Solicitor General Canada

The Effects of Long-Term Incarceration

And a Proposed Strategy for Future Research

by

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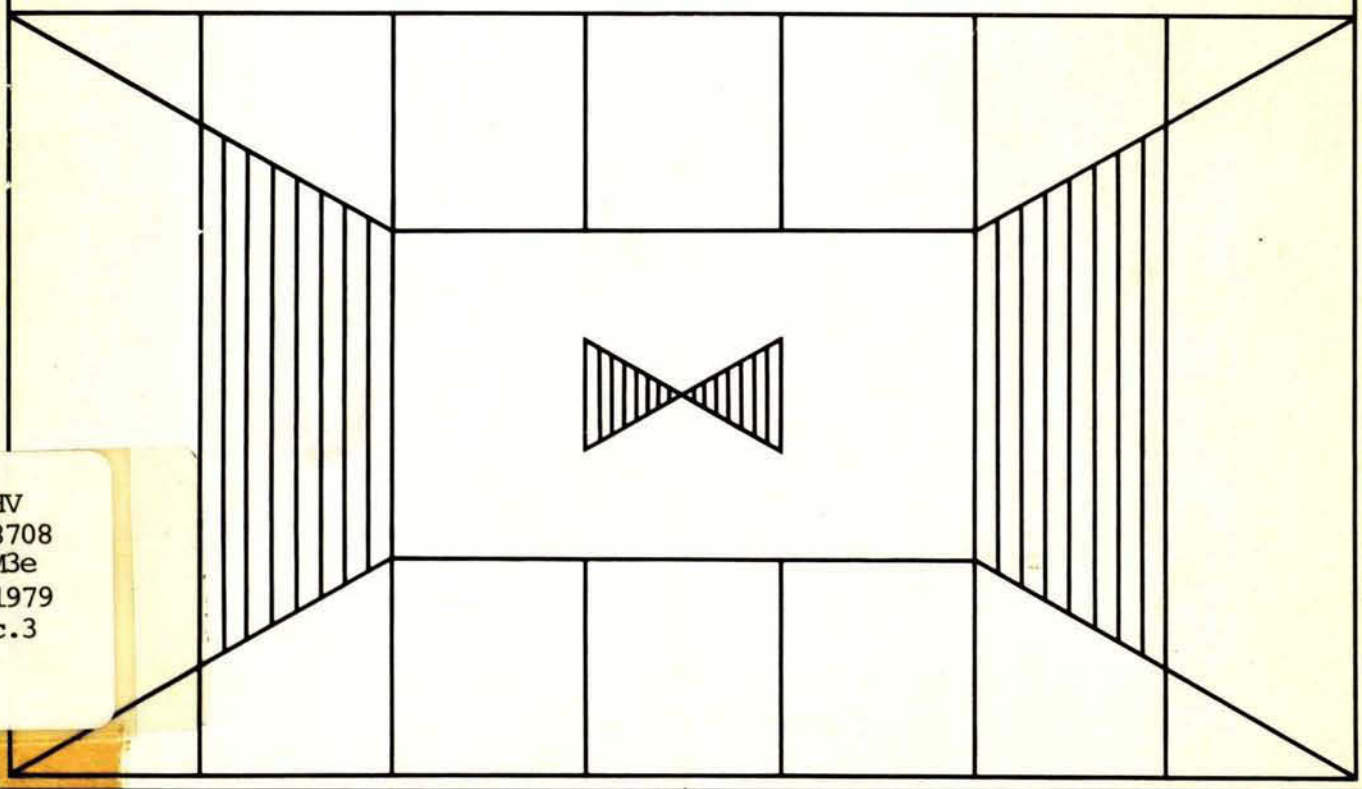

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INTRODUCTION

Project Objectives

A preliminary objective of this project[1] was to initiate a search and assessment of the psychological, sociological, criminological, psychiatric, and medical literature pertaining to long-term or extended incarceration in order to identify effects of such institutionalization on incarcerated populations. This review has resulted in the identification and enumeration of a number of psychological, social, and physiological variables known to be associated with prolonged confinement.

A synthesis of these findings was undertaken to meet another major objective of the project, the formulation of a research strategy regarding effects of long-term incarceration. This formulation includes a discussion of research questions, approaches and priorities for the purpose of providing a framework for future research pursuits in this area.

Procedure

A search of the available social science literature dealing with the effects of long-term confinement was initiated. Texts, reports or reprints of many of the works which are deemed most pertinent to this area of investigation were located for review. In addition, several source and abstract searches were conducted. For example:

a) Annotated bibliographic searches were compiled from the L.E.A.A.* and the American Psychological Association abstract services.

* Law Enforcement Assistance Administration (U.S.)

b) A series of abstract searches were conducted through the computer facilities of the Institute for Behavioural Research located at York University in Toronto of which the University of Ottawa is a consortium member.

c) The University of Ottawa library facilities (Social Sciences, Common Law, Criminology and Medicine) were employed to search for key journal articles and texts.

d) Interviews have been conducted with faculty colleagues and other professionals familiar with aspects of long-term confinement to ascertain other potential sources of information.

e) Correspondence was undertaken and maintained with investigators and agencies directly concerned with the issue of long-term confinement.

Initial Observations

Perhaps the most striking impression in conducting a search of literature in this area is the paucity of systematic research devoted to it. Radzinowicz noted in his 1968 Report of the Advisory Council on the Penal System to the British Home Office:

> "...practically nothing is known about the vital subject of the lasting effects on human personality of long-term imprisonment, yet pronouncements on the subject continue to be made and very long prison sentences continue to be imposed."

The published works reflect a veritable "hodge-podge" of approaches and findings with representation from almost every conceivable discipline and profession (see Appendix A). To complicate matters further, much of the most significant literature is not directly related by investigators to the problem of long-term imprisonment.

It is important to note at the outset that our assessment of the literature to date has indicated that many of the variables which have been claimed as "effects" are not only confounded but are frequently confused with "causes", or conditions that may produce certain other effects. For instance: social, sexual, sensory, intellectual, cognitive or physical deprivation are frequently cited as "effects" of prolonged confinement. Similar statements are made regarding: loss of privacy; restriction on space of free movement; crowding; over-routinization; and the like. In one sense it is quite accurate to state these as "effects" of prolonged confinement. However, it might be more appropriate to suggest that many of these "effects" qualify as descriptions of environments, or as the conditions under which long-term confinement has occurred and been studied. <u>They represent the limiting conditions of environments in which extended incarceration has taken place</u>. Obviously, such literature can be of considerable assistance in identifying and ameliorating those conditions which may have adverse consequences. Thus, it is important for any discussion of the "effects" of long-term confinement to be aware of the causal implications of employing such terminology.

The preliminary search and assessment procedure has also resulted in the enumeration of more specific and often observable consequences to the individual confined for prolonged periods. Observations have included: boredom; altered time perspective; anxiety and stress; "prisonization"; "institutionalization"; prison neuroses and psychoses (e.g., Ganser Syndrome); altered states of consciousness; changes in measures of self-concept, intelligence, abilities, personality and attitudes; and anomie.

Another strong impression from even the most cursory reading in this area is of a methodological nightmare. Perhaps this can be better understood by recognizing that it is an area of experience that does not lend itself easily to systematic empirical investigation. The unique and extreme conditions that are associated with incarcerating individuals for significant periods of their lives is not an easy subject for quantitative analysis. The difficulty in identifying and separating meaningful variables which can be manipulated in the natural environment or simulated in the lab is nearly insurmountable. For example, of the "effects" noted above it is quite possible that at some time during a period of prolonged confinement, an individual may experience any one, or all of these in some combination. Thus, it should not be surprising to find that much of the significant writing which attempts to communicate the effects of the experience of long-term imprisonment is of a qualitative nature. The phenomenological approach serves well in enabling investigators to reach some minimal understanding of the power and complexity of the experience of long-term incarceration.

Clearly, both quantitative and qualitative approaches contain valuable information for the investigator. Another direction pursued in the project was the examination of some literature concerning experiences which approximate or may be analogous to the conditions of long-term imprisonment. For instance, isolation and confinement may be approximated in the literature of the military (e.g., hardship postings, submarine personnel) or, in certain religious orders (e.g., monasteries). The experience of an extreme disruption or sudden and unalterable change in physical and social environments may find its analogy in disaster studies, migration literature, accounts of labour and concentration camp experiences (Brody, 1969; Burns, 1963; Cohen and Taylor, 1972). Accordingly, this report includes a brief sampling of this literature under the rubric of behaviour in other deprivation environments.

In summary, these initial observations are meant to serve as a guiding framework for the review and assessment of the literature pertaining to long-term incarceration. A final note of caution preceding this review is needed. "Long-term" confinement is operationalized non-systematically by investigators and can mean confinement ranging from six months to more than twenty-five years. The primary focus of this report was expected to be on periods of confinement longer than ten years. Clearly, however, some of the research not directly using a decade (minimum) time frame provides valuable information and cannot be ignored. As will be seen in the ensuing discussion, this presents some problems in inference, interpretation and ecological validity of various findings.

PSYCHOLOGICAL CORRELATES OF IMPRISONMENT

Time Perspective

> "March 24, 1947.- Now I have reached twelve hours of sleep daily. If I can keep that up I shall be cutting my imprisonment by a full five years--by comparison with my normal sleeping time of six hours" (Speer, 1977, p. 49).

Stanley Cohen and Laurie Taylor (1972) in their landmark study of long-term, maximum security prisoners devoted an entire chapter to the problem of time, the mechanisms employed by inmates to cope with the passage of time and the fear of deterioration over time. It is evident that the way in which time is perceived or the very notion of time itself as a "problem" becomes a complex and important variable in an environment in which "doing time" is the appropriate metaphor. Curiously, very little is known about the psychological mechanisms involved in adaptive or maladaptive time-framing. Although theorists have suggested that time perspective should be considered an important variable in

studying environments which exercise (fate) control over individuals, empirical research in this area is sparse (Calkins, 1970; Cohen and Taylor, 1970; Landau, 1969; Landau, 1975; Lewin, 1948; Thibaut and Kelley, 1967). There appears to be some consensus among investigators that the indeterminacy of a sentence has far different effects on time perspective than when clear and determinant terms are imposed (Barrett, 1972; Bondy, 1943; Cohen, 1953; Farber, 1944; Richardson, 1972; Thibaut and Kelley, 1967).

One of the few studies to look at time perspective in the prison situation is reported by Farber (1944). His main interest was in determining factors which influence prison behaviour, i.e., whether length of sentence imposed, length of sentence served, or the remaining time of the sentence left to serve, exerted any influence on the prisoner's behaviour, attitudes or emotional responses.

The study, conducted at the Iowa State Penitentiary, included men ($n = 40$ in the sample) serving differing length of sentences, length of time served and time remaining to serve, age groups and reputations (different "types" from case files). Data were collected through interviews conducted individually at the prison. Each interview was extensive and semi-structured covering such topics as the prisoner's attitude toward his sentence, toward the time he had served, the prison way of life, plans for release and relations with persons on the outside.

Farber concluded that feelings of injustice toward the sentence and the time served, could be better related to length of sentence and time already served than to variables which serve to describe the environment. The data also suggest that despite length of sentence, etc., prison behaviour appears to be dominated by the need to get out and consequently, inmates concentrate on means to fulfill that end. Farber also notes that one of the variables closely associated with inmates' perceived degree of suffering was sentence indeterminacy.

Galtung (1961) has noted that one of the effects of routinization in the prison is to elongate prisoners' time perceptions. Thibaut and Kelley (1967) suggest at least two types of adjustment to time-framing that can shorten or lengthen one's time perspective. These involve psychological mechanisms which entail the re-evaluation or readjustment of one's perceptions of the environment, or both. Rogan (1975) has found that inmates' ability to respond in a "Time competent" manner increases as they progress through imprisonment.

> "July 6, 1947.- Raeder tells me I have a fortunate disposition; I am adjusting to imprisonment more easily than all the others. Even now, he says, after two years I still give the impression of being halfway balanced, which is more than can be said for any of the others.
> My temperament may have something to do with it. But it may also come from my ability to organize my life on all planes; the moral aspect by accepting my guilt; the psychic aspect by rejecting almost all deceptive hopes of early release; the practical aspect of disciplining the routine of everyday life, that is, by planning even trivialities, from the cleaning of the cell to dividing time into spells of work and of holiday. Writing down these thoughts is also part of it " (Speer, 1977, p. 69).

Finally, Cohen and Taylor (1972) have discussed a number of coping mechanisms which long-term prisoners employ in order to deal with the problem of passing time and to reduce the stress associated with the fear of deterioration of self while serving time. For instance, thinking about the future is resisted; the belief that "one's life is experienced in prison" is rejected;

and a great deal of effort is expended in finding new and appropriate ways to "time-frame". Events are sought which serve to divide the day as well as providing something to look forward to. In some instances these represent more external forms of time-markers (e.g., visits, letters), but it appears that they must be supplemented by internally-generated means of measuring time passage (e.g., slow but perceptible bodily changes from weight-lifting, reading a particular series of books)

It is curious that the area of time perspective has received little attention by investigators. One of the major consequences of breaking the law is the deprivation of certain freedoms and liberties for a period of time. What is most interesting in the limited literature on time perspective is the strong suggestion of vast individual differences in the subjective experience or estimation of time, or both (Orme, 1969). Furthermore, there appears to be a number of both adaptive and maladaptive strategies for dealing with the problem of time. Certainly this area calls for more comprehensive study from all spheres of research activity.

Cognitive Functioning

A series of investigations conducted recently in the United Kingsom by Banister and his colleagues (1973a, 1973b, 1974, 1976) are perhaps methodologically the most rigorous studies reviewed to date that deal with psychological correlates of long-term confinement. The aim of the first phase of this comprehensive research program was to determine whether comparable changes existed among men serving long periods of imprisonment (Banister, Bolton, Smith and Heskin, 1973a). A long-term prison sentence was defined as either a determinate sentence of ten years or longer, or an indeterminate sentence of life imprisonment or detention at Her Majesty's pleasure.

The total population of men serving life sentences in English and Welsh prisons as of the end of 1968 was approximately 1,100 men. A final sample of 175 male inmates was selected for study. This sample was divided into four groups, matched for age but differing in mean length of imprisonment (the four groups are divided in terms of mean years served:

Grp 1. $\bar{X}$ = 2.47 SD = .83
Grp 2. $\bar{X}$ = 4.94 SD = .62
Grp 3. $\bar{X}$ = 6.99 SD = .77
Grp 4. $\bar{X}$ =11.29 SD =2.41

The N's for Groups 1, 2 and 3 = 50, for Group 4 N=25).[2]

The following tests were administered:

- Gibson Spiral Image
- General Aptitude Test Battery (form-matching)
- Wechsler Memory Scale (associate learning and visual reproduction test)
- Purdue Pegboard
- Wechsler Adult Intelligence Scale
- Reaction Time Tests

The data obtained on the psychological correlates of long-term imprisonment offer no support for the view that increase in length of imprisonment is associated with intellectual decline. (Scores on the information, comprehension and vocabulary sub-tests tend to rise, although non-significantly.) It is interesting to note that a marked decline in perceptual-motor speed occurred in the subjects who had served a mean total of seven years and not in those who had served a mean total of eleven years. The investigators do not offer an explanation for this rather curious finding, however, it might be noted that similar declines in perceptual-motor functions have been reported for certain groups

of hospitalized psychiatric patients. It is suggested that a comparison of these literatures might be of some benefit in future work (Silverman, Berg and Kanfor, 1966).

Most quantitative studies dealing with cognitive functioning are surprisingly devoid of attempts to measure long-term effects. The inclination has been to assess cognitive functioning by means of standardized intelligence tests upon intake only, occasional institutional re-assessment, and post-release follow-up. The search of the literature to date has indicated that very little is known about the effects of long-term confinement in contemporary correctional settings on cognitive functioning. It appears that some investigators are beginning to undertake the steps necessary to remedy this situation. For example, Bolton, Smith, Heskin and Banister (1976) have reported the most recent phase of the United Kingsom project, a longitudinal study in which the identical battery of tests was administered a second time to those subjects who still remained incarcerated after 19.07 months from initial testing. These results were compared with the initial results and with a group of non-prisoners, working in a wide range of occupations. This second group of subjects was matched for age with the prison sample. In total, 88% of the original sample were available for follow-up assessment. The tests mentioned in the previous stages of the study, examining intelligence, ability, personality and attitudes, were administered.

> "Analysis revealed no evidence of psychological deterioration. On the contrary, verbal intelligence showed a significant increase between first and second testing, and there significant reductions in hostility, which were associated with increasing emotional maturity" (Bolton, et al., 1976, p.46).

Results such as the above must always be treated with a considerable degree of caution. The tendency to draw a causal relationship should be resisted or at least tempered with the clear recognition that methodological issues are still contentious (e.g., subject motivation, Butterfield and Zigler, 1970). This cautionary note should apply whether results show improvement, deterioration or no change in test scores. The essence of construct validation in the social sciences is multiple method confirmation, and as Webb, Campbell, Schwartz and Sechrest (1966) have cautioned: "Efforts in the social sciences at multiple confirmation often yield disappointing and inconsistent results" (p. 5). Multiple confirmation has not been attempted in this area to date.

Self-Perception, Personality Variables and Value Change

Another phase of the United Kingdom study was concerned with the question of how the inmates' attitudes to various relevant concepts are affected by the experience of imprisonment and whether imprisonment itself may be implicated as a causal variable (Heskin, Bolton, Smith and Banister, 1974). The same sample was used and a Semantic Differential Test administered.

Perhaps the most significant finding was a decrease in self-evaluation found among men who have experienced longer terms of imprisonment. "For the concept of 'myself', group 3 scored significantly ($p < .001$) lower than group 1 and significantly ($p < .05$) lower than group 2, although the mean for group 4 is slightly above that of group 3" (Heskin et al., 1974, p. 152). In other words, the group who had served a mean total of 6.99 years in prison scored significantly lower on the concept of self-esteem than the groups whose mean length of imprisonment was 2.47

and 4.94 years respectively. Graphically, this resembles a reversed "J" function (ʃ). There was also evidence that more unfavourable attitudes towards work and father were associated with increasing imprisonment. This was felt to be assessed with major changes in the pattern of relationships with the family.[3]

It should be noted that the findings related to inmates' self-perceptions are somewhat contradictory. Culbertson (1975) reports in a study of incarcerated adolescent male offenders that self-concept scores did not decrease significantly for the total population studied, however, for those boys not previously incarcerated, the decrease was significant and linear. Stratton (1963) found no significant or consistent shift in self-esteem scores related to different stages of imprisonment. Atchley and McCabe (1968) report no systematic pattern in self-esteem changes in incarcerated populations. A report prepared by the (Kansas) Committee on Penal Reform (1973) claims that lowered self-esteem is an inevitable consequence of imprisonment. No data are reported to substantiate this statement. Baughman and Pierce (1972) note that real-ideal self descrepancies reported by inmates on MMPI scales are reflected in consistently lower mean scores for ideal self conditions. It is inferred that ideal self manifests fewer or less intense tendencies associated with each of these scales.

Gendreau, Gibson, Surridge and Hug (1973) report a study which attempted to assess changes in self-esteem in young male offenders after six months' incarceration. The sample included 82 first offenders in the Guelph Correctional Centre. (Educational level was grade 9, Range - Grade 3 to 1 year university; I.Q.=102, Range - 84 to 131; and Age - $\bar{X}$ =18, Range - 16 to 24 years).

A test-retest design was employed with the first testing taking place 2-4 weeks after the subjects' arrival at the Centre during September, 1969. The second test period occurred six months later, approximately at the mid-point of the subjects' sentence (because some subjects had been sent to other Ontario correctional centres, only 70 subjects were available for the second test). The tests administered included:

- Self-Esteem Inventory (SE)
- Adjective Check List (ACL)
- Selected MMPI Scales

The statistically significant results of the data are as follows:

a) There was a significant increase in self-esteem $p < .01$
b) Subjects reported fewer depressive symptoms, $p < .01$
c) There was a significant increase on the following scales:
    i) autonomy, $p < .05$
    ii) aggression, $p < .01$

There was a significant decrease on the following scales:

i) abasement, $p < .01$
ii) affiliance, $p < .05$
iii) intraception, $p < .05$
iv) nuturance, $p < .01$
v) personal adjustment, $p < .01$
vi) self-control, $p < 01$
vii) succorance, $p < .05$

Wheeler (1961) has suggested that changes in self-esteem of incarcerated individuals represent an inverted U-shaped function over the period of institutionalization, i.e., self-esteem would increase after the initial period of incarceration, remain fairly high during the mid-portion of confinement and begin to decrease

again as the individual contemplates release. Bennett (1974) failed to support this hypothesis in a recent study. Most of the inmates in his sample experienced an increase in self-esteem during the first few months of their stay which maintained throughout the remainder of their confinement period including pre-release periods. Gattshall (1969) found that an increasing openness to negative attributes of the self-concept, a strengthening of the moral-ethical-self-structure, and increasing acceptance of integrated self-perception and a lessening of, or adjustment to basic personality defects were related to length of incarceration. Finally, in contrast with Wheeler's hypothesis, it should be noted that the Heskin, Bolton, Smith and Banister (1974) results (reported above) resemble more closely a reversed "J" function (∪) than an inverted "U" over long periods of confinement.

Banister, Bolton, Smith and Heskin (1973b) have examined the relationship between length of imprisonment and personality change. As part of the United Kingdom project, the tests administered to the same sample of long-term prisoners included:

- Eysenck Personality Inventory (Form B)
- California Psychological Inventory (masculinity-femininity scale)
- Sixteen Personality Factor Questionnaire (Form B)
- Hostility and Direction of Hostility Questionnaire

The major findings indicate that intropunitive hostility, reflecting both guilt and self-criticism, increases with length of imprisonment with a trend toward declining extroversion.[4] The results show that prisoners are significantly more neurotic than a non-prison sample although neuroticism does not tend to show any consistent relationship with length of imprisonment.

Most typically, however, personality scales are employed in the prison setting either to predict adjustment or to provide information to facilitate treatment intervention (Baughman and Pierce, 1972; Eysenck and Eysenck, 1973; Newburg, 1966; Stump and Gilbert, 1972; Tittle, 1972; Truxal and Sabatino, 1972). The applicability of such results to inferences regarding personality change over periods of long-term confinement is questionable and perhaps negligible. The current debate in psychology concerning the cross-situational consistency of behaviour related to personality dimensions or the stability of personality measures over time raises a complex issue for this literature (Mischel, 1967; Bowers, 1973). Thus, the assessment of any literature on personality change must be done within the framework of expectations we know to be associated with time-lagged correlations (Bem and Allen, 1974).

There are, of course, a number of other difficulties in comparing these apparently contrasting findings. Different measures were used, different samples, etc., but the most obvious difference is in the nature of the samples employed. Specifically, with the exception of the United Kingdom study, the majority of research deals with short-term sentences and frequently the subjects are experiencing their first incarceration. It appears that the bulk of this research indicates that speculation regarding any inherent lowering of self-esteem related to imprisonment is not supported by the evidence. That is, any attempt to draw a causal relationship between lowered self-esteem and imprisonment will encounter precisely the same difficulty as attempts to establish a causal linkage between increases in self-esteem and incarceration. Simply stated, the research reviewed to date does not contain the critical measure that would allow such inferences to be made. We do not know what effect the period

of contact with the criminal justice process prior to sentence disposition has had upon self-esteem. Furthermore, the absence of adequate comparison groups has been characteristic of this research. The conclusion then is, any particular piece of research that claims to have demonstrated a change related to imprisonment must be treated cautiously. The findings must always be tempered with the question--change compared to what? For example, what assumptions can be made regarding a "base rate" of self-esteem prior to any criminal justice contact?

Finally, the interpretation of change scores over time must consider, among other sources of invalidity, the nature of the sample tested and the situational demands (Campbell and Stanley, 1963). There are a number of test biases in the prison setting that do not appear to operate in most other settings. For example, there are, depending upon the setting, strong reasons for "faking" good or bad on many test inventories. Furthermore, the populations are frequently "test-wise" and thus exceedingly difficult to detect in deliberate response distortion.

Curiously, few systematic studies have attempted to explore the relationship between length of incarceration and changes in value structures. This, despite our proclivity toward associating longer sentencing with expectations of subsequent value, attitude, and behavioural change in the offender. Gattshall (1969) has reported a strengthening of the moral-ethical self-structure related to length of imprisonment. Cochrane (1974) contends that maturation of values is retarded in younger inmates by a period of incarceration. The development of an independent set of values is arrested during incarceration periods. Hautaluona and Scott (1973) recently investigated the change in value structures of young male offenders over the period of incarceration. The sample (n=107) was selected from a population (N=400) of inmates residing at an American federal correctional institution. Ages ranged from 14 to 23 years; previous arrests $\bar{x} = 4$; median of one prior incarceration; with the sample representating an adequate cross-section of inmates in this institution at all stages of their sentence

A questionnaire consisting of 77 value and 17 sociometric items was administered to the inmate sample (n=107) and, in addition to a sample of staff members (n=41). Their research was oriented towards testing the hypothesis of a "U"-shaped function of value change in inmates over time. Those inmates expressing the most "acceptable" values would be either at the initial or final stages of their incarceration.

The independent variable selected for study was "time", divided into absolute and relative time. Absolute time was defined as the length of time served prior to testing. Relative time divided each sentence into five equal intervals. The authors felt that this classification of the variable of time would adequately allow a test of the "U"-shaped curve of values hypothesis.

Items associated with the values of achievement, kindness and religiousness yielded significant decreases over absolute time (all p's $<$ .05) while the value of independence showed a significant increase (p. $<$ .05). When relative time was considered the values of achievement, kindness, honesty and religiousness significantly decreased (all p's $<$ .05) while independence and loyalty demonstrate a significant increase (p's $<$ .05) (see Table 1).

TABLE 1

Value Scale
Reliabilities and Correlations
With Inmate's Time in the Institutions (n=107)

Value Scale	Number of Items in Scale	Reliability Coefficient r_{tt}	Correlation with Absolute Time	Correlation with Relative Time
Kindness	5	.73	-.24*	-.19*
Achievement	6	.59	-.25*	-.19*
Loyalty	11	.86	.15	.19*
Physical Development	3	.54	-.08	.03
Status	8	.48	-.03	.09
Religiousness	6	.91	-.24*	-.23*
Honesty	4	.65	-.19	-.25*
Independence	5	.44	.24*	.22*
Social Skills	7	.76	-.17	-.12
Self-Control	4	.66	-.12	-.08

*p $<$ .05

In terms of both relative and absolute time, as the time served in their sentences increased, inmates tend to report values less like those of which the staff approved. "Similarity to staff" value indices showed a significant effect over absolute and relative time variables ($r=-.31$ and $r=-.28$ respectively).

> "The hypothesis of a U-shaped function for change in values with the newest and oldest inmates showing the most 'acceptable' values was tested by combining subjects in the first and last fifths of their sentences (relative time measure) and comparing their scores with those of inmates in the middle three-fifths of their sentences. None of these comparisons yielded a significant difference for any of the value scales. Therefore, it may be concluded that all the value changes detected in the present study represent linear, rather than U-shaped trends" (p. 233).

Although systematic research in this area is sparse and severely limited in generalizability it is clear that the relationship between changes in inmate value structures and length of incarceration is a complex, multivariate issue. All simplistic assumptions regarding the nature and directionality of such relationships should be scrutinized closely by investigators and further research efforts must be aware of the necessity for a methodology capable of exploring more complex and causal relationships (e.g., Eron, Rowell, Huesmann, Lefkowitz and Walder, 1972; Heise, 1970; McGuire, 1973).

PSYCHOPATHOLOGICAL "EFFECTS" [5]

The Ganser Syndrome: An Illustration

One "effect" frequently noted in literature dealing with psychological consequences of long-term incarceration is the Ganser Syndrome. Because this research provides an excellent illustration of the difficulties encountered in describing psychological disorders associated with imprisonment or even more problematic, length of imprisonment, it will be given further and detailed consideration in this report.

The Ganser Syndrome was first described by Dr. Sigbert Ganser in 1898 as a "peculiar hysterical twilight state" (Shorer, 1965, p. 126). Ganser (in: Shorer, 1965) described four essential clinical features of the syndrome as:

1) The giving of approximate answers;
2) The clouding of the consciousness;
3) The features of somatic conversion (including hysterical stigmata); and
4) A transient state with subsequent amnesia for the manifestation of the above symptoms.

One distinguishing characteristic of the Ganser Syndrome is the giving of approximate answers to simple questions. This has frequently been referred to as "vorbeireden": to talk past or beside the point, and "vorbeigehen": to pass the correct answer and give one close to it. Patients suffering from the Ganser Syndrome usually give false answers to the examiner's questions. Although these answers are wrong, they are "...never far wrong and bear a definite and obvious relation to the question, indicating clearly that the question has been grasped" (Anderson and Maillinson, 1941, p. 383).

Views concerning the psychopathology vary considerably. Some authors argue that the syndrome is a psychosis while others claim that it falls in the category of pseudo-dementia. Still others maintain that the disease lies somewhere between malingering and a true hysterical state.

The feature of consistently giving approximate answers makes Ganser patients clinically distinct from others. However, a more difficult feature to determine is whether the provision of wrong answers appears at the conscious or unconsious level. Thus, much of the debate in this literature has focused upon ascertaining whether this is a true psychological disorder or simple malingering. Ganser (in: Shorer, 1965) clearly considered this syndrome to be a unique clinical entity with features consistent with hysterical reactions. The features that Ganser considered both significant and fundamental to the "hysterical twilight state" were the combination of the fluctuating level of consciousness with defects of memory, accompanied by symptoms of hysteria. This combination of features was essential in determining a diagnosis of Ganser syndrome. Clearly, the total symptom constellation is critical since Ganser himself agreed that any or most of these symptoms might appear in other psychiatric conditions. This view is shared by Tsoi (1973). In addition, Tsoi (1973), in his study in Singapore of 10 males with a Ganser diagnosis, suggests that older patients are apparently more prone to develop this disorder. P.D. Scott (in: Shorer, 1965) examined some 8,000 delinquent girls and boys and failed to detect a single instance of the Ganser syndrome. Scott also notes that those delinquents who claimed amnesia for their offences were confined to murderers.

Although Ganser agreed that symptoms of the Ganser syndrome could appear in various other psychiatric conditions, he maintained that the syndrome was a manifestation of hysteria and, as such, should be classified independently of other mental illnesses. Enoch and Irving (1962) favour the inclusion of the syndrome within the group of hysterical reactions. Although

relatively rare, these authors insist that the Ganser syndrome does exist and should be regarded as an independent illness, distinct from either malingering or true dementia. Hysteria is here defined as "mental or physical symptoms, not of organic origins which are produced or maintained by motives never fully conscious, directed at some real or fancied gain to be desired from these symptoms" (Enoch and Irving, p. 220). Therefore, in hysterical reactions, the symptoms, although they provide secondary gains for the patient, are said to be of an unconscious origin. In malingering, the patient is aware that he is simulating and is carrying out his actions for a pre-conceived purpose.

Other authors argue that the syndrome is simulated by those wishing to escape difficult life situations or personal responsibilities. Hennebert (1904) (in: McGrath and McKenna, 1961) asked normal subjects to feign mental illness and found that the answers given by the subjects corresponded closely to those given by Ganser patients. In contrast, Anderson, Trethowan and Kenna (1959) found that approximations of correct answers were given more often by patients with pseudo-dementia than by simulants, normal controls or those with organic dementia. McGrath and McKenna (1961) assume that "...all simulators make a conscious decision to produce an illness for a conscious motive of gain or avoidance." According to Anderson, et al. (1959), purposeful feigning is almost impossible to sustain. Goldin and MacDonald (1955) claim that the Ganser state occupies some "intermediate" position between the malingering and hysterical states.

Mayer-Gross, Slater, and Roth (1961) equate the Ganser syndrome with hysterical pseudo-dementia. The patient claims a loss of memory for portions of his past life and often refuses to recognize relatives. These investigators suggest that the symptoms in the majority of cases are not genuine and are used "...in a most consistent way to defeat investigation....There is often a discreditable incident to be concealed" (p. 141). This

pseudo-dementia is most often observed in prison where there is a failure of memory and intellect accompanied by the acting out of an artificial psychosis, an attempt to escape from the reality of the situation. Prison, it is suggested, provides all of the appropriate stimuli.

Anderson, Trethowan and Kenna (1959) disagree with Mayer-Gross et al., and argue that the absence of a disturbance of consciousness in pseudo-dementia is the differential feature. According to Anderson and his colleagues, the Ganser patient shows much greater psychic disturbance and may become schizophrenic, whereas pseudo-dementia is usually transient, situational and the patient operating much closer to conscious simulation.

Goldin and MacDonald (1955), in reviewing the relevant literature, state that "all of the cases reported since the early German literature appear to have some kind of psychosis in addition to the Ganser state" (p. 267). This is consistent with their position that the majority of cases reported in the literature are not, in fact, examples of Ganser syndrome. Anderson and Maillinson (1941), concerned with describing the Ganser syndrome as a major psychosis, point out that a majority of authorities on the Ganser syndrome describe it as some form of psychic abnormality.

As noted, other symptom constellations may resemble this syndrome. According to May, Voegele and Paolino (1960), an increase or decrease in stimulation outside a person's range of tolerance may produce psychotic reactions similar to the Ganser syndrome. These reactions have been reported by arctic explorers, solitary ocean sailors and persons in isolation chambers.

Weiner and Braiman (1955) contend that Ganser patients are psychotic and state that many reported cases show symptoms of what is more accurately described as a fugue state. Stengel (1943), (in: McGrath and McKenna, 1961, p. 158) defines fugue

as a ..."condition produced by the coincidence of neurotic and psychotic mechanisms." McGrath et al. (1961) agree with Stengel's definition of a fugue and maintain that the definition applies to the Ganser syndrome. Fenichel (1945), (in: McGrath and McKenna, 1969, p. 158) states that "...sometimes an ego otherwise intact is capable of temporarily turning away from an unpleasant reality in 'schizophrenic episodes' of short duration which were called 'hysterical psychosis' in older psychiatric terminology." McGrath and McKenna (1961) contend that the Ganser syndrome can be explained in psychological terms as an example of the defence mechanism of undoing, thereby supporting Fenichel's (1945) view:

> "A compulsion to annul antecedent decisions brought about by a reactive increase in the strength of a drive to oppose the original intention of distorting the perception of reality and cognitive functioning. Unconscious components, which are present in the originally ego syntonic attempts to modify reality, assume primacy over a basically weak ego and are perceived as ego alien. The typical answer is a compromise, simultaneously carrying on the original attempt to simulate and attempting to regain the lost reality by convincing both the patient himself and others that apprehension of the environment is still operating. The result of the message is a contradictory one, conveying 'I am insane, yet sane'. Hence the confusion in the diagnostic constructions put upon this relatively rare state. To use a Freudian analogy, the horseback rider believes himself in control of the horse but in fact is obliged to guide it where it wants to go."

The incidence of the syndrome is very hard to determine since there is considerable disagreement on a precise definition. According to Lewis (1941), (in: Shorer, 1965), the Ganser syndrome is typically found in prisoners awaiting trial. However, Mayer-Gross, et al. (1954), (in: Anderson et al., 1959) reported the syndrome in sentenced prisoners who were later diagnosed schizophrenic without any apparent clear line of demarcation. May, Voegele and Paolino (1960) report on three institutionalized persons who developed the Ganser syndrome just prior to being released. This is in contrast to most published reports stating that the syndrome is most likely to develop upon entering a freedom-restricting environment. These authors suggest that, for these patients, staying in the institution represented a secondary gain, i.e., this environment was a condition necessary for the functioning of the patients. When the risk of losing the protective and secure environment was imminent, the patients exhibited disturbed behaviour approximating the Ganser syndrome.

Since 1941, there has been a revival of interest in this syndrome, due partly to various accounts of men trying to avoid or escape military service (Anderson et al., 1941).

In summary, evidence for the incidence of the occurence of this particular psychopathological disorder which is so frequently associated with imprisonment is scanty and the subject of considerable confusion. Most of the difficulty surrounds the lack of a precise definition that would facilitate differential diagnosis and a discerning standard for evaluating the reported cases in the literature. The debate concerning Ganser syndrome is quite similar to that which has taken place over the diagnosis of psychopathy/sociopathy (McKay, 1970). In brief, most clinicians agree that an independent and identifiable clinical syndrome (Ganser) does exist yet disagree on the symptom pattern, its interpretation, and frequency of occurrence.

FACTORS RELATED TO IMPRISONMENT

Prisonization

Clemmer (1940) states that prisonization indicates "...the taking on in greater or less degree the folkways, mores, customs and general culture of the penitentiary" (p. 299). Zingraff (1975) has defined prisonalization as "...the degree of assimilation into the inmate contraculture and the particular type of social role assumed by the inmate" (p. 366). According to Clemmer, the assimilation process carries the following implications:

1) That a process of acculturation occurs in one group whose members originally were different from those of the group with whom they now associate;

2) That those assimilated come to share these sentiments, memories and traditions of the static group; and,

3) That this assimilation is a slow, gradual, more or less unconscious process, during which a person learns enough of the culture of a social unit into which he is placed to make him take on the characteristics of it (p. 298).

Simply stated, Clemmer coined the word prisonalization to describe those changes that inmates undergo during incarceration. Stated differently, it is a description of the socialization process into the prison culture. In most early studies, researchers appeared interested in differentiating between social typologies to ascertain changes in inmates during imprisonment. For example, Clemmer (1940) employed three categories: the elite, the middle class and the hoosier, whereas, Sykes (1958) relied on prison argot for differentiating prison roles.

According to Clemmer, the degree of prisonization may be affected by the following factors:

1) Personality of the offender and his susceptibility to the inmate subculture. This is seen as primarily dependent on the type of relationships which the offender had prior to incarceration;

2) The type and extent of relationships which the offender had prior to imprisonment;

3) The extent of the offender's affiliation with various prison groups. This, in turn, is related in part to factors (1) and (2);

4) The role of chance: e.g., cell location; proximity to other types through work placement, etc.;

5) The acceptance or rejection of the dogmas or codes of the prison culture; and,

6) A complex of all other and inter-related factors such as demographic characteristics (age, race, nature of criminality).

Zingraff (1975), in a review of this literature, suggests that the degree of prisonization can be determined by:

1) Length of time incarcerated;
2) Interpersonal ties with other inmates;
3) Proportion of time served;
4) Social role adaptation of the inmate;
5) Post-release expectations of the inmate;

6) Degree of alienation from the larger society;
7) Degree of alienation from the institution;
8) Self-concept of the inmate; and,
9) Organization variations.

Two models have been suggested to explain the process of prisonization (Cline, 1968). The first, the deprivation model is based on the assumption that imprisonment is a degrading and depriving experience. Inmates, in an effort to alleviate the "pains of imprisonment" formulate and maintain a subcultural normative system which emphasizes physical toughness, rejection of the formal institution and exploitation of prison programs and staff. The negative orientation of the inmates' subculture is seen as derived from the coerciveness of the formal organizational structure (Zingraff, 1975). Advocates of this model maintain that the pressure associated with imprisonment foster high levels of prisonization. The power of the organizational structure of a prison is seen as a major factor in the generation of stress and conflict in the inmate population.

In contrast, the importation model stresses the importance of the background of the inmate prior to incarceration. Well-defined attitudes and behaviour that accompany the inmate into the institution are seen as an integral factor in determining the subsequent degree of prisonization. This is largely influenced by factors external to the inmates' immediate or current environment; thus, the degree of prisonization is seen as primarily related to pre-prison experiences and reflecting previous contacts with criminal subcultures and the subculture of violence (Thomas and Foster, 1972).

Both models suggest that prisonization has a significant impact on inmates that cannot be considered conducive to resocialization. For instance, Clemmer (1940) suggests that prisonization implies:

1) Opposition to the over-all organization of the institution;
2) Increased priority placed on group loyalty to the inmate subculture; and
3) Denial of the legitimacy of the legal system of justice.

Clemmer (1940), among others, suggests that more "universal factors of prisonization" are evident in most, if not all, correctional environments. These include the inmates' acceptance of an inferior role, interest in and accumulation of facts concerning the organization of the prison; and, the adoption of the local language of prison argot. Thus, each offender entering a penal institution undergoes some degree of prisonization. Although such "universal factors" have not been the focus of a great deal of attention by investigators, Clemmer suggests that they are nonetheless significant when dealing with long-term inmates:

> "Even if no other factor of the prison culture touches the personality of an inmate of many years residence, the influence of these universal factors are sufficient to make a man characteristic of the penal community and probably so disrupt his personality that a happy adjustment in any community be becomes next to impossible" (p. 300).

Thomas and Foster (1972) have highlighted the powerful mediating effect that post-prison expectations have upon the process of prisonization. If an inmate has low expectations regarding

post-release lifestyle, then the degree of prisonization will be greater than if post-prison expectations were high. Clemmer (1951) has noted that inmates serving life sentences hold little if any post-release expectations and thus experience a high degree of prisonization.

Most investigators agree that the strongest determinant of a high degree of prisonization is a long sentence (Berk, 1966; Clemmer, 1940, 1951; Garabedian, 1963; Wheeler, 1961). In the context of this report, where the period of confinement under consideration is more than ten years, the expectation of a high degree of prisonization is clear and inevitable. Prisonization as a consequence of long-term confinement must be reassessed in view of these new expectations regarding length of incarceration.

Support Service Orientation

One issue for investigators would be to ascertain to what extent the processes involved in prisonization have functional value, contain adaptive mechanisms for dealing with an environment which will be the inmates' home for a substantial portion of his life. It has been assumed that the process is always negative. Certainly, in the context of potentially retarding the offenders' resocialization into the community it has obvious deleterious effects. However, when dealing with time frames of twenty years or more, the issue of prisonization must be evaluated from a far different perspective. We must seriously entertain the possibility, for example, that <u>any process</u> which has the potential for facilitating adaptation to the environment and the society which will become the offenders' sole "community" for many years deserves considerable scrutiny by investigators.

If the period of incarceration is to exceed a decade, then serious thought should be given to a complete re-orientation of supportive services provided to the inmate. For example, whereas the focus of many of the efforts of correctional service

workers today is on the post-release re-integration into the community, the emphasis with long-term inmates would be shifted to facilitating adaptation to the prison community. Thus, support would be provided on the vasis of reducing distress associated with imprisonment and assistance in accomodating to the correctional environment and society.

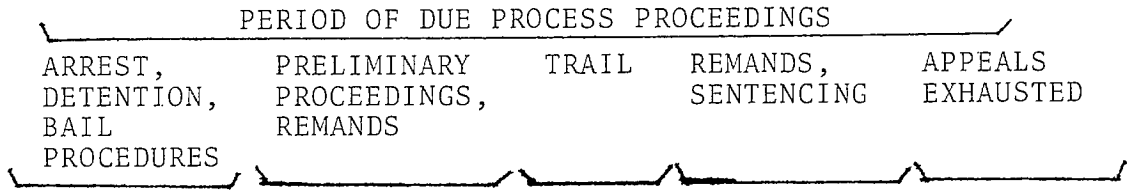
Figure 1 (p. 30a) represents a schema of the criminal justice process on a dimension of relative time. As can be seen the present orientation of support services provided to inmates for most terms of imprisonment is toward post-release reintegration into the community. The effect of most terms of imprisonment is to elongate sections B and C (preparation and readjustment). However, in considering the impact of long-term sentences it is suggested that the most logical effect would be to elongate section A (adjustment). Thus, the primary focus of correctional/ support services for long-term inmates would become adaptation to a period of extended incarceration and all that this entails. Obviously, such a model would necessitate a complete re-analysis of programs currently offered to inmates. The guiding principle in this (re)assessment would be that some programs may not be appropriate for long-term inmates, yet, may be of considerable value for those inmates serving shorter sentences. Whereas the needs of long-term inmates may be met by some existing programs and require the further development and implementation of other new, innovative approaches.

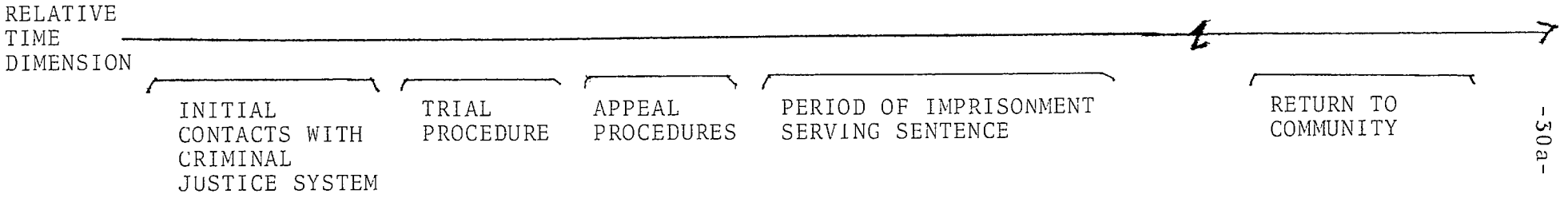
For example, it would be reasonable to suggest that from the day of initial contact with the criminal justice process the <u>expectations</u> of those persons facing potentially long-term sentences are different than most clientele in conflict with the law. The stakes and stress are higher and in many if not most instances the initial custodial risk maximal. Clearly, the emphasis for all criminal justice agents and personnel at this initial juncture is toward providing full security, custodial care and facilitating every effort to ensure that any and every avenue of due process of the law has been made available and exhausted.

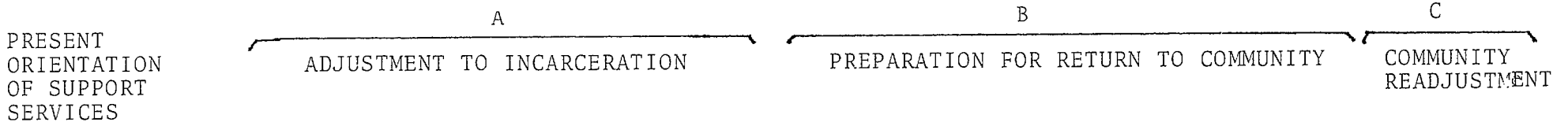
FIGURE 1

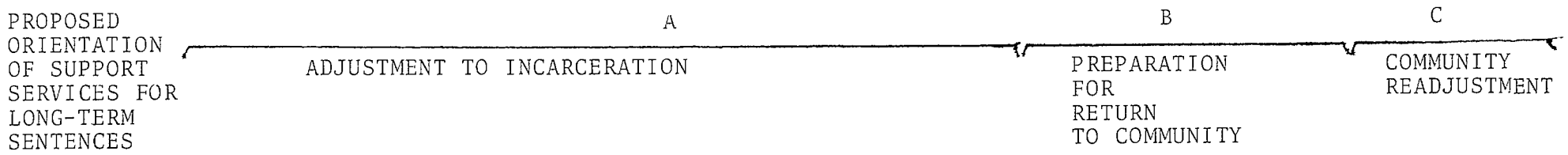
Schema of Criminal Justice Process

or a Dimension of Relative Time









In this model the emphasis for all correctional personnel would be on providing a stable and secure environment in which the person could most effectively deal with the requirements for initiating and exhausting all avenues of due process. Support services would be oriented towards reducing distress associated with this period of uncertainty (e.g., by providing; access to legal resources, liaison with community relationships, counselling, routine program access such as recreation, etc.). Once all legal avenues have been exhausted, the sentence period clear and definite, efforts can then be reasonably turned toward providing access to any and all resources which will enable the inmates to become aware of, select and evolve their own means of adaptation to a period of extended incarceration and all that this entails. Preparation for, and return to the community are, in the context of long-term sentences, remote events to be considered only when the impending release date can be comprehensibly grasped by the inmates. It is suggested that this will be largely determined by the individual inmate in accordance with the style or mode of adaptation that he/she has evolved and that the period of preparation will be initiated by them. Thus, the efforts of support services at this final juncture would be toward identifying, responding to, and facilitating the preparation phase in conjunction with each inmate's particular needs. Long-term offenders appear to pose few internal management problems for prison administrations. West (1967), in an extensive study of imprisoned murderers in England, concluded that they "...give little trouble to the authorities and often seem 'nicer types' than other convicts" (p. 48). Zink (1958) notes that few "lifers" break institutional rules and goes on to suggest that:

> "...men serving life terms appear to be clearly different types from other felons... it would seem logical to consider the establishment of separate facilities for this type of offender designed to deal with the unusual problems of such a group" (p. 434).

Dawes (1976)[6] has stated that long-term inmates almost never participate in prison riots. Thus, in keeping with the model suggested above and the information available regarding management problems posed by long-term offenders it would seem reasonable to explore Zink's (1958) recommendations in further research efforts. It is apparent that long-termers differ on a variety of dimensions, expectations, short- and long-range needs, and behaviourally in the incarceration environment. The differential environments and services to deal with these specific needs must be considered in the immediate future.

Institutional Impact

Garrity (1961) has reviewed and discussed much of the literature dealing with the impact of imprisonment. He notes that imprisonment does not always affect prisoners adversely and in some cases continued prison experiences actually increase chances of successful adjustment upon release. Recent research has measured impact of imprisonment, the experience of incarceration. Eynon, Allen and Reckless (1971) have employed an Impact Scale (originally developed by Eynon-Reckless) which attempts to measure inmates' perceptions of their institutional stay. In this and other studies (c.f., Sindwani and Reckless, 1973; Miller, 1974; Reckless and Sindwani, 1974) the investigators have tended to devote their attention to cross-cultural comparison, inmate versus staff perceptions, maximum versus medium prisoners' perceptions, and the like. Generally, the research indicates that the experience of imprisonment is not always adverse and, in some cases, favourable perceptions of its effect are (self) reported. Kay (1961) reports that the most unfavourable institutional impact was on younger inmates in a sample consisting of both females (N=324) and males (N= 336). No difference in their findings in this area related to sex of the offender. In contrast, Sindwani and Reckless (1973) report that the perceptions of younger inmates were, on the whole, more favourable than the perceptions of impact of imprisonment

on older inmates. Cochrane (1974) has suggested that a major impact of incarceration on younger inmates is the retardation of development of a mature and an independent set of values. Eynon et al. (1971) found that staff perceptions were considerably more favourable than inmates' perceptions regarding the impact of imprisonment.

In summary, it appears that the literature on impact of imprisonment is non-systematic and not yet extensive although more recent attempts by Reckless and his students have indicated that measurement is possible and certainly desirable in this area.

LONG-TERM INCARCERATION AND FAMILY RELATIONSHIPS

Perhaps most surprising in our preliminary search of the literature is the paucity of research dealing with effects of long-term imprisonment on the family relationships of the inmate. Most writings in this area are anecdotal at best and offer few insights into what must obviously be a complex issue. For example, Burkhart (1973) has described the feelings of self-defeat and loneliness experienced by incarcerated women engendered by separation from their children. Morris (1965) and Schneller (1975) appear to agree that many of the conditions described by families since the incarceration of the father, existed prior to the imprisonment period.

Schneller's (1975) study measured the amount of change occurring in families subsequent to the incarceration of the father, an attempt to establish a measure of pre-post comparison. Ninety-three Black American families residing in the District of Columbia comprised the sample. All wives in the sample had been living with their husbands up to the period of incarceration and only those inmates separated from their families for less than five years were included in the study.

A measure was devised and administered to families for the purpose of ascertaining various types of changes experienced within the families. In addition, personal interviews were conducted with the wives and cross-validated with selected questions administered to the inmate-fathers.

Scales measuring emotional-sexual change yielded a number of significant effects. Many women reported familial loss of affection, loss of companionship, increased sexual frustration and sexual desire. In contrast, social acceptability did not appear to pose a problem for these families with the father's absence unnoticed by the community in many instances. Negative and positive economic changes were nearly balanced for the the reporting sample. Families of "happily-married" couples are most likely to report adverse change experienced in emotional-sexual and economic change areas. Families of common-law relationships experienced significantly greater negative sexual and emotional changes than families of civil marriages, which according to Schneller may be attributed to the greater emphasis on these aspects in common-law relationships. It is perhaps indicative that this particular study is unique in the area; it attempts to measure systematically change over a specific time period in terms of impact on the family. It is, however, a retrospective study, inmates and wives were asked to estimate the change that had occurred during the period of incarceration.

Friedman and Esselystyn (1965) report a study conducted in Santa Clara County, California which suggests that school performance and adjustment of children with incarcerated fathers is depressed relative to their peers with non-incarcerated fathers. The study compared school performance and adjustment (on the University of Pennsylvania Pupil Adjustment Inventory: Short Form) of the sons and daughters of Elmwood Rehabilitation Center inmates', where the fathers had been confined for a minimum period of six months, with matched controls in the same school setting (n=328). It should be noted that the authors provide little data and tests of statistical significance are not reported. In addition, of the group with imprisoned fathers, 60% had Mexican surnames, 20% greater than their "matched" controls. The authors conclude that the sons and daughters of inmates perform much below their school peers (even at the upper limits of performance) and, that the daughters pose more extensive adjustment problems than do sons of

inmates. Blackwell (1959), reporting on research in Spokane County, Washington, involving selected families of men committed to prison, also concludes that family adjustment depends largely on conditions that exist in the marital relationship prior to the involuntary separation. The study suggests that factors which predispose a family to attempt to keep a marriage intact or to end an already unstable relationship account for most of the results in the deterioration of the relationship. However, it should be noted that Blackwell also concludes that there is a demoralization in family relationships when a man is imprisoned that does not occur in other types of separation. Anderson (1966) has also noted this process but finds that not all families experience this as a "crisis". In contrast, some families appear to adapt quite well to the "bread winner's" imprisonment and that this adaptation is dependent largely upon how crisis, itself, is defined by the members of the family.

Morris (1965) has conducted one of the most extensive research efforts in this area. Her nation-wide study conducted in England, studied the wives (n=415) of men from 17 English prisons. The participants were over 21 years of age, with the males having a minimum of three months remaining to serve of their sentences. Several studies were undertaken within the scope of this project. For instance, one study reported by Morris attempted to classify the problems experienced by wives during the period of incarceration of their husbands. Among the findings, 41% of the wives regarded money as a major problem, 34% expressed problems with the management of children, 32% experienced loneliness and sexual frustration and 23% were concerned about the effects of the husbands' release from prison. Community reaction and feelings of guilt were seldom expressed as problems.

Another branch of the research attempted to establish factors relevant to good or poor adjustment of the wives. The list of variables considered was extensive (some 13 in all), however, length of sentence and length of separation appeared to be unrelated to the adjustment of the wives.

In summary, five major hypotheses were tested. Two of these received support in the study:

1) Family relationships following upon conviction and imprisonment will follow a pattern set by family relationships existing before imprisonment.

2) Wives with wide kinship networks will seek additional support from them during the husbands' imprisonment.

No evidence was found to support the three remaining hypotheses:

3) Utilization of the statutory and voluntary social services will be greater and more systematic amongst the families of habitual offenders than amongst those of first offenders.

4) The wives of prisoners with children of school age will seek employment, while by contrast, those with children under school age will not be employed, nor will those where there are children in both groups.

5) The adjustment of the family to imprisonment will vary with the type of offence, and with the extent of previous criminal experience (Morris, 1965, p. 302).

Surprisingly, little is known, at least in the literature reviewed to date, about the potential effects of long-term confinement on family relationships (Brodsky, 1974). It is an area which requires a great deal of careful thought from all professions and disciplines in terms of providing the most appropriate and valid information in counselling and support. Inevitably, tough questions must be raised and addressed. For example, is it realistic to expect family relationships to survive a quarter-century

of separation? What type of support can be provided to the inmate and his or her family, immediate and extended, in preparing to cope with the consequences of a long period of incarceration for one of its members? At this point, there is a profound lack of assistance from the social science literature in addressing such critical issues.

ADAPTIVE AND MALADAPTIVE REACTIONS TO CONFINEMENT

Extreme Stress: Death Row

Impending death by execution represents the most extreme conditions under which persons are confined in close custody for prolonged periods. The modes of adjustment to these extreme stress circumstances may provide some further understanding of the consequences associated with long confinement.

Gallemore and Panton (1972) undertook an extensive study of eight men confined for a minimum of two years under the sentence of death. Conducted in North Carolina the study examined the mental and physical status of these men, confined in an isolated section of a maximum security prison, while awaiting execution by gas. All of the participants in the study were involved in legal processes, attempting to exhaust all avenues of legal appeal. Upon admission to the unit each person was exposed to the following measures and periodically re-evaluated for a minimum of two years thereafter.

1) Minnesota Multiphasic Personality Inventory
2) Beta Intelligence Test
3) Wide Range Achievement Test
4) Extensive Social History
5) Comprehensive psychiatric evaluations
6) Physical examinations

Descriptive characteristics of the sample included: age, $\bar{x}$ = 23.6, range = 16-34 years; I.Q., $\bar{x}$ = 95.6, range = 76-118; formal education, $\bar{x}$ = 9.5, range = 6-12 years. Comparison with the prison population data suggested that the death row inmates as a group were more intelligent (75% with normal or above versus 60% in general population) and had more formal education (prison population, $\bar{x}$ = 8.5 years) than the entire prison population as a whole.

Remarking on the findings of the study, Gallemore and Panton state:

> "It is not surprising that a multitude of psychological phenomena can be observed in death row inmates. Despite many common background features and a common external stress, the adjustment required seems to be unique for each individual and not entirely predictable on the basis of psychiatric diagnosis and previous behaviour." (p. 170).

When follow-up studies were conducted, one inmate had been on death row for 5½ years, another for 3 years and the rest had been confined from 2 to 3 years. Three men made relatively poor adjustments with obvious physical and mental deterioration while 5 appeared relatively unaffected on the measures employed. The psychiatric diagnosis of 7 men remained unchanged through the testing. The diagnostic classification of the other was changed to paranoia. One of the other inmates who did not adjust well showed a significantly elevated self-mutilation score on re-test (c.f. also Johnson and Britt, 1967). The third inmate who evidenced adjustment problems requested hospitalization for insomnia within six weeks of entering the institution. Over the next two years, he received twelve different drugs, including anti-depressants, anxiety, hypnotic and tranquillizing medication. After serving twenty months, he was hospitalized for drug overdose.

The five men who appeared to adjust emotionally, referred to a point in time when they accepted their circumstances, usually six to eight months after being incarcerated. None of these men requested medical attention during the two years of the testing. Four men felt that religion was helpful at some point during their stay, but did not maintain their religious interests. All the men complained of boredom. This seemed to be relieved partially throught self-education in law, literature and public events. Those men who had remained on death row for the longest period of time showed the most interest in self-education and also appeared to be the most adjusted to their circumstances.

In general, the inmates who sought medical attention did so increasingly over their length of stay on death row. The most frequent complaints were: musculo-skeletal system (41%); gastro-intestinal system (19%); skin problem (14%); various infections (14%).

MMPI scores suggested "...increased group identification, psychomotor acceleration, less inhibition, decreased sense of social responsibility, and greater identification with an anti-social life-style" (pps. 169-170). The findings also indicate that the group posed a greater management and custodial problem than when they first entered death row and seemed to become more prone to express hostiltiy. Interestingly, there did not appear to be much anxiety evident in test or re-test scale scores although low self-esteem was present in both and sociopathy dominated all profiles. High depression scores in the majority of cases were felt to be associated more with the situational factors than to clinical depression and there were no significant indications of the use of attention-seeking mechanisms. Follow-up tests revealed greater feelings of distrust, resentment and apprehension. Improved ego strength was noted in re-testing and was felt by the authors to be reflecting the increased identification with the peer group over the confinement period.

Bluestone and McGahee (1962) directed their investigation of death row inmates toward further understanding of: "By what mechanisms did these people avoid severe depression and devastating anxiety reactions to such overwhelming stress?" Repeated psychiatric and psychological interviews were conducted with 18 men and 1 woman housed on death row at Sing Sing. The 19 histories had certain features in common. All had come from a deprived background, 18 of them from homes where the father was missing during childhood or adolescence and most had been brought up in foster homes or institutions. The highest level of formal education was grade 10; intelligence scores ranged from 60-140; and the longest period of residence on death row was 2 years. The most frequent defences employed to deal with the extreme stress, depression and anxiety in these circumstances were denial, projection and obsessive rumination. Denial, considered one of the strongest defences against extreme psychological trauma was most evident in the isolation of affect..."So they'll kill me and that's that." Minimizing the predicament, delusional formations and living only in the present moment were found to be also used as expressions of denial. Obsessive rumination in total preoccupation with appeals, religion, philosophical or intellectual matters, or both, was characteristic of many of those studied. Unfortunately, the interview techniques and psychological test battery are not described by the authors, which severely limits further interpretation of these and other findings reported in the study (c.f. Barton, 1966, for a thorough discusison of Institutional Neurosis).

It is important to note that many investigators and observers of extended period, close confinement situations have drawn attention to the tendency for differential adaptation periods and styles, with some individuals undergoing a physical or psychological deteriorative process, or both, by either failing to learn adaptive mechanisms or choosing not to employ them (Bettelheim, 1943; Bluhm, 1948; Cohen and Taylor, 1972; Cooper, 1974; Dimsdale, 1974; Donaldson, 1976; Mathiesen, 1965; Speer, 1977; Unkovic and Albini, 1969).

Differential Adaptation to Confinement

Truxal and Sabatino (1972) failed to find full support for the hypothesis that vast differences would be apparent between a conversion group (a resident who attempts to act out the role of a perfect inmate) and an intransigent group (one who intentionally challenges the institution by flagrant refusal to cooperate) within the prison system on personality and social relationship test items. The conversion group tended to be more at peace with themselves, measured by personal and social well-being items; appeared better organized personally; tended to adopt the attitude of "making the best of things"; showed greater intellectual efficiency, but did not show any greater intelligence. Intransigents evidenced greater psychopathology on the Depression, Paranoia and Schizophrenia scales of the M.M.P.I. The authors suggest that the conversion group have adjusted better, because they appear to have made their peace with the rules of the system.

Stump and Gilbert (1972) note that scores on tests of intelligence and educational achievement do not appear to be related to prison adjustment. In their study, adjustment was measured in terms of escape from custody or time spent in a correctional cell, or both. Age, race, and some clinical data were found to be related to adjustment and the Ego Control (Ec) scale was post-dictively but not predictively related to escape. As Garrity (1961) has observed, a period of incarceration does not necessarily affect all prisoners adversely, yet little is known regarding successful adjustment modes. Tabarkova (1968) has analysed the effect of voluntary periods of social isolation (lasting up to 16 years) and has concluded that this isolation did not provoke any profound personality changes in the basic features of personality constellations. In contrast, Vaughn (1970) in a study of seminary training and personality change found that those individuals who lived in the most isolated, confining environments showed personality changes in the direction of abnormality.

The notion of differential adaptation or adjustment periods and styles is recurrent in works on extended confinement periods. The issue is, to say the least, perplexing in its complexity. There is a lack of any obvious stable, clear predictive or postdictive factors linking any particular individual with adaptive or maladaptive adjustment. Furthermore, the identification of successful and unsuccessful strategies adopted by those who experience long-term confinement is far from complete. At the current state of our knowledge, the lack of understanding regarding appropriate mechanisms for coping with these circumstances is, and should be, of considerable concern to us all.

The Differential Adaptation Hypothesis

As noted, the observations from a variety of literature indicate a clear difference in adaptive and maladaptive strategies employed by those persons who experience long-term confinement (Toch, 1975) . Adaptive stragegies are those which enable the person to cope with the idea of and conditions associated with, extended confinement. Maladaptive strategies are those which prevent the person from adequately coping with these experiences. Implicit in a statement about maladaptive strategies is the assumption of an "attrition rate" that differs from that which would be expected in a non-incarcerated population from normal aging, disease and accident. Our review of the literature to date suggests a variety of factors which may be included in such a process; for instance, physical deterioration, consequences associated with escape and avoidance behaviours, suicide, and unexplained death--for no apparent pathogenic reason.

Lefcourt (1976) has recently reviewed a considerable body of literature dealing with this "sudden death" phenomenon and concludes that a primary causative factor is a sense of hopelessness, a profound sense of despair resulting from a lack of

perceived control over one's fate and circumstances. He notes that "the perception of control would seem to be a significant determinant of the response to aversive events, regardless of species" (p. 14). Richter (1959) conducted a series of laboratory studies of the "sudden death" phenomenon concluding, "some of these instances seem best described in terms of hopelessness--literally a giving up when all avenues of escape appear to be closed and the future holds no hope" (p. 311). Kobler and Stotland (1964) and Lefcourt (1976) among others have observed and reported this phenomenon among psychiatric hospital patients. What the Lefcourt research strongly suggests is that the removal or restriction of those factors associated with the perception of control of one's fate or environment may have a debilitating or even fatal effect. (c.f. also Seeman, 1963, on alienation for further discussion of this and related issues.)

Unfortunately, the literature does not allow us at this point, to make any firm statement regarding the nature and extent of such an attrition rate with those persons sentenced to long terms of confinement. For instance, West (1967) reporting on suicides in English prisons concluded:

> "...the suicide of a convicted murderer in prison is an uncommon event in England, only two instances occurring in a period of 7 years. The Prison Commissioners kindly helped by verifying that no one found guilty of murder within the times and areas covered by this survey (that is, in the London Metropolitan Police District during the years 1954 to 1961) had killed himself while a convicted prisoner" (p. 13).

Recent reports from the Ministry of the Solicitor General of Canada (MacDonald, 1976; Surridge, 1976) indicate that during a sixteen-year period (1960-1975) a total of 122 inmates committed suicide while in the custody of Canadian penitentiaries, the majority (76%) occurring in the four oldest maximum security

institutions. No attempt is made in these reports to compare this with general population suicide rates or to that in other extended confinement situations, e.g., psychiatric hospitals. MacDonald (1976) notes that there are over 4,000 separate pieces of literature submitted to date on the subject of suicide. Obviously, this, and an analysis of non-suicide prison deaths, would represent a valuable source of information for the testing of a differential adaptation hypothesis.

In summary, the question of differential adaptation periods and styles to the idea of, and conditions associated with, an extended period of incarceration has yet to be broached in a systematic manner. It is not clear why this has not been done but perhaps a partial explanation may be found in the sensitivity of officials and the tendency of the media to attribute a direct causal link between any prison death and the conditions of imprisonment. Obviously, if we are going to ask the tough questions about the effects of imprisonment the data which would aid in providing the tough answers must be collected objectively and made available for analysis. It is only through this means that we can begin to enumerate, identify and reasonably propose certain modifiable conditions and adaptive strategies. For instance, the implication of the format of the data presented in the reports cited above is of a relationship between the age of the prison facility and the number of reported suicides. Although few would dispute that this may be a contributing factor, the issue is considerably more complex as even the most cursory reading in this area elucidates.

Stress and Adaptation in Other Deprivation Environments

As noted earlier in this report, a brief sampling of literature pertaining to deprivation and isolation would be undertaken to ascertain the value of information which may be available in studies of analogous environments.

According to Mullen (1960), danger, cold and hardship are not the major sources of stress in isolated Antarctic living. More stress resulted from individual adjustment to the group, the sameness of the environment and the absence of certain accustomed sources of emotional satisfaction. These conclusions were reached after interviews with approximately 85 personnel who had lived in non-experimental stations for 7 or 8 months and were nearing the end of their winter stay.

Among the findings was the report that the absence of hardship and danger were sources of considerable disappointment and disillusionment among the subjects. Also noted was an absence of openly expressed hostility. In this small, closed society, the men could not afford to alienate themselves from the group since each man was dependent on every other man and on the group as a whole for his feelings of security, worth and acceptance. Mullen also found that the frequency of headaches experienced by the men was directly related to this controlled aggression. A fairly widespread phenomenon of sleeplessness was also found. Mullen suggests that the causes of this sleeplessness seem related to such factors as the accumulation of group and personal tensions, the reduced physical activity of the dark winter period and group suggestibility. He also reports a widespread lack of intellectual energy which was severe after several months of isolation. Findings of impaired memory, alertness and concentration ranged from absentmindedness to mild fugue states and seemed to occur after several months of isolation. Mullen suggests a relationship here between impairedness of memory, alertness and concentration and prolonged exposure to "sameness" and a reduction in sensory stimulation. Finally, his results indicated that oral needs were enhanced. Food consumption was enormous with weight gains averaging 20-30 pounds. He notes a slight increase in the sexual content of dreams and proposes that this was indicative of repressed sexuality which had been replaced with a primary focus on oral gratification. This tendency and an increase in the frequency of masturbatory activity became more apparent toward the end of the stay.

Several other researchers have reported a high incidence of sleep disturbance, depression, headaches, irritability and other minor emotional problems in adjustment to the Antarctic environment. (Gunderson, 1963, 1968; Gunderson and Nelson, 1963; Mullen, 1960; Nelson, 1965; Seymour and Gunderson, 1971).

A study conducted by Butcher and Ryan (1974) attempted to investigate and objectively describe the personality characteristics of a group of Antarctic volunteers who remained in the polar station during the winter of 1970 (8.5 months). They also tried to assess any personality change which may have taken place during this period.

Subjects (n=15) were volunteers from a group of 21 scientists and navy support personnel. All subjects had undergone extensive screening which consisted of physical examinations and an interview with both a psychologist and psychiatrist. The base was self-sustaining and the only contact with the outside world was by a short-wave radio.

To each subject, an MMPI and PRF (Personality Research Form) were administered at the beginning of winter, during mid-winter and prior to re-opening the station at the end of the winter. The control subjects (n=30) were selected from a group of 200 male U.S. college students. They were given the same tests on 2 occasions, eight months apart.

The Antarctic volunteers appeared better adjusted; they showed significantly less anxiety, $p < .001$; less bodily concern, $p < .05$; more conventional and less alienated attitudes, $p < .05$, $p < .05$; more able to withstand stress $p < .001$; more achievement oriented $p < .01$; and more serious minded $p < .001$. The college students more frequently sought sympathy, protection, love, advice, and reassurance $p < .05$. However, there were no significant

differences for any of the MMPI or PRF scales between the test-retest period on the Antarctic sample. Although some of the volunteers experienced symptoms of maladjustment such as headaches, depression and irritation, these problems were not sufficient to alter significantly the MMPI profiles over the period of isolation.

Taylor (1969) reports a study of 35 men selected to spend the winter months at the Scott Base in Antarctica. Data on the participants were collected by general observations, structured interviews, and personality inventories.

On being interviewed at the end of their stay, a few men had completely lost interest in their outside relationships, others voiced concern about future vocational opportunities and, one man (who had developed such an awareness to other people's faults and consequently had trouble accepting people), was fearful of ever being able to again establish healthy social relationships. Still others yearned for familiar stimuli: Smell of grass, sight of vegetation, birds singing, different colours and styles of clothes, voices of children, etc. (Taylor, 1969, p. 86), a frequent observation in prison memoirs (Speer, 1977).

Taylor (1969) reports strong evidence for differential adaptation patterns: reactions to indoor confinement; obsessive preoccupation with health, somatic disorders and weight gain; sleep pattern disturbances; self reports of mental and physical deterioration; slowing activity levels and patterns; avoidance of direct confrontation, withdrawal to private spaces, indirect or displaced aggression; reduction in initiating and conducting social intercourse, lack of "fresh" topics, ideas for exchange (at approximately 3 months into their stay); and, diminished concern with sexual matters. It is interesting to note that a test-retest conducted on the 16 P.F. Inventory failed to yield any significant differences.

Palmai (1962) (in: Taylor, 1969) describes the three major psychological stresses at the Scott Base as: (1) problems of individual adjustment to the group, (2) relative sameness of milieu, (3) absence of many accustomed sources of gratification, both sexual and gastronomic, and lack of variety of companionship (p. 90).

In contrast, Taylor (1969) makes only a passing mention of sexual problems in his article, only noting that the men missed their wives and girl friends and homosexual activities were not evident at the Base.

Gunderson (1963) reports that healthy subjects exposed to long periods of restricted stimulation (like the Scott Base) experience emotional and somatic disturbances. The reactions of the men were similar to those reported in studies dealing with perceptual, social and sensory isolation: lethargy, boredom, monotony and irritability. This syndrome has come to be known as "Antarctic Fever" (Ronne, 1961, in Taylor, 1969). "...They were like prisoners who had to master the seeming eternity of time that stretched before them, while retaining hope for the future and command of themselves in the present" (Taylor, 1969, p. 90).

Perhaps the most extensive and comprehensive review of literature dealing with isolation and confinement in environments other than prisons has been carried out by Rasmussen (1972). His review includes sensory deprivation effects in laboratory studies of prolonged confinement in underground caves, isolated farms, arctic expeditions and the like. In his review, Rasmussen has concluded that there is a certain degree of validity in the investigative techniques employed in this area which would allow us to develop general principles about how men and women in isolation behave and are affected by their environment.

In summary, it appears that the results of the few studies reviewed in this area suggest a remarkable similarity to some of the effects known to be associated with imprisonment and subsequent to a period of social and physical deprivation. Clearly this literature has much to offer future investigators. It appears a fruitful ground for deriving hypotheses and testing ideas with voluntary subjects.

REVIEW SUMMARY AND COMMENTS

Little has changed since Radzinowicz's (1969) statement, cited earlier in this report. We have an astounding lack of knowledge about the effects of long-term incarceration yet we continue to recommend and impose longer prison terms (Baster and Nuttal, 1975).

That so little is known about this area is itself an intriguing phenomenon. The reluctance of scientists and professionals to conduct research related to this area of human experience is at least partial testimony to the compelling and persuasive writing found in personal accounts of long-term incarceration. Such records are clear and consistent in their presentation of long-term confinement as unique, powerful and almost incomprehensible. It is, in fact, almost impossible for us to grasp the impact of being imprisoned for two or more decades. There have been a number of significant attempts to communicate this experience in writings by and about long-termers (Alper, 1974; Berkman, 1970; Burney, 1952; Clayton, 1970; Cleaver, 1969; Cohen and Taylor, 1972; Freiberg and Biles, 1975; Gaddis, 1956; Griswold, 1970; Hassler, 1955; Jackson, 1971; Jackson, 1975; Knight, 1970; Leopold, 1958; Mannocchio and Dunn, 1970; Minton, 1971; Pell, 1972; Serge, 1970; Solzhenitsyn, 1968; Speer, 1977). In fact, this literature seems to attest to man's powers of adaptation and ability to withstand adversity under even the most extreme conditions. What emerges is the feeling that

the idea of long-term confinement is frequently even more extreme than the environment(s) in which it occurs. The deprivation of liberty entailing restriction of the space of free movement and the surrender of a certain degree of control of one's environment for a considerable portion of a lifetime is an extreme event. Perhaps reading this literature has the effect of overwhelming investigators. The enormity and complexity of the issue is far from attractive to empirical researchers and, coupled with the numerous problems long associated with prison research, has almost guaranteed a paucity of good research in this area.

It is worth a note of caution that the phenomenological, the qualitative literature, cannot be discounted as merely interesting. It should be evaluated on the basis of providing a plentiful source for hypothesis derivation and construction. Obviously, some and often considerable bias exists in these accounts. For instance, it is unlikely that many reports are written or published that describe a positive adaptation to confinement; "The Joys of Imprisonment" sounds discordant with our expectations.

One of the strongest impressions to emerge in reviewing long-term confinement literature is the striking discrepancy between personal accounts and the data-based research describing it. As this review has indicated, the observable and measured effects of long-term incarceration are by no means clear. In many cases, it is impossible to draw any firm conclusions because the data that would allow us to do so, simply do not exist. In some instances (e.g., cognitive functioning), the measured effects appear far from adverse. Furthermore, in areas which have been subjected to methodologically rigorous investigation, the ecological validity of the findings respecting long-term confinement is questionable at best. Perhaps the most outstanding example is the literature pertaining to the "deprivations". As noted earlier in this report, this may be more appropriately considered a statement describing the limiting conditions of the environment. The deprivations of: stimulation of the senses, physical heterosexual

relationships, and privacy are not necessary "effects" of the environment. They are, in fact, modifiable conditions, variables which can be manipulated to produce effects. The enhanced effectiveness of social influence attempts (reinforcer value), and increases in imitative behaviour under various conditions of deprivation have been recognized by social learning theorists for some time (Bandura and Walters, 1965). Behavioural engineering or modification programs in corrections have not only taken advantage of these circumstances, but have frequently established relative deprivation conditions to enhance reinforcer value and effectiveness (McKay and Ross, 1973; Ross and McKay, 1974a, 1974b; Ross, McKay and Trantina, 1974; Ross and McKay, 1976). Thus, the use of deprivation conditions has been, and is used explicitly or adventitiously, as a precondition for behavioural manipulation and control mechanisms.

In contrast, the deprivation of unrestricted freedom of movement is, by definition, a necessary condition of long-term confinement. With rare exceptions, the relationships which exist between the state and the offender are non-voluntary. The offender wishes to leave, escape the contraints, whereas the function of the state authority is to prevent him from accomplishing this end (Thibaut and Kelley, 1967). The offender has relinquished the right of unrestricted access to society. The deprivation of one's freedom alone is a powerful consequence of illegal behaviour. This point should be emphasized in any deliberations concerning the provision of facilities, the environment(s) under which long-term confinement will occur.

It is, at this point, that a possible explanation for the discrepancy between the personal accounts and other data suggests itself. When a confined person's environment appears to take on malevolent or even persecutory characteristics, we find not only adverse, but severely debilitating physical and psychological effects (Bettleheim, 1960; DesPres, 1976). This is not meant to imply that it is our intention to be malevolent toward those we incarcerate. Certainly, our attempts to humanize such environments, promulgate a rehabilitative ideal, provide meaningful programs

within custodial limitations and our abolition of capital punishment attest to this. It is more likely that malevolence arises out of what Mattick (1973) has called the "mundane routines" of prison life. As Jayewardene, McKay and Krug-McKay (1976) have noted, it is in the everyday relationships between inmates and custodians that we find the etiology of perceived malevolence which may have disruptive potential. Some authors have described processes and conditions in these environments which likely contribute to the inmates' perception of malevolence. For instance, Goffman (1969) speaks of the "mortification process"; Sykes (1958) describes the "pains of imprisonment"; Atkins (1972), Wright (1973) and Ohlin (1956) refer to "the overcrowded and often barbaric living conditions".

Cohen and Taylor (1972) have documented a perfect illustration of how even the most mundane situations can assume malevolent characteristics (pp. 68-70). The restrictions, censorship of personal correspondence, the potential abuse of such information by custodians to embarrass or humiliate prisoners, may seem like relatively trivial issues to some. However, it is precisely this context which leads to perceptions of persecution with malevolent intent. Simply stated, the very things that bother, annoy, distress you and I, bother, annoy and distress inmates. Discourtesy, arbitrary exercise of authority, lack of respect, are among the things that bother, annoy and distress <u>us</u>.

Clearly, the question of security with long-term prisoners is of paramount importance. The public demands this assurance and it must be met by its agencies. We must recognize, however, that it is possible to justify nearly every conceivable action or policy on the basis of being a "security requirement" and thus for the public good. Policies which may appear compelling and rational to correctional administrators may, of course, be evaluated differently by inmates. The <u>effect</u> of actions and policies is largely determined by the way in which the inmate perceives them. For instance, there is a point at which surveillance and monitoring of long-termers'

activities becomes excessive and can border on the malevolent. Should this occur, other effects tend to follow closely. For instance, these (mis)perceptions can advance a "we/they" psychology leading to an inevitable escalation of conflict. In turn, it tends to romanticize for the inmate his struggle against a "malevolent" authority, a symbolic struggle between good and evil. This is one way of imbuing an otherwise monotonous existence with some meaning.

Most current psychological thinking would suggest that inmates in long-term environments have certain basic needs which much be met to avoid adverse effects. These would seem to be reflected in the following categories:

1. Comfort: This encompasses all of those things which most of us accept as basic "creature comforts" including access to food, shelter, medical services and protection from physical harm. In addition, the person should have access to sensory and cognitive stimulation and to some means of satisfying those needs which are seen as fundamental to human experience. For example, Rotter (1964) has reformulated Murray's (1975) "list of needs" as follows:

> 1. Recognition-Status: The need to excel, to be considered competent, good or better than others in school, occupation, profession, athletics, social position, physical appeal, or play. That is, the need to obtain high position in a socially valued competitive scale.
>
> 2. Dominance: The need to control the actions of other people, including family and friends; to be in a position of power, to have others follow one's own ideas and desires.

3. Independence: The need to make one's own decisions, to rely on oneself to develop the skills necessary to obtain satisfaction and reach goals without the help of others.

4. Protection-Dependency: The need to have another person or persons prevent frustration, provide protection and security, and help obtain other desired goals.

5. Love and Affection: The need for acceptance and liking by other people, to have their warm regard, concern, and devotion.

6. Physical Comfort: The need for physical satisfaction that have become associated with security and a state of well-being, the avoidance of pain and the desire for bodily pleasures. (pp. 58-59).

It is suggested that the inmate will seek ways to satisfy these general needs if they remain unfulfilled within the legitimate structure of the institution.

2. Control: Lefcourt (1976) has presented an extensive argument for a fundamental need of man to believe that he exercises some form of control over his fate and environment. If control, or the illusion of control, is removed and the person loses hope of regaining it, the results can be powerful, long-term and enduring--even fatal. What is suggested by this line of reasoning is that, in the desire to control the inmate's environment, an excess of zeal can lead to the removal of even the "illusions of control". This could lead to a number of adverse psychological consequences. It does not take a great deal of ingenuity to develop ways in which control in the environment can be exercised. Choices must be made available. Hospitals, for example,

provide even those on a restricted diet with choices in selection from available options. In military life there are built-in choices that do not threaten authority or order. For instance, Habeck and Bond (1974) have examined programs which have been of demonstrable benefit in improving over-all institutional atmosphere, oriented toward personal growth and humanization, without jeopardizing custodial or security considerations. At the risk of invidious comparison, hotels have devised a variety of low cost schemes to provide consumers with the illusion of choice and control within the context of a highly systematized environment. The objective of providing a desired and desirable service with maximum cost efficiency may not be as conceptually different as popular wisdom would have it. Rather than dismiss such analogies abruptly we should examine them thoroughly, analyze them, learn from them.

3. Meaning: This encompasses that broad area which is reflected in religious, philosophical or experiential concerns. The most fundamental tenet common to all of these is that man's existence must have some meaning. If the means for establishing this are not provided by the legitimate structure of the institution, then it will be sought elsewhere.

In conclusion, Etzioni (1968) has argued that there is an universal set of basic human needs which have attributes of their own, that are not determined by the social structure, cultural patterns, or socialization processes. It is to these fundamental needs that we must learn to direct our attention and resources. Constructing new correctional facilities, making them more respectable, the staff more professional and the food more palatable may be desirable, perhaps necessary, but hardly sufficient in

meeting these needs (McKay, 1976). As one inmate-author has aptly stated:

> "Unfortunately, there is no substantive relationship between a reduced number of cockroaches and recidivism, between clean sheets and reform" (Griswold et al., 1970, p. 26).

A PROPOSED STRATEGY FOR FUTURE RESEARCH

There is no doubt that our current knowledge base of the effects of long-term incarceration is inadequate. This is so, not only because most research reports do not contain the empirical data necessary for meaningful conclusions, but also because the framework of the studies are, for the most part, deficient conceptually and methodologically. Such statements are neither trite not the hackneyed phraseology which appears with some frequency in other areas of human investigation. We must remind each other constantly that the issues under consideration here are substantial and dramatic. Decisions respecting this area of human concern have long-term and enduring consequences for us all, as individuals and as a society. Research, despite the impression conveyed by many investigators, is and has been inextricably interwoven with policy considerations. Correctional and field research is difficult and a plethora of obstacles confront every potential investigator. Policy should complement basic and applied research efforts, and research should be cognizant of the policies and the potential influence of research efforts on policy promulgation and revision. To the extent that policy may be perceived as dictating research choices, tough decisions must be made by investigators. For instance, inclinations toward the adoption of less than the most adequate available methodology and/or weak problem conceptualization is, and should be the responsibility and concern of the researcher and his/her professional community. Pragmatism should not be offered as an implicit rationale for

ill-conceived research. If policy has influenced research choices and strategy in particular ways this should be specified in reports. Candor in communication with policy makers is necessary if basic and applied research is to have a meaningful impact. Clearly, the emphasis on facilitating research efforts which may address tough and "sensitive" issues, with requisite rigour in search of fact must come from policy spheres, if our methods and findings are to be meaningfully interpreted.

Some of the more recent studies do, however, inject a note of optimism by providing more systematic and more methodologically rigorous approaches to the investigations. By way of illustration, the United Kingsom study undertaken by Smith and his colleagues (1973a, 1973b, 1974, 1976) stands out as a reasonably rigorous attempt to add to our understanding of the psychological correlates of imprisonment. Jones (1976) has recently provided extensive documentation of the health risks associated with imprisonment. In both of these illustrative instances the problem area was clearly defined and stated a priori by the investigators, the best available methodology selected and employed and the research carried out with the minimum degree of intrusion into and reactivity with the environment. It is not our intention to omit mention of the numerous research efforts in this most difficult area of investigation which have added to our understanding of the issues. Many of the research reports we reviewed were testimony to the ingenuity, persistence, and desire for understanding of the researchers despite the myriad of obstacles in the path of methodological rigor. Our purpose here is to discuss ways of minimizing the barriers to further understanding.

Much of the work that does meet the requisite criteria has not been directly related to the prison situation (e.g., Lefcourt, 1976, on perceived control; Rasmussen, 1973, on isolation and deprivation environments; Seyle, 1974, on stress; Steiner, 1970, on perceived freedom). Even statements regarding the necessity

for methodological rigor must be tempered with the understanding that this does not imply that only research employing experimental and quasi-experimental designs can produce valuable information or only such studies should be supported (Wilkins, 1969). For example, the work of Cohen and Taylor (1972) employing the method of participant-observation provides a rich source of information for future investigators. Toch (1971) has elaborated upon the possibilities inherent in inmate-initiated research and participation in research activities. Similar studies should be conducted. But when studies assume an experimental or quasi-experimental flavour they must be methodologically sound.

Our recommendation for future research in this area will focus primarily upon the means by which the hypotheses and models to be tested, the methodology to be employed and the data bases available can be rigorously evaluated prior to implementation. Towards this end the research is seen as addressing itself to specific questions which must be answered before a policy decision is made and before a policy decision is implemented. Our suggestions include the recognition that many of the decisions respecting research in this area do and should include, policy input.

Establishing a Common Data Base

Of considerable assistance to potential investigators in this area would be the establishment of a common data base. The data base would be comprised of all information pertaining to long-term offenders and the environments in which long-term incarceration takes place. Ideally, this would include all routinely collected and collated psychological, psychiatric, sociological and medical information which describes the long-term offender at various stages of his or her contact with the criminal justice system. This entails centralization of information that is regularly recorded at an institutional level (e.g., visits,

treatment programs, transfers, etc.). In addition, the common data base should describe the characteristics of the environments in which long-term incarceration occurs. This might include such diverse pieces of data as inmate/staff ratios, lighting levels, colour of the walls, noise level, institutional regulations, administrative changes and the like. Obviously, steps should be taken to disguise the identities of all individuals. The kinds of data collected might then be enumerated and announced to all potential research resource pools. This would allow investigators from a variety of disciplines to become aware of the possible relationship between their own specific problem and interest area and such data. Thus, it may very well be that an investigator who has been specializing in laboratory research on a specific problem (e.g., sensory deprivation, self-esteem, perceived control, etc.) can provide novel approaches, new hypotheses, models for dealing with the available data. Clearly, such efforts could aid greatly in our understanding of this issue. An ancillary effect might be to minimize intrusion into the often complex and sensitive environments in which long-term incarceration occurs. Data access is a fundamental requirment for addition to and development of our knowledge base in this area.

Multi-Disciplinary Research Teams

A proposal which should be given serious consideration is the establishment of a permanent Multi-Disciplinary Research Team which would have the responsibility of conducting most research which requires intrusion into these environments. Such a team would be comprised of professionals from a variety of disciplines and supplemented by part-time consultants with consideration given to a definite term appointment in any role (e.g., three to five years). Thus, the team as an entity would maintain a reasonable degree of continuity, accumulating both expertise and knowledge regarding the methodological and administrative difficulties involved in institution research, be recognized by all potential research

participants as a unit which has official sanction to conduct research in their institution, and would provide a resource pool from which information may be obtained or disseminated. One of the functions of the part-time consultant would be to serve as a liaison with the team in bringing newly acquired information from academic and professional spheres directly and indirectly related to the problems of long-term incarceration. It was our impression in reviewing the available literature that many of the studies were on a "one-shot" basis, poorly conceived and suffering from numerous methodological weaknesses. Few attempts were made to provide multiple confirmation of findings, adequate controls where designs were employed, and both internal and external threats to validity concerns were frequently overlooked (Campbell and Stanley, 1963). Furthermore, few attempts were made to devise unobtrusive or non-reactive measures to supplement or replace measurement that required intrusion into the environment with all of the consequences associated with reactivity (Webb, Campbell, Schwartz and Sechrest, 1967). It is suggested that the development and continuity of such measures (perhaps feeding into a common data base) would be greatly facilitated through the establishment of a Multi-Disciplinary Research Team. Thus, the steps leading up to research being suggested to, and conducted by, the research team might resemble the following:

1) Promulgation of broad policy
2) Statement of potential research areas related to policy
3) Setting of priorities: This might include priorities on a variety of dimensions, e.g., the problem area; focus of the research, i.e., persons, staff, community, families, etc.; the methodology, i.e., comparable methodologies; non-reactive or reactive measurement; theoretical vs. applied research; and the like.
4) "State of the Art" reviews
5) Statement of research problems
6) Setting of research problem priorities
7) Short-term feasibility studies

8) "Third-party" evaluations for "feasible" studies
9) Priority scheduling
10) Research assignments to Multi-Disciplinary Research Team or other researchers.

Proposed Research-Action Model

Ministry sponsored research, we feel, should be action oriented, i.e., directed towards the implementation of policy. The implementation of policy presumes the existence of policy and relegates the implementation to a translation of the policy from the abstract to the concrete. No such presumption is made here and implementation of policy is meant to include the formulation of policy as well. Action oriented research is seen as providing the necessary informational base for all stages of decision-making leading to a specific action. The decision-making here is seen as a process of selection from alternatives with research providing the alternatives from which the selection could be made. With reference to Figure 2, the process is seen as comprising 3 distinct phases in each of which are 4 distinct stages.

The first phase comprises deciding in broad and general terms what should be done. It ends in goals-means statements in abstract terms. The statements link abstract goals with abstract means. It can be looked upon as the conceptualization of action. The second phase comprises translating the abstract into the concrete. It also ends in goals-means statements but statements which have as their goals, the abstract means of the first phase and as their means specific types of action. These statements link abstract goals with concrete means. This phase can be looked upon as the translation into action. The third phase comprises the specification of the action. It also ends in goals-means statements but the goals here are the specific means of the second stage and have as their means very concrete types of action. They link the concrete with the concrete. For example, in the first

FIGURE 2
RESEARCH-ACTION MODEL

	Phase 1 Conceptualization of Action	Phase 2 Translation into Action	Phase 3 Specification of Action
Stage 1 Identification and Enumeration of Alternatives	I Possible Goals: AG1, AG2 Possible Means: AM1, AM2	IV Possible Goals: AMCN1, AMCN2 Possible Means: AM12, AM22	VII Possible Goals: AMT1, AMT2 Possible Means: AM123, AM223
Stage 2 Coordination and Collation of Alternatives	II Possible Action: AM1, AM2 Conditions Necessary: AC1, AC2 Feasible Means: AMF1, AMF2	V Possible Action: AM12, AM22 Conditions Necessary: AC12, AC22 Feasible Means: AMF12, AMF22	VIII Possible Action: AM123, AM223 Conditions Necessary: AC123, AC223 Feasible Means: AMF123, AMF223
Stage 3 Evaluation of Alternatives	III Possible Action: AMF1, AMF2 Possible Results: AR1, AR2	Possible Action: AMF12, AMF22 Possible Results: AR12, AR22	Possible Action: AMF123, AMF223 Possible Results: AR123, AR223

Figure 2
Research-Action Model
Cont'd

	Phase 1 Conceptualization of Action	Phase 2 Translation into Action	Phase 3 Specification of Action
Stage 4 Selection from Alternatives	Decision I Desired Goal: A G CN Desired Means: A M CN	Decision II Desired Goal: A G T Desired Means: A M T	Decision III Desired Goal: A G S Desired Means: A M MS

Key Symbols:

A - Action
C - Conditions
CN - Conceptualization
G - Goal
F - Feasible
T - Translation
M - Means
R - Results
S - Specification

phase it may be contended that the aim of corrections is the protection of society through:

1) the prevention of non-offenders becoming offenders;
2) the prevention of first offenders recidivating;
3) the prevention of recidivists continuing their activity, etc....

In the second phase, each of these means would be considered and the possible means of achieving them spelled out. Thus, the prevention of recidivists continuing their activity could be seen as achieved through their incapacitation through:

1) death;
2) banishment;
3) long-term incarceration, etc....

In the third phase each of these means could be considered and the specific form they could take considered. Thus long-term incarceration can be seen as implemented in:

1) maximum security prisons;
2) remote access communities;
3) work camps, etc....

Each of these phases is seen as comprising 4 distinct stages, because of the informational base that is necessary for the selection from alternatives. The first stage comprises the identification and enumeration of alternatives. Here what research is supposed to contribute is a listing of alternative goals and of alternative means for the achievement of these goals irrespective and independent of the socio-economic and value context of the

society to which they are to be applied. Here the information exists in the form of

Possible Goal: A_G B_G

Possible Means: A_{M1} A_{M2} A_{M3} B_{M1} B_{M2} B_{M3}

In the second stage the possibilities have to be narrowed, taking into consideration the socio-economic context of the society. This stage comprises coordination and collation of the alternatives. Here the information exists in the form

Possible Action: A_{M1} A_{M2}

Conditions Necessary: A_{C11} A_{C12} A_{C13} A_{C21} A_{C22} A_{C23}

In the third stage the possibilities have still to be narrowed taking into consideration the values of society. This stage comprises evaluation of the alternatives. In this stage the information exists in the form

Possible Action: A_{M1}

Possible Results: A_{R11} A_{R12} A_{R13}

The fourth stage comprises selection from the alternatives. Research could and should provide 9 sets of information as seen from Figure 2. The first 3 sets of information should lead to Decision 1 in Stage 4. This decision should guide and limit the information required in the 4th, 5th and 6th sets of information which should

lead to Decision 2. This decision in its turn should guide and limit the information required in the 7th, 8th, and 9th sets which should lead to Decision 3. It should be realized that Decision 3 is the ultimate goal but that it cannot be rationally made without Decisions 1 and 2. Research priorities could then be set up in terms of the information lacking to make the necessary decisions.

Thus, in the context of the problem area under consideration here, we have contended that the knowledge base respecting the effects of long-term incarceration is inadequate on a number of dimensions. In this report, we have identified and enumerated a number of problem areas in which further investigation was recommended. Other areas, also deserving further investigation were suggested on the basis of integrating an often diverse literature, brought together under identifying rubric (e.g., differential adaptation). As can be readily seen, the input of such alternatives into a research-action model enables priority setting to be accomplished with the appropriate inclusion of mulit-dimensional factors. For instance, the enumeration of "problem area" alternatives, may now be considered in concert with other forms of alternatives, such as; the focus of the research (i.e., person, staff, community, families, etc.); the methodology (i.e., obtrusive, reactive, comparable, participant-observation, experimental, quasi-experimental, etc.); the discipline (i.e., medicine, sociology , etc.); and the like. It is our position that the steps suggested from conceptualization to action will greatly enhance the potential of research bringing considerably more rigor and systematic thought to this area of profound human concern.

NOTES

1. The Ministry of the Solicitor General of Canada provided financial assistance to this project (Contract 62-6/5-156). It should be noted that this report does not necessarily represent, nor should it be construed as, the authors' support or rejection of the policy of, or policies associated with, long-term imprisonment. The terms of reference for the report are stated under Project Objectives. We also wish to extend our gratitude for the assistance provided to the project by Barbara Krug-McKay, Helen Durie, and Hugh Haley, and our sincere appreciation for the high standard of excellence always evident in the work of Ms. Chi Hoang.

2. The four groups that were selected differed only in the length of imprisonment served on the current sentence. It was assumed by the authors that previous imprisonment would be randomly distributed throughout the groups, and would not be a confounding variable (Banister, Smith, Heskin, Bolton, 1973, p. 314).

3. Only the "attitude toward work" finding was significant on retest in the longitudinal study (Bolton et al., 1976). The authors suggest that the initial findings regarding "father" may have been due to increasing lack of contact and/or the inevitable deterioration in external relationships.

4. As noted, this finding was not replicated in the longitudinal study, where a reduction in hostility was found over the test-retest period. Events related to a tense atmosphere in the settings during initial test period may have contributed to the difference.

5. A discussion of other syndromes related to institutionalization will not be presented here. For a detailed description, the works of Barton (1966) on institutional neuroses and Scott (1969) on psychiatric syndromes in captive society, are recommeded.

6. Personal Communication. Mr. D. Dawe, Director, Preventive Security, Ministry of the Solicitor General of Canada, 1976.

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APPENDIX A

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EXECUTIVE SUMMARY APPENDIX B

Report on the Effects of Long-Term Incarceration and a Proposed Strategy for Future Research. By H. Bryan McKay, C.H.S. Jayewardene and P.B. Reedie, Criminology, Ottawa.

Initiated by the Research Division and financially supported by the Department of the Solicitor General of Canada, this report is based on a review and assessment of literature pertaining to extended periods of confinement.

The authors emphasize that in this literature, sequence of causality is frequently confused when "effects" are discussed. Often cited as "effects" of prolonged confinement are social, sexual, sensory, intellectual/cognitive, and physical deprivation as well as loss of privacy, overcrowding, over-routinization, and the like. It is contended that these "effects" should be more appropriately construed as representing descriptions of the limiting conditions of environments in which extended incarceration has taken place and been studied.

Few strong and consistent associations between periods of confinement and other variables have been reliably demonstrated in this literature. This is, in part, attributed to a paucity of methodologically rigorous, conceptually sound and systematic investigation undertaken in this area to date. The authors describe much of the empirical research as a "methodological nightmare".

The review of the literature with the authors' evaluations are presented under several headings.

Psychological Correlates subsumes investigation of possible psychological reactions to long-term confinement. Of particular interest is work on "time perspective" and "time framing" which

considers the important function of coping mechanisms in reactions to imprisonment. The research reported indicates that indeterminancy of sentence is an important variable in the subjective distress experienced by the inmate. Wide individual differences are reported in the abilities and styles employed to "frame" time adaptively.

In the area of cognitive functioning, a series of studies from the United Kingdom is reported which suggests that long periods of imprisonment are not necessarily associated with a decline in performance on standard tests of intelligence and other psychometric measures.

Also included in this section is research on personality variables and values. The measurement of changes in self-concept while incarcerated forms a major portion of this work. The findings, taken over-all, are contradictory with some studies reporting no change, others positive or negative change, and still others a variety of change patterns as a function of time.

The authors conclude the section on psychological correlates with the statement that much of the research reviewed to date either does not contain the critical measures that would allow valid inferences to be made (e.g., adequate comparison groups - a characteristic of this area of research), or, has failed to provide multiple confirmation of findings more rigorously achieved.

Psychopathological Effects: A review of literature on the "Ganser Syndrome" is used as illustrative of the problem complexity in evaluating research on psychopathology as it relates to imprisoned persons. Controversy over this particular disorder has persisted since the initial description by Dr. Ganser in 1898, with the existence of the disorder as an identifiable nosological category denied by some, and case studies reported by others as demonstration of occurance. Ganser Syndrome is

presumably a (semi) hysterical, fugue (like) state, peculiar to confined persons, problematic in detection and diagnosis due to a resemblance to symptomatology frequently utilized by persons feigning psychopathological disorders.

Factors Related to Imprisonment: This section focuses on the concept of "prisonization", the process of socialization into the inmate culture, that may have deleterious consequences for successful re-integration of the inmate into the community. The authors discuss the possibility that the effect of long-term sentences may be to modify our perspective of this phenomenon from a maladaptive to potentially adaptive process. In accord with this view, a schema for the re-orientation of support services toward adjustment of the individual to the impact of extended incarceration, is presented.

Adaptive and Maladaptive Reactions to Confinement: In addition to a review of research on conditions of extreme stress in confinement (death row), the authors hypothesize and note support for the occurrence of differential adaptation strategies or styles and critical adjustment periods to the idea of, and circumstances associated with, prolonged confinement periods. Adaptive strategies are defined as those which enable the person to cope with the idea of, and conditions associated with, extended confinement. Maladaptive strategies are those which prevent the person from adequately coping with these experiences. A statement about maladaptive strategies contains implicit assumptions of an "attrition rate" differing from that which would be expected in a non-incarcerated population from normal aging, disease, accident and suicide. This "attrition rate" might include factors such as accelerated physical and psycological deterioration, consequences associated with escape and avoidance behaviours, suicide, and unexplained death--for no apparent pathogenic reasons; and would be a function of failure to learn adaptive strategies or choosing not to employ them.

Stress and Adaptation in Other Deprivation Environments: Research in potentially analogous situations (voluntary hardship and isolation postings) is examined and the similarity of findings which describe physical, psychological and social consequences of isolated living conditions to reports of the prison experience is noted as a valuable research resource.

Review Summary provides an integration of findings, themes and hypotheses from the literature. It is noted that most current psychological thinking would suggest that certain basic human needs must be met within the legitimate structure of the institution if adverse effects to inmates are to be avoided. Such needs (e.g., comfort, control, meaning) are seen as basic to human survival and if unfulfilled by the legitimate structure, will be sought through other devices. For instance, the existence and escalation of "we-they" psychology in correctional environments may be a mechanism whereby the individual attempts to imbue an otherwise monotonous, routine and boring life with some sense of meaning through identification with a symbolic struggle between good and evil, justice and injustice, we and they, and so on.

It is also contended that a major source of distress associated with long-term confinement can be located in the "mundane routines" of prison life. Adverse, even debilitating effects are seen as a direct consequence of stress arising from inmate perceptions of the physical and social environment as malevolent and persecutory. A discussion of the factors which facilitate the development of such perceptions in the context of custodial environments is presented.

Strategies for Future Research: Three separate mechanisms are discussed which may be of assistance in planning and implementation of future research projects in this area. It is suggested that research to date in this area lends itself to the statement -- that more of the same is not necessarily better. Thus, a research strategy is proposed which emphasizes the rigorous scrutiny of problem area, conceptualization, methodology, and the like, prior to intrusion into extended incarceration environment.

1) Establishment of a Common Data Base is recommended. This would entail centralization of descriptive information about inmate populations (age, sex, offence, etc.) and environments (security level, staffing, information related to physical plant). The availability of and access to such information, announced to all research resources would, according to the authors, simplify basic data collection for researchers, reduce redundancy of collection and collation, minimize interference with institutional functioning, and prevent unwarranted intrusion into the lives and environments of long-term inmates.

2) A "Multi-Disciplinary Research Team" is envisaged as providing the primary research functions within the institutional context. Recognized by all interest groups as a body, with official sanction, the team is seen as serving as a liaison and information resource through which some continuity of expertise and research implementation might be achieved. The team would draw upon academic and professional communities as consultants assigned to the team, with permanent research staff filling supportive and concrete functions during definite term appointments.

3) The authors present a "Research Action Model" which describes a systematic process by which policy and research input are integrated with maximal effectiveness through several phases and stages of feedback and decision-making to provide the concrete outcomes for any problem area and the means by which they may be achieved. Ministry-sponsored research is conceptualized as

action oriented, with research providing the necessary informational base for all stages of decision-making leading to a specific action. Decision-making in this context is seen as a process of selection from alternatives, with research providing the alternatives from which the selection could be made. The model outlines a process whereby 9 sets of information are provided through 3 decision phases leading to specific action(s). The underlying basis for the model presented by the authors is that research in the correctional environment is a multi-dimensional problem and clear explication of policy input must be one of these dimensions.