitudes towards offenders or in a measure of attitudes towards rehabilitation. Inconsistencies between studies in the nomenclature of the correlates of staff attitudes are also prevalent.

Despite these limitations regarding comparisons and generalizations on staff, the findings suggest variation in correctional officers' attitudes according to individual and job-related variables. Many of the studies show the multi-dimensionality of staff attitudes. Given their complexity they cannot be treated simply as lying on one continuum, for example from punitive or custodial to reformative or treatment oriented.

It remains important to address the issue of correctional orientation held by staff its role in the rehabilitation of offenders. The identification of predictors of positive and negative staff attitudes towards offenders and rehabilitation is necessary to achieve an optimum environment for offender change. The systematic research on staff attitudes is an emerging priority within the Research Branch.

RECRUITMENT, SELECTION, TRAINING, AND RETENTION

It has been argued that the selection, assessment and training of correctional staff should be linked to specific attitudinal and behavioral skills that are required for the performance on the job (Walher & Gendreau, 1985). "The selection, training and clinical supervision of staff should each best reflect the particular attitudes, skills and circumstances that are supportive of delivery of the services planned" (see chapter 2 of this *Compendium*). The interaction between employee attitudes and the organizational philosophy is critical to effective functioning and outcomes of an organization (Simourd, 1997). Moreover, correctional organizations need to recognize the interplay between individual and organizational factors (i.e, commitment) in the recruitment, selection, training, and retention of correctional staff.

Recruitment and selection

Successful candidates will be required to perform a significant role in accomplishing the organization's overall mandate towards rehabilitation. Organizations, then, should seek to hire individuals with the most positive attitudes. In order to increase the fit between organizational and employee values, there may therefore be a need to place greater emphasis on attitudinal values in the selection process. By implication, correctional organizations must have, or develop, strong value-based measures for the assessment of the potential candidates. An investment in a front-end selection process is worthwhile as many of the candidates may remain within the organization for their entire work lives (e.g., high retention). Officers' reasons for taking the job significantly influence their attitudes toward inmates. Attracting careeroriented officers who are interested in the job for intrinsic reasons (either human service or security work aspects) will contribute favourably to effective correctional programming. Measuring attitudes of correctional staff could also further assist in the selection of those who are involved in providing treatment. Hogue (1993) found that correctional officers who were involved in sex offender treatment held more positive attitudes towards offenders than those who were not engaged in treatment.

Front-line staff, defined primarily as correctional officers, parole officers and program deliverers, are a fundamental part of the correctional environment and offender rehabilitation process. In the Correctional Service of Canada (CSC), correctional officers comprise 40% of staff working in correctional facilities, as compared to parole officers (5%) and program staff (8%) (Solicitor General of Canada, 1999).

Tellier, Dowden, and Lefebvre (2001) conducted recent demographic profiles of over 1,200 correctional officer recruits. The retrospective file reviews were undertaken using data collected between September 1997 and May 2000. Of these recruits, 32.8% are women, 8.5% are Aboriginal, 8.0% are visible minorities. The average age is 28.9 years at the time of recruitment. Further, over 42% have a University degree and 68% have a degree in a field related to corrections (e.g., law and security, criminology). An interesting finding was that 74.4% of the recruits have related work experience and 40.4% have related volunteer work prior to being recruited. Fifty-eight percent of CSC program deliverers are appointed internally and the primary feeder group comes from the COII occupational group. The trend in recruitment appears to be a rise in terms of external hiring, mainly due to requirement for a university degree in social sciences or a related field. Lastly, correctional officers tend to apply more often for parole officer positions which, are classified at a higher level (CSC, 2000).

Training

Training plays a crucial role in preparing staff to assume their new responsibilities. It also has a role to play in promoting and ensuring that positive attitudes are maintained. A workplace with little ongoing managerial support could negatively impact the individual's personal and professional potential. Knowledge about the factors that influence attitudes could be useful to researchers and correctional managers in terms of the development of correctional management strategies for the orientation of new staff, and developmental training for existing staff.

It has been argued that the role demands of CO's are so encompassing and yet also restrictive that all officers regardless of gender, social background, and prior beliefs will develop similar attitudes towards their jobs (Jurik & Halemba, 1984). Therefore, working conditions are capable of overriding individual attributes.

Jones (1999) sheds light on the issues surrounding officer selection and the subsequent preparation of those officers for their demanding and complex role within the institutions. He provides useful insights into the experiences and thinking of new correctional face early in their careers. Most importantly, his research provides information concerning officers and the challenges they the officers' perceptions of the utility of the recruitment and training experience. The study corroborates the existence of a strong correctional officer subculture. This subculture is present even during the initial stages of the training program and intensifies once the officers transfer to their institutional placements. Accordingly, it has a direct impact on the professional decisionmaking of many recruits and compromises certain value-based behaviours important to CSC. Jones highlights the need for longitudinal research with a much larger sample size.

Plecas and Maxim (1987) indicated that attitude changed with respect to "working with inmates", in a sample of 670 CSC staff. Their study demonstrates that attitudes change negatively (more punitive and less supportive of inmates' rights) within the first 9 months after induction training, eventually stabilizing at this level by the end of the 18 months.

These studies illustrate that attitudes are amenable to change and can be influenced by management practices. The Research Branch is presently developing a plan of research to examine correctional officers' attitudes and other attributes in a more dynamic fashion. Studies that have examined correctional officer attitudes have been typically limited in their focus on a small number of variables and the majority has been cross-sectional in nature. It appears that no research study has been conducted to assess change in attitudes as a result of training and initial adjustment working in direct contact with offenders in a correctional environment. This research project will identify and examine the factors that predict changes in attitudes towards corrections in a sample of approximately 1,600 correctional officer recruits. A broad range of predictor variables will be examined including demographic characteristics, intrinsic job motivation, occupational selfefficacy, concerns about personal security and safety, and social cohesiveness. This is a multi-wave longitudinal study that examines changes in attitudes in two different environments, namely the classroom setting and at the institutional level. These changes in attitudes will also be linked to important organizational variables such as retention, absenteeism, and individual job performance. Recruits will be assessed five times between their selection to attend the Correctional Officer Training Program to the end of their one-year probationary period in a penitentiary.

A better understanding of factors that contribute to changes in staff attitudes will provide management with the opportunity to modify certain conditions to create a more positive environment.

Retention and turnover

Empirical links between correctional attitudes and turnover are inconsistent. According to Jurik and Winn (1987), significant results were observed between correctional attitudes and the relationships between willingness to end employment (r = -0.28)and consideration of ending employment (r = -0.22). Results also indicated that staff who placed less emphasis on rehabilitation were more willing to seek other employment alternatives. In contrast, Teske and Williamson (1979) in a similar study, reported no such relationships. This significance may have resulted from their rigid operationalization of turnover intention (the likelihood that the staff will continue their employment with the organization until retirement). In a 6-year follow-up study by Plecas and Maxim (1987) examining attitudes and turnover of 527 CSC staff, they reported that neither positive nor negative attitudes increased the likelihood of staff leaving the organization. Simourd (1997), in her examination of correctional attitudes and desirable work outcomes, found both a positive relationship between favourable attitudes and desirable work outcomes (i.e., general job satisfaction, growth satisfaction, organizational commitment and job performance). A negative relationship was also found with undesirable work outcomes (i.e., work stress and intention to turnover). That is, as the correctional attitudes become more favourable, the less likely staff were willing to turnover. These finding are consistent with both Teske and Williamson (1979), and Plecas and Maxim (1987) but are inconsistent with those of Jurik and Winn (1987).

Essentially retention is an index of an organization's success regarding recruitment, selection and training. Retention, then, is an important area for correctional managers to monitor, as tremendous costs are associated with these activities.

THERAPIST EFFECT ON TREATMENT OUTCOMES

A major impediment to effective programming is offender attrition from programs. Practically, it is difficult for offenders to gain from a particular program if they refuse or drop out prior to completion (Dowden & Serin, in press). Methodologically there is also the concern that those offenders who actually complete the program are different in meaningful ways (e.g., motivation, risk and need level, age) than non-completers (Annis, Schober & Kelly, 1996), thereby biasing conclusions about program effectiveness. For these reasons, improving offender motivation for program participation is an important entry point for determining the contribution of staff skills to program effectiveness. There is a growing body of literature that staff skills and interpersonal characteristics do significantly influence program participation and performance. These include research in the area of sex offenders (Fernandez, Serran, & Marshall, 1999), domestic violence (Murphy & Baxter, 1997), and substance abuse (Brown & Miller, 1993). Meta-analytic research (Dowden & Andrews, 2000) also supports the importance of specific practices (Andrews & Keissling, 1980) on program effectiveness. For instance, greater effect sizes are reported for programs where staff effectively uses authority, anti-criminal modelling and reinforcement, problem-solving, and quality interpersonal relationships between staff and clients.

Within counselling situations therapeutic alliance and group cohesion have been related to reduced symptomatology. For those staff whose role is to counsel and challenge offenders' distorted and criminal thinking, it is important to recognize that motivational interviewing strategies (Miller & Rollnick, 1991) appear more effective than direct confrontation. Similarly, the most effective program staff has specific skills that reflect a firm but fair interaction style. In particular they demonstrate open and interested body language, are supportive; actively listen; are appropriate in their self-disclosure (knowledge of boundary issues); use open-ended questions but are also directive (not aggressive), can be flexible, encourage active participation, and lastly, use humour appropriately (not manipulative or derogatory). Importantly, programs in which helpers reflect these characteristics and skills appear to result in increased acceptance of criminal responsibility by offenders, and improved program participation (Fernandez et al., 1999). Increasingly, it would appear that staff skills and characteristics do impact program performance and outcome, making staff selection and training an important component in effective corrections. Further, it is likely these findings could also be extrapolated to compliance with community supervision and community-based programs. Interestingly, these strategies are consistent with the present emphasis on motivational interviewing as a means to enhance program performance with resistant populations (Preston, 2000).

HELPING STAFF MANAGE WORKING IN CORRECTIONS

Increasingly correctional jurisdictions are recognizing the value of staff and highlight their important contribution. This can be accomplished formally by way of Mission statements and performance appraisals. It can also occur through staff training initiatives (e.g., Front Line Leadership). If we accept the evidence that staff impact correctional effectiveness, then attending to staff issues should improve correctional results. Accordingly, there are two fundamental reasons for attending to staff needs - philosophical and practical. Philosophical in that the organization values staff, and practical in that having the right staff can improve the organization's effectiveness.

Critical to achieving positive correctional results is the maintenance of healthy staff. Certainly there is research that indicates that correctional officers report high levels of work-related stress (Philliber, 1987), however, other groups may also experience stress working in correctional contexts (Robinson, Porporino, & Simourd, 1996). Stress is person-specific such that individuals respond to stressful situations differently. Also, staff varies in their ability to avoid and cope with stress. In order for an organization to maximize its ability to meet its correctional goals, it must first identify staff whose performance is attenuated or sub-optimal due to factor such as stress, and then respond in a manner that ameliorates symptoms and facilitates performance. If certain situations (e.g., shift-work, duration of actual shifts, inadequate staff training, insufficient offender/staff ratios, etc.) are known to consistently yield specific negative effects (e.g., increased use of sick leave, poorer response to crisis situations, increased use of overtime), then the organization can be proactive by developing preventative strategies. Alternatively, it can provide an opportunity for healing and recovery for those staff who were unable to sustain their original level of performance in the face of ongoing work demands. For those staff whose contact with offenders is frequent and unavoidable, often there is considerable risk that their optimism or professional interaction with offenders will erode over time. It is not uncommon for this erosion to result from an initial high level of commitment to their work.

For some time Employee Assistance Programs (EAP) and Critical Incident Stress Management (CISM) services have been provided to correctional staff for work-related difficulties (Bromley & Blount, 1997). In addition to EAP and CISM, mediation has recently showed promise in assisting staff to deal with work-related conflicts. EAP is a broad-based counselling service provided by the employer to ensure that staff with interpersonal difficulties and mental health symptoms have access to professional services. Independent community practitioners typically provide this confidential counselling. CISM is a two-phased approach by the employer to provide debriefing and counselling services to staff who witness and experience crises or trauma as a result of their employment. There is an initial debriefing at the resolution of the crisis incident and a subsequent group follow-up session. Where appropriate additional aftercare counselling is made available. Mediation is the involvement of an independent third party to resolve differences between two or more staff. The mediator has no direct authority and is simply a resource to assist staff to air their concerns and attempt to find a mechanism for a common solution. Importantly these represent a range of services that staff might access, but they are different in terms of referral, targets, and goals. In a related theme, work shops and training with respect to boundary issues might also be helpful, particularly for staff who provides counselling to offenders. Finally, peer support programs may provide balance and prevent staff deterioration over time.

To date research regarding staff has been limited to descriptive studies and surveys. While there are differences among staff and their attitudes according to factors such as gender, age, and occupational group, it is unclear to what extent these differences are a result of working in corrections. In order, then, to more fully understand the influence of the correctional environment, longitudinal research is required.

POPULATION DEMOGRAPHICS AND RESPONSIVITY

Consistent with society, the correctional staff is aging. For instance, in the Correctional Service of Canada, the average age of its approximately 14,000 staff is 41.5 years. Presently, there are 3,289 employees aged 50 or greater. It is forecast that in 5 years this aged 50+ group will be 5,891. Furthermore, correctional officers represent close to 44% of the total staff complement. Within this group, there are presently 1,049 staff aged 50 or greater. This is relevant in that age 50 is the age for earliest retirement without penalty for those operational staff with 25 years experience.

Forty-two percent of staff are women, and 23% are correctional officers. More than half of these correctional officers are less than 40 years of age, suggesting some stability in gender representation, assuming modest retention levels. In summary, correctional staff is aging, creating unique challenges for succession planning.

In terms of ethnicity, efforts are underway to recruit more correctional staff from diverse cultural backgrounds. Presently, approximately 4.0% of the total correctional staff are Aboriginal and 2.6% are other minority groups. In comparison, a snapshot of the national federal Canadian offender population revealed that 12.5% were aged 50 or greater and 28.9% were non-Caucasian. Obviously, any gains that can be made to have staff demographics better reflect the offender population is to be encouraged.

This past decade has seen a marked diversification of ethnic groups involved with the criminal justice system. Beyond the practical issues of language, correctional agencies must endeavour to recruit and retain staff who reflects the ethnocultural composition of their offender population. Consistent with these developments, an important operational issue is whether assessment procedures and programs apply equally to all offenders. Again, from the perspective of correctional results, it is imperative to consider how best to deliver correctional programs. Correctional agencies that recognize characteristics such as age, gender and ethnoculture to be responsivity factors (Bonta, 1995) will be able to determine the best matching of these factors to improve performance. For instance, older offenders may respond better to interaction with staff of a similar age. Similarly, specific cultural issues may interfere with staff from one culture completing valid assessments of offenders from another. At a minimum, staff's performance would be enhanced if they receive some form of ethnocultural sensitivity training.

This is clearly the case for women and aboriginal offenders within the Correctional Service of Canada. Issues of gender and culture are woven into the very fabric of correctional practice for these groups. While there is still progress to be made, it is no longer the case that materials and procedures developed on a predominantly white male offender population are simply "adapted" for use with aboriginal and women offenders. For instance, new conceptual models are being considered (*Creating Choices*) and new measures are in development to ensure that these issues are addressed. These practices are embedded within the legislative framework of the *Corrections and Conditional Release Act*, but their application is specifically to improve correctional results.

REFERENCES

- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), *Action control: From cognition to behavior* (pp.11-39). New York, NY: Springer-Verlag.
- Ajzen, I. (1988). Attitudes, personality, and behavior. Chicago, IL: Dorsey.
- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice Hall.
- Allport, G. W. (1935). The radio as a stimulus situation. Acta Psychological (The Hague). 1, 1-6.
- Andrews, D. A. (1982). A personal, interpersonal and community-reinforcement perspective on deviant behavior (PIC-R). Toronto, ON: Ontario Ministry of Correctional Services.
- Andrews, D. A. (1997). The psychology of criminal conduct and effective treatment. In J. McGuire (Ed.), *What works: Reducing reoffending* (pp. 35-62). West Sussex, UK: John Wiley & Sons.
- Andrews, D. A., & Bonta, J. (1994). The psychology of criminal conduct. Cincinnati, OH: Anderson.
- Andrews, D. A., & Bonta, J. (1998). The psychology of criminal conduct 2nd Edition. Cincinnati, OH: Anderson.
- Andrews, D. A., & Kiessling, J. J. (1980). Program structure and effective correctional practices: A summary of the CaVIC research. In R. R. Ross & P. Gendreau (Eds.), *Effective correctional treatment* (pp. 441-463). Toronto, ON: Butterworth.
- Annis, H., Annis, H. M., Schober, R., & Kelly, E. (1996). Matching addiction outpatient counseling to client readiness for change: The role of structured relapse prevention counseling. *Experimental and Clinical Psychopharmacology*, 4(1), 37-45
- Bazemore, G., & Dicker, T. J. (1994). Explaining detention orientation: Individual characteristics, occupational conditions, and organizational environment. *Prison Journal*, 76(1), 297-311.
- Bonta, J. (1995). The responsivity principle and offender rehabilitation, *Forum* on Corrections Research, 7(3), 34-37.
- Bromely, M., & Blount, W. (1997). Criminal justice practitioners. In W. S. Jr. Huthinson & W. G. Emener (Eds.), *Employee Assistance Programs: A basic text*. Springfield. IL: Charles C. Thomas.

- Brown, J. M., & Miller, W. R. (1993). Impact of motivational interviewing on participation and outcome in residential alcoholism treatment. *Psychology* of Addictive Behaviors, 7(4), 211-218.
- Correctional Service Canada (2000). Demographic analysis report of the CSC workforce. Ottawa, ON.
- Cullen, F. T., Latessa, E. J., Burton, V. S., & Lombardo, L. X. (1993). The correctional orientation of prison wardens: Is the rehabilitative ideal supported? *Criminology*, 31(1), 69-92.
- Cullen, F. T., Link, B. G., Wolfe, N. T., & Frank, J. (1985). The social dimensions of correctional officer stress. *Justice Quarterly*, 2(4), 505-528.
- Cullen, F. T., Lutze, F. E., Link, B. G., & Wolfe, N. T. (1989). The correctional orientation of prison guards: Do officers support rehabilitation? *Federal Probation*, 53, 33-41.
- Davies, P. (1979). Motivation, responsibility and sickness in the psychiatric treatment of alcoholism. *British Journal of Psychiatry*, 134, 449-458.
- DiClemente, C. (1991). Motivational interviewing and the stages of change. In W. R. Miller & S. Rollnick (Eds.), *Motivational interviewing: Preparing people* to change addictive behavior, (pp. 191-201). New York, NY: Guilford Press.
- Dowden, C., & Andrews, D. (2000). The importance of staff characteristics in delivering effective correctional treatment: A meta-analytic review of core correctional practice.
- Dowden, C., & Serin, R. C. (in press). Anger management programming for federal male inmates: The impact of dropouts and other program performance variables on recidivism.
- Dowden, C., & Tellier, C. (in press) Predicting work-related stress in correctional officers: A meta-analysis.
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Ft. Worth, TX: Harcourt Brace.
- Farkas, M. A. (1999). Correctional officer attitudes toward inmates and working with inmates in a "get tough" era. *Journal of Criminal Justice*, 27, 495-506.
- Fernandez, Y., Serran, G., & Marshall, W. L. (1999). The reliable identification of therapist features in the treatment of sexual offenders. Paper presented at Association of Treatment of Sexual Abusers annual conference. Orlando, Fl.
- Fishbein, M., & Ajzen, I. (1975). Bayesian analysis of attribution processes. *Psychological Bulletin*, 82(2), 261-277.
- Garland, R. J., & Dougher, M. J. (1991). Motivational intervention in the treatment of sex offenders. In W. R. Miller & S. Rollnick (Eds.), *Motivational Interviewing: Preparing people to change addictive behavior* (pp. 303-341). New York, NY: Guilford Press.
- Gillis, C. A. (2001). Offender employment: Exploring contributing factors to job attainment. American Correctional Association Convention, Winter Session. Nashville, TN.
- Gillis, C. A. (1998). The prediction of employment stability in a sample offederal offenders on conditional release. Unpublished document, Ottawa, ON: Carleton University.
- Gillis, C. A., & Andrews, D. A. (1997). Integrating the PIC-R perspective and theory of planned behaviour: Specifying the role of attitude in predicting criminal behaviour. Unpublished paper, Ottawa, ON: Carleton University.
- Gillis, C., Getkate, M., Robinson, D., & Porporino, F. (1995). Correctional work supervisor leadership and credibility: Their influence on work motivation. *Forum on Corrections Research*, 7(3), 15-17.
- Gillis, C. A., & Grant, B. A. (1999). Day parole outcome, criminal history and other predictors of successful sentence completion. Research Report R-83. Ottawa, ON: Correctional Service of Canada.
- Ginsburg, J. I., Weekes, J. R., & Boer, D. P. (2000). Assessing treatment motivation in alcohol abusing offenders following a motivational interview. Canadian Psychology Association. Annual Convention. Ottawa, ON.
- Goldstein, A. P., & Kanfer, F. H., (Eds.), (1979). Maximizing treatment gains: Transfer enhancement in psychotherapy. New York, NY: Academic Press.
- Guenther, A., & Guenther, M. (1974) Screws vs. thugs. Society, 12, 42-50.
 Hepburn, J. R., & Knepper, P. E. (1993). Correctional officers as human service workers: The effect on job satisfaction. Justice Quarterly, 10 (2), 315-335.
- Hogue, T. E. (1993). Attitudes towards prisoners and sexual offenders. *Issues in Criminology and Legal Psychology*, 19, 27-32.
- Jackson, J. E., & Ammen, S. (1996). Race and correctional officers' punitive attitudes toward treatment programs for inmates. *Journal of Criminal Justice*, 24, 153-166.

- Jones, J. R. (1999). A research report on the values-based component of the recruit officer selection process and the training of those officers at the staff college, *Correctional Service of Canada*, Kingston, ON: Unpublished document, Fleming College.
- Jurik, N. C. (1985). Individual and organizational determinants of correctional officer attitudes toward inmates. *Criminology*, 23, 523-539.
- Jurik, N. C., & Halemba, G. J. (1984). Gender, working conditions and the job satisfaction of women in a non-traditional occupation: Female correctional officers in men's prisons. *The Sociological Quarterly*, 25 (Autumn), 551-566.
- Jurik, N. C., & Musheno, M. C. (1986). The internal crisis of corrections: Professionalization and the work environment. *Justice Quarterly*, 3 (4), 457-480.
- Jurik, N. C., & Winn, R. (1987). Describing correctional security dropouts and rejects: An individual or organizational profile? *Criminal Justice and Behavior*, 14 (1), 5-25.
- Karoly, P. (1980). Person variables in therapeutic change and development. In P. Karoly & J. Steffen (Eds.), *Improving the long-term effects of psychotherapy: Models of durable outcome*. New York, NY: Gardner Press, 195-261.
- Keithly, L. J., Samples, S. J., & Strupp, H. H. (1980). Patient motivation as a predictor of process and outcome in psychotherapy. *Psychotherapy*, 33, 87-97.
- Kelloway, K., Desmarais, S., & Barling, J. (2000). Absenteeism in the Correctional Service of Canada: Links to occupations and conditions of employment. Unpublished document.
- Klofas, J. M. (1986). Discretion among correctional officers: The influence of urbanization, age, and race. *International Journal of Offender Therapy and Comparative Criminology*, 30, 111-124.
- Larivière, M., & Robinson, D. (1996). Attitudes of federal correctional officers towards offenders. Research Report R-44. Ottawa, ON: Correctional Service of Canada.
- LaTullipe, L., & Vallière, E. (1993). Preliminary report of CX/WP staff motivation survey. Ottawa, ON: Correctional Service of Canada.
- Lombardo, L. X. (1985). Group dynamics and the prison guard subculture: Is the subculture an impediment to helping inmates? *International Journal of* Offender Thenapy and Comparative Criminology, 29, 79-90.
- Miller, W. R. (1985). Motivation for treatment: A review with special emphasis on alcoholism. *Psychological Bulletin*, 98(1), 84-107.
- Miller, W. R. (1989). Increasing motivation for change. In R. K. Hester & W. R. Miller (Eds.), *Handbook of alcoholism treatment approaches: Effective alternatives*. New York, NY: Pergamon, 67-80.
- Miller, W. R. (1996). Motivational interviewing: Research, practice, and puzzles. Addictive Behaviors, 21(6), 835-842.
- Miller, W. R., & Rollnick, S. (Eds.) (1991). Motivational interviewing: Preparing people to change addictive behavior. New York, NY: Guilford Press.
- Murphy, C. M., & Baxter, V. A. (1997) Motivating batterers to change in the treatment context. *Journal of Interpersonal Violence*, 12, 607-619.
- Paboojian, A., & Teske, R. H. C. (1997). Pre-service correctional officers: What do they think about treatment? *Journal of Criminal Justice*, 25(5), 425-433.
- Philliber, S. (1987). Thy Brother's Keeper: A review of the literature on correctional officers. *Justice Quarterly*, 4(1), 9-37.
- Plecas, D. B., & Maxim, P. S. (1987). CSC correctional officer development study recruit survey. Ottawa, ON: Correctional Service of Canada.
- Poole, E. D., & Regoli, R. M. (1980). Role stress, custody orientation, and disciplinary actions: A study of prison guards. *Criminology*, 18(2), 215-226.
- Preston, D. L., (2000). Treatment resistance in corrections. Forum on Corrections Research, 12(2), 24-28.
- Prochaska, J. O., & DiClemente, C. C. (1982). Transtheoretical therapy: Towards a more integrative model of change. *Psychotherapy: Theory, Research and Practice*, 19(3), 276-288.
- Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Application to addictive behaviors. *American Psychologist*, 47(9), 1102-1144.
- Robinson, D., Porporino, F., & Simourd, L. (1993). The influence of career orientation on support for rehabilitation among correctional staff. *The Prison Journal*, 73(2), 162-177.
- Robinson, D., Porporino, F., & Simourd, L. (1996). Do different occupational groups vary on attitudes and work adjustment in corrections? *Federal Probation*, 60(3), 45-53.

- Shamir, B., & Drory, A. (1981). Some correlates of prison guards' beliefs. *Criminal Justice and Behavior*, 8, 233-249.
- Simourd, L. (1997). Staff attitudes towards inmates and correctional work: An exploration of the attitude - work outcome relationship. Ph. D. dissertation. Ottawa, ON: Carleton University, 146 pages.
- Solicitor General Canada (1999). Corrections and conditional release statistical overview. Ottawa, ON.
- Tellier, C. (1999) A dynamic multiconstruct model for conceptualizing motivation for change in corrections. Unpublished document. Ottawa, ON: Carleton University.
- Tellier, C., Dowden, G., & Lefebvre, D. (2001) Profile of correctional officer recruits. Unpublished document, Ottawa, ON: Correctional Service Canada.
- Tellier, C., & Robinson, D. (1995). Correlates of job stress among front-line correctional staff. Canadian Psychology Association Annual Convention. Charlottetown, PEI.
- Teske, R. H. C., & Williamson, H. E. (1979). Correctional officers' attitudes toward selected treatment programs. *Criminal Justice and Behavior*, 6, 59-66.
- Toch, H., & Klofas, J. (1982). The guard subculture myth. *Journal of Research* in Crime and Delinquency, 19, 238-234.
- Wahler, C., & Gendreau, P. (1985). Assessing correctional officers. Federal Probation, 49, 70-74.
- Whitehead, J. T., Lindquist, C. A., & Klofas, J. (1987). Correctional officer professional orientation: A replication of the Klofas-Toch measure. *Criminal Justice and Behavior*, 14, 468-486.

PART THREE

Evaluation

CHAPTER 22

GERRY GAES¹

Why, what, where, who and how are the key questions that must be asked to conduct a program evaluation. Why, is the most fundamental question regarding an evaluation. The question addresses the reason an evaluation is conducted and the intended goals of the program being evaluated. In asking What, one must define the precise nature of intervention, the social and/or psychological mechanism that are to be affected, the nature of outcomes, and the program settings. The Where of program evaluation concerns the location of the program and the timing in relation to the chronology of the offenders' correctional career. Who, refers to the program participants and their characteristics. This question is important in deciding what level of generalization is made after the evaluation is conducted. The How of program evaluation refers to both quantitative and qualitative methods of evaluation. This chapter presents these fundamental questions and also touches on the issue of the effective communication of results.

THE WHY OF PROGRAM EVALUATION

Even though this is the most fundamental question regarding an evaluation, it is probably the least likely to be addressed, and the least understood. When an administrator asks for an evaluation, it is very important to get an understanding of what he or she wishes to accomplish. Too often these questions of purpose or goals are not asked. An evaluation is conducted. The results are presented and the administrator protests, "That is not what I wanted to know."

Policymakers, administrators, program designers, often do not know how to articulate their interests in what an evaluation will achieve. Thus, the evaluator must make sure that he or she understands what is being asked. This may seem a trivial point when it comes to program evaluations for correctional interventions. Surely we know that the aim of the program is to address some deficiency of the offender and to assist his or her reintegration. But these goals are often too vague. One policymaker may have in mind that for a program to be successful a large proportion of program participants must show dramatic success. An administrator may have in mind that the program will probably only help some offenders and not others, and our expectation should not be too high. Some administrators are interested in knowing how to improve a program. A program designer may think that a program success is achieved if the participant changes his or her attitudes about wanting to change their behaviour; yet this may be too low an expectation from the administrator's point of view.

Thus, the evaluator must be able to define the goals of the study, articulate measures or criteria that will satisfy the interested parties, and get the stakeholders concurrence either that the research will address their concerns or that some questions will have to await further inquiry. This is best done prior to the research design, and before the implementation of the program, particularly for those programs that are new or innovative. If a program is ongoing, it is still important to clarify the administrator's goals.

Rossi and Freeman (1993) have devoted an entire chapter in their classic book on evaluation to "The Social Context of Evaluation." In that chapter they discuss the implication of evaluation, stakeholders, and the political process involved. They distinguish the following stakeholders: policymakers and decision makers, program sponsors, evaluation sponsors, target participants, program managers, program staff, program competitors, contextual stakeholders, and the evaluation community. Most of these categories are self-explanatory. The distinction between a program sponsor and an evaluation sponsor is that the former funds or somehow supports the design and implementation of the program while the latter conducts the evaluation supported by a research group whose reputation and credibility is at stake. Program competitors are not just those people who might compete for the development and analysis of a program, but are those who compete for the resources devoted to the program. Many observers of prison program have discussed the competition between program providers and staff providing basic security and custody services. It is not unusual to read reports where outside observers detect hostility between program and custody staff to the point where custody staff tries to undermine prison programs. It is clearly in the interests of all staff to have useful and successful programs but different stakeholders do not see it that way. Outside evaluators ought to be aware of the potential for such conflict in a prison environment. There are many ways to combat these hostilities to insure that a program has an opportunity to fail or succeed on it merits rather than the political context.

Contextual stakeholders are organizations or groups who have a substantive and political stake in the evaluation outcomes. These may be self-interest groups, policymakers, political lobbies, or unions to name a few. The evaluation community are those of us who read evaluations, assess their technical quality, summarize the results, and produce generalizations based upon many different studies.

It is important to recognize that almost every evaluation has these as well as other stakeholders. It is not always easy to

¹ Federal Bureau of Prisons

recognize the stakeholders or their agendas. Nevertheless, it is naive to assume that such groups and agendas do not exist.

To give these concepts substance, I use one of the most highly charged and politically sensitive areas of inquiry that currently exists in corrections — the effectiveness of prison privatization. In one sense, the total operation of a prison can be viewed as the broadest of program interventions. In fact, there are those that argue that the ultimate judgement of prison privatization depends on whether the industry is capable of doing a better job of reintegrating the offender back into society.

Privatization is a case where the competitors are easy to identify and where the consequences of any evaluation will be hotly contested. The stakeholders consist of policymakers and decision-makers (legislators and high ranking government officials). The program sponsors are either private corrections companies or government officials advocating privatization. Evaluation sponsors are typically consulting firms or universities with foundations that do outside consulting. The target participants are the inmates assigned to a particular prison or program. The program management team is composed of corporate CEO's and administrators. The program staff are all those who are hired to deliver services. The program competitors are those companies who competitively bid to deliver a program and in some cases the competitors may be public sector employees. The contextual stakeholders are not only the individual private companies but also public labour unions and public prison administrators or legislators who line up on both sides of the issue.

Once the goals and purposes of a program evaluation have been defined, the stakeholders identified and the political context recognized, the next step is to analyze all of the components of the program and the nature of the change mechanisms that the program is supposed to address.

It is crucial to understand that the evaluation has a political context and that the results of even a well-conducted evaluation may have little or no impact on policy decisions given the political power of the various stakeholders. The proper role of the evaluator is to conduct a well designed study; to address as many of the questions that stakeholders are interested in; and to report findings and the limitations of the conclusions. Rossi and Freeman (1993, p. 421) cite Campbell's (1991) proposal that evaluators should act as the servants of "the Experimenting Society." Campbell thought that the proper role of the evaluator is to report one's findings rather than to advocate for a particular program or policy. Campbell also cautioned against a lack of humility in presenting findings. Campbell wrote that "Perhaps all I am advocating is that social scientists avoid cloaking their recommendations in a specious pseudo-scientific certainty, and instead acknowledge their advice as consisting of wise conjectures that need to be tested in implementation."

THE WHAT OF PROGRAM EVALUATION

There are many considerations at this stage. One must define the precise nature of the intervention, the social and or psychological

mechanisms that are to be affected, the nature of the outcomes, and the program setting. Rossi and Freeman (1993, p. 119) advocate the development of an impact model. This is "an attempt to translate conceptual ideas regarding the regulation, modification, and control of behaviour or conditions into hypotheses on which action can be based." They also discuss causal, intervention, and action hypotheses. The impact model contains a causal hypothesis that outlines the nature of the problem being addressed. How does one become an alcoholic? What is the nature of drug addiction? What are the mechanisms of sexual dysfunction? The intervention hypothesis states how the intervention will affect the mechanism of dysfunction. The action hypothesis states whether the intervention is somehow different from the mechanism that caused a problem to occur in the first place. For example, If one is designing a program to teach employment skills, the causal hypothesis states that certain skill sets and competencies are necessary to become employed. The intervention hypothesis says that vocational training will improve the set of skills; however, the action hypothesis says that while vocational training improves skills, it does not address all of the competencies required for successful employment. Other competencies include the ability to get along with co-workers or the ability to listen and take orders.

THE WHERE OF PROGRAM EVALUATION

The where of program evaluation concerns the location of the program and the timing in relation to the chronology of the offender's correctional career. Program location may seem unimportant; however, it can often be the deciding factor whether a program is successful or not. A residential drug abuse program located in an environment where drugs are readily accessible or where staff, other than the program staff, are not supportive of the intervention is unlikely to succeed regardless of how well the program is designed. Program support is something that is not typically documented by program evaluators. This can have grave consequences for program success.

THE WHO OF PROGRAM EVALUATION

Defining program participants is as important as defining the nature of the program. In some cases, the characteristics of the program participants may be so important that the evaluator will want to experimentally manipulate the relation between the intervention and the target population. The risk principle is a global statement of the nature between interventions and the program participants. It says that regardless of the nature of the program or the intervention, the program will demonstrate a greater success for those offenders who are at higher risk. There are of course many other characteristics of the target population that could affect the inferences to be made. Are there gender-specific types of interventions have the target population participated in before? All of these questions are necessary not only to control for background characteristics of the population. They are important in deciding what level of generalization we want to make after the evaluation is conducted.

THE HOW OF PROGRAM EVALUATION

Quantitative versus qualitative approaches

Most of the modern research on program evaluation emphasizes quantitative methods to determine whether an intervention has been successful. I am an advocate of quantitative research because I think it is the only way that the social sciences will be able to establish laws about human behaviour. But there is a great deal of room for the qualitative analyst in the social sciences and in evaluation research. Even though we assume that interventions are based upon the best science available and we may be simply expanding on an intervention that has been used before, a great deal can be learned by participant observation, interviewing program participants, or simply observing program participation with an open mind set. Anyone who has conducted serious quantitative analysis knows how much variability there is to the human response. Some of this variability may be explained by a host of variables that we use to analyze the data. But there will almost always be a great deal of residual variance. One way to approach that quantitative phenomenon is to use qualitative methods to explore the differences in human responses. Using this approach, qualitative methods are complementary to quantitative techniques.

Complementing quantitative with qualitative information

I borrow several examples from Patton's (1990) book on qualitative methods to show how qualitative evaluation can be used to supplement quantitative analysis. Patton describes an evaluation of a literacy program where the evaluators used quantitative methods to measure the gain score in literacy and scales to assess participants' satisfaction with the program. While students did show positive gains from the program, the evaluators dug deeper and used individual case examples to explain the nature of the gains and open-ended interviews to enhance their understanding of satisfaction with the program.

When program participants were asked to describe their opinions about the program, they gave specific reasons why they were so satisfied. No longer constrained to the specific responses in the satisfaction questionnaire, participants described how they could now read the newspaper; make a shopping list; understand the instructions on their medicine bottles; navigate city streets better; and, how they could take the written test for their drivers license.

Qualitative data is not simply an exposition of quantitative data, it often suggests that the categories we choose to uniformly measure a phenomenon may not be the "phenomenology" of the participant. Open-ended interviews or open-ended items allows the participant to express attitudes, opinions, or beliefs that may provide a fresh insight into the program impact. This may be especially important during the early phases of a program design or implementation.

Appropriate use of qualitative methods

Patton (1990, p. 92-141) has also outlined "Particularly Appropriate Uses of Qualitative Methods". The following briefly describe each of these.

Process studies and process evaluations

Process evaluations examine the nature of how an outcome is achieved. Program evaluations should always be based on theory that articulates how an intervention will modify human behaviour. To understand the mechanism of change, the researcher can supplement quantitative measures of mediating outcomes with interviews that probe the client on the nature and causes of his or her behaviour. It is my experience that even in successful intervention programs, attempts to quantitatively relate process to outcome typically have limited success. In quasi-experimental designs or observational studies, it is particularly important to rule out artifactual or unintended causes of an outcome. Process evaluations not only examine the mechanisms of changes but the change agents themselves. Thus, program providers are also under study in a qualitative process evaluation. Patton (1990, p. 95) lists the following questions: "What are the things people experience that make this program what it is? What are the strengths and weaknesses of the program? How are clients brought into the program and how do they move through the program once they are participants? What is the nature of staff-client interactions?"

Formative evaluations for program improvement

Formative evaluations are intended to improve a program. These are also process evaluations that emphasize the strengths and weaknesses of a program. A program may be well-designed, based on sound theory, and well measured; yet, there may be internal group or individual dynamics that interfere with program progress. Perhaps staff are not well trained or they are not "connecting" with the clients. Formative process evaluations seek to uncover these problems.

Evaluating individualized outcomes

The matching of treatments and program services to the needs of clients is the mantra of many social workers, psychologists, and educators. Yet, matching is rarely an explicit part of a program assessment process. One way to approach matching is to do qualitative studies in which the researcher provides descriptions of the different ways clients react to different treatments, treatment styles, and treatment providers. Evaluators document the unique perspectives of clients to the treatment regimen. This may lead to a typology and eventually to a quantitative assessment of specific matching hypotheses.

Case studies to learn about special interest, information-rich cases

Cases can be chosen that represent particularly incisive information about a particular program. Perhaps case studies of extreme program failure are relevant. Structured interviews with these clients may indicate alternative strategies for subclasses of individuals. Such inquiries may extend to dropouts, or to people who show dramatic gains from a program. In each case, the researcher is interested in understanding the nature of failure or success so that the program can be improved.

Comparing programs to document diversity

When one tries to adapt a national program or a "universal intervention" to a specific location, there are many reasons to expect that there are local nuances in program implementation or potential differences in the clients. These differences may contribute to unexpected outcomes. These differences can be documented both quantitatively and qualitatively.

Implementation evaluations

The best interventions will fail if attention is not given to the implementation of a program. Most evaluators using objective, quantitative data go about their measurement of outcomes assuming that the program has been successfully implemented. There are quantitative methods to assess program implementation; however, qualitative methods can also be of assistance here. Patton (1990, p. 105) addresses the problem with the following qualitative dimensions: "What do clients in the program experience? What services are provided to clients? *What does staff do? What is it like to be in the program? How is the program organized?*" This qualitative approach should be supplemented with tests of what the client has learned or ratings of the effectiveness of the treatment provider by other knowledgeable people. Thus, once again we can complement one type of information with the other.

Identifying a program's or organizations's theory of action

According to Patton, a theory of action relates program inputs and actions to outcomes. This sounds very much like a well articulated theory. However, citing Argyris (1982), Patton discusses "espoused theories" from "theories-in-use". The former are those principles advocated by program designers or program theorists. The latter are the beliefs of the treatment provider, the street level bureaucrat actually doing the work. A qualitative assessment of both will indicate the extent to which there is parallelism in the plans of the treatment designer and the treatment provider. This may be especially crucial in a new groundbreaking approach.

Evaluability assessments

This is Patton's terminology for identifying when a program is ready for more systematic, objective assessment. Is the treatment identifiable? Have outcomes been clearly defined? Has the outcome been articulated into a measurable quantity?

Focusing on program quality or quality of life

Patton argues that even if a program evaluation can be clearly defined and measured in a quantitative way, it is still important in many cases, to assess the texture and contours of meaning of program impact by doing a qualitative assessment as well. For example, if we find that an offender is less likely to use drugs after a drug treatment program, what else does this imply about the offender's quality of life? A qualitative response may add insight into the nuances of different responses given by people. What does it mean to be somewhat satisfied as opposed to be completely satisfied with one's treatment?

Documenting development over time

Developmental changes are extremely important in analyzing human and organizational growth (decline) over time. While quantitative data may indicate developmental changes are occurring, qualitative inquiry may give greater insight into the growth process. When we measure growth, we often use linear or sometimes non-linear patterns to demonstrate growth has occurred. But these may be idealized growth curves. Growth may represent sudden transitions in states for some individuals or organizations and slow or little growth in others. Trying to ascertain the growth phenomenon through qualitative analysis may provide a greater understanding of the processes under consideration.

THE HOW OF QUANTITATIVE EVALUATION AND COMMUNICATING RESULTS

The how of quantitative evaluation could cover volumes. It involves research design, quantitative methods, measurement theory, metaanalysis, decisions about cost-benefit procedures, simulations, and many other technical areas. It involves precise operational definitions of the program intervention, the processes it is intended to change, and the outcomes of interest. The skill sets of the evaluators should also be considered. Psychologists, sociologists, economists, operations researchers, and computer simulation experts all can bring different perspectives to the evaluation approach. Some of these topics are covered in subsequent chapters. The few comments I want to make here relate to communicating the results of the quantitative analysis.

In their concluding chapter, "The Social Context of Evaluation" Rossi and Freeman (1993, p. 402) discuss the need for evaluators to become "secondary disseminators". Most evaluators are quite good at producing a technical report on the results of the evaluation. These reports are usually only read by peers and not by the stakeholders who are most affected by the evaluation results. Thus, secondary dissemination refers to the communication of research results to the stakeholders in ways that they can understand and that are useful to making further policy decisions. This kind of communication should be direct and short. It should provide any necessary qualifications or limitations of the study, often missing from executive summaries. It should also use language that the stakeholders can understand omitting the technical jargon of the discipline. As Rossi and Freeman suggest, there are few opportunities in graduate school to learn the art of communication to stakeholders. In my experience, the communication must be tailored to the audience. It can be a humbling experience to ask your audience what they learned from your presentation. But it is also my experience that getting their feedback is better than their silence.

REFERENCES

- Argyris C. (1982) Reasoning, learning, and action: Individual and organizational. San Francisco, CA: Jossey-Bass.
- Campbell, D. T. (1991) Methods for the experimenting society. *Evaluation Practice*, vol. 12, no. 3.
- Patton, M. Q. (1990) Qualitative evaluation and research methods: Second edition, Newbury Park, CA: Sage.
- Rossi, P. H., & Freeman, H. E. (1993) Evaluation: A systematic approach, 5th Edition, Newbury Park, CA: Sage.

CHAPTER 23

LAURENCE L. MOTIUK¹

Criminal justice policy makers and practitioners in the field of corrections have a keen interest in reducing the likelihood of repeat offending because of the enormous costs to victims and society. While crime continues to present a serious social problem, changes in legal definitions coupled with reduced public tolerance for serious crimes and focused media attention have led to significant improvements in policing, court processing and corrections.

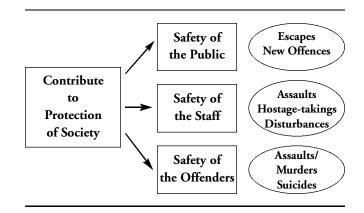
Being acutely aware that the general public does not fully understand the inner workings of the criminal justice system, correctional service providers are being called upon to provide timely responses and accurate information on the care, custody and safe reintegration of criminal offenders. Realizing too, that the media has stretched public tolerance to the limit for any failure in the community, has meant that correctional service providers are learning everything there is to know about outcome measurement and become actively involved in public relations.

To summarize the problem — offenders, staff, volunteers, and public opinion exert a significant influence over the realization of correctional service delivery objectives. In particular, the task of safely reintegrating offenders in the community continues to fall squarely on the shoulders of staff and volunteers located in correctional facilities, mental health settings, and the community at large. Certainly, these people are being called upon to deliver more sophisticated services to a clientele constantly changing and for a public that is uncertain. And to top it all off, they must do so in an effective and cost efficient manner as possible. It's a common challenge, but one that's difficult to measure. This chapter tries to address why correctional outcome is so tough to measure and tries to show how we can measure it as best we can.

THE CORRECTIONAL MANDATE

Correctional agencies at the federal, provincial, and territorial levels across Canada share a common aim or purpose. "Contributing to public protection" is well entrenched in the daily activities of these organizations and the minds of staff. A review of missions, mandates and visions of Canadian correctional agencies is a good illustration of how agencies all across the country have responded to national crime control policies (Motiuk, 2001). Essentially, they aid in the safe reintegration of offenders into society by providing education, vocational and personal development opportunities to offenders. Moreover, each of them track and monitor three important areas of correctional outcome safety of the public, safety of staff and safety of offenders (see Figure 23.1). Some common indicators used for reporting results in these areas are encircled in Figure 23.1.





CARE, CUSTODY, AND SAFE REINTEGRATION

Offender care is concerned with safe healthy environments for those living and working in correctional systems as well as members of the public. Custody refers to the accommodation and management of offenders in correctional facilities that is reasonable, safe, secure and humane and in accordance with the least restrictive option. Reintegration infers that offenders are being safely and effectively returned to the community. While not to discount the importance of care, this chapter is focused primarily on the outcome measurement of the *custody* and *safe reintegration* aspects of correctional case management.

Custody

Custody placement allows society to effectively incapacitate dangerous offenders who show little potential for changing behavioural patterns that threaten the safety of the public. However, for less serious offences that normally results in short prison terms, there are few empirically identifiable benefits to recommend the use of incarceration as a penalty. Imprisonment of offenders for minor crimes may provide some compensation to the public and to victims in terms of retribution. At the same time, longerterm issues of public safety are almost completely neglected when incarceration is used as the only form of correctional intervention. An attractive alternative is to examine the possible benefits

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The opinions expressed are those of the author and do not necessarily represent the official views of the Correctional Service of Canada or the Solicitor General Canada.

of redirecting resources currently committed to incarceration for minor offences and/or low-risk offenders to the crime prevention agenda. For example, a greater emphasis could be placed on alternative sentences served in the community with appropriate treatment programming extended to manageable cases. There is now ample research evidence to suggest that well-designed, community-based alternatives to incarceration for many cases offer greater advantages in terms of controlling criminal recidivism.

Some theorists of criminal behaviour point to the impulsive nature of the crimes committed by violent, sex and repeat offenders who simply fail to think before they act. The research literature suggests that impulsivity and risk-taking are important distinguishing characteristics of violent, sex and repeat offenders. Unfortunately, the impulsivity exhibited by these offenders is likely to severely limit the deterrent value of criminal penalties such as incarceration. Ross and Fabiano (1985, p. 162) offer the following:

The research we have reviewed suggest that deterrence may have little reality or meaning for many offenders. Many offenders seldom consider the consequences of their acts. Many underestimate the risk: some are indifferent to the risks; some thrive on them. Many are sublimely optimistic; they believe that they will not be caught; if caught, not convicted; if convicted, not sentenced; if sentenced, not imprisoned; if imprisoned, quickly released. (We hasten to add that such beliefs are by no means unrealistic).

Deterrence, regardless of the type of penalty, may work well for the majority of citizens who possess the cognitive skills necessary to think before they become involved in illegal activities. However, for violent, sex and repeat offenders the threat of incarceration appears to hold little promise for controlling criminal behaviour. Incapacitation resulting from imprisonment only provides a benefit to society while the offender is incarcerated. The incapacitating effect of imprisonment for a given offender ends with their release.

As a program of rehabilitation, incarceration has not shown much success in rehabilitating offenders. Based on an analysis of over 50 studies involving more than 300,000 offenders, Gendreau, Goggin, and Cullen (1999) explored whether prison reduced criminal behaviour or recidivism. The essential conclusion their work purports "no evidence that prison sentences reduced recidivism". In fact, prison sentences produced slight increases in recidivism and there was some tendency for lower risk offenders to be negatively affected by the prison experience. They conclude, "the primary justification for use of prisons is incapacitation and retribution". Consequently, without other forms of intervention that directly address criminal behaviour and attempt to instill new patterns of behaviour, custody on its own lacks promise.

In a study exploring the impact of preventative detention on the post-release violent and sexual recidivism of 424 detainees, Motiuk, Belcourt, and Bonta (1995) found that time served on detention did not reduce the likelihood of violent recidivism. This was after controlling for level of risk of reoffending and time at risk in the community. Another analysis by Bonta and Motiuk (1996) of detention cases and court designated Dangerous Offenders found both the courts and correctional agencies tend to equate high-risk violent offenders with sex offenders. Also noteworthy is the absence of empirical work on optimal sentences for violent, sex and repeat offenders. Consequently, more attention should be paid to selection issues for which a considerable body of literature exists on the predictors of criminal recidivism and treatment efficacy.

Recent reviews of accumulated findings from hundreds of published studies on rehabilitation programs for offenders (Andrews, 1995; 1996; Gaes, Flannigan, Motiuk, & Stewart, 1999; Gendreau & Goggin, 1996; McGuire, 1995; Lipsey, 1995; Lösel, 1995; 1996) yield clear empirical evidence of the impotency of criminal sanctions when unaccompanied by appropriate rehabilitative programming. The results of these reviews also suggest that rehabilitation programming that takes place in custodial settings appears to be less effective than programming that occurs in the community. In view of the evidence that better outcomes are reported for those completing treatment and particularly for programs operating in the community, the notion that offenders can be sent to prison to be rehabilitated without treatment and aftercare is questionable.

The ineffectiveness of incarceration alone and the effectiveness of appropriate rehabilitation programming, particularly community-based, in reducing repeat offending continue to be advanced by a growing body of contemporary researchers. Indeed, Tarling (1993) has noted that a change in the order of 25% (of the prison population) would be needed to produce a 1% change in the level of crime. On the other hand, Gendreau and Goggin (1996) have found that prison programs with a great deal of therapeutic integrity can produce recidivism reductions in the range of 20% to 35%. Consequently, criminal justice systems are being challenged to offer more specialized programming and improved case management services to violent, sex and repeat offenders - a large, diverse and challenging segment of the criminal offender population (Williams, 1996). More importantly, it is considered essential that any rehabilitation programming being delivered to these types of offenders be theoretically sound, based on research, and provided in priority to those offenders who require them most (Gordon, Holden, & Leis, 1991). Nevertheless, a dilemma remains in terms of determining what risk management model works best and for whom it may be most effective.

Safe reintegration

Of all the factors that influence public safety, criminal justice system service providers in collaboration with releasing authorities, can affect the safe release of offenders into the community. There is solid evidence supporting the premise that the gradual and structured release of offenders is the safest strategy for the protection of society against new offences by released offenders. For example, recidivism studies (Waller, 1974; Harman & Hann, 1986) have found that the percentage of safe returns to the community is higher for supervised offenders than those released with no supervision. Therefore, reintegration is seen as working to better prepare offenders for release and providing them with greater support once they are in the community. Reintegration efforts should yield dividends in terms of higher rates of safe return to the community and lower rates of criminal recidivism.

RISK MANAGEMENT

The public is very concerned with the manner in which criminal offenders are managed because those providing reintegration services are seen as being responsible for their safety. In keeping with this important task, Motiuk (1995, p. 24) notes:

Faced with the fact that most offenders eventually return to the community the best way to serve the public is to recognize the risk presented by an individual, and to then put to good use the tools, the training and our fundamental understanding of what it really means to manage offender risk. Effective risk management implies that decisions impacting on the organization are made using the best procedures available, are in keeping with the overall goals of the system.

For correctional service providers, the application of risk management principles to reducing the chance of criminal recidivism is all that is required to develop an effective risk management program (or to improve on an already existing one). These risk management principles include the assessment of risk; the sharing of information (communication); the monitoring of activities (evaluation); and if deemed appropriate, an intervention (incapacitation, programming). Public safety is improved whenever these risk management activities are integrated into every function and level of the organization providing care and control.

Many jurisdictions have been implementing new and improved offender risk assessment and management technology. The rest of the chapter addresses three important and related questions: "What are correctional outcomes?" and "How do we measure them?" Then, we ask ourselves a final question, "What else do we need to know?"

WHAT ARE CORRECTIONAL OUTCOMES?

In the criminological literature, there have been many attempts to show the relative efficacy of risk management procedures in meeting various correctional objectives. So far, attention has focused on both institutional adjustment and post-discharge/release outcome as the variables most relevant to criminal justice and mental health decision-making (Motiuk, 1991). Most investigations exploring the issue of institutional adjustment have evaluated offenders in terms of disruptive or rulebreaking behaviour such as: riots, assaults, homicides, rule infractions, incident reports, misconducts, drug abuse, escapes, transfers, self-mutilations and suicides. Another large collection of investigations examining the topic of institutional adjustment has assessed offenders with respect to illness behaviour. For these studies, adjustment criteria have included illness complaints, sick call attendance, medical diagnosis, medication line attendance and hospitalizations.

Traditionally, studies addressing the topic of post-discharge/ release outcome have evaluated released offenders in terms of recidivism measures. The most significant of these measures have been arrest, reconviction, parole violation and return to prison. From the public's perspective, violent or sexual recidivism is an important problem to address because of its detrimental impact on victims. Moreover, it provides an indication of the effectiveness of correctional interventions (Lipton, Martinson, & Wilkes, 1975; Sechrest, White, & Brown, 1979).

HOW DO WE MEASURE THEM?

Resolving uncertainty about decisions, after all due consideration of relevant risk factors, is the cornerstone of any effective risk management program. In practice, the analysis of offender risk should serve to structure much of the decisionmaking with respect to custody/security designations, temporary/conditional release, supervision requirements and program placement. Therefore, it is not surprising to find ongoing attempts to design, develop and implement objective procedures for classifying offenders.

It is believed that comprehensive assessment at the intake/ admission stage is critical to the ability to gauge accurately risk during the later phases of the sentence, when decisions as to possible release are taken. At the same time, it is noteworthy that there are successful models of risk assessment for conditionally released offenders in the community. Such work can and has laid the foundation for developing assessment processes for all offenders at the front-end. The amalgamation of front-end and back-end processes into one integrated system requires the ability to conduct systematic and objective assessments upon intake/admission and to link up in meaningful ways (i.e., use the same language and cues) with community-based re-assessments.

Risk principle considerations address the assessment of risk, the prediction of recidivism, and the matching of levels of treatment service to the risk level of the offender (Andrews, Bonta, & Hoge, 1990). While there is considerable empirical evidence to support the "risk principle", it cannot be made fully operational until a framework is put into place for establishing program priorities, implementing programs and allocating resources to best meet the needs of offenders.

An example: Sex offender treatment

The treatment of sex offenders is viewed as a therapeutic and structured intervention aimed at the reduction of risk to reoffend sexually (Motiuk, 1999). Although treatment may be more likely to reduce recidivism among higher risk sex offenders than their lower risk counterparts (Andrews & Bonta, 1994; Nicholaichuk, 1996), their higher risk level suggests that some of them will reoffend — even after treatment. Unfortunately, the public is not likely to be very impressed with statistically significant treatment effects when some graduates from sex offender programs continue to reoffend (Gordon & Nicholaichuk, 1996). Nevertheless, some would argue that we still have a duty to reduce sex offences among higher risk sex offenders to prevent further victimization.

Reviewing the literature on the management and treatment of sex offenders is a formidable task. Especially, with the proliferation of published material devoted to the topic of sexual offending in recent years. However, one gets the impression of two groups headed in opposite directions — on the one hand, policy makers with limited knowledge of psychology and risk prediction, and on the other hand, practitioners with limited understanding of crime and jurisprudence — and arriving at very different conclusions from the same empirical evidence.

The sex offender treatment literature consists of a diverse collection of studies on exhibitionists, rapists, hebophiles, paedophiles, child molesters and incest offenders, sometimes subsumed under the general category of sex offender. The degree to which this heterogeneous group of sexual offence "subtypes" overlaps in treatment studies is difficult to determine. Where examinations of programs targeting discrete typologies or subtypes of sex offenders have produced some intriguing findings (Hagan, King, & Patros, 1994; Knight & Prentky, 1990; Lang, Pugh, & Langevin, 1988; Marshall & Barbaree, 1990), implications for the general sex offender population may be limited.

Sex offender programs have within them a diversity of treatment goals. These include: minimization and rationalization (Barbaree, 1991), attitudes and cognitive distortions (Murphy, 1990), social competence skills (Stermac & Quinsey, 1986), deviant arousal and fantasy (Laws & Marshall, 1990: Quinsey & Earls, 1990), anger management/impulse control (Prentky & Knight, 1986) and relapse prevention (Pithers, 1990). Unfortunately, some aggregations of treatment outcome position them all under the general heading of sex offender treatment.

Also important to consider is that sex offender treatment is conducted in different settings (residential, outpatient) with varying levels of intensity (duration, focus), employing different treatment techniques (cognitive-behavioural, pharmacological, psychotherapeutic) and modalities (individual, group). Consequently, any thorough review of the offender treatment literature would likely yield varying and inconsistent results (Lipsey, 1995).

Another reason for diverse findings in the literature is that many studies are characterized by the use (or selection) of heterogeneous offender samples, groups defined on the basis of rather loose criteria, and inappropriate control or comparison groups lacking fundamental matching procedures (Baxter, Motiuk, & Fortin, 1995). For example, in different treatment studies, participants have been identified as sex offenders on the basis of type of conviction, sexual preference, or measures of deviant sexual arousal. As well, comparing deniers or treatment dropouts to those who admit their sex offences or complete treatment, or incarcerated sex offenders to those on probation, may hold little potential for advancing our knowledge about treating sexual offenders. The absence of uniformity in operational definitions makes comparing across studies difficult, as it not at all clear that different treatment studies are examining the same or even a similar sex offender population.

For corrections, the random assignment of sex offenders to either "treated" or "non-treated" groups is especially problematic. While some sex offenders who are not motivated to receive treatment willingly do not participate, many service providers question the ethics of denying programming to sex offenders who wish to participate but do not for evaluative purposes (Marshall & Barbaree, 1990).

Examinations of sex offender treatment effectiveness examination should match treated offenders with untreated offenders on a set of relevant characteristics such as: being similarly situated, release date, age at release and sentence length (Motiuk, Smiley, & Blanchette, 1996). Ideally, the control or comparison group would also be matched with the treated group on risk factors such as: history of sexual offending and victim age/gender preferences. Such risk factors have been found to be significantly related to reoffending among sex offenders (Hanson & Bussière, 1996). This presents yet another methodological obstacle to overcome, as selection criteria for treatment (or exclusion) could have adverse impacts on the ability to conduct matching procedures.

Other methodological problems have arisen with using variable follow-up periods and different outcome measures. The exploration of sex offender recidivism, its correlates, and the impact of treatment in reducing the likelihood of its occurrence is a veritable challenge for any researcher. Explaining the causes and correlates of sexual reoffending is complicated by time at risk in the community (longer post-release periods necessarily results in greater higher recidivism rates), intensity of supervision, and a variety of moderating variables. Post-release outcome studies rarely concur on recidivism rates, partly due to the varying definitions of what constitutes "recidivism" (Freeman-Longo & Knopp, 1992). Treatment outcome measures include self-reports of new offences, charges, convictions, or returns to custody. On the other hand, more stringent definitions consider only new convictions for sex crimes as an outcome measure. Again, the absence of uniformity in measures makes comparing across studies difficult.

Interpretation of sex offender treatment studies is beset with a host of additional problems. Because of low base rates of sexual reoffending (Hanson & Bussière, 1996), sample sizes need to be exceedingly large (Marshall & Pithers, 1994). Moreover, reliance on officially recorded convictions may underestimate actual sexual recidivism rates. It is possible that a large amount of sexual offending remains undetected by these sources (Weinrott & Saylor, 1991). The problem is further compounded by sample attrition where individuals are removed from the treatment study or follow-up for a variety of reasons (Blanchette, 1996). Other methodological problems include detailing the therapeutic intervention under investigation, measurement of the service provider's adherence to the treatment protocol, and factoring in the delay between treatment completion and release.

These issues (heterogeneity of the sex offender population; differences in treatment goals, setting, intensity, technique and modality; selection of participants and non-participants; random assignment, matching, problems of definition; measurement of outcome) permeate the sex offender treatment literature to such an extent that synthesis of the major findings is often quite difficult.

While investigators may question the effectiveness of sex offender treatment to reduce sexual reoffending over extended time periods, the challenge is generally made on the basis that virtually all sex offender treatment outcome studies have methodological problems (Quinsey, Harris, Rice, & Lalumière, 1993). However, others have found that some treatments can be empirically demonstrated to be effective with sex offenders and are, in fact, successful in reducing sexual reoffending (Barbaree, Seto, & Maric, 1996; Marshall, 1996; Robinson, 1996).

In 1995, Hall conducted a meta-analysis of available sex offender treatment studies that showed a small, but robust, effect size for sex offender treatment. More specifically, Hall (1995) found that across studies, sexual recidivism for untreated sex offenders was 27%, compared with 19% for treated sex offenders. Therefore, on average, sex offender treatment tends to reduce sexual recidivism by approximately 30 percentage points. Similarly, others are reporting substantial reductions in sexual recidivism relative to comparison groups using a cognitive-behavioural approach of 24% (Gordon & Nicholaichuk, 1996).

In a multi-year multi-modal review of sex offender programs in Canadian federal corrections (Motiuk, 1998), a three-year follow-up of 210 treated sex offenders showed a 50% reduction in sexual recidivism (from 6% for the benchmark group to 3% in the program group). Similarly, Looman, Abracen, and Nicholaichuk (2000) explored long-term recidivism (average time at risk was 9.9 years) among treated and released sexual offenders from a Regional Treatment Centre and matched controls and found that the treated group had a reduction in sexual recidivism of 54%.

Albeit that attributing monetary value to human pain and suffering as well as life is controversial, a Criminology Research Council in Australia funded a recent study that investigated the economic costs and benefits of implementing prison-based sex offender treatment programs for male child sex offenders. Although cost-benefit analysis is always based on many assumptions, Donato and Shanahan (1999) estimate that, "if a 14 percentage point reduction in recidivism is achieved following an in-prison treatment program, this could result in an economic gain of up to \$39,870 per prisoner, or \$3.98 million for 100 treated prisoners".

In a study of cognitive skills programming, Robinson (1996) reported a 58% reduction in the general recidivism of sex offenders who completed treatment while in prison. Although sex offenders appeared to achieve the greatest treatment gains relative to other offence groups (violent, drug, property) from cognitive skills training, about one-third had received sex offender treatment before participating in cognitive skills training. Here the question becomes one of whether the reduction in reoffending among sex offenders is attributable to sex offender treatment, cognitive skills training, or some combination thereof. Consequently, another methodological problem arises in the form of sequencing where sex offenders may have received more than one treatment before discharge. Future research into sex offender program effectiveness will undoubtedly have to address this issue.

Although there is some convergence among studies on the effectiveness of sex offender treatment in reducing sexual recidivism, treatment is not a unitary concept. Often, sex offenders are required to complete a variety of programs before being considered for release. Then, they may be required to participate in maintenance programs upon being cascaded in security level or placed in the community. As yet, the full impact or relative contribution of post-program efforts (i.e., relapse prevention) to reducing recidivism among sex offenders remains largely untested (Miner, Marques, Day, & Nelson, 1990).

The fact that sex offenders appear to be benefiting from treatment and that sex offenders are often required to complete programs before discharge or release points to importance of continuing to offer specialized services to these individuals. It also emphasizes that research into sex offender program effectiveness must look deeper into the various components of a program before drawing hasty conclusions as to whether a particular treatment has had any impact. Nevertheless, a broader look at an overall system's impact on reducing repeat sexual offending can be expressed as follows.

A broader perspective ...

From the public's perspective, criminal recidivism is an important problem because it may provide an indication of the ineffectiveness of correctional interventions (such as probation, incarceration and treatment). A December 31, 2000, review of the Correctional Service of Canada *Offender management system* identified 3,428 sex offenders under federal jurisdiction, which accounts for about 16% of the total federal offender population (Motiuk & Vuong, 2001). This end-of-2000 review also determined that 66% of the sex offenders were incarcerated in federal institutions and 34% were being supervised on conditional release.

As noted earlier, an indices of repeat sex offending often used is the number of new charges recorded for released offenders during a particular time period. As noted in the *Departmental Performance Report* (Correctional Service of Canada, 2000), for all released federal offenders over a five-year period, from 1994-1995 to 1999-2000, the number of charges (not convictions) for sex assault decreased from 49 to 23, or by 47% (see Table 23.1). A note of caution is warranted here as "charges" may inflate the rate of recidivism as offences could be later cleared for various reasons.

TABLE 23.1 Charges for Sex Assault for All ReleasedFederal Offenders (1994 to 2000)

	1994-	1995-	1996-	1997-	1998-	1999-
	1995	1996	1997	1998	1999	2000
#	49	22	31	23	32	23

Source: Departmental Performance Report, Correctional Service Canada, 2000

Another indices of repeat sex offending often used is the number of crimes reported to police over a particular time period. As noted in the *Uniform Crime Report*, (Statistics Canada, 1999), for Canada, the actual number of sexual assaults (level 1, 2-with weapon, 3-aggravated) reported to police decreased from 31,706 to 23,872 or by 25% (see Table 23.2).

TABLE 23.2 Sex Assault Incidents Reported to Police inCanada (1994 to 1999)

	1994	1995	1996	1997	1998	1999
Actual # Rate/100,000	31,706 109	28,234 96	27,026 91	27,063 90	25,493 84	23,872 78
Adult males charged	10,434	9,062	8,498		7,887	7,361

Source: Uniform Crime Report, Statistics Canada, 1999

Also noteworthy, the rate of sexual assaults reported to police declined from 109 per 100,000 Canadian population in 1994 to 78 per 100,000 in 1999 and the number of adult males charged declined from 10,434 to 7,361 or by 30%. According to Correctional Service of Canada's *Offender Management System* and the 1999 *Uniform Crime Report* survey, there were 15 sex offences committed by federal offenders while on conditional release in 1999 and, therefore, as a group, accounted for 0.6 of every 1,000 sex offences reported in Canada that year. (Source: *The Safe Return*

of Offenders to the Community, November 2000, Correctional Service of Canada).

However, an important question still remains. How many federal sex offenders who had completed specialized treatment commit new sex crimes while on conditional release or after their sentence is completed? To answer this question one can look to the literature. Between 1991 and 1994, an early study (Motiuk & Brown, 1993) found that among 570 released federal sex offenders (treated and untreated, with an average follow-up of 3.5 years), less than 1-in-10 (or 7%) were convicted for a new sexual offence. Similarly, Nicholaichuk (1996) reported a 6% sexual recidivism rate for a treatment group released from federal prisons.

Taken together, the average rate of sexual recidivism (6-7 % across federal studies) among released federal sex offenders is considerably lower relative to other published studies (average 13% — see Hanson & Bussière, 1996). About half the rate found in other studies. In a more recent study (Motiuk, 1998), between 1994 and 1998, among treated and released federal sex offenders (with an average follow-up of 3.5 years), less than 1-in-33 were convicted for a new sex offence. The average rate of sexual recidivism (3.3%) among treated and released federal sex offenders is considerably lower relative to all released federal sex offenders. Again, we find about half the rate of all federal sex offenders.

WHAT ELSE DO WE NEED TO KNOW?

What constitutes recidivism? Is it is failure? ... returns to custody, ... technical violations, or ... new offences. How do we define and measure new offences? We seem to run into even more problems when we try to evaluate correctional success. Although "what is the recidivism rate" is a popular and valid question, it is really a difficult one to answer, and to emphasize any one answer can be misleading if we don't recognize its limitations.

A review of the available literature would reveal that the most common definition of recidivism is the percentage of released offenders returned to a correctional authority for a new offence during a particular period of study (Nouwens, Motiuk, & Boe, 1993).

Number of releases

Deciding on how to determine the number of released offenders raises several options and necessarily affects the denominator. For example, calculations may be used for the following:

- any release (under supervision and upon completion sentence),
- 2) release under supervision (whether discretionary release parole or a presumptive release statutory release), and
- the aforementioned (flow) combined with those already under community supervision (stock) to complete the full picture of community supervision caseloads.

Naturally, the later is the basis on which most correctional systems would prefer to use as it reflects the full magnitude of

case management effort required to reduce the likelihood of criminal recidivism.

Number of readmitted offenders

Deciding on how to determine the number of readmitted offenders also poses some choices and necessarily affects the numerator. For example, calculations may be used for the following:

- 1) any return (under suspension, revocation, or new offence),
- 2) return for technical violations of conditions, and
- return for a new offence (any, violent, or a specific offence like a sex offence).

Of course, the later is the basis on which most correctional systems prefer to measure recidivism as it reflects true relapse into crime.

Period of study

Deciding on how to determine the period of study has a few choices and necessarily affects both the numerator and denominator. For example, calculation may be used for the following:

- 1) while under status (under sentence, post-sentence or both),
- 2) a specified time frame (6 months, 1 year, 2 years, 3 years, 10 years, etc.), and
- 3) a regular basis (annually).

Usually, the later is the basis on which most correctional systems prefer to measure recidivism as it reflects both recent and fiscally relevant accountability.

Even if we know the recidivism rate, we still can't be sure what it means and what accounts for it. We run into particular problems when we try to evaluate the success of correctional systems or programs. Is the program successful if offenders who participated in it no longer commit offences related to the problem addressed by the program? For example, in 1998, we saw that the Correctional Service of Canada examined the post-release performance of over 1,000 treated sex offenders for an average of 3.5-year period and found that 17 cases recidivated sexually. Optimizing for length of follow-up, the recidivism rate rose to 3%, roughly half that of the entire sex offender when released. Overall, a good correctional result was obtained and whether it can be attributed in whole, or in part to prison-based sex offender treatment or in combination with effective community supervision practices may matter little in the long run. This result does, however, continue to pose methodological concerns for program evaluation purposes whenever recidivism rates are low.

SUMMARY

For evaluating correctional programs, reporting the change and reduction in recidivism for completers, participants and dropouts has become common practice. The change and reduction (reported as the difference in recidivism rate over the comparison group — which raises the overall magnitude of the effect) in recidivism is measured relative to a matched comparison group, control group (sometimes program waiting list controls) or general base rate of recidivism for a similarly situated correctional population.

For evaluating correctional system(s) performance, reporting recidivism rates over time or comparing with other jurisdictions is also popular. A note of caution is warranted in conducting comparisons with others. Correctional systems exist in different countries with different social, political and judicial systems. Nevertheless, there continues to be sustained efforts to refine outcome definitions as well as optimism for new and better measures.

REFERENCES

- Andrews, D. A. (1995). The psychology of criminal conduct and effective treatment. In J. McGuire (Ed.). What works? Reducing reoffending. (pp. 35-62). New York, NY: Wiley.
- Andrews, D. A. (1996). Recidivism is predictable and can be influenced: An update. *Forum on Corrections Research*, 8(3), 42-44.
- Andrews, D. A., & Bonta, J. (1994). The psychology of criminal conduct. Cincinnati, OH: Anderson.
- Andrews, D. A., Bonta, J., & Hoge, R. (1990). Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice & Behaviour*, 17, 19-52.
- Barbaree, H. E. (1991). Denial and minimization among sex offenders: Assessment and treatment outcome. Forum on Corrections Research, 3(4) 30-33.
- Barbaree, H. E., Seto, M. C., & Maric, A. (1996). Effective sex offender treatment: The Warkworth Sexual Behaviour Clinic. *Forum on Corrections Research*, 8(3), 13-15.
- Baxter, D. J., Motiuk, L. L., & Fortin, S. (1995). Intelligence and personality in criminal offenders. In D. H. Saklofske & M. Zeidner (Eds.), *International Handbook of Personality and Intelligence*, New York, NY: Plenum.
- Blanchette, K. (1996). Sex offender assessment, treatment and recidivism: A literature review. Research Report R-48. Ottawa, ON: Correctional Service of Canada.
- Bonta, J., & Motiuk, L. L. (1996). *High-risk violent offenders in Canada*. Research Report R-50. Ottawa, ON: Correctional Service Canada.
- Donato, R., & Shanahan, M. (1999). The economic of implementing intensive in-prison sex offender treatment programs. *Australian Institute of Criminology: Trends and Issues, 134.*
- Freeman-Longo, R. E., & Knopp, H. F. (1992). State-of-the-art sex offender treatment: Outcome and issues. Annals of Sex Research, 5(3), 141-160.
- Gaes, G., Flanigan, T., Motiuk, L. L., & Stewart, L. (1999). Adult correctional treatment. In M. Tonry & J. Petersilia (Eds), *Prisons*. Chicago. IL: University of Chicago Press.
- Gendreau, P., & Goggin, C. (1996). Principles of effective correctional programming. Forum on Corrections Research, 8(3), 38-41.
- Gendreau, P., Goggin, C., & Cullen, F. (1999). The effects of prison sentences on recidivism. Report to the Department of the Solicitor General of Canada.
- Gordon, A., Holden, R., & Leis, T. (1991). Managing and treating sex offenders: Matching risk and need in programming. *Forum on Corrections Research*, 3(1), 7-11.
- Gordon, A., & Nicholaichuk, T. (1996). Applying the risk principle to sex offender treatment. Forum on Corrections Research, 8(2), 36-38.
- Hagan, M. P., King, R. P., & Patros, R. L. (1994). The efficacy of a serious sex offenders treatment program for adolescent rapists. *International journal* of Offender Therapy and Comparative Criminology, 38(2), 141-150.
- Hall, G. C. (1995). Sex offender recidivism revisited: A meta-analysis of recent treatment studies. *Journal of Consulting and Clinical Psychology*, 63(5), 802-809.
- Hanson, R. K., & Bussière, M. T. (1996). Sex offender risk predictors: A summary of research results. *Forum on Corrections Research*, 8(2), 10-12.
- Harman, W. G., & Hann, R. G. (1986). Predicting general release risk for penitentiary inmates. User Report: Ministry of the Solicitor General of Canada, No. 1986-32.

- Knight, R. A., & Prentky, R. A. (1990). Classifying sex offenders: The development and corroboration of taxonomic models. In W. L. Marshall & H. E. Barbaree (Eds.), *Handbook of Sexual Assault: Issues, Theories, and Treatment* of the Offenders (pp. 23-52). New York, NY: Plenum.
- Lang, R. A., Pugh, G. M., & Langevin, R. (1988). Treatment of incest and pedophilic offenders: A pilot study. *Behavioral Sciences and the Law*, 6, 239-255.
- Laws, H. E., & Marshall, W. L. (1990). A conditioning theory of the etiology and maintenance of deviant sexual preference and behavior. In W. L. Marshall & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offenders* (pp. 209-229). New York, NY: Plenum.
- Lipsey, M. (1995). What do we learn from 400 research studies on the effectiveness of treatment with juvenile delinquents? In J. McGuire (Ed.). What works? Reducing reoffending. (pp. 35-62). New York, NY: Wiley.
- Lipton, D., Martinson, R., & Wilkes, J. (1975). The effectiveness of correctional treatment — A survey of treatment evaluation studies. New York, NY: Praeger.
- Looman, J., Abracen, J., & Nicholaichuk, T. (2000). Recidivism among treated sexual offenders and matched controls. *Journal of Interpersonal Violence*, 15, 279-290.
- Lösel, F. (1995). The efficacy of correctional treatment: A review and synthesis of meta-evaluations. In J. McGuire (Ed.). What works? Reducing reoffending. (pp. 79-114). New York, NY: Wiley.
- Lösel, F. (1996). Effective correctional programming: What empirical research tells and what it doesn't. *Forum on Corrections Research*, 8(3), 33-37.
- Marshall, W. L. (1996). Assessment, treatment, and theorizing about sex offenders: Developments during the past twenty years and future directions. *Criminal Justice and Behavior*, 23(1), 162-199.
- Marshall, W. L., & Barbaree, H. E. (1990). Outcome of comprehensive cognitivebehavioral treatment programs. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 363-385). New York, NY: Plenum Press.
- Marsall, W. L., & Pithers, W. D. (1994). A reconsideration of treatment outcome with sex offenders. *Criminal Justice and Behavior*, 21, 10-27.
- McGuire, J. (1995). What works? Reducing reoffending. New York, NY: Wiley.
- Miner, M. H., Marques, J. K., Day, D. M., & Nelson, C. (1990). Impact of relapse prevention in treating sex offenders: Preliminary findings. *Annals of Sex Research*, 3(2), 165-185.
- Motiuk, L. L. (1991). The antecedents and consequences of prison adjustment: A systematic assessment and reassessment approach. Doctoral dissertation. Ottawa, ON: Carleton University.
- Motiuk, L. L. (1995). Refocusing the role of psychology in risk management: Assessment, communication, monitoring and intervention. In T. A. Leis, L. L. Motiuk, & J. R. Ogloff (Eds.), *Forensic psychology: Policy and practice in corrections*. Ottawa, ON: Correctional Service Canada.
- Motiuk, L. L. (1996). Assessing sex offenders for responsivity. A published paper presented at the 15th Meeting of the Association for the Treatment of Sex Abusers, Chicago, Illinois.
- Motiuk, L. L. (1997). Sex offender assessment: A risk-based case differentiation approach. A paper presented at the 16th Annual Research and Treatment Conference for the Association for the Treatment of Sex Abusers. Arlington, Virginia.
- Motiuk, L. L. (1998). A multi-year multi-modal review of sex offender programs in federal corrections. A paper presented at the 17thAnnual Research and Treatment Conference for the Association for the Treatment of Sex Abusers. Vancouver, British Columbia.
- Motiuk, L. L. (1999). The treatment of sex offenders in penal establishments and release programs. A paper published in the proceedings of the 12th Conference of Directors of Prison Administration, Strasbourg, France.
- Motiuk, L. L. (2001). Public administration and management of adult correctional services in Canada. In J. Winterdyk (Ed), Corrections in Canada: Social reactions to crime. Toronto, ON: Prentice-Hall.

- Motiuk, L. L., Belcourt, R., & Bonta, J. (1995). Managing high-risk offenders: A post-detention follow-up. Research Report R-39. Ottawa, ON: Correctional Service Canada.
- Motiuk, L. L., & Brown, S. L. (1993). Survival time until suspension for sex offenders on conditional release. Research Report R-31. Ottawa, ON: Correctional Service Canada.
- Motiuk, L. L., Smiley, C., & Blanchette, K. (1996). Intensive programming for violent offenders: A comparative investigation. *Forum on Corrections Research*, 8(3), 6-9.
- Motiuk, L. L., & Vuong, B. (2001). Homicide, robbery, sex and drug offenders in federal corrections: An end-of-200 review. Research Brief B-25. Ottawa, ON: Correctional service of Canada
- Murphy, W. D. (1990). Assessment and modification of cognitive distortions in sex offenders. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 331-342). New York, NY: Plenum Press.
- Nicholaichuk, T. P. (1996). Sex offender treatment priority: An illustration of the risk/need principle. *Forum on Corrections Research, 8*(2), 30-32.
- Nouwens, T., Motiuk, L., & Boe, R. (1993) So you want to know the redicivism rate. Forum on Corrections Research, 5(3), 22-26.
- Nuffield, J. (1982). Parole decision-making in Canada: Research towards decision guidelines. Ottawa, ON: Solicitor General of Canada.
- Otto, R. K. (1992). Measuring patient violence in dangerousness research. *Law* and Human Behavior, 17, 277-288.
- Pithers, W. D. (1990). Relapse prevention for sexual aggressors: A method for maintaining therapeutic gain and enhancing external supervision. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual* assault: Issues, theories, and treatment of the offender (pp. 343-361). New York, NY: Plenum Press.
- Prentky, R. A., & Knight, R. (1986). Impulsivity in lifestyle and criminal behavior of sexual offenders. *Criminal Justice and Behavior*, 13, 141-164.
- Quinsey, V. L., & Earls, C. M. (1990). The modification of sexual preferences. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 279-295). New York, NY: Plenum Press.
- Quinsey, V. L., Harris, G. T., Rice, M. E., & Lalumière, M. L. (1993). Assessing treatment efficacy in outcome studies of sex offenders. *Journal of Interpersonal Violence*, 8(4), 512-523.
- Quinsey, V. L., Harris, G. T., Rice, M. E., & Cormier, C. A. (1998). Violent offenders: Appraising risk and managing risk. Baltimore, MD: United Book Press.
- Robinson, D. (1996). Factors influencing the effectiveness of cognitive skills training. *Forum on Corrections Research*, 8(3), 6-9.
- Ross, R. R., & Fabiano, E. (1985). *Time to think: A cognitive model of delinquency prevention and offender rehabilitation*. Johnson City, TN: Institute of Social Sciences and Arts.
- Sechrest, L., White, S., & Brown, E. (1979). The rehabilitation of criminal offenders. Washington, DC: National Academy of Sciences.
- Stermac, L. E., & Quinsey, V. L. (1986). Social competence among rapists. Behavioral Scientist, 8, 171-285.
- Tarling, R. (1993). Analysing offending: Data, models and interpretations. London, UK: HMSO.
- Waller, I. (1974). Men released from prison. Toronto, ON: Centre of Criminology, University of Toronto Press.
- Weinrott, M. R., & Saylor, M. (1991). Self-report of crimes committed by sex offenders. *Journal of Interpersonal Violence*, 6(3), 286-300.
- Williams, S. M. (1996). A National Strategy for Managing Sex Offenders. Forum on Corrections Research, 8(2), 33-35.

CHAPTER 24

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The past decade has seen significant gains in our understanding regarding correctional programming. This has subsequently led to a substantial increase in the range and number of correctional programs provided to offenders, both those incarcerated in prisons and those under community supervision. The most prominent theoretical orientation of correctional programs, perhaps because of their demonstrated efficacy, has been cognitive-behavioural in orientation (Andrews, Dowden, & Gendreau, 2000). Further, this proliferation of correctional programming has been driven by concerns by administrators of increased inmate populations and the perceived need to provide better risk management (Motiuk & Serin, 1998). This chapter addresses the selection of appropriate measures in order to determine the effectiveness of a correctional program.

Regarding program evaluation, there are a number of key elements that contribute to the overall effectiveness of a particular intervention. Van Voorhis and her colleagues have outlined many of these elements to assist practitioners and policymakers to make informed decisions about interventions for offenders (Van Voorhis, Cullen, & Applegate, 1995). In their review of violent offender programs, they illustrate the importance of such factors as the consideration of program climate and support, the development of offender selection criteria based on the treatment targets of the intervention, the assurance of program integrity, and the determination of measures of success. They provide an extended discussion of each of these factors, but this chapter will limit its focus to the factor they termed intermediate measures of program success. It must, however, be emphasized that quality of program delivery and implementation concerns such as staff selection and training are also critical to program evaluation (Serin & Preston, 2001).

The coining of the term intermediate measures is an effort by researchers to better link program targets, program objectives, and outcome measures (Van Voorhis et al., 1995). In terms of measuring the impact of a particular intervention, it is recommended that assessment be multi-method and multi-modal (Palmer, 1996). Further, the assessment protocol should not rely solely upon offender self-report because of the numerous difficulties inherent in this approach (Serin & Preston, 2001). Related to this, then, attempts should be made to control for social desirability. Alternative forms of assessment include structured interviews, vignette (in situ) assessments, and behavioural observations. Staff ratings, particularly of motivation and treatment readiness, and treatment performance should also be included (Kennedy & Serin, 1999). Lastly, a literature review, consultation with colleagues and researchers, and the availability of appropriate norms should guide the final selection of assessment tools.

PRE- AND POST-TESTING

Pre- and post-treatment testing is one aspect related to assessment of target problems (Goldstein & Keller, 1987; Serin, 1995). Offenders should complete a comprehensive, multi-method assessment battery before and after a planned intervention. The assessment battery should assess domains that are reasonable treatment targets and that are determined on an a priori basis. This could include literature reviews, theoretical models, and demonstrated need. This will allow for the identification of individual treatment needs and provide a basis from which to gauge treatment gain. It should then be possible to link specific intervention strategies to particular treatment needs. Ideally, these treatment needs will also be determined on the basis of their relationship to criminal behaviour (Andrews & Bonta, 1998). Importantly, the assessment of criminogenic needs may include structured ratings (LSI-R, Andrews & Bonta, 1995; Motiuk, 1997), selfreports (Serin & Mailloux, 2001), and functional analyses (McDougall, Clark, & Fisher, 1994).

While pre- and post-tests provide an indication of change as a condition of treatment, process measures can help determine which aspects of the program are responsible for producing change. In effect, process measures assess the impact of program content on knowledge and skills acquisition (Marques, Day, Nelson, & West, 1994). Obviously, process measures must be specific to the content of each module of the program, and offenders should complete them before and after the delivery of each particular module. Interim and outcome evaluations of the program can then examine the extent to which the process measures are useful in measuring change and in predicting outcome.

MEASURING TREATMENT SUCCESS

Intermediate measures of treatment success should include behavioural ratings in addition to the more common offender self-reports. An additional means of assessing treatment gain to pre- and posttests (and change scores), and to process measures, are systematic ratings of behaviour. Thus, these ratings can identify at which point in the program gains became evident by profiling change over time. Behaviours such as attendance, participation, attentiveness, comprehension, and skill implementation are just some to

¹ Correctional Service of Canada

consider. To maximize reliability, a Likert scale could be used with explicit behavioural anchors. As well, staff could complete these by consensus such that each rating reflects an average of two raters. Subsequent analyses can then determine the relationship between staff ratings and offender reports and behaviour change, as well as the extent to which each predict outcome.

A clear description of the treatment targets and program objectives are critical to the development of intermediate measures of success. Essentially there are three distinct questions. Does change occur in the areas targeted by the correctional intervention? Is this change in the predicted or hypothesized direction? Are these changes related to other indices of treatment performance? A related question is whether these changes correlate with other dependent variables such as recidivism. In this context the first two questions answer whether change has occurred, but the prediction of recidivism is an investigation of the generalization of these treatment gains to other situations.

In terms of evaluating treatment performance it may be helpful to consider intermediate objectives (see Table 24.1). For instance, for violent offenders it is reasonable to investigate whether "successful" program participation yields reductions in institutional infractions in terms of fights or arguments. For sex offenders, intermediate objectives might be decreases in inappropriate comments to women staff or reductions in contacts with identified victim types (e.g., viewing children in catalogues and on television). For substance abusers, an intermediate objective might be reductions in institutional infractions relating to possession or use of illicit substances. For each of these objectives, it is also possible to consider reductions in either frequency or severity, relative to some prescribed period of time prior to the initiation of treatment. Other intermediate objectives could include reductions in the number of days spent in segregation for disciplinary reasons before and after the program. Also, tabulating rates of granting conditional release, rates of referral for special conditions or residential requirements might be instructive. Depending of the nature of the program and the needs of the offenders, examining employment rates and subsequent program participation may be helpful. Further, consideration of transfers to reduced security (or increased security in the case of program failures) might be a manner of determining program success prior to collecting recidivism data. Finally, it is important to consider refusal rates, program completion rates, and reasons for non-completion. High refusal rates and high program attrition will ultimately limit the generalizability of the program and raise legitimate questions regarding its efficacy.

CONSUMER SATISFACTION

Another form of evaluating intermediate measures of program success relates to consumer satisfaction. Surveys that consider the content of the program, its duration and other time issues, the process by which the program was delivered, and the skill components would all be important. An indication of the best and worst aspects of a program is also sometimes illuminating. It is worth, however, noting that often such surveys simply provide a forum for offenders to try and garner support by extolling the merits of a particular program and its staff. Therefore, in addition to having offenders complete a confidential post-treatment evaluation of staff and the program, it is important to consider other consumers. Accordingly, this could include conducting a survey to determine the utility of post-treatment reports to various decision-makers.

CHANGE SCORES

The literature regarding the predictive validity of change scores is relatively ambiguous. In the area of sex offender treatment,

Type of Offender (Primary need)	Offence Specific	Intermediate Outcome Measures		
Violent	 Reduced institutional charges Fewer verbal confrontations with staff 	 Transfers to reduced security Program performance and compliance Program completion 		
Sexual	 Reduced inappropriate interactions with staff Decreased victim interest (viewing children on T.V.) 	 Positive release decisions Fewer days served post-treatment Decreased evidence of sexually predatory behaviour against other offenders 		
Substance Abuser	 Fewer institutional incidents relating to drugs and debts (possession/under the influence) Negative urinalysis testing 	 Post-treatment program compliance Positive urinalysis for less addictive drugs Changed peer associations 		

 TABLE 24.1 Intermediate Indices of Program Effectiveness

the best predictors of sexual recidivism appear to be static risk factors and pre-treatment phallometric indices of sexual deviance (Hanson & Bussière, 1998; Quinsey, Harris, Rice, & Cormier, 1998). Changes in phallometric levels appear less predictive than baseline levels. Also, changes on questionnaires relating to knowledge of relapse prevention principles in sex offender treatment appears unrelated to outcome, however, for some groups of sex offenders, gains in skills may be related to outcome (Marques, personal communication, December 1999). In other areas, such as violent offenders, changes are often contaminated with social desirability or offenders' self-reports on psychological scales reflect increased problems at post-treatment (Serin & Kuriychuk, 1994). Anecdotally, it appears that such anomalous findings have been explained by proposing that the intervention has had an effect in that the offenders now recognize their behaviour to be problematic. Typically, most studies report changes in scores between pre- and post-treatment testing, but often the relationship to social desirability is alarmingly high (Blanchette, Robinson, Alksnis, & Serin, 1998). Importantly, these changes do not consistently relate to reductions in recidivism, necessitating longitudinal studies. In the area of substance abuse there is some indication that change scores are related to improved outcome (Reintegration Programs, 1999).

This very brief overview of intermediate measures of treatment success highlights four specific program evaluation issues. Firstly, the necessity to measure social desirability as part of the assessment battery. Secondly, the need to ensure that the measures are theoretically and empirically related to treatment targets, and program objectives (Van Voorhis et al., 1995). Thirdly, the need to distinguish between knowledge and skills. The latter may be best assessed by performance-based measures that are situational-specific such as hypothetical vignettes (Dodge & Frame, 1982; Serin, 1991). Fourthly, the potential advantage in distinguishing between change scores and threshold scores in the prediction of recidivism. Change scores reflect the degree of change on a test between evaluations completed prior to and after treatment. It is possible that an offender may have very low pre-treatment scores because of high needs or low skills. Further, they may make significant gains and have marked change scores, but still fall well below the levels attained by other offenders. It is also possible that in order for there to be sustained behaviour change across different situations, greater knowledge or skills are required. That is, a higher threshold score is necessary and it is this final score, not the change score that may prove to be a better predictor of outcome.

CHANGE SCORES AND RISK RE-APPRAISALS

In deference to the risk principle that states higher risk offenders required higher intensity intervention (Andrews & Bonta, 1998), most programs consider risk measures within the program delivery procedure. In some cases this is part of the selection criteria (Reintegration Programs, 1999) or the risk estimate is used for post-treatment comparisons regarding differential treatment response (Dowden, Blanchette, & Serin, 1999). Since most of the popular risk assessment strategies reflect static factors, an important issue is how to best incorporate treatment change into re-appraisals of risk and post-treatment risk management strategies (Serin 1998).

OFFENDER HETEROGENEITY

Presently the correctional program evaluation literature is principally concerned with determining treatment effectiveness. As noted earlier, restricting definitions of effectiveness to only the issue of recidivism is considered potentially limiting.² Various intermediate indices of program success exist and should be investigated. Equally limiting is the apparent belief that offenders are a homogeneous group who will respond similarly to the same program experience. This belief is reflected in the practice of choosing to investigate treatment outcome between groups (treated versus untreated; treated versus dropouts), although this is in contrast to the literature regarding treatment responsivity (Bonta, 1995; Kennedy & Serin, 1999). Even in the area of sex offenders where distinct groups exist because of victim characteristics, programs typically include different types of offenders within the same program and collapse across groups for the purposes of program evaluation. Equally disconcerting is the tendency to develop a program for a particular target, for example, violence, and then fail to consider that the targets within a sample of violent offenders may differ (Serin & Preston, 2001). In fact, it may be that failing to match the offender with the appropriate intervention may actually result in treatment failures (Rice, Harris, & Cormier, 1992; Serin & Preston, 2001). Paying closer attention to the development of treatment targets, intermediate measures and program objectives (Serin & Preston, in press; Van Voorhis et al., 1995) might assist clinicians to more carefully consider treatment responsivity factors (Kennedy & Serin, 1999).

OUTCOME EVALUATION

The final issue to address is the reliance on recidivism as the *mison d'être* for correctional program. It has been argued that recidivism may not be the preferred index of treatment effectiveness (Elliot, 1980). Specific to recidivism, there are several considerations. For instance, the length of follow-up time will effect base rates. Also, there is debate regarding the "best" definition (Phipps, Korinek, Aos, & Lieb, 1999). Alarmingly, this absence of a standard makes comparisons across programs problematic. For violent offenders it seems most probable that reductions in violent reoffending would be viewed as the most desirable outcome, yet even this could be debated because violence defined by conviction is a poor proxy to actual behaviour. Also, if a violent offender recommits a violent

 $^{^2}$ Sex offender the rapists appear not to tolerate "lapses" because of the victimization issues.

crime, but relative to their history it involves a less serious incident, less victim injury or longer time to reoffence, is this a clear indication of program failure? Defining outcome only dichotomously, then, limits our understanding about program effectiveness. The use of survival analyses, consideration of prediction analyses as well as comparisons of group differences, and the relative utility of change scores and thresholds in determining program effectiveness are all recommended. Lastly, the consideration of intermediate measures should contribute to increased fidelity of determinations of program effectiveness.

REFERENCES

- Andrews, D. A., & Bonta, J. (1995). The Level of Service Inventory-Revised. Toronto, ON: Multi-Health Systems.
- Andrews, D. A., & Bonta, J. (1998). The psychology of criminal conduct. 2nd Edition, Cincinnati, OH: Anderson Publishing.
- Andrews, D. A., Dowden, C., & Gendreau, P. (2000). Clinically relevant and psychologically informed approaches to reduced reoffending: A meta-analytic study of human service, risk, need, responsivity and other concerns in a justice context. Manuscript submitted for publication.
- Blanchette, K., Robinson, D., Alksnis, C., & Serin, R. C. (1998). Assessing treatment change among family violent offenders: Reliability, and validity of a family violence treatment assessment battery. Research Report R-72. Ottawa, ON: Correctional Service of Canada.
- Bonta, J. (1995). The responsivity principle and offender rehabilitation. Forum on Corrections Research, 7(3), 34-37.
- Dodge, K. A., & Frame, C. L. (1982). Social cognitive biases and deficits in aggressive boys. *Child Development*, 53, 620-635.
- Dowden, C., Blanchette, K., & Serin, R. C. (1999). Anger management programming for federal male inmates: An effective intervention. Research Report R-82. Ottawa, ON: Correctional Service of Canada.
- Elliott, D. S. (1980). Recurring issues in the evaluation of delinquency prevention and treatment programs. In D. Schichor & D. Kelly (Eds.), *Critical issues in juvenile delinquency*, (pp. 237-262). Lexington, MA: D.C. Heath.
- Goldstein, A. P., & Keller, H. (1987). Aggressive behavior: Assessment and intervention. New York, NY: Pergamon.
- Hanson, R. K., & Bussière, M. T. (1998). Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology*, 66, 348-362.
- Kennedy, S., & Serin, R. (1999). Examining offender readiness to change and the impact on treatment outcome. In P. M. Harris (Ed.), *Research to results: Effective community corrections*, (pp. 215-230). Lanham, MD: American Correctional Association.
- Marques, J. K. (1999). Personal communication, December.
- Marques, J. K., Day, D. M., Nelson, C., & West, M. A. (1994). Effects of cognitive-behavioral treatment on sex offender recidivism: Preliminary results of a longitudinal study. *Criminal Justice and Behavior*, 21, 28-54.

- McDougall, C., Clark, D., & Fisher, M. (1994). The assessment of violent behaviour. In M. McMurran & J. Hodge (Eds), *The assessment of criminal behaviour of clients in secure settings*, (pp. 68-93). London, UK: Jessica Kingsley Publishers.
- Motiuk, L. L. (1997). Classification for correctional programming: The Offender Intake Assessment (OIA) process. *Forum on Corrections Research*, 9(1), 18-22.
- Motiuk, L. L., & Serin, R. C. (1998). Situating risk assessment in the reintegration potential framework. Forum on Corrections Research, 10(1), 19-22.
- Palmer, T. (1996). Programmatic and non-programmatic aspects of successful interventions. In A.T. Harland (Ed.), *Choosing correctional options that work: Defining the demand and evaluating the supply* (pp. 131-182). Thousand Oaks, CA: Sage.
- Phipps, P., Korinek, K., Aos, S., & Lieb, R. (1999). Research findings on adult corrections programs: A review 1999. Olympia, WA: Washington State Institute for Public Policy.
- Quinsey, V. L., Harris, G. T., Rice, M. E., & Cormier, C. A. (1998). Violent offenders: Appraising and managing risk. Washington, DC: American Psychological Association.
- Reintegration Programs, 1999. An outcome evaluation of CSC substance abuse programs: OSAPP, ALTO and Choices. Ottawa, ON: Public Works and Government Services Canada.
- Rice, M. E., Harris, G. T., & Cormier, C. A. (1992). An evaluation of a maximumsecurity therapeutic community for psychopaths and other mentally disordered offenders. *Law and Human Behavior*, 16, 399-412.
- Serin, R. C. (1991). Psychopathy and violence in criminals. *Journal of Interpersonal Violence*, 6, 423-431.
- Serin, R. C. (1995). Psychological intervention in corrections. In T. A. Leis, L. L. Motiuk, & J. R. P. Ogloff (Eds.), *Forensic psychology: Policy and practice in corrections*, (pp. 36-40). Ottawa, ON: Ministry of Supply and Services Canada.
- Serin, R. C. (1998). Treatment responsivity, intervention, and reintegration: A conceptual model. *Forum on Corrections Research*, 10(1), 29-32.
- Serin, R. C., & Kuriychuk, M. (1994). Social and cognitive processing deficits in violent offenders: Implications for treatment. *International Journal of Law* and Psychiatry, 17, 431-441.
- Serin, R. C., & Mailloux, D. L. (2001). Development of a Reliable Self-Report Instrument for the Assessment of Criminogenic Needs. Research Report R-96. Ottawa, ON: Correctional Service of Canada.
- Serin, R. C., & Preston, D. L. (2001). Designing, implementing and managing treatment programs for violent offenders. In G. A. Bernfeld, D. P. Farrington, & A. W. Leschied (Eds.), Offender rehabilitation in practice: Implementing and evaluating effective programs, (pp. 205-221), West Sussex, UK: John Wiley & Sons.
- Serin, R. C., & Preston, D. L. (2001). Managing and treating violent offenders. In J. B. Ashford, B. D. Sales, & W. Reid (Eds.), *Treating adult and juvenile offenders with special needs*, (pp. 249-272). Washington, DC: American Psychological Association.
- Van Voorhis, P., Cullen, F. T., & Applegate, B. (1995). Evaluating interventions with violent offenders: A guide for practitioners and policymakers. *Federal Probation*, 59, 17-28.

CHAPTER 25

PAUL GENDREAU, CLAIRE GOGGIN, and PAULA

SMITH¹

Correctional policy-makers and clinicians are bombarded annually with growing offender treatment and prediction literatures, the findings of which are often contrary. Meta-analysis offers a means of overcoming the innate biases of narrative or box score review techniques by standardizing the review process, and shifting the focus away from traditional significance testing by making use of point estimates (i.e., means) and confidence intervals. Thus, clinicians and policy-makers can place greater credence in the conclusions emanating from quantitative summaries and, in turn, incorporate them in the decision-making process. In this way, one can ensure that forthcoming correctional policies are empirically, rather than ideologically derived.

One of the most daunting tasks facing correctional policymakers and clinicians are to make sense of the vast amounts of treatment and prediction data generated annually. This is not, of course, a problem unique to corrections. Hunt's (1997) convincing portrayal of the social science and medical research world where the landscape appears, at times, to be "*pervaded by a relentless crossfire in which the findings of new studies not only differ from previously established truths but disagree with one another, often vehemently*" (p. 1). In corrections, for example, there is conflicting data on the efficacy of treatment versus "get tough" strategies (e.g., boot camps) or the putative cruelty versus utility of prisons, to highlight just a few topics.

Is it any wonder, then, that when legislators, in collaboration with clinicians and policy-makers, attempt to generate cogent policies on issues of offender management, a perplexed look crosses their faces when confronted with the "data" (see Hunter & Schmidt, 1996)?

SOURCES OF CONFUSION

In our view, the genesis of this confusion has multiple sources (Gendreau, Goggin, & Smith, 2000). Two of the more crucial, that of ideology and the traditional methods of literature review and knowledge cumulating, will be the focus of this chapter.

Ideology

During the 1950s and 1960s, there was a naïve, idealistic belief amongst social scientists trained in North America that we were an experimenting society (see Campbell, 1969; see also Gendreau & Ross, 1987). In other words, respect for evidence generated from soundly conceptualized and conducted evaluations would, more or less literally, be translated into public policy. This, however, has not turned out to be the case, particularly in corrections, where contextual factors, such as political and professional ideologies, have frequently highjacked policy (Cullen & Gendreau, 2000, Gendreau, 1999; Gendreau & Ross, 1987).

The popularity of the "get tough" movement in the United States corrections illustrates this point. It coincided with the ascendancy of conservative values in the socio-political arena (Cullen & Gendreau, 1989) and the resulting ideologically-driven policies — greater use of prisons (such as boot camps, longer sentences), community sanctions (such as electronic monitoring, drug testing) — were presumed to effectively deter criminal behaviour despite being bereft of empirical support. Such initiatives totally ignored the thousands of studies in the psychological punishment and social psychological literatures which would have predicted the folly of such strategies (Gendreau, 1996a). Indeed, several of the programs or policies that have emanated from the "get tough" ideology, such as cross-dressing humiliation therapy, John T.V., and reintroducing the whip into prisons (see Gendreau, Goggin, & Smith, 2000), defy credulity.

Political ideologues are not unique in this predilection for simplistic, common-sense notions of how the world works. Academics have been known to jump on ideological bandwagons as well. Andrews and Bonta (1998) have documented a plethora of instances where the offender personality and treatment literatures were dismissed by a number of criminologists as being of no consequence when a wealth of data spoke to the contrary. Disparities in interpretations of a literature by academics exist, in part, due to competition amongst various disciplines for academic pre-eminence and the attendant perks, access to external funding, and blatant careerism (Gendreau, Goggin, & Smith, 2000; Gendreau & Ross, 1979; Hunt, 1997). In fact, there is a class of "academic" who is particularly skilled at disguising his/her ideology. Included therein are the policy entrepreneurs and combat intellectuals who are adept at maintaining the pretence of being rational empiricists all the while serving their own or a special interest-funded ideological agenda (see Krugman, 1994; Starobin, 1997).

Pity then, the average policy-maker or clinician who is faced with this unseemly and contradictory brouhaha. For example, most clinicians have little time to conduct extensive literature

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reviews; as we detail later, most applied research literatures are also "huge" and ever more "technical". Policy-makers, on the other hand, face a somewhat different challenge. In the "old days", it was commonplace to find senior-level policy-makers who had specialized in the fields for which they were directly responsible, and who remained in their portfolios long enough to appreciate all of the "ins and outs" of the theories and evidence that informed their decision-making (Granatstein, 1982; Osbaldeston, 1989). Currently, the tenure of most policy-makers in a single portfolio is very short-lived (less than 3 years on average) and their background training is often generic in nature (Fulford, 1995). Increased political control over the bureaucracy (Savoie, 1999) likely militates against non-ideological discourse while reinforcing the development of quick-fix panaceas in response to pressing and often complex problems.

We are not suggesting that ideology is so insidious as to paralyze attempts at cumulating knowledge, nor that some aspects of ideological positions may not, in fact, be fairly "accurate" insofar as they are based on research findings. Indeed, no matter what the ideological barometer in a given culture, social scientists have always endeavoured to make some sense of research literatures. The traditional means by which this has been done, however, poses a major problem, particularly within large datasets.

INFORMATION OVERLOAD AND THE NARRATIVE REVIEW

Given the voluminous amount of information now available, some of which may be contrary, it is not surprising that clinicians and policy-makers entertain disparate notions of what works in corrections.² Part of the problem lies in how a literature is reviewed, as the method of cumulating knowledge clearly influences one's conclusions and, thus, policy development. Traditionally, policy-makers have relied upon narrative reviews to make decisions regarding policy. These summaries generally have been qualitative in nature and involved the following process: typically, the writer formulates an opinion by reading a few influential theoretical articles, examines the available evidence, and then selects the results that substantiate his/ her position.

Although narrative reviews may be appropriate when a literature base is relatively small (e.g., 5 to 10 studies) or purely qualitative in nature, critics of this approach have noted several limitations (Glass, McGaw, & Smith, 1981; Redondo, Sanchez-Meca, & Garrido, 1999; Rosenthal, 1991). Perhaps the narrative's most troublesome shortcoming is its tendency to omit key data. As such, the scope of a literature review is often limited by the prejudices of the reviewer. Of equal concern, narrative reviews are virtually impossible to replicate. In addition, essen-

tial concepts are often poorly operationalized. Redondo et al. (1999) have also pointed out that the mind has a limited capacity for the systematic processing of a multitude of methodologies, outcomes, study characteristics, and potential moderators. One can appreciate, then, what an onerous task it can be to summarize large numbers of studies (i.e., 30-200). Typically what occurs (Gendreau & Ross, 1987) is that a reviewer favours a small subset of studies that he/she "likes" or can "handle" in order to generate conclusions about large and sometimes complex literatures. Glass et al. (1981) provide one of the most compelling examples of this phenomenon. When five leading scholars conducted narrative reviews of the same literature (the effectiveness of psychotherapy versus drug therapy) they differed as to which studies qualified for the review, disagreed as to which studies should be placed in the treatment categories, and disputed the consistency and magnitude of the results. In short, narrative reviews are on occasion distressingly imprecise.

A slightly more formal approach to cumulating knowledge is the box score analysis. In essence, this method tabulates the frequency of statistically significant versus non-significant effects within a given body of studies, the "winner" being the condition with the greater frequency. Although this technique appears straightforward, the issue becomes complicated when the value of some statistically significant results are larger than others, or, worse, when the value of some non-significant results are larger than those designated as significant (determination of significance, of course, being inherently wedded to sample size)!

Several authors have concluded that both narrative reviews and box score analyses are of limited utility given their reliance on significance testing, and, further, that this has served to hinder the process of cumulating knowledge (Schmidt, 1996). Schmidt has cited several common misinterpretations accruing from statistical testing, among them: (a) a result that is statistically significant indicates whether the findings are reliable and can be replicated, (b) the significance level provides an estimate of the importance of the effect (i.e., p<0.01 is better than p<0.05), and (c) if one fails to reject the null hypothesis (p>0.05), then the results are due to chance alone and are likely zero. Each of these statements is incorrect, and can lead to gross misinterpretations about the nature of a given literature.

By way of illustration, assume we have 5 studies, all with fairly small sample sizes of 30, 40, 80, 20, and 60. The treatment is a specific type of cognitive behavioural intervention used with high-risk offenders in different settings by different staff. In each study, the researcher records the reductions in recidivism and generates a correlation coefficient (r) to reflect the reductions of 0.34, 0.30, 0.21, 0.40, and 0.23, respectively. The mean effect size across all treatment programs is r = 0.30. Clearly, the results consistently point to an effective treatment. In consulting a table of values of r for different levels of significance, however, it is apparent that none of the individual r values is significant at the

² When the first author began working in corrections 40 years ago, the literature was minuscule by today's standards (Gendreau, 1996b). There were less than a handful of requisite books or journals one need consult to remain informed.

 α = 0.05 level. A narrative review of these results would inevitably conclude that the intervention is not effective and suggest to a policy-maker that such a program be discontinued or fail to receive inaugural endorsement.³ In fact, we have seen instances in the literature where it has been demonstrated that different risk measures predicted recidivism equally well but since some correlations were "significant" and others were not, the latter were

What is an effect size?

Effect size, a term now ubiquitous in the meta-analytic literature, simply refers to the size of the result obtained in a prediction or treatment study. In other words, it is an estimate of the magnitude of the correlation between a risk measure and outcome or the difference in a measure of outcome between a treatment group versus a control group. There are several ways to calculate an effect size but the one that is most favoured for ease of use and comprehension is the Pearson correlation coefficient (r) (Rosenthal, 1991). Unless the database is extreme in some way (has very high or low base rates, small sample sizes) the *r* value, or effect size, can safely be interpreted at face value (see Cullen & Gendreau, 2000). So, for example, if a cognitive behavioural intervention for offenders produces recidivism rates of 10% versus the control group's rate of 30%, then the r value will be 0.20 (a difference of 20% between the two groups) or very close to it. Similarly, in the case of a prediction study, the fact that the LSI-R predicts recidivism at r = 0.38 simply means, assuming a 50% base rate, that the recidivism rate of offenders who score high (above a designated cut-off score) recidivate at 69% versus 31% (i.e., a 38% difference) for those who score low on the measure.

dismissed as being of little use, with the only profound difference amongst the studies being minor variations in sample size.⁴

Making better sense of research literatures: Quantitative research synthesis

How can this problem be resolved? One must standardize the review process and shift the focus of data analysis away from traditional significance testing. For example, a quiet revolution has been ongoing in medicine and psychology for about two decades whereby scholars have begun to synthesize research literatures in a more precise and quantitative fashion using a methodological process known as meta-analysis. Indeed, quantitative summary techniques have been used in the "hard" sciences for years (Hedges, 1987). One should note, however, that our goal in this chapter is not to train readers how to do a meta-analysis (they can, at times, be quite complicated and excessively timeconsuming undertakings) (such as Cooper, 1997; Shadish, 1996), but, rather, to give them a better understanding of the process.⁵ Fortunately, when it comes to the needs of clinicians and policymakers, most elementary meta-analyses will suffice (Rosenthal, 1995). In corrections, as in most applied fields, one is rarely concerned with the subtle effect of higher-order interactions, the meanings of which are often problematic. Rather, the development of sound policy on important issues such as which type of treatment is more effective in reducing recidivism or which risk measure is the more accurate in predicting reoffending is best predicated on empirical conclusions (such as Gendreau, Little, & Goggin, 1996).⁶

What does a meta-analysis look like? Let's assume one wants to examine the factors that best predict academic performance among first year university students. A representative sample of 100 undergraduates is assessed. In the case of each student, one records his/her grade point average (GPA). In addition to gender, one also notes the student's age, family socio-economic status, intellectual aptitude, study habits, types of courses, grading methods, etc. One can readily see that it would be difficult to reach anything remotely resembling a precise general conclusion regarding the predictability of the GPA on the basis of just one student's data. For example, if the student had a relatively high GPA (i.e., 4.0) and came from a "good" socio-economic family background, it would be tempting to conclude that the correlation between the two conditions was necessarily important. On the other hand, one might surmise from a study of his/her transcript that GPA magnitude was unduly influenced by the student's selection of "easy" courses. After collating the results of the above factors for all students (n = 100), however, a much clearer picture emerges as some factors will likely produce larger correlations with GPA than do others. Further statistical analyses can then sort out which of the more robust correlations are among the most important. Essentially, this is what meta-analysis does, albeit the general focus is on the single study, rather than individual, as "subject". Meta-analysis typically groups studies and the variables of concern along certain specified dimensions;⁷ expresses the outcomes of interest (i.e., recidivism) from these studies in a

³ A marginal increase of only five to ten offenders in each of the five samples, while maintaining the same effect sizes, produces markedly different results: each of the correlations is now statistically significant although the mean effect size remains unchanged (r = 0.30).

⁴ We are mindful of the fact that some researchers, as do we, choose to weight studies by sample size. We argue elsewhere that this is not necessarily axiomatic procedure; studies with large sample sizes may have less methodological quality (Gendreau, Goggin, & Smith, 2000, p. 56). ⁵ A more detailed discussion can be found in the reader-friendly, how-to "cookbooks" on

meta-analysis by Durlak (1995) and Wolf (1986).

⁶ Notwithstanding the need for standardized policies, exceptions to an overarching policy can easily be made if circumstances warrant doing so (i.e., a given risk measure is found to be superior among a small sub-sample of offenders or for a particular type of outcome).

⁷ Important study characteristics that are routinely coded include: study context country of study, author's discipline, source of funding, and year and type of publication; sample characteristics - age, gender, race, and offender risk level; variables specific to treatment studies - type of treatment, treatment dosage, "who" administers the treatment, treatment setting, program sponsorship, age of program, theoretical foundation of program, and role of evaluator; method - comparability of treatmentcontrol groups, rate of attrition, type of outcome, and length of follow-up.

common metric known as an effect size, most often Pearson *r*; averages the effect sizes obtained; statistically analyzes these effect sizes to determine if variations in the magnitude of effect size are correlated with the type of variable under investigation or study characteristics. In this way, inconsistencies in a set of seemingly variant studies are uncovered and one can pinpoint the characteristics of studies producing apparently discrepant results.

Table 25.1 depicts what a meta-analytic data base "looks like" in its most elementary form. In this very simple display a wealth of information is revealed. Data from six treatment studies are detailed and, for the sake of brevity, we report on two very important moderators (at least vis-à-vis corrections): offender risk level and quality of research design.

The studies vary considerably as to sample size ($n_{range} = 30$ to 180) and effect sizes ($r_{range} = -0.09$ to 0.34). Recall our discussion about box-score summaries and significance testing. Only 2 of 5 studies in Table 25.1 (#3, #4), produce a statistically significant effect on recidivism, yet the 95% confidence intervals (CI_r) of each of the six studies overlaps indicating that they are sampling from the same population parameter. Contrast these results with the conclusion one would reach using a box score tabulation of significant effects (i.e., treatment is ineffective).

TABLE 25.1 The relationship between treatment andrecidivism across a sample of studies

Study No.	Risk	Quality	N	r	CI _r
1	L	L	52	-0.09	-0.36 to 0.18
2	L	L	180	0.02	-0.13 to 0.17
3	Н	Н	42	0.34*	0.07 to 0.61
4	Н	L	82	0.22*	0.01 to 0.43
5	Н	Н	30	0.29	-0.04 to 0.62
6	L	Н	68	0.06	-0.18 to 0.30
Total			454	0.14	0.05 to 0.23

Note. Risk = offender risk level; Quality = study design quality; N = study sample size; r = correlation coefficient (or effect size) between age and recidivism; CI_r = confidence interval about r.

The use of the *CI* in meta-analysis is crucial. As Schmidt (1996) has pointed out, many people erroneously think that null hypothesis significance testing equally limits the probability of Type I (incorrectly concluding there is an effect) and Type II errors (incorrectly concluding there is no effect). Rather, what happens with significance testing is that, while Type I errors may be held at the 5% level (i.e., $\alpha = 0.05$), no equivalent control of the Type II error rate can be assumed. The rate may commonly, in fact, be very high, often in the 50% range (Cohen, 1988),

especially among studies with low power due to small sample sizes. Confidence estimates, on the other hand, provide a great advantage to cumulating knowledge in that they hold the overall error rate at 5% (Schmidt, 1996). That is, in only 5% of confidence intervals would one <u>not</u> expect to find the population parameter, or "true" effect size.

Thus, besides quantitatively demonstrating the degree of agreement there is within a given body of literature, meta-analysis also provides an estimate of certainty about a given effect. When the *CI* is very wide it tells the policy maker to be cautious, that conclusions about a given relationship should be regarded as tentative; more research is required. When the interval is very narrow, as in recent studies on the lack of effectiveness of time spent in prison and intermediate sanctions on recidivism (Gendreau, Goggin, & Fulton, 2000; Gendreau, Goggin, & Cullen, 1999), the policy-maker can place much more confidence in a reviewer's conclusions and, therefore, in their recommended course of action.

Returning to Table 25.1, we note the average effect size is r = 0.14, or a 14% reduction in recidivism with an associated *CI* of 0.05 to 0.23. Furthermore, following a useful procedure generated by Hedges and Olkin (1985), the effect sizes from studies can be weighted by sample size and the number of effect sizes involved which, in this case, produces a mean value of 0.10 with a *CI* bounded by 0.01 and 0.19.

Now, we have a more precise notion of the utility of the cognitive treatments in our example. Furthermore, we can examine moderators of interest within the database (i.e., offender risk or quality of program design), and repeat the procedures noted above to determine if these produce differential effects on recidivism. For example, in this case, risk level appears to be an important moderator (i.e., $r_{high} = 0.28$ vs. $r_{low} = -0.003$), in that our hypothetical treatment results in a 28% decrease in recidivism among high risk offenders versus an approximate 1% increase in recidivism among the low risk group.

Recently, "new" statistics have appeared that are welcome additions to the meta-analyst's armamentarium. One group includes the fail-safe indicators (Gendreau, Smith, & Goggin, 1999; Orwin, 1987; Rosenthal, 1991) which assist in determining the degree of confidence one can attribute to the mean effect of a given set of studies. That is, they specify how many additional studies averaging null effects, be they retrievable or unretrievable, would be required to counter the conclusions of a given meta-analysis.

We also favour the common language (*CL*) effect size indicator (McGraw & Wong, 1992). For example, in a forthcoming meta-analysis we report on which of two risk measures is the most useful for predicting offender recidivism, an issue dear to the hearts of many prison and parole officials. We found that, while both instruments were better than chance alone in predicting recidivism, one of the two produced significantly greater predictive validities (p<0.05). Clearly, a statement of statistical significance is not particularly helpful to the policy-maker or clinician in this regard. The *CL* indicator, on the other hand, is both an easily calculable and comprehensible statistic that can be of immediate utility to administrators. It provides them with a probabilistic statement of the relative performance of each of a pair of variables with outcome. For example, in the aforementioned meta-analysis, the *CL* indicated that one of the two risk measures produced higher correlations with recidivism 78% of the time (Gendreau, Goggin, & Smith, 1999). This is an example of the limitations inherent in significance testing and the benefits of somewhat more practical information in making informed decisions.

FUTURE OF META-ANALYSIS

Meta-analysis has now become the review method of choice and has led to significant advances in knowledge on issues in a variety of fields (Hunt, 1997) including criminal justice (Gendreau, Goggin, & Smith, 2000). Indeed, in a quantitative comparison of the results of narrative versus meta-analytic reviews, Beaman (1991) found that meta-analyses out-performed narrative reviews by about 50% on average in their description of myriad study characteristics including the nature and conditions of the literature under review, the direction and magnitude of the effect size in question, as well as the relationship between the results and specific moderators.

Narrative summaries also tend to underestimate the magnitude of an effect (Cooper & Rosenthal, 1980). This may be due to the fact that those conducting such reviews are unduly cautious in their conclusions, lacking as they do the collaborative support of exact quantitative effect size estimates.

Admittedly, meta-analytic procedures are no panacea. Anyone who has conducted one knows full well that the meta-analyst faces a number of complex, subjective decisions regarding study coding and type of analysis. Also, there are some meta-analytic issues that, as Cooper (1997, p. 179) has noted, "*often baffle even sophisticated data analysts.*" The meta-analytic review is sometimes portrayed as the definitive answer but, in our experience, after having meta-analyzed several correctional literatures, we have concluded that the studies in some of these literatures were so lacking in essential details that additional primary research is still needed (Gendreau et al., 1996; Gendreau, Goggin, & Smith, 1999) before one could furnish clinicians and policy-makers with more definitive conclusions. In addition, there are literatures that have so few quantitative studies that a narrative review must suffice for the moment.

Granted the above caveats, however, in our view, there is no avoiding the use of quantitative research syntheses to foster much needed respect for evidence in the field of corrections. As noted elsewhere (Gendreau, 1999), we would consider it a victory if even 20% to 40% of our policies were derived from metaanalytic approaches.

REFERENCES

- Andrews, D. A., & Bonta, J. (1998). The psychology of criminal conduct, 2nd edition. Cincinnati, OH: Anderson Press.
- Beaman, A. L. (1991). An empirical comparison of meta-analytic and traditional reviews. *Personality and Social Psychology Bulletin*, 17, 252-257.
- Campbell, D. T. (1969). Reforms as experiments. *American Psychologist, 24*, 409-428.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum.
- Cooper, H. (1997). Some finer points in meta-analysis. In M. Hunt (Ed.), *How science takes stock: The story of meta-analysis* (pp. 169-181). New York, NY: Russell Sage Foundation.
- Cooper, H. M., & Rosenthal, R. (1980). Statistical versus traditional procedures for summarizing research findings. *Psychological Bulletin*, 87, 442-449.
- Cullen, F. T., & Gendreau, P. (1989). The effectiveness of correctional treatment: Reconsidering the "nothing works" debate. In L. Goodstein & D. L. MacKenzie (Eds.), *The American prison: Issues in research and policy* (pp. 23-44). New York NY: Plenum.
- Cullen, F. T., & Gendreau, P. (2000). Assessing correctional rehabilitation: Policy, practice, and prospects. In J. Horney (Ed.), *National Institute of Justice criminal justice 2000: Changes in decision making and discretion in the criminal justice system*. (pp. 109-175). Washington, DC: Department of Justice, National Institute of Justice.
- Durlak, J. A. (1995). Understanding meta-analysis. In L. G. Grimm & P. R. Yarnold (Eds.), *Reading and understanding multivariate statistics* (pp. 219-252). Washington, DC: American Psychological Association.
- Fulford, R. (1995, October). Regarding Henry. Report on Business Magazine, 91, 67-74.
- Gendreau, P. (1996a). The principles of effective intervention with offenders. In A. T. Harland (Ed.), *Choosing correctional interventions that work: Defining the demand and evaluating the supply* (pp. 117-130). Newbury Park, CA: Sage.
- Gendreau, P. (1996b). Offender rehabilitation: What we know and what needs to be done. *Criminal Justice and Behavior, 23,* 144-161.
- Gendreau, P. (1999). Rational policies for reforming offenders. The ICCA Journal of Community Corrections, 9, 16-20.
- Gendreau, P., Goggin, C., & Cullen, F. (1999). The effects of prison sentences on recidivism. Ottawa, ON: Solicitor General Canada.
- Gendreau, P., Goggin, C., & Fulton, B. (2000). Intensive supervision in probation and parole. In C. R. Hollin (Ed.), *Handbook of offender assessment and treatment* (pp. 195-204). Chichester, UK: John Wiley.
- Gendreau, P., Goggin, C., & Smith, P. (1999, May). Predicting recidivism: LSI-R vs. PCL-R. Canadian Psychology Abstracts, p. 40, 2a.
- Gendreau, P., Goggin, C., & Smith, P. (2000). Generating rational correctional policies: An introduction to advances in cumulating knowledge. *Corrections Management Quarterly*, 4, 52-60.
- Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of adult offender recidivism: What works! *Criminology*, 34, 575-607.
- Gendreau, P., & Ross, R. R. (1979). Effective correctional treatment: Bibliotherapy for cynics. *Crime and Delinquency*, 25, 463-489.
- Gendreau, P., & Ross, R. R. (1987). Revivification of rehabilitation: Evidence from 1980s. Justice Quarterly, 4, 349-407.
- Gendreau, P., Smith, P., & Goggin, C. (1999). *Catching up is hard to do: A fail-safe statistic for policy-makers.* Unpublished manuscript, Centre for Criminal Justice Studies, University of New Brunswick at Saint John, NB.
- Glass, G., McGaw, B., & Smith, M. L. (1981). Meta-analysis in social research. Beverly Hills, CA: Sage.
- Granatstein, J. L. (1982). *The Ottawa men: The civil service mandarins*, 1937-1957. Toronto, ON: Oxford Press.
- Hedges, L. V. (1987). How hard is hard science, how soft is soft science: The

empirical cumulations of research. American Psychologist, 42, 443-455.

- Hedges, L. V., & Olkin, I. (1985). Statistical methods for meta-analysis. San Diego, CA: Academic Press.
- Hunt, M. (1997). How science takes stock: The story of meta-analysis. New York, NY: Russell Sage Foundation.
- Hunter, J. E., & Schmidt, F. L. (1996). Cumulative research knowledge and social policy formulation: The critical role of meta-analysis. *Psychology, Public Policy, and Law, 2,* 324-347.
- Krugman, P. (1994). Peddling prosperity: Economic sense and nonsense in the age of diminished expectations. New York, NY: Norton.
- McGraw, K. O., & Wong, S. P. (1992). A common language effect size statistic. *Psychological Bulletin*, 111, 361-365.
- Orwin, R. G. (1987). A fail-safe N for effect size in meta-analysis. Journal of Educational Statistics, 8, 157-159.

- Osbaldeston, G. (1989). Keeping deputy ministers accountable. Whitby, ON: McGraw-Hill.
- Redondo, S., Sanchez-Meca, J., & Garrido, V. (1999). The influence of treatment programmes on the recidivism of juvenile and adult offenders: A European meta-analytic review. *Psychology, Crime and Law, 5*, 251-278.
- Rosenthal, R. (1991). *Meta-analytic procedures for social research*. Beverly Hills, CA: Sage.
- Rosenthal, R. (1995). Writing meta-analytic reviews. *Psychological Bulletin, 8*, 183-192.
- Savoie, D. J. (1999). Governing from the centre: The concentration of power in Canadian politics. Toronto, ON: University of Toronto Press.
- Schmidt, F. (1996). Statistical significance testing and cumulative knowledge in psychology: Implications for training of researchers. *Psychological Methods*, *1*, 115-129.
- Shadish, W. R. (1996). Meta-analysis and the exploration of causal mediating processes: A primer of examples, methods, and issues. *Psychological Bulletin*, *1*, 47-65.
- Starobin, P. (1997, July). Word warriors. *The Washingtonian, 32,* 48-51& 101-103. Wolf, F. M. (1986). *Meta-analysis: Quantitative methods for research synthesis.*
- Newbury Park, CA: Sage.

JAMES McGUIRE¹

THE IMPORTANCE OF EVALUATION

Today it is virtually a universal requirement of services provided from public funds that they be evaluated and that information be available regarding their overall effectiveness. This is a product of several interacting forces. One of them has its origins in a growing popular and political desire for the most prudent fiscal management of government expenditure. Over recent decades, the adoption of monetarist policies by some countries, coupled with the escalating costs of public services has led to a drive towards greater accountability. Often, this has been associated with efforts to reduce taxation and to measure the effectiveness ("value for money") of services funded from it.

A second factor has been growing awareness that a significant volume of research has been published on many aspects of human services. Yet simultaneously, portions of it have not been adequately synthesized into an accessible format. Were this to become available, it would be much easier for research findings to be used to inform professional practice, service management, and policy formation by government departments.

Third, the possibility of conducting that work has been facilitated by the development of new methods of statistical review of research findings, which though first developed at the beginning of the twentieth century only came to be extensively used from approximately 1980 onwards. The findings of such *metaanalytic* reviews have had particular significance for correctional services in dispelling the therapeutic nihilism of the phrase "nothing works".

Interest in evaluation can be viewed as one component of *evidence based practice*. It may come as a surprise to find that the applied sectors of a discipline should be anything other than evidence-based. Regrettably that has been the position in several fields for a considerable time. But during the last three decades, many academics and practitioners have themselves become acutely aware of the discrepancies to which it leads. The emphasis on furnishing an evidence base for interventions, particularly in the field of health care, came from within the medical profession itself.

In a seminal paper, the medical epidemiologist Cochrane (1979) raised the question of whether medicine and related health research fields could genuinely claim to have sound empirical foundations, as there was no systematic record of the outcomes of their interventions. Cochrane bemoaned the fact that no critical

summary existed of research findings, for example, of randomized controlled trials relevant to a given question about the efficacy of interventions. In the wake of this challenge medical researchers became progressively more conscious of these limitations. Mulrow (1987) examined a set of 50 review articles published in medical journals over a selected twelve-month period (June 1985 to June 1986). Her survey found major shortcomings in the manner in which reviews were conducted and reported. Remarkably, only one of the reviews clearly specified the source of information on which it was based. Only three reviews employed quantitative methods of synthezising the information obtained from the original articles they had surveyed. Mulrow concluded that there was a need for sizeable improvement in the manner in which reviews, which play such an essential part in the advancement of knowledge, were carried out.

Concerns such as these played a driving role in the 1993 inauguration of the Cochrane Collaboration, an international network of researchers and reviewers co-ordinated through 15 separate sites in Europe, North and South America, Australia, and South Africa. Over recent years, this has led to a considerable degree of activity in attempting to remedy the deficits identified. Between 1994 and 1999, more than 50 Review Groups were established through the Collaboration, each covering a specific field or branch of inquiry. In each case, their task was to locate, evaluate and integrate the results of well-designed intervention studies, usually (randomized controlled trials) RCTs. By 1999 the available set of outcome studies, assembled in the Cochrane Database of Systematic Reviews, and derived from detailed searches of over 1,100 research journals, contained more than a quarter of a million entries. These are accessible to researchers and other users through the Cochrane Library, established on an Internet web-site and updated on a quarterly basis.

The pursuit of a more systematic basis on which to draw conclusions concerning outcomes has not been restricted to the field of health. In education, pioneering work was done in attempting, for example, to clarify the relationship between class size and educational achievement, which despite earlier efforts to detect clear trends had remained unresolved (Glass, McGaw, & Smith, 1981). In social work, despite early reviews that questioned aspects of its effectiveness (Fischer, 1973, 1978), later overviews reported more encouraging results (MacDonald, Sheldon, & Gillespie, 1992; Russell, 1990). There is presently a significant drive to establish it on a firmer and more extensive empirical basis (MacDonald, 1999).

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CORRECTIONAL SERVICES

The origins of the present era of interest in evaluations of criminal justice services is often traced to the period 1974-1976, when research reviews were conducted on both sides of the Atlantic. The perceived primary objective of most intervention research in this field is to discover methods of reducing offender recidivism. In the United States, a review was centrally commissioned and published subsuming 231 treatment studies (Lipton, Martinson, & Wilks, 1976). Martinson (1974) increased the public significance of these findings prior to their final appearance by the extensive media attention arising from the appearance of his paper. In the United Kingdom, Brody (1976) reviewed 100 studies of the impact of different types of court sentences and other interventions. The drawing of clear conclusions was hampered in both reviews by the poor quality of the research. But the available findings appeared to point towards very little if any discernible impact in terms of reduced rates of reoffending. Martinson's general summary of findings was that "treatment", by which he meant any added ingredient in criminal justice agencies such as provision of counselling, education, vocational training or psychological therapy, added nothing to the available network of criminal justice sentences, sanctions, and other formalized legal procedures.

These conclusions were questioned by several critics, principally on the grounds that the reviewers had ignored more positive evidence (Palmer, 1975; Ross & Gendreau, 1980). The latter publication was an edited book containing reports on effective services in which there was evidence of reductions in recidivism. Ironically, Martinson himself (1979) reversed the thrust of the negative conclusions he had initially drawn. Current evidence reviewed elsewhere in this *Compendium* has firmly demonstrated the invalidity of his earlier claims. On the basis of many hundreds of evaluations and a series of integrative meta-analytic reviews, there is a consensus that knowledge in this field has advanced considerably concerning the ingredients of effective correctional programs.

Recently, a new initiative has been launched, known as the *Campbell Collaboration* (a parallel to the *Cochrane* review process), with its primary centre of activity at the University of Pennsylvania (Boruch, Petrosino, & Chalmers, 1999). The focus of its work will be upon social and educational as opposed to medical and health-related interventions. It appears feasible that this collaboration may also bridge the gap between the work of *Cochrane Review Groups* and of the large-scale reviews undertaken by specialists in the field of offender treatment (Petrosino, Boruch, Rounding, McDonald, & Chalmers, 1999). A new database of studies, the *Social, Psychological, and Criminological Trials Register (SPECTR)* has been compiled; specialized conferences have been held; and a new set of reviews begun to be commissioned.

That there is now extensive interest in evaluation of criminal justice services and interventions with offenders can hardly be in doubt. In the United Kingdom, all the agencies working with offenders have begun to pursue this agenda. The provision of programs designed to reduce recidivism was introduced as a key performance indicator by the prison service in 1996. The pressure to adopt evidence-based practice and conduct evaluations has also been felt very keenly in probation and other communitybased criminal justice services. One initial source of the latter was a report by the Audit Commission (1989), a body that monitors the spending of other government agencies and local authorities. This report pointed out that while there were many imaginative and apparently valuable schemes in operation within probation services, little work was done to examine them systematically and identify the most useful forms of work. During the later 1990s, interest in this accelerated. The British government's Inspectorate of Probation embarked on an effective practice initiative to establish the extent to which activities within probation services met the overall goals of public protection and reduction of reoffending. Subsequently, the Audit Commission (1996) published a similarly influential report on youth justice services, questioning the pattern of spending and emphasizing the need to evaluate interventions and other aspects of service provision.

EVALUATION FRAMEWORKS

The present position regarding evaluation is such that it would now be seen as unacceptable to embark on any new departure within corrections without incorporating evaluation proposals in the project specification. Given that premise, this chapter is focused on the logic of the evaluation process, the types of procedures that flow from it, and their assembly in a coherent framework.

In different circumstances or viewed from different perspectives, the goals of evaluation can vary considerably. To practitioners, some approaches to evaluation often appear to be very mechanical or abstract. They seem divorced from the more complex and disorderly real-world setting in which most work with offenders is carried out. At the same time, practitioners often want to carry out an evaluation, yet have only minimal interest in providing results that would interest the wider scientific community. The motives for evaluation are different again when, for example, the managers of a correctional program or those who provided its funding want to evaluate its benefits, to assist them in making decisions over its future.

Posavac and Carey (1997) have subsumed the numerous objectives of evaluation into three broad categories. *Formative evaluations* are conducted with the aim of strengthening plans for service provision, shaping the nature of services, or improving their efficiency. *Summative evaluations* are focused upon outcomes, and inform decisions about whether to continue with programs or to choose between alternative forms of service. It should be noted that the outcomes of such evaluations themselves rarely determine decisions about the fate of a program, which will be taken on the basis of a wider range of information. *Monitoring* is a process of using feedback (and of creating systems that will generate it) to ensure the quality of a program is maintained.

Stecher and Davis (1987) have described evaluation processes applied to social programs, such as offender services, and have proposed a taxonomy of five different approaches to the task. The categories they describe overlap with each other to some extent, but there are important differences between them, stemming principally from different aims that evaluation may be intended to serve. The five approaches are:

- *Experimental.* Here, an attempt is made to view a program from outside, and to be as rigorous as possible in the evaluation. The overall aim is to reach conclusions that can be *generalized* widely in a scientific sense, and that will be of interest to the research community. The outcomes of such an evaluation may be intended to serve the purpose of contributing to the wider field of knowledge of which the study forms a part. The potential audience for such knowledge is worldwide.
- ◆ Goal-oriented. With this, a program's stated aims are examined, criteria for evaluating their achievement are identified in consultation with project staff, and outcomes evaluated accordingly. This involves a process of interaction between researchers and practitioners. The resultant findings are unlikely to be generalizable, but could nevertheless be of external interest when compared with projects with similar objectives.
- Decision-focused. Adopting this approach, particular attention is paid to discerning the loci of decision-making within an agency or service, and to providing information that will assist program managers in decision-making. This approach bears the strongest similarity to *audit* as used by service managers, but goes beyond the mere collection of quantitative data (such as numbers of admissions to a penal institution) by examining the processes and decisions influencing such flows.
- User-oriented. This is intended to supply items of information that will influence the direct use of a program in some respect. It may entail obtaining user feedback on several aspects of a program's performance. "Users" in this case might refer to a range of people or groups. For correctional programs it could include courts, service managers, practitioners, government agencies, the public, or offenders themselves.
- *Responsive.* Here, an attempt is made to describe programs from the perspectives of all those involved, and to collect information that will meet each of their needs. This is typically more qualitatively based, but may also employ data sources found in the other four types of approaches.

It is possible in practice to combine these orientations and carry out evaluation with a number of aims simultaneously in mind. If this is done, it is important to have clear guidelines as to the various kinds of data to be collected, the rationales for doing so, and the eventual uses to which any evaluative information will be put. Posavac and Carey (1997) describe a fuller list of eleven different types of evaluation model: traditional, socialscience, industrial inspection, "black box", objectives-based, goalfree, fiscal, accountability, expert opinion, naturalistic, and improvement-focused. In many respects these are sub-divisions of some of the approaches in the above list.

Many evaluation projects in correctional services often take a hybrid form in terms of the foregoing scheme. It is more than likely that several aims will be embodied within them simultaneously. Thus while some attempt might be made to secure results that can be generalized, the likelihood of being able to achieve this is often low, given that the practical day-to-day concerns of agencies are the provision of services to courts and clients. It is the continuing tension between these two sometimes competing concerns that makes evaluation of services recurrently problematic.

For example, the concept of interactive evaluation embodied in the *goal-oriented* approach may appear alien to those who favour a more distant and detached attitude towards estimating effectiveness. It may be thought that there is a danger that evaluators will be seduced into employing only such measures as are guaranteed to produce good results for program leaders. Evaluators may wish to debate whether the objectives set for a program are the most suitable ones given other aspects of its context. It may be only by considering this that they can account for the program's overall effects.

To circumvent some of these difficulties Posavac and Carey (1997) advocate the use of an *improvement-focused* model of evaluation. *"Improvements can be made in programs where discrepancies are noted between what is observed and what was planned, projected, or needed"* (1997, p. 27). In this sense, all evaluation is integral to program delivery and constitutes a feedback loop to its design and delivery. This type of relationship is shown in Figure 26.1.

The most appropriate resolution of all conflicts that may arise when planning an evaluation, and the best combination of approaches, has to be decided on a project-by-project basis by those conducting the evaluative work. All of this suggests that the first kind of issue to be addressed before embarking on an evaluation is that of why it is being undertaken. Who is asking for it to be done? What is it for?

PROGRAM AIMS AND OBJECTIVES

It is another pre-requisite of effective evaluation that there be some objective against which a correctional service or program can be evaluated. Preferably, such objectives should be stated in a form that renders them suitable to an evaluation process. Goals of public policy or of large governmental agencies are commonly stated in fairly general terms, making reference for example to "community safety"; a composite of many factors which requires

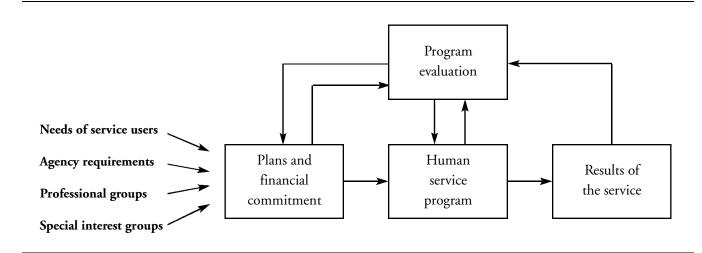


Figure 26.1 Evaluation provides a feedback loop to programs (adapted from Posavac and Carey, 1997)

further analysis to yield outcomes that could be methodically assessed. This applies equally to the kinds of products of official boards or working committees known collectively as "mission statements". Diffuse, inadequately specified goals are not amenable to proper evaluation.

At the level of intervention programs or projects, it should be feasible to provide objectives that are clear and explicit. The process of arriving at this is beneficial for almost every aspect of the working of an agency and delivery of its services. Clear goals can be communicated to personnel such that each member of staff fully understands his or her task. This supports the achievement of proclaimed objectives both directly, by enabling staff to grasp the requirements of their roles, and indirectly, through its effect on morale and organizational cohesiveness. Without clear aims, there will be difficulties at every level. Explicit, clearly defined objectives are also essential to the process of evaluation. There is a useful acronym here encapsulated in the concept of SMART objectives (specific, measurable, achievable, realistic and time-limited). The closer a program's objectives come to meeting these criteria, the easier it will be to evaluate them.

Correctional programs in particular should be scrutinized for the clarity of their objectives. Once these are agreed, they simultaneously furnish a rationale for other components of the service. Researchers in the field of criminal justice have recognized the importance of this. Criteria for accreditation of programs almost universally include the stipulation that a program should be founded upon an *explicit model of change*. This presents a target for intervention and a rationale for the methods to be employed. It is thus inextricably linked to the statement of objectives of any program. To sum up, then, the second key question evaluators must ask themselves therefore is: What are the objectives of the program to be evaluated?

RESEARCH LOGIC AND THE DESIGN OF EVALUATIONS

Research work is usually considered to be the exclusive preserve of specialists. This image probably derives from the physical and biological sciences, where costly and elaborate equipment is required for the conduct of most experiments. But large-scale social science studies too can be expensive and may use complex methods of data analysis (sometimes yielding research results that are as robust as those of the "hard" sciences; Hedges, 1987). Whatever the field, research by its very nature is generally seen as an activity separate from the work undertaken by most practitioners, and not accessible to them.

The fundamental principles of research and evaluation are fairly simple: they are attempts to answer questions. Their intricacies arise from two inter-connected problems. First, it is surprisingly difficult to ask questions that are sufficiently clear to allow meaningful answers to be given (Dillon, 1990). Second, unless considerable care is taken in thinking about what given answers will mean, the process of interpreting them can be formidably difficult.

All the complexities of research methods flow from attempts to observe these fundamental points. *Research design* is a set of established rules or principles that safeguard against the numerous errors that might be made along the way. If research is to be valid and its results are to make sense, careful thought must be given to designing it. Only then will the information obtained provide clear and accurate answers to the questions posed.

Evaluation is commonly based on some notion of change over time. A fundamental assumption then is that information will be gathered on at least two points in time, usually at the beginning and at the end of an intervention. These can be designated in various ways, most commonly, by the phrases *pre-test* and *post-test* respectively, but occasionally using some other nomenclature such as T_1 and T_2 . Evaluation studies in criminal justice will usually also have a follow-up point (T_3), and in some research there may be several such points (e.g., 12, 24 or 60 months after the intervention). For correctional interventions, it was argued some time ago that a minimum acceptable follow-up period is two years (Logan, 1972).

For the foregoing reasons, *controlled experimental designs* are unanimously favoured as the most rigorous and robust form of evaluative research. By systematically controlling for a range of factors collectively known as *extraneous variables*, such studies allow for the best tests of hypotheses and the drawing of clear conclusions. Ideally, members of the different samples (*experimental conditions*) in such a study should be allocated on a random basis, creating what is known as a *randomized controlled trial* or RCT. In an RCT, members of different groups are matched on all variables other than their presence in experimental or control conditions. Their random allocation to these samples means that any differences then found are due to the researcher-controlled variables that differentiated the groups (i.e., provision of some form of treatment or training).

For evaluating the effectiveness of treatment with offenders, the best designed research involves working along these lines to make controlled comparisons between parallel groups. There are usually two kinds of groups. One, the experimental group, receives the treatment that is the object of the study and which is hypothesized by the investigator to have some desired effect. The details of this treatment should be clearly specified. The other, the control group, should be carefully matched with the first in background characteristics that may be relevant to the outcome. These might include age, gender, ethnicity, numbers or types of previous convictions, and other key demographic or criminological variables. Members of this group do not receive any treatment, and care should be taken to ensure the two groups do not interact. Hence, in well-designed research, the only difference between the two groups will be in the independent variable: the intervention used with one group and not the other. The logic of sound design is thus that any obtained difference in outcome — which is then designated the dependent variable - can only be explained in terms of this planned difference in the independent variable.

In more elaborate research designs, a third group is added: the *attention control* or *placebo* group. This is intended to evaluate the possible impact of being involved in an experimental trial. It is well known that attention and interest can themselves influence people taking part in research. Observed changes may be due to this rather than to the intervention as such. Inclusion of a placebo group helps the researchers to evaluate the potential importance of this factor. The placebo group should receive the same level of input in terms of time as the experimental group, but in research terms this input should be *inert*, that is it should not contain the methods of intervention whose hypothesized impact is being evaluated. In summary, there are several factors to take into account in well-conducted evaluation. Figure 26.2 illustrates some of the characteristics of an idealized design for evaluation in a correctional setting.

Most evaluation research inevitably falls below the standard implied in Figure 26.2. Not only are the phenomena under investigation intrinsically very complex; many variables are simply beyond the control of researchers. These difficulties notwithstanding, much research fails to observe the principles implicit in this design. Reviewers in the academic journals repeatedly criticize the poor quality of published studies for their lack of *methodological rigour*. Given the number of variables that can detract from sound design, the task faced by all evaluators is one of minimizing the number of them that might otherwise explain the findings. The purpose of good experimental designs is to reduce or eliminate the effects of such variables.

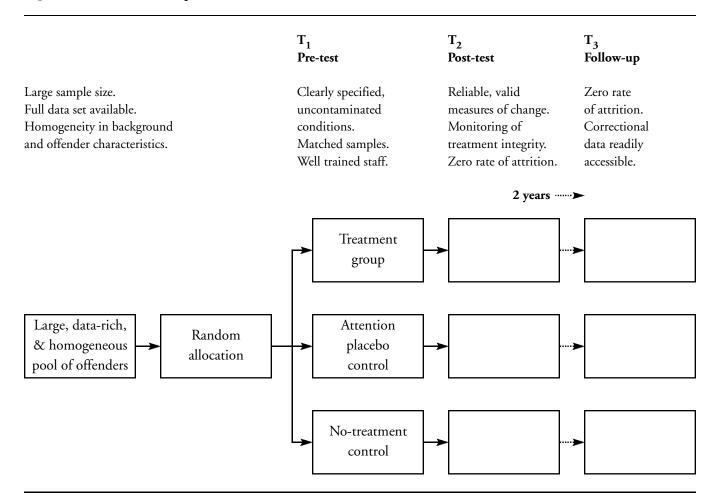
In research terms these factors are called *threats to validity*. The validity of an evaluation experiment is the extent to which any effects that are observed in the treatment group can be attributed to the effect of the intervention, *and the intervention only*. Cook and Campbell (1979) have categorized different types of validity in research and identified various kinds of *threats* to each of them. There are two main types of validity, *internal* and *external*, alongside other types that have to do with the valid use of inferential statistics.

Internal validity is a measure of the extent to which, within any single experiment or evaluation, the influence of extraneous variables has been reduced. This may be threatened by several obstacles, including:

- the possibility that experimental and control groups were not matched in crucial ways;
- the fact that there was *contamination* between the groups, or between one group and outside factors;
- the possibility that historical factors and events in the individuals' lives differentially affected members of the experimental, control or placebo groups;
- different loss or attrition rates in groups between the beginning and the end of an evaluation;
- changes in the way assessment and evaluation instruments may have worked at different points in time (*calibration error*).

External validity refers to the extent to which the results of a research study can be generalized outside the experimental sample: to other groups, in other places at other times. There are three sub-types of this form of validity, known as population, ecological, and temporal validity respectively. There are threats to this type of validity also. They include:

- the use of biased or unrepresentative samples;
- experimenter effects and the influence of demand characteristics on participants' expectations;
- multiple-treatment interference effects;
- usage of *analogue* participants.



Random-allocation experiments still form only a small proportion of published reports in correctional research. An exception is the study by Ross, Fabiano, and Ewles (1988) of the *Reasoning and Rehabilitation* program in which a group of offenders was randomly sub-divided into three sub-samples. One group attended $R \not\subset R$, which was the treatment of interest. The second attended a lifeskill program, which in effect acted as a placebo; while the third that were placed under conventional probation supervision acted as a no-treatment control. In this study as in others, "no-treatment" refers to minimal contact that contains no identified program. This is sometimes depicted as "business-as-usual" in correctional intervention experiments.

The reason for the relative scarcity of randomization is of course that decisions to allocate offenders to different disposals are predominantly made by courts of law. Comparisons between samples of offenders sentenced in different ways, or between those who voluntarily participate in a program and those who decline, cannot be true experiments: the respective groups are *non-equivalent*. Where this occurs, researchers resort to using what are known as *quasi-experimental designs* (Cook & Campbell, 1979) in which samples are constructed on a non-random basis. McGuire, Broomfield, Robinson, and Rowson (1995) used a design of this kind for evaluation of probation-based group programs.

In reviewing a range of evaluation studies in correctional settings, Sherman, Gottfredson, MacKenzie, Eck, Reuter, and Bushway (1997) developed a *scientific method score* in which studies were allocated to one of five groups depending on the level or quality of design used in the evaluation. Scores are allocated as follows:

- 1. *Correlational designs.* These are the weakest forms of evidence, in which there is only an association between program participation and alterations in rates of offending at a specific point in time.
- 2. *Single-group pre-post designs*, in which program participants are assessed prior to and after participation in the program; or non-equivalent control group designs in which they are compared with a control sample which may differ from them in some important respects.
- 3. *Equivalent control group design.* Here, the experimental or treatment group is compared with a sample that

is broadly equivalent on key variables and also on pre-assessment measures.

- 4. *Control of extraneous variables.* In these studies there is closer matching of groups, for example in scores on predictor instruments, and major external influences are controlled.
- 5. *Randomized experimental design.* Individuals are drawn at random from an initial sample for allocation to experimental and control groups.

RESEARCH DESIGN LIMITATIONS

The idealized type of design outlined earlier, which receives the highest value within the *experimental* evaluation framework (as categorized by Stecher & Davis, 1987), and would receive a rating of 5 in Sherman et al's (1997) scoring system, has its epistemological foundations in the way research might be conducted in controlled laboratory conditions. This creates a dilemma: such findings can rarely be extrapolated to the more chaotic setting of correctional environments. Conversely, experiments conducted there almost always have many uncontrolled variables. According to Robson (1993), it is almost as if the respective requirements of internal and external validity work against each other. The better controlled a study is, the safer are the conclusions to be drawn from it: but they may not be applicable elsewhere.

Recognition of the gap between well-controlled evaluative trials and implementing their findings in practice has been a topic of major controversy in mental health research (Dobson & Craig, 1998; Persons & Silbersatz, 1998). It has been argued that a distinction must be made between treatment efficacy and service effectiveness. The former is based on evidence that an intervention worked when used in the limited conditions of an RCT. The latter refers to evidence of genuine success of the intervention in real-world conditions. There is an agreed need to find ways to bridge the gap between the two. One proposed solution is to conduct more evaluations that have greater ecological validity. While many correctional evaluations do not achieve the standards of an RCT, paradoxically they may have other advantages. Evaluating a program in the actual conditions in which it will have to survive in practice is a better all-round test of its feasibility as well as its potential effectiveness.

Another possibility often advanced to span the research-practice divide is to make more extensive use of *single-case research designs*. These represent a fusion of experiment with practice in which an intervention is evaluated with one individual (or a small sample or *case series*). The design logic runs as follows. If the introduction of an intervention (that is, an attempt to change an individual's behaviour) is uniquely associated with changes in the target variable (that is, there are no changes in it at other times), then the likelihood is reduced that other explanations for the change are true. There are several varieties of such designs, and a number of studies have been published employing them with offenders (McGuire, 1992). Space does not permit more detailed coverage of this issue here. Single-case research designs are described in some detail in books such as those by Barlow and Hersen (1984), and Kratochwill and Levin (1992).

WHAT TO MEASURE AND HOW

The range of information that can be assembled in an evaluation is potentially very wide. Data can be classified in many ways. They may be quantitative or qualitative. They can be defined according to the domain of information-gathering (e.g., demographic/background, behaviour/experience, knowledge, opinion/value; Patton, 1987). Alternatively they may be conceptualized in terms of the kind of method used to obtain them (such as interviews, observation, psychometric, criminological, econometric). The following are some of the principal types of data likely to be sought in correctional evaluations. Few studies would be likely to include all of them.

Demographic and criminological data

Most evaluations of correctional services will likely include some descriptive data on offenders themselves. The main types typically reported include: gender, age, ethnic group, employment and socio-economic status, marital status, years of formal education, family background, and other important developmental information (such as history of contact with welfare services or other agencies). Typical criminological indicators used in research include numbers and types of previous convictions; age at first conviction; sentencing history (numbers and types of court disposals), and changes in patterns of reoffending over time. What is of prime interest of course is whether or not the latter indicators are subsequently influenced by participation in the program being evaluated.

Audit information

Evaluators will generally seek access to information about the organization and delivery of a project. This could encompass data such as numbers of referrals made, numbers of offenders sentenced, numbers commencing in the program, attendance, absconding and completion rates, amounts of time spent on various activities, staff-prisoner ratios, total and *per capita* running costs. Managers routinely seek evidence of this kind for internal purposes. It will inform an agency's policies on resource levels, including allocation of personnel.

Risk-needs assessment

Over recent years there has been an emphasis on the importance of risk-needs principles in the design of correctional programs. This has been facilitated by the increasing availability of wellvalidated assessment and predictor scales. They include for example the *Level of Service Inventory* (Revised) (Andrews & Bonta, 1998); the *Manitoba-Wisconsin Risk-needs Classification System* (Bonta, 1996); the Offender Group Reconviction Scale (Copas, 1995; Taylor, 1999); or the Violence Risk Appraisal Guide (Quinsey, Harris, Rice, & Cormier, 1998). While some of these are purely actuarial in methodology, others entail particular formats for using actuarial and clinical information in specific combinations. Recently, some commentators have noted the need to include other historical and situational variables, in a procedure called anamnestic risk assessment (Melton, Petrila, Poythress, & Slobogin, 1998).

Recidivism

The measurement of criminal recidivism holds a pivotal place in evaluation of correctional interventions and is usually seen as the ultimate test of their effectiveness. Some commentators have described the search for methods of reducing recidivism as the "secular grail" of research in this field (Lab & Whitehead, 1990). But recidivism itself can be measured in various ways and inconsistencies in this area have been a cause of much misunderstanding and controversy. Depending on the targeted age-group, correctional context or other factors, outcome criteria may vary considerably. The data chosen may consist of rates of: arrest; re-conviction; parole violation or breach of supervision or probation; reincarceration following new convictions; recall to prison whilst on license; or re-admission to secure hospital.

Also, most research on reoffending focuses simply on the event itself, gauged by one of the preceding methods. Relatively few studies take into account its type or level of seriousness; or with repetitive offending, its distribution over time. One approach to the latter is the use of comparative survival rates (time to reconviction) for different cohorts of offenders. Weekes, Millson, and Lightfoot (1995) used this type of data to evaluate the relationship between offender performance on a substance abuse pre-release program and rates of return to custody following release. Henning and Frueh (1996) also used it to evaluate a cognitive self-change program for violent offenders. Given the effort and timeinvestment involved, still fewer studies examine the relation of crimes to other events and circumstances in offenders' lives. As Motiuk, Smiley, and Blanchette (1996, p. 12) have remarked, "... research into program effectiveness must look deeper into the nature of recidivism." To incorporate such factors into evaluations, in-depth information would have to be collected, based on interviews with clients or examination of court depositions.

An example of research of this kind is the work of Zamble and Quinsey (1997). These authors have reported on a follow-up study of 311 men discharged from Canadian prisons who reoffended, and compared them with a much smaller sample (n = 36) who did not. Recidivists reported more problems in the period after release, but had fewer or less effective skills for coping with them. Recidivists more often experienced, and had poorer strategies for managing, negative emotional states such as anger, anxiety and depression. They also thought more frequently about substance abuse and possible crimes, and less about employment and about the future in an optimistic light. They experienced greater fluctuation in emotional states in the 48 hours preceding a reoffence. These findings have potentially enormous value for the design of relapse prevention and other types of both pre-release and post-release intervention with high-risk individuals.

When interpreting recidivism rates, care must be taken to exclude *pseudo-reconvictions* that are the result of offences committed before the commencement of an intervention (Lloyd, Mair, & Hough, 1994). Ideally, comparisons should be made between the actual recidivism rate for a group of offenders and their projected rate based on predictor scales, as well as with suitable control groups.

Participant feedback

Some evaluations are based on offender or consumer feedback. Measures of attendance are one crude form of this. If offenders have choices over whether or not to attend a program, their level of participation may be one signal of its success or failure. Trends in attendance rates were used as a measure of the effectiveness of a life skills program introduced in a probation centre in the United Kingdom (Priestley, McGuire, Flegg, Barnitt, Welham, & Hemsley, 1984). Verbal or written feedback concerning responses to a program can be collected without too much difficulty using interviews or questionnaires. An example is the evaluation of the Edmonton Institution for Women's Peer Support Program (Eamon, McLaren, Munchua, & Tsutsumi, 1999). Though data of this kind are sometimes perceived as "soft" and unreliable, they can yield valuable information concerning responsivity and may provide explanations for differential impact of program components or degrees of attendance or completion.

Intervening variables

More elaborate evaluations of correctional programs are likely to focus on the extent of change in variables targeted by the program. In most evaluations, the variables so assessed will be ones hypothesized to mediate between the interventions being applied (the independent variable), and actual changes in offenders' behaviour (the dependent variable). Hence, attempts may be made for example to assess knowledge, attitudes, thinking patterns, affective states, behavioural skills, and personality dimensions; or features of lifestyle, such as numbers of criminal associates or levels of conflict with significant others. The choice of measures used will depend on the selected targets of change in a given program. Cognitive skills programs for example are designed to engender changes in such variables as social problem-solving, impulsivity, anger management, social skills, or locus of control. These and other variables can be assessed by an assortment of self-report and observational scales. Robinson, Grossman and Porporino (1991) and Robinson (1995) used this approach in the evaluation of CSC cognitive skills training programs.

Numerous self-report inventories and rating scales exist for assessment of a range of dynamic risk or criminogenic needs factors. Many (though by no means all) of these can be assessed by means of a "psychometric" approach. In selecting specific measures for this purpose, a fairly standard set of criteria is employed. Psychometric assessments are usually judged in terms of their reliability (their freedom from various kinds of measurement error), construct validity (the extent to which a scale measures what it is supposed to measure) and predictive validity (the extent to which it predicts performance on some criterion), amongst other indices. By comparison with colleagues in the fields of education or mental health, correctional researchers still have far fewer well-tested psychometric instruments at their disposal. Evaluation of change in subtler variables such as egocentrism, victim empathy or socio-moral reasoning remains difficult in the absence of well-established measures. There is however a steadily growing literature on the most effective methods of accomplishing this.

A comprehensive plan for data collection in evaluation of a correctional program might therefore entail the following:

- Compilation of descriptive data on individuals referred to the program, in terms of a standard set of demographic and criminological information; alongside comparisons with other offender groups to provide information on selection and targeting.
- Audit data concerning rates of referral, commencement, attendance, dropout and completion.
- Analysis of changes between *pre-test* and *post-test* on self-report or observational measures. Inter-group comparisons between program completers and offenders in other experimental or control conditions or other correctional disposals.
- Examination of inter-correlations between *offender characteristics;* and *outcomes*.
- Follow-up of survival rates at designated intervals (e.g., 6, 12, 24 or 60 months); involving comparisons with related program and sentence types, and with pre-selected predictor scores.
- Given adequate sample sizes, analysis of the impact of the program employing multiple regression analyses or structural equation models. Examination of inter-relationships between offender or setting characteristics, program variables, preto-post test changes and recidivism outcomes.

This range of data is likely to be collected in relatively large-scale, resource-intensive evaluations employing an experimental paradigm as described by Stecher and Davis (1987; see above), or characterized as the *social science research* evaluation model by Posavac and Carey (1997). For other types of evaluation, depending on the objectives set, quite different types of data would be required. If the objective were to discover reasons for program attrition, for example, an exploratory interviewbased study would be more appropriate. If it were to examine reasons for practitioners' allocation of offenders to different programs, again a different evaluation approach would have to be adopted.

PROGRAM INTEGRITY: LINKING PROCESS AND OUTCOME

It is commonly acknowledged that there is a close association between process and outcome in interventions. Large-scale literature review of offender treatment has illustrated the importance of focusing on the manner of delivery of programs. It is vital, if a program is to achieve its declared aims, that it should be executed properly. Accomplishing this involves a number of elements. Cumulatively, these elements are known as *program integrity*.

Programs in many fields including corrections are known to have failed because their integrity of delivery was compromised. For a variety of reasons programs may become distorted or corrupted, and if this occurs they will be unlikely to achieve their appointed goals. Hollin (1995) has described phenomena such as *program drift* and *program degradation* in relation to offender services. More recently Gendreau, Goggin, and Smith (1999) have drawn attention to the importance of program implementation processes and have argued that this has been a comparatively neglected feature in the process of translating research findings into practice. For all these reasons, comprehensive evaluations should include some focus on how integrity may be monitored and safeguarded.

Program integrity

There is however no universally agreed definition of these concepts, though Gendreau and Andrews (1996) have identified a number of separate elements that can be considered to compose it. For present purposes, a distinction will be made between two main aspects of integrity. The term *program integrity* will be taken to refer to external, organizational features of a program that are essential for its proper delivery along the lines planned by its designers and managers. This refers to the presence of trained staff, appropriate referrals, adequate resources, clear objectives, managerial support, and agency policies concerning these issues and others.

Treatment integrity

This concept refers more specifically to internal aspects of the program's mode of delivery: the direct, face-to-face interaction between program staff and offenders. *Treatment integrity* or *fidelity* (Moncher & Prinz, 1991) designates the process by which the theoretical model of the problem being addressed, and of the ways in which it is believed it can be remedied, are visible in the process through which offenders are offered assistance and expected to change.

MONITORING PROCESS

It is important that a set of monitoring process be adopted within agencies implementing a program. These can be of two principal sorts. The first will entail systems of recording and monitoring not unlike those that would be utilized in a systematic audit. Data would be held on staff selection processes; staff training events; employment stability and continuity; offender targeting and selection processes; offender attendance and completion rates; reliable availability of material resources; frequency of program planning sessions; frequency of program review sessions; frequency of staff supervision sessions; attendance at relevant staff meetings. Program staff would be provided with adequate time for planning and review. Cumulatively, the total program time will be a multiple of the actual session delivery times. Policy documents related to these features of the program would be available for inspection on request.

The converse of this, is that rates of non-attendance, attrition, session cancellations, absence of review documents or reports, may be indicators of deteriorating or non-existent program integrity. For thorough evaluation, it is necessary to develop and establish systems for logging and monitoring data of this kind to create a system of integrity checks. In addition, within an agency decisions should be made regarding which person has the responsibility for collection, managing and acting on this information. Arrangements should be made such that the person so designated has adequate time for these tasks, and a position of sufficient influence to enable him or her to address any deficiencies effectively.

Second, there is a parallel need to establish procedures for monitoring treatment integrity. This is a subtler and less easily recorded feature of programs. The most clear-cut and publicly accountable way of achieving it is through video-recording the sessions. Staff member and supervisor should then jointly review the tapes at a pre-agreed frequency. Alternatively, an external assessor or program auditor may view the tapes on a sampling basis, and prepare reports on the treatment integrity of sessions.

The presence of treatment integrity is generally judged in terms of two component criteria: adherence to the program model as described in the manual, and style of delivery. Relevant information in evaluating the former includes whether objectives are clearly stated for the program, session, or exercise; whether the contents are being covered; whether session contents and exercises are appropriately used; and whether program tasks are being accomplished. Specific items may be added as a function of the type of program involved. For style of delivery, information will be needed on whether the nature of any tasks is clearly explained, and whether participants' understanding of them is checked. Observational data may be needed on the levels of warmth or liveliness shown by program staff; alongside evidence of offender engagement and participation. For programs delivered to offenders in group settings, information may be needed concerning the creation of an appropriate learning ethos within them (Platt, Perry, & Metzger, 1980).

ACCREDITATION OF CORRECTIONAL PROGRAMS

The contemporary trend in a number of correctional services is towards placing the provision of programs, and the process of auditing and monitoring them, on a formal, mandatory basis. This has led to the establishment of procedures for *program accreditation*.

In many respects this development mirrors practices that have been present in other spheres of public service for some time, most notably in education. It is taken for granted that college courses or professional training diplomas will be submitted to external scrutiny before they are deemed to be adequate to their purpose. To check that the designated services remain intact and that the required standards of teaching are maintained, the process is repeated at regular intervals.

Recently this type of system has been introduced by both prison and probation services in the United Kingdom. A new set of jointly agreed prison-probation accreditation criteria has been published (Home Office Probation Unit, 1999), building on an earlier set prepared by the prison service (HM Prison Service, 1998). This requires both that all offender programs be inspected and approved by a central, independent panel of expert consultants, and that the delivery of a program at any given site be subjected to a further process of annual auditing. The set of criteria issued by the panel consists of the following 11 items (See Chapter 1 of this *Compendium* for more details):

- Model of change. There should be specification of a clear theoretical model describing how the program will have an impact on factors linked to offending behaviour.
- Dynamic risk factors. Program materials should identify factors linked to offending which if changed will lead to a reduction in risk of reoffending.
- ◆ *Range of targets.* Given the complexity of factors linked to criminal acts programs should focus on multiple treatment targets in an integrated, multi-modal format.
- *Effective methods.* The methods of change utilized in the program should have empirical support concerning effectiveness and be sequenced in an appropriate way.
- *Skills orientated.* The skills targeted by the program should have explicit links to risk of reoffending and its reduction.
- Intensity, sequencing, duration. The mode of delivery of sessions should be appropriate in the light of available evidence and the program's objectives and contents.
- *Selection of offenders.* The population of offenders for whom the program is designed should be clearly specified, as should procedures for targeting, selection, and exclusion.
- Engagement and participation. The program should be designed with reference to the concept of responsivity and materials, methods and manner of delivery planned accordingly.
- ◆ Case Management. The program should be inter-linked with other elements of the offender's supervision and case

management, and guidelines provided for implementation within services.

- Ongoing monitoring. Procedures and processes should be established for collection and review of integrity monitoring data.
- ◆ *Evaluation*. There should be a framework and agreed methods for evaluation of the overall delivery and impact of the program.

Lipton, Thornton, McGuire, Porporino, and Hollin (2000) have discussed the implementation and impact of this process itself. It is integral to such systems that procedures be in place for the collection of data for both ongoing monitoring of process, and evaluation of outcomes. In the United Kingdom, a system is currently being developed for the management of all data generated by the application of programs in offender services. The importance of such a system for our present purposes is the prospect it creates of considerably facilitating the entire process of program evaluation.

ECONOMETRICS OF CORRECTIONAL PROGRAMS

As stated at the beginning of this chapter, one of the principal reasons why it has become imperative to evaluate correctional programs is a concern with their impact relative to the resources invested in them. It is incumbent on managers of services to ensure that facilities are used in the most efficient way possible. To do this, monetary costs are computed for all forms of investment in programs, whether of practitioners' time, provision of physical resources, or learning materials. This may be used to inform two types of evaluation (Posavac & Carey, 1997). The first is known as a costbenefit analysis. This entails calculation of the expenditures required in the provision of a program or service, and a comparison made with the sum of the direct and indirect benefits of the program (to the extent that these can be computed in monetary terms). The second type of study is a cost-effectiveness analysis. Here, the focus is upon whether objectives were achieved, including ones whose monetary value may be difficult to estimate. Comparisons are then made between the resource costs of different types of programs; cost-effectiveness refers to the relationship between the two. Though comparatively few studies of either kind have been reported in criminal justice research, they have a potential significance far beyond the number of them published.²

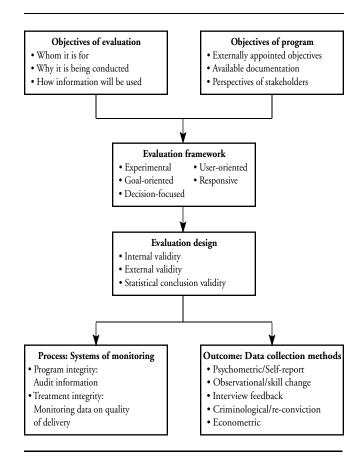
General estimates that will allow global comparisons between different forms of criminal justice provision are not difficult to make. Official data can be used to compare costs of imprisonment versus community sentences.

A PROGRAM LOGIC MODEL FOR EVALUATION

The ground covered in this chapter can be summarized in a stepwise sequence for planning evaluations, the *program logic model*. The crux of the model is a recognition of the pivotal relationship between the objectives of evaluation, and those of the program or service to be evaluated, on the one hand; and of the approach, design and methodology of the evaluation process on the other. Clarification of the first significantly elucidates the nature of the second, and in many instances virtually dictates it. Figure 26.3 illustrates this relationship.

Following this model, evaluators are recommended to ask several types of question prior to commencing work. They relate respectively to the objectives of the evaluation itself, and to the objectives of the program or service being evaluated. When these have been considered, a choice of evaluation framework can then be made that is most apposite for achieving both sets of goals.

Figure 26.3 A program logic model for evaluation



The outcome of that process should in turn make certain types of research design more obvious choices. Additionally, having clarified the objectives and the questions to be answered, evaluators can consider how the validity of any conclusions can be assured and threats to validity minimized. These decisions will determine the best methods of data collection.

Different elements of evaluation design, then, are interdependent. Note that of course these questions are being addressed here at a conceptual level. No account is being taken

² For more information on this subject, please see Cost-effective correctional treatment from Shelley Brown, Chapter 27 of this *Compendium*.

of numerous practical issues that might affect the feasibility or otherwise of different options. Realistic evaluation is an attempt to converge the principles of sound evaluation with the realities of program delivery whilst emerging with something that can shed light on previously unanswered questions.

SYNTHESIZING EVALUATION DATA

Meta-analytic review involves integration of the data from separate *primary studies* (intervention experiments or evaluations) into a higher-order statistical analysis. However, reviewers of research repeatedly comment that the process of conducting reviews and interpreting trends within them is dogged by the poor quality of many evaluation studies or reports. In several reviews (Lipsey, 1992; Lipton, Pearson, Cleland, & Yee, 1997; Sherman et al., 1997), procedures are introduced for categorizing program evaluations according to their design quality. Given the vagaries of real-world evaluation, there will probably always be difficulties in achieving the maximal standards of research design. But this by no means invalidates the rationale for conducting evaluations and attempting to do so as well as possible. On the contrary, that rationale is now stronger than ever.

FURTHER SOURCES

Numerous aspects of program evaluation cannot be covered in a single chapter. However, many useful texts and sourcebooks exist on research and evaluation. For a general introduction to practitioner research see Robson (1993); for a general introduction to criminological research see Jupp (1989). There is a wide range of books on research designs in psychology and behavioural sciences; see for example Shaugnessy and Zechmeister (1997). Another useful resource is the nine-volume *Program Evaluation Kit* produced by Sage Publications.

REFERENCES

- Andrews, D. A., & Bonta, J. (1998). The psychology of criminal conduct. 2nd edition. Cincinnati, OH: Anderson.
- Audit Commission (1989). The probation service: Promoting value for money. London, UK: Her Majesty's Stationery Office.
- Audit Commission (1996). *Misspent youth: Young people and crime*. Abingdon, UK: Audit Commission Publications.
- Barlow, D. H., & Hersen, M. (1984). Single case experimental designs: Strategies for studying behavior change. New York, NY: Pergamon.
- Bonta, J. (1996). Risk-needs assessment and treatment. In A. T. Harland (Ed.) Choosing correctional options that work: Defining the demand and evaluating the supply. Thousand Oaks, CA: Sage.
- Boruch, R. F., Petrosino, A. J., & Chalmers, I. (1999). The Campbell collaboration: A proposal for systematic, multi-national and continuous reviews of evidence. Background paper for the Cochrane Collaboration meeting, London, UK: School of Public Policy, University College London, July.
- Brody, S. (1976). The effectiveness of sentencing. Home Office Research Study No. 35. London, UK: HMSO.
- Cochrane, A. L. (1979). 1931-1971: A critical review, with particular reference to the medical profession. *Medicines for the Year 2000*. London, UK: Office of Health Economics.
- Cook, T. D., & Campbell, D. T. (1979). Quasi-experimentation: Design and analysis issues for field settings. Boston, MA: Houghton Mifflin.

- Copas, J. (1995). On using crime statistics for prediction. In M. A. Walker (Ed.), Interpreting Crime Statistics. Oxford, UK: Clarendon Press.
- Dillon, J. T. (1990). The practice of questioning. London, UK: Routledge.
- Dobson, K. S., & Craig, K. (Eds.) (1998). Empirically supported treatments: Best practice in professional psychology. Thousand Oaks, CA: Sage.
- Eamon, K. C., McLaren, D. L., Munchua, M. M., & Tsutsumi, L. M. (1999). The Peer Support Program at Edmonton Institution for Women. *Forum on Corrections Research*, 11(3), 28-30.
- Fischer, J. (1973). Is casework effective? A review. Social Work, 18, 5-20.
- Fischer, J. (1978). Does anything work? Journal of Social Service Research, 3, 213-243. Gendreau, P., & Andrews, D. A. (1996). Correctional Program Assessment Inventory.
- 6thedition. Saint John, NB: University of New Brunswick.
- Gendreau, P., Goggin, C., & Smith, P. (1999). The forgotten issue in effective correctional treatment: Program implementation. *International Journal of Offender Therapy and Comparative Criminology*, 43, 180-187.
- Glass, G. V., McGaw, B., & Smith, M. L. (1981). *Meta-analysis in social research*. Newbury Park, CA: Sage Publications.
- Hedges, L. V. (1987). How hard is hard science, how soft is soft science? The empirical cumulativeness of research. *American Psychologist*, 42, 443-455.
- Henning, K. R., & Frueh, B. C. (1996). Cognitive-behavioral treatment of incarcerated offenders: An evaluation of the Vermont Department of Corrections' Cognitive Self-Change Program. *Criminal Justice and Behavior*, 23, 523-542.
- HM Prison Service (1998). Criteria for accrediting programs 1998-99. London, UK: Offending Behaviour Programs Unit, HM Prison Service.
- Hollin, C. R. (1995). The meaning and implications of program integrity. In J. McGuire (Ed.), What works: Reducing reoffending: Guidelines from research and practice. Chichester, UK: John Wiley & Sons.
- Home Office Probation Unit (1999). What works initiative: Crime reduction programme. Joint prison and probation accreditation criteria. London, UK: Home Office.

Jupp, V. (1989). Methods of criminological research. London, UK: Unwin Hyman.

- Kratochwill, T. R., & Levin, J. R. (1992). Single-case research design and analysis: New directions for psychology and education. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Lab, S. P., & Whitehead, J. T. (1990). From 'nothing works' to 'the appropriate works': The latest stop on the search for the secular grail. *Criminology*, 28, 405-417.
- Lipsey, M. W. (1992). Juvenile delinquency treatment: A meta-analytic inquiry into the variability of effects. In T. Cook, D. Cooper, H. Corday, H. Hartman, L. Hedges, R. Light, T. Louis, & F. Mosteller (Eds), *Meta-analysis for explanation: A casebook.* New York, NY: Russell Sage Foundation.
- Lipton, D. S., Martinson, R., & Wilks, J. (1976). The effectiveness of correctional treatment: A survey of treatment evaluation studies. New York, NY: Praeger.
- Lipton, D. S., Pearson, F. S., Cleland, C., & Lee, D. (1997). Synthesizing correctional treatment outcomes: Preliminary CDATE findings. Paper presented at the 5thAnnual National Institute of Justice Conference on Research and Evaluation in Criminal Justice, Washington, DC, July.
- Lipton, D. S., Thornton, D., McGuire, J., Porporino, F., & Hollin, C. R. (2000). Program accreditation and correctional treatment. Substance Use & Misuse, 35, 1705-1734.
- Lloyd, C., Mair, G., & Hough, M. (1994). Explaining reconviction rates: A critical analysis. Home Office Research Study No. 136. London, UK: Her Majesty's Stationery Office.
- Logan, C. H. (1972). Evaluation research in crime and delinquency: A reappraisal. *Journal of Criminal Law, Criminology and Police Science, 63*, 378-387.
- MacDonald, G. (1999). Evicence-based social care: Wheels off the runway? Public Money & Management, January-March, 25-32.
- MacDonald, G., Sheldon, B., & Gillespsie, J. (1992). Contemporary Studies of the effectiveness of social work. *British Journal of Social Work*, 22, 615-643.
- Martinson, R. (1974). What Works? Questions and answers about prison reform. *The Public Interest, 10,* 22-54.
- Martinson, R. (1979). New findings, new views: a note of caution regarding sentencing reform. *Hofstm Law Review*, 7, 243-258.

- McGuire, J. (1992). Interpreting treatment-outcome studies of anti-social behaviour: Combining meta-analyses and single-case designs. (Abstract) *International Journal of Psychology, 27,* 446.
- McGuire, J., Broomfield, C., Robinson, C., & Rowson, B. (1995). Shortterm impact of probation programs: An evaluative study. *International Journal* of Offender Therapy and Comparative Criminology, 39, 23-42.
- Melton, G., Petrila, J., Poythress, N., & Slobogin, C. (1998). Psychological evaluations for the courts: A handbook for lawyers and mental health practitioners. 2nd edition. New York, NY: Guilford Press.
- Moncher, F. J., & Prinz, R. J. (1991). Treatment fidelity in outcome studies. Clinical Psychology Review, 11, 247-266.
- Motiuk, L. L., Smiley, C., & Blanchette, K. (1996). Intensive programming for violent offenders: A comparative investigation. *Forum on Corrections Research*, 8(3), 10-12.
- Mulrow, C. D. (1987). The medical review article: State of the science. Annals of Internal Medicine, 106, 485-488.
- Palmer, T. (1975). Martinson re-visited. Journal of Research in Crime and Delinquency, 12, 133-152.
- Patton, M. Q. (1987). How to use qualitative methods in evaluation. Newbury Park, CA: Sage.
- Persons, J. B., & Silbersatz, G. (1998). Are the results of randomized controlled trials useful to psychotherapists? *Journal of Consulting and Clinical Psychology*, 66, 126-135.
- Petrosino, A. J., Boruch, R. F., Rounding, C., McDonald, S., & Chalmers, I. (1999). A Social, Psychological, Educational and Criminological Trials Register (SPECTR) to facilitate the preparation and maintenance of systematic reviews of social and educational interventions. Background paper for the Cochrane Collaboration meeting, London, UK: School of Public Policy, University College London, July.
- Platt, J. J., Perry, G. M., & Metzger, D. S. (1980). The evaluation of a heroin addiction treatment program within a correctional environment. In P. Gendreau & R. R. Ross (Eds.), *Effective correctional treatment*. Toronto, ON: Butterworths.
- Posavac, E. J., & Carey, R. G. (1997). Program evaluation: Methods and case studies. 5thedition. Upper Saddle River, NJ: Prentice Hall.

- Priestley, P., McGuire, J., Flegg, D., Barnitt, R., Welham, D., & Hemsley, V. (1984). Social skills in prisons and the community: Problem-solving for offenders. London, UK: Routledge.
- Quinsey, V. L., Harris, G. T., Rice, M. E., & Cormier, C. A. (1998). Violent offenders: Appraising and managing risk. Washington, DC: American Psychological Association.
- Robinson, D. (1995). The impact of Cognitive Skills Training on post-release recidivism among Canadian federal offenders. Research Report R-41. Ottawa, ON: Correctional Service of Canada.
- Robinson, D., Grossman, M., & Porporino, F.J. (1991). Effectiveness of the Cognitive Skills Training Program: From pilot project to national implementation. Research in brief B-07. Ottawa, ON: Correctional Service of Canada.
- Robson, C. (1993). Real world research: A Resource for Social Scientists and Practitioner-Researchers. Oxford, UK: Blackwell.
- Ross, R. R., Fabiano, E. A., & Ewles, C. D. (1988). Reasoning and rehabilitation. International Journal of Offender Therapy and Comparative Criminology, 32, 29-35.
- Ross, R. R., & Gendreau, P. (Eds.) (1980). *Effective correctional treatment*. Toronto, ON: Butterworths.
- Russell, M. N. (1990). Clinical social work. Newbury Park, CA: Sage Publications.
- Shaughnessy, J. J., & Zechmeister, E. B. (1997). Research methods in psychology. 4thedition. New York, NY: McGraw-Hill.
- Sherman, L., Gottfredson, D., Mackenzie, D. L., Eck, J., Reuter, P., & Bushway, S. (1997). *Preventing crime: What works, what doesn't, what's promising.* Washington, DC: Office of Justice Programs.
- Stecher, B. M., & Davis, W. A. (1987). *How to focus an evaluation*. Newbury Park, CA: Sage.
- Taylor, R. (1999) Predicting reconvictions for sexual and violent offences using the revised offender group reconviction scale. Research Findings No.104. London, UK: Home Office Research, Development and Statistics Directorate.
- Weekes, J. R., Millson, W. A., & Lightfoot, L. O. (1995). Factors influencing the outcome of offender substance abuse treatment. *Forum on Corrections Research*, 7(3), 8-11.
- Zamble, E., & Quinsey, V. L. (1997). *The criminal recidivism process*. Cambridge, UK: Cambridge University Press.

CHAPTER 27

SHELLEY L. BROWN¹

The evidence is overwhelming — human service-based interventions reduce criminal recidivism; punishment does not. Recently synthesized findings based on over 500 studies spanning five decades of research clearly indicate that any kind of human-service based treatment reduces recidivism on average by 10% (Andrews et al., 1990; Lipsey, 1992; Lösel, 1995). Moreover, treatment approaches that follow empirically validated principles of effective intervention (Andrews & Bonta, 1998) yield substantially higher reductions ranging from 26% to 40% (Andrews, Dowden, & Gendreau, 2000; Lösel; 1996).

Clearly, we know what works with certain offenders. Equally important, however, is determining whether or not effective interventions are cost-effective from an economic perspective (Elliott, 1980; Morris & Braukmann, 1987; Rossi, Freeman & Lipsey, 1999; Weimer & Friedman, 1979). Efficiency evaluations, more commonly known as cost-benefit and cost-effectiveness analyses, strive to promote optimal resource allocation. In economic terms optimal resource allocation is achieved when no one is made better off without simultaneously making at least one person worse off. In practice however, net social welfare is rarely improved without negatively impacting at least one person. Consequently, economists have adopted a less stringent decision rule for evaluating economic efficiency. Specifically, a given resource allocation strategy is considered efficient if and when an overall net monetary benefit is realized. Thus, a correctional treatment program that costs \$1,000,000 but generates \$3,000,000 in terms of reduced criminal justice costs would be considered cost-effective.

Cost-benefit analyses (CBA) generate conclusions such as "every dollar spent on program X saves the taxpayer \$10.00 in the long run". In contrast, cost-effectiveness analyses (CEA) report the benefits of a given program in substantive rather than monetary terms. Thus, a cost-effectiveness analysis might conclude, "sex offender treatment costs \$12,000.00 per potential victim saved" (Marshall, 1992). Thus, while cost-benefit approaches monetize program benefits, cost-effectiveness methods do not. Cost effectiveness analyses, simply determines for example how much it costs to save one human life, or to prevent one victim from experiencing the emotional pain and suffering associated with sexual assault.

Since the 1960s, government regulatory boards have either recommended (e.g., Treasury Board of Canada, 1976; 1998) or

required (e.g., United States Office of Management and Budget, 1989; 1996) that cost-benefit and cost-effectiveness techniques be used to assist policy decision-makers in the allocation of public resources. Surprisingly, efficiency evaluations have been noticeably absent from the psychological treatment literature. For example, a recent review revealed that less than five percent of psychologically-based treatment outcome evaluations conducted between 1967 and 1991 included CBA or CEA results (Yates, 1998). Similarly, Welsh and Farrington (2000) were only able to identify seven studies featuring control groups that applied cost-benefit analysis to correctional program evaluation. Nonetheless, efficiency evaluations are rapidly becoming popular, particularly within the criminal justice realm (Aos, Phipps, Barnoski, & Lieb, 1999; Cohen, 1999; Donato & Shanahan, 1999). Further, as Cohen aptly notes, "criminal justice researchers and policy makers will increasingly be confronted with costeffectiveness and benefit-cost analyses — whether they like it or not" (1999; p. 2).

This chapter describes some of the potential benefits to victims, society and offenders that can result from effective correctional programming. Conversely, it also reviews the costs associated with providing such treatment. The chapter proceeds to address some of the more common methodological issues surrounding efficiency evaluations. Lastly, it highlights the results of correctionsbased efficiency evaluations that have been conducted over the last 10-15 years.

HOW CAN VICTIMS BENEFIT FROM CORRECTIONAL PROGRAMMING?

Crime impacts victims, their families, as well as their friends. Robbery victims lose money. They may also suffer physical or emotional trauma that will require short term and quite possibly, long term medical care. Similarly, family and friends may be forced to take time off work without pay to care for the needs of a crime victim.

Correctional programs that are successful in preventing offenders from committing new crimes may not only save potential victims money but they may also avert future pain and suffering. Thus, programs that reduce recidivism generate benefits in the form of future reductions in crime-related costs that would have otherwise accrued in the absence of treatment. At first glance the identification of program benefits appears seemingly straightforward. However, as Rossi et al. (1999) note identifying such benefits is somewhat subjective, dependent upon one's perspective, be it the program participant, the program sponsor, the victim, or society at large. Further, the literature has described benefits that are direct and indirect as well as those that are tangible and intangible.

Direct program benefits are intentional. They are known before the program is implemented and are expected to accrue as a direct result of the program. In contrast, indirect benefits are unintentional and unplanned. They are best thought of as positive, albeit secondary by-products of the program. Thus, from a contemporary rehabilitative standpoint, reductions in recidivism would constitute a direct benefit while enhanced selfesteem would represent an indirect benefit.

Benefits can be further differentiated in terms of whether or not they are intangible or tangible (Kiessling, 1976; Laplante & Durham, 1983). While tangible benefits are quantifiable and can be expressed in monetary terms, intangible benefits can not (Cohen, 1999; Rossi et al., 1999). Although, recent techniques have provided a means of translating seemingly intangible benefits (e.g., human life) into monetary terms (Cohen, Miller, & Rossman, 1994; Miller, Cohen, & Wiersema, 1996). Further, goods and services traded in private or public markets will usually be considered tangible in nature.

Table 27.1 describes various domains where potential victims, families, and friends can benefit from effective correctional programming. More specifically, not only can appropriate treatment save lives but it can also prevent future victims and their families from having to experience the pain and emotional suffering that inevitably accompanies any type of crime. Moreover, treatment can prevent future victims from having to take unpaid leave from work or from having to pay for medical expenses that may follow victimization. Lastly, treatment can spare future victims and their families from having to engage in crime avoidance behaviour.

Out-of-pocket expenses

Out-of-pocket expenses refer to tangible, financial losses that are incurred by the victims of crime as well as their family and friends. They do not include expenses that are reimbursed to victims through private insurance companies or government health care systems. Thus, expenses associated with damaged or stolen property, stolen money, medical bills (for physical injury or emotional trauma), unpaid work days, or lost housework days that are not absorbed by the system but are the responsibility of the victim are considered out-of-pocket expenses (Cohen, 1988, 1998; Cohen et al., 1994; Holahan, 1973; Rajkumar & French, 1997; Weimer & Friedman, 1979). Similar expenses incurred by the family and friends of a victim are also considered tangible, out of pocket expenses, albeit indirect. Examples include: a parent who takes unpaid leave to care for an injured child or a husband who takes unpaid leave to accompany his wife while she testifies in a court of law. While indirect effects to family and friends are recognized in theory, corresponding cost estimates have yet to be generated.

Crime avoidance behaviour

Crime victims may experience a heightened sense of fear associated with the possibility of future victimization. In theory, this fear may manifest itself in various forms, collectively coined, crime avoidance behaviour. For example, "....during the weeks or months

	Benefits				
Di	rect	Indirect			
Tangible	Intangible	Tangible	Intangible		
 Out-of-pocket expenses (costs not reimbursed by health care or insurance companies: medical costs-physical & emotional trauma, forgone/lost productivity-lost wages, school days, housework days, and property losses- stolen, damaged, money) Crime avoidance behaviour (e.g. purchasing alarms, locks, weapons) 	 Reduced quality of life (pain & suffering associated with non-fatal injuries, activities that can no longer be performed as a result of the injury) Loss of life Crime avoidance behaviour (e.g. restricted activity-no running at night) 	 Out-of-pocket expenses (family and friends attend- ing to physical needs of victim resulting in forgone productivity, e.g. lost wages, lost school days, lost housework days) Negative spill over to fam- ily & friends (crime avoid- ance behaviour — purchasing locks, alarms, weapons) 	 Pain and suffering experienced by family and friends when a loved one is injured/murdered Negative spill over to family & friends (crime avoidance-restricted activity-no running at night) 		

TABLE 27.1	Potential	Correctional	Program	Benefit	ts to t	he Victim
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following the (rape), women frequently make costly changes in their lifestyles; this may involve moving to a "better" neighbourhood, buying expensive security systems, or avoiding work situations which they suddenly perceive as dangerous" (Burt & Katz, 1985; p. 333). Tangible crime avoidance behaviours include purchasing products (e.g., alarms, weapons, and locks) and services (e.g., self-defence courses, security guards, guard dogs) designed to reduce the probability of future victimization. In contrast, intangible crime avoidance behaviours focus on lifestyle restrictions such as refusal to jog or take public transportation at night. Further, it is not inconceivable that victim-related crime avoidance behaviours may spill over and promote similar behaviours among family and friends (Cohen et al., 1994). Once again, cost estimates for either direct or indirect forms of crime avoidance behaviour have yet to be generated.

Loss of life and reduced quality of life

Successful programming can reduce fatalities (i.e., loss of life) and prevent potential victims and their families from experiencing a reduced quality of life that invariably accompanies nonfatal injuries. Unlike out-of-pocket expenses, quality of life factors emphasize the intangible consequences of crime (Cohen, 1988, 1998; Cohen et al., 1994; Miller et al., 1996; Rajkumar & French, 1997). These factors attempt to capture the mental anguish as well as the actual physical pain and suffering associated with victimization and its consequences. Thus, efficiency evaluators recognize the importance of incorporating factors such as the emotional cost to a victim who can no longer tie her shoes as the result of a debilitating car accident caused by a drunk driver, or the cost to a father who can no longer play baseball with his son due a crime-related injury. Similarly, they also acknowledge for example, the robbery victim who is forced to endure lifelong chronic pain resulting from a gunshot injury or a rape victim who can no longer sleep through the night due to persistent nightmares (Cohen et al., 1994). Lastly, sparing family members and friends from having to watch a loved one cope with the aftermath of a crime or deal with the death of a loved one are also recognized as additional benefits, albeit secondary or indirect. Given that current procedures for estimating victim pain and suffering invariably include familial pain and suffering, Cohen et al. recommends their exclusion.

HOW CAN SOCIETY BENEFIT FROM CORRECTIONAL PROGRAMMING?

Crime impacts almost every segment of society from the taxpayer, to the person who has never been directly victimized by crime but fears it nonetheless, and to the people and organizations tasked with the responsibility of apprehending, prosecuting, incarcerating and treating the perpetrators of crime. As Table 27.2 illustrates effective correctional programming can generate various benefits to society that are either direct or indirect in nature or tangible or intangible.

Benefits					
Direct		Indi	Indirect		
Tangible	Intangible	Tangible	Intangible		
 Criminal justice system (police, adjudication, corrections) Offender's forgone taxable income Victim forgone productivity Medical expenses covered by health care system (physical and emotional) Insurance and disability claims including administrative costs Victim services (e.g. counselling, temporary shelter, financial aid) 	N/A	 Future crime prevention (broken cycle of violence) Other non-criminal justice crime prevention programs (e.g. Neighbourhood Watch, Crime Stoppers) Transfer payments to offender's dependants Crime avoidance behaviour by potential victims (e.g. alarms, locks, weapons) 	 Crime avoidance behaviour by potential victims (e.g. restricted activity-no night running) Generalized societal fear of crime 		

Virtually all efficiency frameworks include reductions in criminal justice expenses that would have otherwise accrued in the absence of treatment. For example, successful programming can reduce the number of offenders who will be sought out by the police, prosecuted in a court of law, and subsequently incarcerated in a correctional facility. This in turn reduces the cost of administering the criminal justice system, a burden that is inevitably shouldered by the taxpayer (Cohen, 1998; Cohen et al., 1994; Gray, 1979; Holahan, 1973; Miller et al., 1996).

Additionally, a large portion of effectively treated offenders will also obtain legitimate employment. As a result, society will benefit from an additional source of taxable revenue that would have otherwise been absent if the offender had not been treated and consequently, had resumed criminal activity (Miller et al., 1996; Rajkumar & French, 1997; Seashore, Haberfeld, Irwin, & Baker, 1976). Similarly, reduced recidivism rates translates into fewer victims in need of time away from work, school or from household duties. Thus, society will suffer fewer productivity losses that would have otherwise accrued in the absence of effective programming.² Fewer victims also means reduced health care costs, fewer insurance claims and a decreased demand for victimrelated services offered outside of the traditional health care system (e.g., temporary shelter and volunteer counselling services). All of which may result in reduced taxes, possibly a reallocation of resources, and lower insurance premiums.

The literature has also identified a number of plausible indirect benefits to society.³ Laurence and Spalter-Roth (1996) note that domestic violence initiatives may inadvertently benefit society by breaking the cycle of violence. Thus, while a program's primary goal may be to treat the present-day perpetrator it might also generate secondary, positive effects such as preventing child victims or witnesses of domestic violence from manifesting s imilar behaviours in adulthood. Similarly, Cohen et al., (1994) have argued that if the impact of the program was sufficiently large the need for non-criminal justice organizations such as Neighbourhood Watch and Crime Stoppers would eventual decline, thus resulting in substantial cost savings or a redistribution of resources. Some studies (Knox & Stacey, 1978) have also included reductions in transfer payments to the dependants of offenders as valid, tangible benefits to society. However, others have argued for their exclusion (Mallar & Thornton, 1978). Additionally, successful programming could also result in global reductions in society's generalized fear of crime as well as the extent to which society engages in crime avoidance behaviour

(Cohen et al., 1994; Gray, 1979; Holahan, 1973; Miller et al., 1996; Phillips & Votey, 1981). However, once again attempts to quantify such effects in a reliable manner have yet to emerge.

HOW CAN OFFENDERS BENEFIT FROM CORRECTIONAL PROGRAMMING?

The perpetrators of crime do not escape unscathed. If caught, they may be sentenced to a prison term resulting in loss of freedom, forced separation from loved ones and missed employment opportunities. Similarly, their family and friends may also be adversely impacted. Nonetheless, correctional efficiency evaluators such as Cohen (1998) have dismissed offender-related benefits given that it would be philosophically inappropriate to include such factors within a cost-benefit framework. Moreover, such factors are more likely to dissuade rather than persuade policy decision-makers regarding the merit of offender treatment. Regardless, an overview of potential programming benefits that may accrue to the offender is provided for discussion purposes.

As Table 27.3 demonstrates offenders may receive direct, tangible benefits from programming. Employment-specify programs or those that target factors that help offenders maintain steady employment (e.g., substance abuse, interpersonal skills training) will increase the number of offenders who obtain and maintain jobs, thereby increasing legal income. Hence, successfully treated offenders will receive legal income that would have otherwise been lost if the offender had maintained a criminal lifestyle.⁴ Additionally, it is arguable that successful programming can generate direct, albeit intangible benefits. Some rehabilitated offenders may no longer experience anxiety or the constant fear of detection that may or may not accompany certain criminal individuals. Similarly, they will no longer experience the pain and suffering associated with non-fatal crimerelated injuries. As well, the odds of losing one's freedom or being fatally wounded during the commission of a crime will also decrease considerably.

As Table 27.3 indicates correctional programming may also inadvertently generate indirect benefits that are tangible as well as intangible. For example, what an offender learns during programming may transfer or spill over to his/her friends, family, or children (Levine, 1983; Nas, 1996; Rossi et al., 1999). Offenders who gain improved job search techniques such as resume writing and interviewing skills may share this knowledge with family and/or friends who in turn are able to secure better jobs and enhance their own earning potential. Additionally, correctional programs may unintentionally improve an offender's overall well being, family functioning, as well as non-familial relationships. These factors are viewed as indirect given that the primary goal of offender treatment should be to generate reductions in recidivism rather than increases in an offender's overall well being. Although all of the aforementioned benefits are theoretically possible they have yet to be examined in practice.

² When a victim is unable to work due to a crime-related injury two distinct losses may occur: victim losses (lost wages for unpaid workdays) and societal losses (foregone productivity) (Miller et al., 1996).

³ Given that offender treatment programs promote change at the individual rather than societal level, global changes in societal behaviour that can be directly linked to any one specific program are viewed as secondary or indirect effects, albeit positive.

⁴ In the present model an offender's income after taxes is considered a direct benefit to the offender, while the taxable component is considered a direct benefit to society.

Benefits					
l	Direct	Indirect			
Tangible	Intangible	Tangible	Intangible		
• Forgone legal earnings after taxes	 Quality of life (fear of detection, pain & suffering from non-fatal injuries) Loss of life Loss of freedom 	• Positive spill over of treatment effects to friends & family	 Improved well-being Improved familial relation Improved non-familial relations 		

TABLE 27.3 Potential Correctional Program Benefits to the Offender

WHAT DOES CORRECTIONAL PROGRAMMING COST THE VICTIM?

The literature has not fully explored potential victim-related costs associated with program delivery (see Table 27.4). Certain programs such as restorative justice initiatives may impose direct monetary expenses on victims such as foregone wages and transportation costs associated with program participation. Similarly, the notion of rehabilitating rather than punishing perpetrators of crime may evoke feelings of injustice from individual crime victims as well as victim advocacy groups. However, to date, the literature has not developed methods for quantifying such factors. Further, it is likely that the development of such techniques will be challenging if not entirely impossible.

WHAT DOES CORRECTIONAL PROGRAMMING COST SOCIETY?

From a societal perspective, the literature has primarily focused on direct program-related costs that are tangible in nature (see Table 27.5). Examples include: the cost of hiring staff to deliver a program, the cost of purchasing the necessary equipment and materials to run a program, and the cost of operating the actual facility from which a program is run.

Some researchers have identified indirect costs that may be associated with correctional programs (see Table 27.5). A correctional industry program (e.g., CORCAN) may cause displacement effects whereby newly trained ex-offenders who are willing to work at a lower rate, replace higher paid, prosocial workers (Laplante & Durham, 1983; Levine, 1983; Rossi et al., 1999). Intensive community-based treatment programs may inadvertently interfere with an offender's probability of securing and maintaining steady employment. This results in a reduction to the offender's overall contribution to the workforce that may in turn reduce available taxable income. As well, treatment may inadvertently prolong incarceration which in turn increases incarceration costs (T³ Associates, 1999). Lastly, society may reject community-based programs (e.g., halfway houses) or any form of human-service based intervention for that matter, on the grounds that treatment is incongruent with get tough on crime policies and that it heightens society's generalized fear of crime. It should also be noted that it is unclear in terms of whether or not societal opposition to treatment should be considered separately or conjointly with victim advocacy opposition. To date, no studies have attempted to quantify any of these indirect costs.

Costs				
Direct		Indirect		
Tangible	Intangible	Tangible	Intangible	
• Out-of-pocket expenses associated with program participation (e.g. travel costs, lost wages, school days, housework days associated with some restorative justice initiatives)	NA	NA	• Feelings of injustice associated with treating offenders from immediate victims of crime and victim advocacy groups	

TABLE 27.5 Potential Correctional Program Costs to Society

Benefits					
Direct	t	Indirect			
Tangible	Intangible	Tangible	Intangible		
• Program costs (personnel, facilities, equipment, materials)	NA	 Displaced workforce Forgone productivity (i.e. offender's taxable income) Prolonged incarceration costs (e.g. not released until program completed) 	 Inconsistent with 'get tough on crime policies' Heighten fear of crime (e.g. halfway house located in one's neighbourhood) 		

WHAT DOES CORRECTIONAL PROGRAMMING COST THE OFFENDER?

The efficiency literature has generally neglected direct program costs for offenders. However, as Table 27.6 demonstrates offenders may in theory, experience indirect costs. A community-based program may unintentionally reduce an offender's income during the duration of program delivery. Similarly, the practice of favouring institutional over community-based treatment coupled with a parole board's reluctance to grant early release to individuals who have not experienced a full bevy of treatment programs prior to release may inadvertently result in prolonged incarceration. This in turn may produce intangible emotional discomfort for the offender.

In sum, the correctional efficiency literature has identified numerous potential benefits and costs associated with appropriate programming. The offender, the victim and society stand to benefit substantially from effective correctional programming. However, it is unlikely that reductions in global phenomena such as crime avoidance behaviour, societal fear of crime, the cycle of violence, or the reliance on non-criminal justice prevention programs could be causally linked to any one specific program (Cohen, 1998). Further, while a distinction has been made between activity-related crime avoidance behaviour and society's generalized fear of crime, in practice separating the two may prove impossible. Lastly, several of the previously reviewed costs and benefits exist merely as hypothetical constructs rather than quantifiable entities. Nonetheless, the literature has developed defencible methods for quantifying many of the existing crime-related consequences and program costs.

HOW DO WE MEASURE COSTS AND BENEFITS?

Efficiency evaluators assign dollar values to the costs and benefits of correctional programming using a variety of methods. While most tangible victim and criminal justice costs can be estimated from survey data and financial records, the majority of crime-related costs are not directly accessible. Consequently, efficiency evaluators rely on a number of indirect estimation procedures including shadow prices, the jury compensation method and the willingness to pay approach. Unlike direct estimation, indirect estimation can be controversial and complicated (Rossi et al., 1999).

Financial records

For the most part, programming (e.g., staff, materials) and criminal justice costs (e.g., policing, incarceration) can be estimated directly from financial records (Cohen et al., 1994; Cohen, 1999; Miller et al., 1996). However, at times it may be difficult to separate marginal from fixed costs. While fixed costs remain constant

TABLE 27.6	Potential	Correctional	Program	Costs to	the Offender

	Benefits				
D	irect	In	ndirect		
Tangible	Intangible	Tangible	Intangible		
N/A	N/A	• Forgone legal earnings after taxes	• Prolonged incarceration (emotional distress associated with loss of freedom).		

regardless of whether or not a program is implemented, marginal costs vary as a function of the program. They represent the added or incremental cost associated with treatment delivery, independent of the cost of running a correctional institution (e.g., electricity, food, clothing). A basic principle underlying all efficiency evaluations is that cost be restricted to marginal expenses (Cohen, 1999; Levine, 1983; Nas, 1996). Thus, standard institutional operating costs (e.g., electricity) that exist regardless of whether or not a program is implemented should be excluded. Similarly, other criminal justice expenditures such as the annualized cost of maintaining a police station should be excluded given that they typically do not change as a function of a unit decrease in crime. Unfortunately, marginal costs are not always readily available. Consequently, evaluators sometimes use average or aggregate costs, a procedure that typically overestimates expenditures (Laurence & Spalter-Roth, 1996; Tonry 1990).

Survey data

Victim survey data is commonly used to assess monetary victim expenses including medical costs, lost property, and forgone earnings (Cohen, 1988, 1998; Cohen et al., 1994; Miller et al., 1996). The criminal justice literature has primarily relied on the American National Crime Victimization Survey (NCVS; Bureau of Justice Statistics, 1998) as a means of estimating tangible victim costs. The NCVS polls households regarding information pertaining to recent criminal victimizations. The survey however, has been criticized for underestimating victim-related costs. For example, the survey only elicits information about medical costs incurred during the past six months. Further, it does not inquire about mental health costs, forgone housework or school-related productivity. Additionally, such surveys implicitly assume that respondents can provide accurate cost estimations for expenses commonly paid for by insurance companies (Cohen et al., 1994; Rajkumar & French, 1997). Miller et al. (1996) circumvented some of these problems by combining the survey data with primary file information obtained from workers compensation and hospitalization records. Interestingly, this procedure resulted in substantially higher cost estimates than those derived from the NCVS. For example, Miller et al. report cost estimates that are 10 to 20 times higher for certain violent crimes than those reported in the NCVS (Cohen, 1999). However, cost estimates derived from Canadian victimization surveys and the Canadian health system are still required if accurate Canadian-based cost-benefit analyses are to be conducted.

Shadow pricing

Economists commonly quantify costs based on market prices. The market price for most tangible commodities is readily available and hence traded openly by buyers and sellers in the market place. However, more often than not, market prices are distorted for various reasons including government subsidies and monopolies. When this occurs, researchers rely on shadow prices (Rossi et al., 1999; Weimer & Friedman, 1979).

Shadow prices refer to the true market price that would exist under perfectly competitive market situations or when the demand for a given commodity equals its supply. In essence, a shadow price *hides behind* or *shadows* the observed market price (Laplante & Durham, 1983; Levine, 1983; Nas, 1996). Assume for example that a researcher is evaluating a new pilot program for violent offenders. Initially, post-graduate clinical students deliver the program. Further, the students receive academic rather than monetary credit for their participation. In this situation it would be more accurate for the evaluator to determine the cost of the program based on estimated salaries of paid treatment deliverers rather than clinical students (Nas, 1996; Rossi et al., 1999).

Willingness to pay

In some circumstances a market does not exist for a given crimerelated cost such as human life or emotional pain and suffering. While a cost-effectiveness analysis is a viable option (Levine, 1983), economists and criminal justice researchers have developed alternative methods for quantifying intangible victim costs. Two current methods include the willingness to pay approach and the jury compensation method.

The willingness to pay approach estimates how much society is willing to pay to reduce the risk of crime-related death by extrapolating from non-crime studies that have examined for example, how much society is willing to pay to ensure safe workplaces or safe vehicles. The most common study estimates how much society values human life by examining worker's willingness to accept riskier jobs in exchange for a premium wage. Two independent reviews of this literature (Viscusi, 1993; Miller, 1990) involving 70 different studies revealed that the statistical value of a human life has been estimated between \$500,000 and 7 million (average: 2.7-5 million).

Critics argue that the willingness to pay approach is not only morally wrong but that it is also technically flawed in that it assumes people correctly perceive the risk associated with a given behaviour (Zerbe, 1998). Further, it is also possible that people would be willing to pay substantially more for reducing the risk of death from a violent crime rather than a workplace accident. Nonetheless, the assignment of monetary value to human life has become standard operating practice for prominent government regulatory boards, albeit the Treasury Board of Canada (1998) has adopted a somewhat more conservative approach. Further, most efficiency experts would agree that currently, this method remains unrivalled given that earlier cost studies grossly underestimated the value of human life by relying solely on forgone productivity. This method not only failed to consider the intrinsic value of life (e.g., pain and suffering, enjoyment of life) but it also implicitly placed less value on the elderly and the young (Cohen et al., 1994; Laurence & Spalter-Roth, 1996).

Jury Compensation Method

Cohen and his colleagues (1994; Miller et al., 1996) pioneered the jury compensation method as a means of quantifying the fear, pain, suffering, and reduced quality of life experienced by non-fatally injured victims of crime. Originally, damages awarded to accident victims in civil cases were used to approximate the monetary cost of similar injuries incurred by crime victims. However, the method assumes that injuries resulting from crime should be afforded the same weight as similar injuries resulting from incidents of a non-criminal nature. Intuitively it seems reasonable to assume that crime-victims are more likely to experience increased pain and suffering that is uniquely related to crime-specific psychological trauma (Cohen, 1999). Interestingly, recent litigation trends in the United States have obviated this problem. In 1996, Miller et al. analyzed 2,112 jury awards and settlements to assault, rape and burn victims. The lawsuits generally involved third party negligent suits such as a rape victim who sued the owner of an underground parking garage for poor lighting. Further, the analysis focused exclusively on the portion of the award designed to compensate the victim for pain, suffering, and lost quality of life.

Based on their analysis, the authors provide monetary quality of life estimates for serious felony offences (e.g., child abuse, sexual assault, assault, robbery, drunk driving, arson, property offences) by combining the jury information with tangible victim cost estimates obtained from survey data (e.g., NCVS). The authors estimate that the pain and suffering associated with rape for example, is valued at approximately \$81,400.00 while the pain and suffering of being robbed is valued at \$5,700.00. They do not provide estimates for white-collar crime, environmental crimes, *Food and Drug Act* violations, anti-trust breaches or crimes of treason. While tangible estimates are available for aggregate fraud losses (Titus, Heinzelmann, & Boyle, 1995), intangible estimates have yet to become available. Even Cohen (1999) concedes that it may be impossible to quantify all types of crimes, particularly those involving anti-trust violations or treason.

Proponents of this method argue that not only are jury awards stable and predictable but given that society has chosen the civil court system as an acceptable means of redressing victims, jury awards represent a reasonable proxy for assessing crime-related pain and suffering (Cohen, 1988, 1999). Further, the jury compensation method has been used outside of the criminal justice realm (e.g., Consumer Product Safety Commission, Zamula, 1987 cited in Cohen, 1998). As well, this method is perceived as being less subjective compared to it's predecessor which estimated the cost of victim pain and suffering based on public opinion surveys (Phillips & Votey, 1981; Sellin & Wolfgang, 1964). Lastly, criminal justice researchers have embraced rather than rejected the quantification of human life, pain and suffering both in theory (Gray, 1994; Kiessling, 1976) and in practice (Cohen, 1998; Rajkumar & French, 1997).

Discounting costs and benefits to present value

Before costs and benefits can be compared they must be adjusted to ensure an 'apples to apples' comparison. More specifically, costs and benefits expected to accrue in the future must be converted into present dollar value before making a meaningful comparison (Cohen, 1998; Laplante & Durham, 1983; Levine, 1983; Nas, 1996). Suppose for example that you wish to purchase a new set of golf clubs. Further assume that it is the middle of winter and that your local sports store is having a golf equipment sale. Now ask yourself, how much must the original price be discounted or reduced by in order to make the purchase worth your while? Remember that you won't be able to use your new clubs until the spring. Here in lies the essence of discounting; a dollar spent today is not the same as a dollar received tomorrow. Future benefits must be discounted or depreciated to present value when compared with costs incurred today (Cohen, 1998). This principle perhaps explains why so many of us find it difficult to save money for our retirement when we would rather spend it on present-day activities such as holidays and entertainment. While discounting is a standard economic technique, the selection of an appropriate discount rate can be a rather dubious task.

There are no authoritative guidelines for choosing an appropriate discount rate. The criminal justice literature has used rates as low as 2% and as high as 15%. While prominent experts (Cohen, 1998, 1999) recommend 2% and 3% rates, government regulatory boards (e.g., U.S. Office of Management and Budget, 1996; Treasury Board of Canada, 1998) recommend considerably higher rates ranging between 7% and 10%. It is important to note that the lower the discount rate, the greater the value placed on benefits that accrue in the future. Conversely, higher discount rates deflate the value of future benefits. Further, discount rates can have a dramatic influence on one's results. As the Treasury Board of Canada (1998) observed, "most projects look good at a 5% discount rate and poor at a 15% discount rate." Nonetheless, discounting future benefits or costs to present value is a mandatory requirement for any cost-benefit analysis that can not be avoided

Comparing costs and benefits

The two most common methods for comparing costs and benefits are benefit-cost ratios and net present value. A benefitcost ratio compares the present value of benefits to the present value of costs. Benefit cost ratios generate statements such as every dollar spent on program X generates \$30.00 in benefits or economic returns. Benefit-cost ratios in excess of 1.00 are considered economically efficient. In contrast, the net present value is simply the present value of all benefits, discounted at the appropriate discount rate, minus the present value of all costs discounted at the same rate (Nas, 1996; Treasury Board of Canada, 1998). If the net present value is positive, the program is judged economically efficient. Benefit-cost ratios are beneficial in that they facilitate comparison across studies. However, they made be misleading given that different studies incorporate different benefits and hence will generate benefit-cost ratios that may vary more as a function of one's accounting perspective rather than the actual cost-effectiveness of the program in question (Weimer & Friedman, 1979).

Dealing with uncertainty: Sensitivity analysis

Efficiency evaluations rely extensively on a number of assumptions. Consequently, economists recommend that an efficiency analysis be accompanied by a sensitivity analysis (Nas, 1996; Rossi et al., 1999). Briefly, a sensitivity analysis requires that the researcher re-analyze the results across a number of different assumptions. If the results remain positive across a wide range of possibilities (e.g., varied discount rate, varied statistical value of life estimate, varied program effectiveness) one can be reasonably assured that the results are accurate.

ARE CORRECTIONAL PROGRAMS COST-EFFECTIVE?

Correctional program efficiency evaluations have proliferated substantially since they first emerged in the 1960s. However, methodological shortcomings precluded earlier studies from reaching meaningful conclusions. More often than not, correctional researchers failed to describe cost estimation procedures in sufficient detail. Further, sensitivity analysis and discounting procedures were rarely used. As well, researchers often relied on inferior study designs. Earlier studies also excluded intangible program-related benefits given that quantification techniques had not yet been developed, hence grossly underestimating potential economic returns. Lastly, the lack of consistency in terms of which program-related benefits correctional researchers chose to examine precluded meaningful comparisons across studies.

Fortunately, the last decade has witnessed substantial progress in the quality of corrections-based efficiency evaluations. Consequently, this section highlights key efficiency findings from recent years that have focused specifically on correctional program outcomes. It should be noted that the review emphasizes methodologically superior studies.

Treatment versus punishment

Zedlewski (1985), a staff economist for the U.S. National Institute of Justice concluded that prisons are a highly cost-effective means of reducing crime. More specifically, he estimates that every dollar allocated towards imprisonment could generate \$17.00 in tangible criminal justice savings. However, as others have aptly noted (Greenberg, 1990; Zimring & Hawkins, 1988) Zedlewski's conclusions are predicated on a number of faulty assumptions. For example, he incorrectly assumes that incarceration has a general deterrence effect. Critics (Greenberg, 1990) have clearly illustrated that the research in this area is less than reliable. Further, Zedlewski's cost saving estimates are based largely on the assumption that the crime rate will drop substantially if society incarcerates offenders who would have otherwise received probation or monetary fines. In essence, he argues that net widening⁵ will save society money. He arrives at this conclusion based on selfreport crime data obtained from 2,190 incarcerated offenders who on average, reported committing 187 property offences annually. He erroneously assumes that individuals who have been sanctioned either by probation or monetary fines offend at the same frequency and intensity as individuals serving carceral sentences who undoubtedly are higher risk cases. Thus, he incorrectly concludes that the incarceration of one individual who would have otherwise been in the community under a probation order will prevent 187 property crimes from occurring.

Meta-analytic reviews provide the most persuasive evidence against the argument that punishment is economically efficient. The most recent review by Andrews et al. (2000) demonstrates that punishment is actually related to slight increases rather than decreases in recidivism. Thus, if punishment can not reduce recidivism it surely can not reduce future criminal justice costs. Additional evidence in support of treatment is available from recent research sponsored by the Washington State Institute for Public Policy.

Aos et al., (1999) analyzed 108 correctional treatment outcome studies using a cost-benefit approach. Traditionally, meta-analytic techniques have been used to aggregate the findings of a large number of treatment studies to ascertain the average impact that treatment has on reducing recidivism. This review represents the first attempt at estimating average cost-savings across various programs using meta-analytic techniques.

The authors focused on studies conducted during the last 20 years that compared recidivism rates between an experimental treatment group and a comparison group that did not receive treatment. Further, only methodologically superior studies were included. Cost savings were reported for several different treatment categories from two perspectives: the taxpayer and the victim. The taxpayer's perspective focused exclusively on criminal justice savings (e.g., police, adjudication, and corrections) while the victim's perspective incorporated criminal justice savings as well as monetary victim losses (e.g., medical and mental health care expenses, property damage and losses, reduced future earnings). Intangible victim costs such as pain and suffering and loss of life were excluded.

In sum, the review demonstrated that on average, every dollar spent on human-service orientated interventions (N = 88) saves the taxpayer approximately \$5.00, and the victim, \$7.00.⁶ Conversely, punishment-orientated interventions such as boot

⁵ Net widening refers to the practice of meting out hasher penalties (e.g. boot camps) to individuals who would have otherwise received less costly, traditional forms of punishment (e.g. probation) if the alternative (e.g. boot camp) had not been available to the sentencing judge.

⁶ Adult cognitive-behavioural treatment programs generate economic returns ranging from \$2.54 to \$11.48 for every invested program dollar.

camps and intensive supervision programs that rely on expensive strategies such as random curfew checks, electronic monitoring, and urinalysis testing (N = 20) yielded substantially lower economic returns ranging from 50¢ to 75¢ for every dollar allocated to the program. Thus, human-service interventions satisfy standard economic efficiency threshold criteria while punitive interventions do not.

The inability of intermediate sanctions such as boot camps, intensive supervision, and electronic monitoring to demonstrate cost-effectiveness is not surprising. A recent meta-analysis that reviewed 20 studies that evaluated intermediate sanctions concluded that these programs have virtually no impact on recidivism (Gendreau, Goggin, Cullen, & Andrews, 2000). Thus, it is not surprising that they do not reduce criminal justice costs. Further, opponents have long argued that intermediate sanctions are actually more expensive than traditional forms of punishment due to net widening and close monitoring (Gendreau, Paparozzi, Little, & Goddard, 1993; Clear & Hardyman, 1990; MacKenzie & Parent, 1992; Tonry, 1990). For example, given the option, judges are more likely to sentence convicted offenders to boot camp or electronic monitoring who would have otherwise been sentenced to less costly, albeit more traditional forms of punishment such as probation. Further, the close monitoring that accompanies intensive supervision programs (ISP's) actually increases the probability of detecting and processing technical violations that would have otherwise gone unnoticed under regular supervision. Thus, additional costs associated with revoking and eventually incarcerating the offender are incurred. Lastly, critics (Tonry, 1990) have argued that diversion programs such as ISP's do not generate the substantial cost-savings that supporters purport due to an over reliance on fixed rather than marginal costs. As Tonry (1990) aptly observes the savings incurred by diverting one offender from prison in reality are quite small, amounting to no more than a bit of food and record keeping. Large cost savings will only materialize if and when diversion programs either cause existing prisons to close or prevent new prisons from being built.

Juvenile offender treatment

Promising findings have resulted from three relatively recent juvenile efficiency evaluations. Greenwood, Model, Rydell, and Chiesa (1996) conducted a cost-effectiveness comparison of California's three-strikes law versus early intervention programs. Two of the most promising intervention programs included graduation incentives and parent skills training. Graduationincentive programs financially compensate disadvantaged high school students to encourage graduation. Alternatively, parenting skills programs teach parents how to deal effectively with aggressive children. The study estimates that California's three-strikes law will reduce crime by 21% at an annual increased incarceration cost of 5.5 billion dollars. However, graduation incentive programs coupled with parenting skills training could approximately double the crime reduction rate for 1/5 of the cost.

Aos et al., (1999) reviewed 21 human-service orientated juvenile treatment programs including parent skills training, diversion programs, and aggression replacement training. The results indicated that each juvenile treatment dollar will generate between \$7.62 to \$31.40 in future economic returns. Interestingly, juvenile offender treatment generated the highest benefit-cost ratios outperforming both adult offender treatment and primary prevention strategies.⁷

Cohen (1998) estimates that one chronic juvenile offender will cost victims and society between 1.3 and 1.5 million dollars in the long run. The majority of which will be associated with intangible victim costs (50%) followed by tangible victim costs (25%), criminal justice expenses (20%), and foregone offender productivity (5%). This implies that relatively small treatment effects could generate substantial cost savings. For example, a program that costs \$500,000 to treat 100 chronic juvenile offenders would still be deemed cost-effective with a success rate as low as 1%. However, in reality success rates are substantially higher, particularly for innovative juvenile treatment programs such as multisystemic therapy (MST). Aos et al. (1999) reported that MST generates \$13.45 dollars in returns for every invested program dollar. Interestingly, however, if one adopts Cohen's (1998) 1.3 to 1.5 million dollar estimate, MST could potentially generate \$60.00 in economic returns for every program dollar.⁸ The discrepancy (\$13.45 vs. \$60.00) is most likely attributable to the fact that Aos et al. excluded intangible victim costs whereas intangible victim costs accounted for 50% of Cohen's 1.3 to 1.5 million-dollar estimate.

Sex offender treatment

The literature has produced conflicting results regarding the cost-effectiveness of sex offender treatment. For example, Aos et al., (1999) recently concluded that sex offender treatment is not cost-effective. Based on a review of six treatment outcome studies the authors report that every dollar allocated towards sex offender treatment yields no more than 25¢ in economic returns. However, more promising conclusions have been reached independently by Canadian, American and Australian researchers.

Marshall (1992) concludes that by treating 100 sex offenders, Canadian society will not only save 50 potential victims but that it will also save 4.4. million dollars in averted criminal justice costs. Marshall's estimates were based on the assumption that sex offender treatment has a 25% success rate and that the typical sex offender recidivist will commit at least two new sexual offences.

⁷ Primary prevention programs target children who have had no formal involvement with the criminal justice system but are considered high risk for future contact (e.g., Big Brothers).

⁸ This latter estimate is based on the assumption that MST has a 20% success rate (Henggeler, Melton, & Smith, 1992)

Prentky and Burgess (1990) conducted a cost-benefit analysis of a program that had been treating child molesters in Massachusetts since 1959. Like Marshall, they concluded that the treatment of sexual offenders can result in substantial cost savings, specifically, they estimate that for every 100 treated sex offenders society saves 2.7 million dollars in averted criminal justice expenses. However, it should be noted that Prentky and Burgess did not have access to a random or matched control group. Instead, they used information obtained from Marshall who estimated the recidivism rate for untreated sex offenders based on his own Canadian-based research.

While Prentky and Burgess conclude that sex offender treatment can be cost-effective the absence of a reliable control group precludes confidence in the results. Similarly, critics (Quinsey, Harris, Rice, & Lalumière, 1993) would likely argue that Marshall's 25% success rate is grossly inflated. Both studies did not conduct detailed sensitivity analyses nor did they use discounting procedures or include victim-related benefits. However, recent findings from Donato and Shanahan (1999), and Hanson (personal communication, 2000) have addressed some of this issues.

Donato and Shanahan (1999) conducted a cost-benefit analysis of an intensive, sex offender treatment program delivered in Australian prisons to child molesters. The authors demonstrate that treating child molesters prior to release can be cost-effective provided that reductions in recidivism exceed 6% and that both tangible and intangible victim-related benefits are included. The authors further illustrate that a 14% reduction in sexual recidivism can generate almost 4 million dollars in economic returns for every 100 child molesters that are treated. In contrast, sex offender treatment will not generate positive economic returns if reductions in recidivism are less than 2%, regardless of whether or not tangible or intangible benefits are included. Donato and Shanahan's research represents one of the first attempts to incorporate tangible as well as intangible victim benefits into a sex offender efficiency evaluation.

A recent meta-analytic review of 42 sex offender treatment outcome studies involving 9,316 sex offenders demonstrated that on average, untreated sex offenders reoffend at rate almost twice as high (17.7%) as their treated counterparts (9.9%) (Hanson, personal communication, 2000). Thus, extrapolating from Donato and Shanahan's work, one can infer that the typical, contemporary sex offender program will generate positive economic returns provided that intangible victim-related benefits are considered. More specifically, the treatment of 100 sex offenders will save society between \$41,6000 and 1.85 million dollars. However, primary efficiency evaluations involving well-controlled sex offender outcome studies remain noticeably absent. Thus, most individual jurisdictions can not state with certainty in terms of whether or not their own programs are cost-effective.

Education and employment

To date, 21 employment and/or education programs have been evaluated within a cost-benefit framework (see Aos et al., 1999; Knox & Stacey, 1978; Mallar & Thornton, 1978; Seashore et al., 1976). However, the majority were conducted by a secondary group of researchers (e.g., Aos et al., 1999). In sum, most employment and/or education programs generate positive economic returns. More specifically, every dollar allocated towards vocational and basic education programs yields cost savings ranging from \$1.71 to \$3.23. Similarly, job search and/or counselling programs generate positive returns ranging from \$2.84 to \$6.56. Mallar and Thornton conclude that one program dollar could generate returns as high as \$53.73. Conversely, short-term financial assistance and subsidized job placements programs generate break even returns (e.g., 1 dollar spent = 1 dollar gained). Additionally, while Friedman (1977) concludes that work-release programs generate positive economic returns (e.g., \$1.64), Turner and Petersilia (1996) concluded otherwise.

Substance abuse treatment

The efficiency literature has paid considerable attention to substance abuse treatment (Apsler, 1991; Britt, Gottfredson & Goldkamp, 1992; Goldschmidt, 1976; Hertzman & Montague, 1977; Holder, 1987; Leukefeld, Logan, Martin, Purvis, & Farbaee, 1998; Swint & Nelson, 1977). While drug diversion programs have generated modest returns (e.g., \$1.69 to \$2.18 for every program dollar), interventions classified as case management substance abuse programs have generated negative returns, such that every program dollar actually costs the taxpayer 15¢, and the victim 21¢ (Aos et al., 1999).

However, more encouraging findings are also available. For example, a recent Canadian study demonstrated that one of the Correctional Service of Canada's core substance abuse treatment programs generated approximately \$2,000 in annual savings per offender (T^3 Associates, 1999). Similarly, research conducted on substance abusers, rather than criminal offenders suggests that for every 100 substance abusers that are treated, society accrues between 1.4 and 2.2 million dollars in cost savings. Cost savings associated with the provision of substance abuse treatment have included criminal justice expenses, tangible and intangible victim losses, as well as offender foregone productivity (Rajkumar & French, 1997).

CONCLUSION

In sum, the available empirical literature presents a convincing argument that evidence-based correctional treatment is costeffective. However, the review also illustrates the absence of wellcontrolled primary studies. Further, standard operating practices that outline common ingredients required of all correctionsbased efficiency evaluations should be established (Welsh & Farrington, 2000). Thus, regardless of which program is being evaluated, one can argue that all evaluations should include program costs, criminal justice expenses, tangible and intangible victim costs, and forgone offender productivity. The development of such standards is necessary to promote consistency and hence, comparability across studies. The importance of this objective is made acutely clear by Eddy's (1992) statement, *"much of cost-effectiveness analysis parallels clinical judgement"* (p. 3344). This observation is particularly distressing given the responsibility of making predictions about future behaviour (Grove, Zald, Lebow, Snitz, & Nelson, 2000).

Critics argue that efficiency evaluations are subject to a "garbage in, garbage out phenomena". Regardless of how technically accurate an efficiency evaluation may be, the findings will be rendered unreliable if the primary impact evaluation was sufficiently flawed. Similarly, cost-benefit analyses rely extensively on uncertain assumption and at times, less then reliable cost estimates. Further, attributing monetary value to human pain and suffering as well as human life remains controversial. Lastly, the level of technical expertise required to conduct such evaluations may simply be inaccessible to some jurisdictions.

Clearly, it is difficult to justify maintaining programs that have no impact. However, even programs with a demonstrated impact may be difficult to maintain given political climate, public opinion or if limited resources intensifies competition among various programs. Further, efficiency analyses can enhance informed policy decision-making, reduce the costs of obtaining key objectives, and promote efficient resource allocation. While economic arguments may be insufficient to affect policy change given that the average person is more readily influenced by programs that are marketed as "state of the art" as well as programs that affect real people rather than anonymous statistical cases (Eddy, 1992) they can help bridge the gap between research and practice.

REFERENCES

- Andrews, D. A., & Bonta, J. (Eds.), (1998). *The psychology of criminal conduct.* Cincinnati, OH: Anderson Publishing Co.
- Andrews, D. A., Dowden, C., & Gendreau, P. (2000). Clinically relevant and psychologically informed approaches to reduced reoffending: A meta-analytic study of human service, risk, need, responsivity and other concerns in justice contexts. Manuscript submitted for publication.
- Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work? A psychologically informed metaanalysis. *Criminology*, 28, 369-404.
- Aos, S., Phipps, P., Barnoski, R., & Lieb, R. (1999). The comparative costs and benefits of programs to reduce crime: A review of national research findings with implications for Washington State. Washington, DC: Washington State Institute for Public Policy.
- Apsler, R. (1991). Evaluating the cost-effectiveness of drug abuse treatment services. In *Economic Costs, Cost-effectiveness, Financing, and Community-Based Drug Treatment,* National Institute of Drug Abuse Research Monograph Series 113 (pp. 57-66), Rockville, MD: U.S. Department of Health and Human Services.
- Britt, C. L., Gottfredson, M. R., & Goldkamp, J. S. (1992). Drug testing and pre-trial misconduct: An experiment on the specific deterrent effects of drug

monitoring defendants on pre-trial release. *Journal of Research in Crime and Delinquency*, 29(1), 62-78.

- Bureau of Justice Statistics (1998). Criminal Victimization 1997 (Report NCJ-173385) Washington, DC: U.S. Department of Justice.
- Burt, M. R., & Katz, B. L. (1985). Rape, robbery, and burglary: Responses to actual and feared victimization, with special focus on women and the elderly. *Victimology: An Internal Journal*, 10, 325-358.
- Clear, T. R., & Hardyman, P. L. (1990). The new intensive supervision movement. Crime & Delinquency, 36, 42-60.
- Cohen, M. A. (2000). Measuring the costs and benefits of crime and justice. In D. Duffee (Ed.), *Measurement and analysis of crime and justice, criminal justice 2000, 4,* (pp. 263-315). Rockville, MD: National Institute of Justice/NCJRS.
- Cohen, M. A. (1998). The monetary value of saving a high-risk youth. Journal of Quantitative Criminology, 14(1), 5-33.
- Cohen, M. A. (1988). Pain, suffering, and jury awards: A study of the cost of crime to victims. *Law and Society Review*, 22(3), 537-555.
- Cohen, M. A., Miller, T. R., & Rossman, S. B. (1994). The costs and consequences of violent behavior in the United States. In A. J. Jr. Reiss & J. A. Rother (Eds.), *Consequences and control of understanding and preventing violence* (pp. 67-166). Washington, DC: National Research Council, National Academy Press.
- Donato, R., & Shanahan, M. (1999). The economics of implementing intensive in-prison sex-offender treatment programs. In *Trends and issues in crime* and justice, 134, (pp. 1-6). Canberra, Australia: Australian Institute of Criminology.
- Eddy, D. M. (1992). Cost-effectiveness analysis: Is it up to the task? Journal of American Medical Association, 267(24), 3342-3348.
- Elliott, D. S. (1980). Recurring issues in the evaluation of delinquency prevention and treatment programs. In D. Schichor & D. H. Kelly (Eds.), *Critical issues in juvenile delinquency* (pp. 237-262). Lexington, KY: D. C. Health and Company.
- Friedman, L. S. (1977). An interim evaluation of the supported work experiment. *Policy Analysis*, 3(2), 147-170.
- Gendreau, P., Goggin, C., Cullen, F. T., & Andrews, D. A. (2000). The effects of community sanctions and incarceration on recidivism. *Forum on Corrections Research*, 12(2), 11-13.
- Gendreau, P., Paparozzi, M., Little, T., & Goddard, M. (1993). Does "Punishing Smarter" Work? An assessment of the new generation of alternative sanctions in probation. *Forum on Corrections Research*, 5(3), 31-34.
- Goldschmidt, P. G. (1976). A cost-effectiveness model of evaluating health care programs: Application to drug abuse treatment. *Inquiry*, XIII, 29-47.

Gray, C. M. (Ed) (1979). The costs of crime. Beverly Hills, CA: Sage Publications.

- Gray, T. (1994). Research Note: Using cost-benefit analysis to measure rehabilitation and special deterrence. *Journal of Criminal Justice*, 22(6), 569-575.
- Greenberg, D. F. (1990). The cost-benefit of imprisonment. Social Justice, 17(4), 49-75.
- Greenwood, P. W., Model, K. E., Rydell, C. P., & Chiesa, J. (1996). Diverting children from a life of crime: Measuring costs and benefits. Santa Monica, CA: RAND Corporation.
- Grove, W. M., Zald, D. H., Lebow, B. S., Snitz, B. E., Nelson, C. (2000). Clinical versus mechanical prediction: A meta-anlaysis. *Psychological Assessment*, 12, 19-30.
- Henggeler, S. W., Melton, G. B., & Smith, L. A. (1992). Family preservation using multisystemic therapy: An effective alternative to incarcerating serious juvenile offenders. *Journal of Consulting and Clinical Psychology*, 60(6), 953-961.
- Hertzman, M., & Montague, B. (1977). Cost-benefit analysis and alcoholism. Journal of Studies of Alcohol, 38(7), 1371-1384.
- Holahan, J. (1973). Measuring benefits from prison reform. In *Benefit-cost and policy analysis. An Aldine annual on forecasting, Decision-making and evaluation* (pp. 491-516). Chicago, IL: Aldine.
- Holder, H. D. (1987). Alcoholism treatment and potential health care cost saving. *Medical care*, 25, 52-71.
- Kiessling, J. J. (1976). A cost-effectiveness analysis of the Ottawa Volunteer Program. Ottawa, ON: Ontario Ministry of Correctional Services.

- Knox, G. W., & Stacey, W. A. (1978). Determinants of employment success among ex-offenders. Offender Rehabilitation, 2(3), 205-214.
- Laplante, J. M., & Durham, T. R. (1983). An introduction to benefit-cost analysis for evaluating public expenditure alternatives. (Available from the Policy Studies Associates, P.O. Box 337, Croton-on-Hudson, NY 10520).
- Laurence, L., & Spalter-Roth, R. (1996). Measuring the costs of dynamic violence against women and the cost-effectiveness of intervention: An initial assessment and proposals for further research. (Available from the Institute for Women's Policy Research, 1400 20thStreet, NW, Suite 104, Washington, DC 20036).
- Leukefeld, C. G., Logan, T. K., Martin, S. S., Purvis, R. T., & Farabee, D. (1998). A health services use framework for drug-abusing offenders. *American Behavioral Scientist*, 41(8), 1123-1135.
- Levine, H. M. (1983). Cost-effectiveness: A primer. New perspectives in evaluation, 4. Beverly Hills, CA: Sage Publications.
- Lipsey, M. W. (1992). Juvenile delinquency treatment: A meta-analytic inquiry into the variability of effects. In R. S. Cook, H. Cooper, D. S. Cordray, H. Hartmann, L. V. Hedges, R. J., Light, T. A. Louis, & F. Mosteller (Eds.), *Meta-analysis for explanation* (pp. 83-125). New York, NY: Russell Sage.
- Lösel, F. (1995). The efficacy of correctional treatment: A review and synthesis of meta-evaluations. In J. McGuire (Ed.), What works: Reducing reoffending: Guidelines from research and practice (pp. 79-111). Chichester, UK: Wiley.
- Lösel, F. (1996). Effective correctional programming: What empirical research tells us and what it doesn't. *Forum on Corrections Research*, 8(3), 33-37.
- MacKenzie, D. L., & Parent, D. G. (1992). Boot camp prisons for young offenders. In J. M. Byrne, A. J. Lurigio, & J. Petersilia (Eds.), *Smart sentencing: The emergence of intermediate sanctions* (pp. 103-119). Newbury Park, CA: Sage Publications.
- Mallar, C. D., & Thornton, C. V. (1978). Transitional aid for release prisoners: Evidence from the life experiment. *The Journal of Human Resources*, X111(2), 208-236.
- Marshall, W. L. (1992). The social value of treatment for sexual offenders. *The Canadian Journal of Human Sexuality*, 1(3), 109-114.
- Miller, T. R. (1990). The plausible range for the value of life: Red herrings among the mackerel. *Journal of forensic economics*, 3(3), 75-89.
- Miller, T. R., Cohen, M. A., & Wiersema, B. (1996). Victim costs and consequences: A new look (NCJ-155282). Washington, DC: National Institute of Justice.
- Morris, E. K., & Braukmann, C. J. (Ed.) (1987). Behavioral approaches to crime and delinquency: A handbook of application, research, and concepts. New York, NY: Plenum Press
- Nas, T. F. (1996). Cost-benefit analysis: Theory and application. Thousand Oaks, CA: Sage Publications.
- Phillips, L., & Votey, H. L. (1981). The economics of crime control. Beverly Hills, CA: Sage Publications.
- Prentky, R., & Burgess, A. W. (1990). Rehabilitation of child molesters: A costbenefit analysis. American Journal of Orthopsychiatry, 60, 108-117.
- Quinsey, V. L., Harris, G. T., Rice, M. E., & Lalumière, M. L. (1993). Assessing treatment efficacy in outcome studies of sex offenders. *Journal of Interpersonal Violence*, 8, 512-523.
- Rajkumar, A. S., & French, M. T. (1997). Drug abuse, crime costs, and the economic benefits of treatment. *Journal of Quantitative Criminology*, 13(3), 291-323.

- Rossi, P. H., Freeman, H. E., & Lipsey, M. W. (1999). Evaluation: A systematic approach, 6thedition, Thousand Oaks, CA: Sage Publications.
- Seashore, M. J., Haberfeld, S., Irwin, J., & Baker, K. (1976). Prisoner education: Project Newgate and other college programs. New York, NY: Praeger Publishers.
- Sellin, T., & Wolfgang, M. E. (1964). The measurement of delinquency. New York, NY: Wiley.
- Swint, J. M., & Nelson, W. B. (1977). Prospective evaluation of alcoholism rehabilitation efforts: The role of cost-benefit and cost-effectiveness analyses. *Journal of Studies on Alcohol, 18*(7), 1386-1404.
- T³ Associates (1999). An outcome evaluation of CSC substance abuse programs: OSAPP, ALTO and Choices-Executive Summary (Available from Reintegration Programs, Correctional Service of Canada, 340 Laurier Avenue West, Ottawa, ON, K1A 0P9).
- Titus, R., Heinzelmann, M. F., & Boyle, J. M. (1995). Victimization of persons by fraud. *Crime and Delinquency*, 41, 54-72.
- Tonry, M. (1990). Stated and latent functions of ISP. Crime & Delinquency, 36, 174-191.
- Treasury Board of Canada (1976). Benefit-cost analysis guide (Catalogue No. BT35-2-1976). Ottawa, ON: Minister of Supply and Services Canada.
- Treasury Board of Canada (1998). DRAFT *Benefit-cost analysis guide*. Ottawa, ON: Author.
- Turner, S., & Petersilia, J. (1996). Work release in Washington: Effects on recidivism and correctional costs. *The Prison Journal*, 76(2), 138-164.
- United States Office of Management and Budget (1989). *Regulatory Program* of the United States. Washington, DC: U.S. Government Printing Office.
- United States Office of Management and Budget (1996). Economic analysis of federal regulations under Executive Order 12866. Washington, DC: Author.
- Weimer, D. L., & Friedman, L. S. (1979). Efficiency considerations in criminal rehabilitation research: Costs and consequences. In L. Sechrest, S. O. White, & E. D. Brown (Eds.), *The rehabilitation of criminal offenders: Problems and prospects.* Washington, DC: National Academy of Sciences.
- Welsh, B. C., & Farrington, D. P. (2000). Correctional intervention programs and cost-benefit analysis. *Criminal Justice and Behavior*, 27(1), 115-133.
- Viscusi, W. K. (1993). The value of risk to life and health. *Journal of Economic Literature*, 31, 1912-1946.
- Yates, B. T. (1998). Toward the incorporation of costs, cost-effectiveness analysis, and cost-benefit analysis into clinical research. *Journal of Consulting* and Clinical Psychology, 62, 729-736.
- Zamula, W. (1987). Social costs of drownings and near-drownings from submersion accidents occurring to children under five in residential swimming pools. (Available from Directorate for Economic Analysis, U.S. Consumer Product Safety Commission).
- Zedlewski, E. W. (1985). When have we punished enough? *Public Administration Review*, 45, Special Issue, 771-779.
- Zerbe, R. O. (1998). Is cost-benefit analysis legal? Three rules. Journal of Policy Analysis and Management, 17(3). 419-456.
- Zimring, F. E., & Hawkins, G. (1988). Incapacitation: Penal confinement and the restraint of crime. New York, NY: Oxford University Press.