——— **Research Report** ———

**A Review of Optimal Group Size and
Modularisation or Continuous Entry
Format for Program Delivery**

Ce rapport est également disponible en français. Pour en obtenir un exemplaire, veuillez vous
adresser à la Direction de la recherche, Service correctionnel du Canada, 340, avenue Laurier
Ouest, Ottawa (Ontario) K1A 0P9.

This report is also available in French. Should additional copies be required, they can be obtained
from the Research Branch, Correctional Service of Canada, 340 Laurier Ave., West, Ottawa,
Ontario, K1A 0P9.

2010 N° R-215

A Review of Optimal Group Size and Modularisation or Continuous Entry Format for Program Delivery

Lynn Stewart, Ph.D., C.Psych.

Amy Usher

Kim Allenby

Research Branch

Correctional Service of Canada

June 2009

Acknowledgements

Executive Summary

Program mangers and administrators are seeking methods of more efficiently delivering correctional programs while at the same time not compromising program quality or public safety. Two methods of potentially increasing the number of offenders who complete programs that have been proposed is increasing group size and the delivery of programs in a continuous entry or modularised format.

This literature review on group size found that there were very few empirical studies that would provide strong evidence of the optimal group size; however, practitioners from diverse program areas have consistently recommended that group size should not exceed 6-8 participants. Very rarely does a researcher or practitioner recommend a group size above 10 participants.

It is possible that educational or didactic programs may be delivered to larger groups without compromising program quality and effectiveness. With larger groups, administrators should carefully monitor facilitators for the potential of burn out.

Writers recommending the number of participants in a group acknowledge that the optimal size of the group should depend on the goals of the program, the theoretical orientation of the program, the profile of the participants and the requirements of the agency.

Correctional programs are based upon cognitive-behavioural principles and require that participants be actively involved in practicing skills and receiving feedback from facilitators. Large groups make this requirement for practice very difficult.

Correctional programs in CSC address the multiple needs of offenders who have learning and behavioural problems. They come from diverse ethnic and offence backgrounds. Given the challenges of this population, when there is only one facilitator, the group size should not exceed 10 offenders. For very high needs groups, the group size should be smaller than this.

Despite its administrative challenges, the modularised format does provide flexibility and the ability to tailor the program delivery to offender need. Based on interviews and recommendations from program deliverers the following circumstances are those in which the format works best:

- When the group is relatively homogenous, i.e. participants have similar offence histories or similar criminogenic needs. (It should be noted however that the Community Maintenance Program (CMP) is able to integrate offenders from diverse backgrounds into a continuous entry program);
- When the group participants are not high risk or high need;
- When the participants come from a previous program background so that the material is not entirely new to them;
- When the program is offered in the community.

Modularised or continuous entry format may be too difficult to implement for the high risk and high need offenders who take programs at institutional sites. The community sites have had success in the delivery of the Community Maintenance Program which may be because referral criteria require participants to have previously completed a correctional program.

An alternative to offering all of the program in a modularised format is proposed that would involve the delivery of an initial module based on the design of AMIs (Adaptation of Motivational Interviewing) that have been shown to improve the impact of later treatment participation and have been effective in producing long standing change in some problem behaviours as stand alone interventions (Burke, Arkowitz & Menchola, 2003).

Table of Contents

List of Tables

PRINCIPLES OF EFFECTIVE CORRECTIONAL INTERVENTION

The Correctional Service of Canada (CSC) is responsible for providing federally sentenced offenders with correctional programs that will address needs related to their offending and promote their successful reintegration into the community (CSC, 2003). Interventions which adhere to the principles of risk, need and responsivity have been found to be the most effective in reducing recidivism. These three principles stipulate that the intensity of the intervention should correspond to the offenders' level of risk (that is, higher risk offenders receive high intensity programs; lower risk offenders should receive low intensity programs or no interventions), that programs should target criminogenic needs (i.e., those dynamic factors associated with reducing recidivism), and that programs should be delivered in a style and form that is sensitive to the offenders' culture and gender but also their level of skills and abilities (Andrews & Bonta, 2006).

Various program group characteristics comprise a key aspect of responsivity and as such can have an impact on effective delivery. CSC has a mandate to deliver effective programs to all offenders who require them. This can be challenging and as a result, managers and administrators are constantly trying to identify strategies that improve on program effectiveness and also on efficiency. Their goal is to find more efficient ways to deliver correctional programs that will allow more offenders to complete their program requirements while at the same time not compromise the program quality or public safety. Factors such as group size and the continuous or controlled intake of participants (i.e., entry that is flexible and open throughout the course of the program) may affect the response of offenders to the program material. The purpose of the following paper is to briefly review the literature and the input of stakeholders to determine: (1) the optimal group size for correctional programs; and (2) the advantages and disadvantages of delivering programs applying a continuous entry or modularised format. A third strategy to increase program efficiency by delivering correctional programs twice per day has also been proposed. However, no research could be found on this subject so it is not included in the discussion.

GROUP SIZE

Offering programs in a group format has the benefits of providing an environment in which individuals can appropriately socialize, learn to listen, communicate and handle conflicts. In addition, a group setting gives participants a place where they can share and learn from each other, practice new skills and work through issues together. Group size is a cost effective method of delivering key services that would otherwise be offered by staff to individual offenders, requiring a much larger facilitator staff complement.

The number of participants in a group can have important potential implications for the effective delivery of group programs. Some of the disadvantages of larger treatment and program groups may include less time per participant to work through problems, less time to practice key skills and receive feedback, a tendency for participants to disengage with the material or become disruptive, and increase the potential of the more withdrawn members to not actively express themselves or engage with the group. Group cohesiveness may be a challenge in very large groups. Several authors stress the relationship between group cohesiveness and group efficacy (Oesterheld, McKenna & Gould, 1987; Hartmann, Herzog & Drinkmann, 1992; Mitchell, 1991; Cox & Merkel, 1989), and conclude that a stable membership is difficult to achieve due to higher drop-out rates in larger groups (Yalom & Leszcz, 2005). In agencies with a large demand for services , however, and a mandate to provide programs to offenders who require them, larger groups can increase program capacity and decrease wait times, bed space, and ultimately, reduce costs to the public.

Within the CSC, policy sets limits on the number of participants who can participate in a program at a given time. This is dependent on the number of facilitators (Correctional Program Officers (CPOs) or psychologists) who are delivering the program. The moderate intensity programs are typically facilitated by one staff member; in this case the maximum number of participants is set at ten, while this is increased to twelve if two staff members are facilitating (CSC, 2008). All the high intensity correctional programs are delivered by two facilitators. It is recognised, however, that this policy may not be suitable for all types of correctional programs and the types of offenders for which these programs are geared towards. For example, the Women's Violence Prevention Program (WVPP) is set to a maximum of six participants throughout the pilot phase, with a potential of being brought to a maximum of eight once this

phase is completed. This lower maximum is set due to the nature of the program's intensity and because of the high risk and high needs profile of the target population (CSC, 2008a). In comparison, the violence prevention program designed for male offenders[1] (VPP) is co-facilitated by a CPO and a mental health staff member and can have a maximum of twelve participants (CSC, 2004). In smaller community sites or in some institutional settings where the variable language profile of offenders or the problem of association with other offenders Security has designated as "incompatibles" make it more difficult to load a program with ten or twelve offenders, it is recognised that programs can be started with fewer offenders. Indeed, the latest version of Reintegration Programs' policy does not set a restriction on the minimum number of offenders required to launch a program although site managers may not want to allocate staff resources to very small groups.

Other correctional agencies similarly recommend limiting group size. For example, the US Department of Justice suggests an optimal group size of twelve, with a maximum of sixteen (Linhorst, 2000) while the British Prison Service and Probation set the upper limit on group size at ten and always employ two facilitators. The John Howard Society recommends that groups range in size from eight to twelve members (2004).

Most of the literature on this topic is restricted to observations on ideal group size for group psychotherapy whereas the correctional programs in CSC are based on cognitive-behavioural principles and their effective delivery requires a lot of skills training and practice. The usual recommendation among practitioners is to aim for groups with five to seven clients (Levine, 1979; Yalom, 1975) but the basis for this limitation has not been made clear and there is very little empirical support for their contentions. Erickson's (1982) review of small group psychotherapy noted that recommendations in the literature regarding group size vary, although clinical tradition has settled on about eight members.

Yalom writes that in his experience, groups of five to ten are acceptable with the ideal being around seven. He considers that groups under five lack some of the benefits from the group's dynamics.

Slavson (1957) defines a group as having to consist of three or more persons; he goes on to state that, within therapy groups, a minimal number of individuals is necessary in order to foster meaningful relationships. Ideally, he states, the size of psychotherapy groups often ranges

---

[1] The VPP became an accredited program in June, 2000.

3

between five to ten participants. The lower limit is determined by the number of individuals required in order to function cohesively as a group, while the upper limit is determined by the number of participants that the therapist can effectively work with in the given amount of time (Yalom & Leszcz, 2005).

Fulkerson, Hawkins & Alden (1981) surveyed the literature on small groups and reported that groups with a size of five members are reported to be most satisfying to the members. They propose five as the minimum number of members necessary for the therapeutic group process to develop. Groups with more than five members appear to more easily develop cohesion, group identity (perhaps the most important single factor in therapeutic effectiveness) and to form an interactive group process.

Larger groups restrict the amount of "air time" each member of the group can expect. There is evidence that communication in general is attenuated when groups are larger. Castore's (1962) study of the number of verbal interrelationships in inpatient groups of varying sizes demonstrated sharp drops in verbal interrelations when the group reached nine and seventeen members, concluding that five to eight members is optimal for patient participation. Here again, however, the nature and goals of the group in question determine optimal size.

Bond (1984) examined the role group size had on the degree of norm regulation within the group. Group norms are shared understandings among group members regarding appropriate and inappropriate behaviours. Factors that reflect norm regulation include the extent of the diversity of opinion, compliance on issues related to attendance, participation and confidentiality. These factors are related to the degree of normative conflict in a group. Larger groups, owing simply to their greater numbers, are more likely to have a diversity of opinion that can result in conflict. Bond found that in the case of positive regulation, there was a significant nonlinear relationship with group size. The moderate sized groups (five to six) achieved the greatest positive norm regulation. He speculated that a group with five to six is optimal for the development of positive norm regulation, balancing off the inhibiting factor of the awkwardness of a restricted range of behaviour of a small group and exploiting the dynamics of the group form while keeping conflict among participants manageable by the therapist.

Fettes & Peters (1992) considered the impact of group size for the delivery of programs to address bulimia. They found a positive association between outcome and the number of subjects per group, but that association was not significant. They concluded that group

psychotherapy for bulimia can be effective when conducted with high client-to-therapist ratios. They warned, however, that large groups may have a harmful long term effect on service providers by increasing 'burn out', thus reducing efficacy and efficiency in the long term.

Thorn and Kuhajda (2006) suggest that groups for dealing with chronic pain would ideally comprise between five to seven patients. They favour limiting the size to five because they believe it is sufficient to facilitate interaction among group members while providing enough time for each patient to be heard.

In their recommendations for group therapy for depression, Hollon and Shaw (1979) stated that six participants would appear to be the maximum number practical for a single therapist to handle. Other authors support numbers close to this size. Scott and Stradling (1990) examined small group cognitive therapy for depression and compared the results to individual therapy. They found that group therapy was as effective as individual therapy and that treatment gains were still demonstrated after six months. They did not find that increasing the group size from 6 to 8 diminished the effectiveness of the therapy. They calculated that for the average group size of six patients, there was a saving of 42% of therapist time, and for eight patients that figure would be 50%. They concluded that group therapy was more efficient than individual.

In Weis' (2003) review of support groups for cancer patients he noted that the number of members in groups ranges from five to a maximum of twelve members. The optimal group size, he stated, has been shown to be about eight members.

McCaughrin and Price (1992) completed research on the impact of various characteristics of substance abuse treatment programs on outcomes. They reported that smaller groups (lower case loads and smaller patient to staff ratios) was one feature associated with superior treatment outcomes. Similar results were confirmed by Broome, Flynn, Knight, and Simpson (2007) in their large scale study of program characteristics and their impact on program effectiveness. They concluded that larger capacity programs appear to be less productive environments for both clients and staff, as underscored by the lower sense of efficacy (r $=-.26$), professional community (r $= -.14$), and poorer climate (r $= -.08$) that prevails there. This suggests that the barriers to interaction and greater workload may outweigh any potential resource advantage associated with increased size. They advise that the challenge that faces programs is to work toward an optimal size, neither too small nor too large, to balance the benefits of efficiency and social interaction.

An evaluation of a national offender substance abuse program (OSAP) in CSC provided a natural experiment with which to look at the impact of group size on offender outcomes. The researchers were able to capitalize on the fact that the OSAP program was administered to 20 consecutive groups of offenders with groups ranging in size from 9 to 20 offenders. Four categories of group size were created: (1) average group size of 12 (range = 9 to 14); (2) average group size of 16 (range = 15 to 17); (3) average group size of 18 (no combining of other group sizes); and (4) average group size of 20 (range = 19 to 20). The re-admission rates for each of the four groupings increased according to the average size of the group. Average group sizes of between 18 and 20 offenders had re-admission rates of 34% and 33%, respectively, compared to a smaller average group size of 12 (re-admission rate of 27%). Although the differences were not statistically significant, the authors claimed that there was a trend indicating that re-admission rate increased with increasing group size (there is however, the possibility that the lower numbers who completed some of the groups included those who remained after the higher risk or less motivated offenders had dropped out, thus distilling those with outcomes that are more likely to be positive). The authors concluded that the findings suggest that an effort to increase the number of participants in a group will impact negatively on post-release success.

Delivering a group correctional program within a correctional setting presents the challenge of adequately delivering program material to a unique population. Ross et al. (2008) suggest that working effectively with a large group of offenders many of whom may have learning problems, language barriers, brain injury, personality disorders and come from very diverse cultural backgrounds may be beyond the scope of any one therapist. The demands of processing a group with so many multiple learning needs has the potential to adversely affect both the program facilitator and the participating offenders. For this reason, Ross, Polaschek & Ward (2008) have suggested that working with ten offenders may be too many for one therapist to effectively handle. In a recent survey of ten experienced program delivery facilitators in CSC, nine out of ten noted that an ideal group number for a group led by one facilitator is fewer than eight. Most believed that a group should be between six to eight members. Most acknowledged that with two facilitators groups could have ten to twelve members.

Group size: Summary

This brief review looked at recommendations for program group size from various sources. These sources and their recommendations are compiled in Appendix A. With few exceptions, reviewers or researchers recommend groups of fewer than ten participants. Although the empirical literature comparing larger with smaller groups is scant, the consensus of opinion across practitioners is impressive. Optimal group size depends on several variables including the type of program delivered, the length of the program, the profile of the clientele, and the demands placed on the facilitator. The effective delivery of correctional programs requires that each participant must be actively involved in role plays, practice skills and receive feedback from the facilitator. The group content touches on very personal material and requires the application of new ways of thinking and behaving in high risk situations. The participants generally represent a population with multiple problems that affect their learning and come from ethically and linguistically diverse backgrounds. It is recommended, therefore, that for the delivery of these program where there are so many challenges faced by facilitators the number of participants in a group with one facilitator should not exceed ten and should be lower for groups with very high needs offenders. For programs that are educational and didactic, that is, those that are purely information-based, group size can probably be larger without having a negative impact on effectiveness.

CONTINUOUS INTAKE OR MODULARISED FORMAT PROGRAM DELIVERY

Another correctional program characteristic to be considered is the viability of a modular program format. Sometimes referred to as open group programs, this style of delivery offers flexible entry so that offenders are able to start a program when they are ready without having to wait to start at the beginning when the program comes available. This format could include entry at the beginning of a new module or the most flexible version will allow for entry at any point in the program.

The advantage of running open group interventions that allows for the accommodation of participants as soon as they are available for the program is that it potentially results in shorter and more manageable waitlists. Moreover, continuous intake can facilitate participants learning from each other as the experienced participants can assist newcomers as they enter the program (Marshall & Williams, 2001).

Despite these advantages, closed groups (i.e., those programs which do not have flexible entry and whose participants all start and end the intervention at the same time) also offer some advantages. Program entry is often closed in order to maintain a better sense of cohesion amongst group participants (CSC, n.d.). Many of CSC's programs are designed in such a way that learning the concepts and skills is cumulative, with each session building on the previous one. Programs that have not been designed to allow continuous entry but use the format anyway place a lot of demands on the facilitator to help new participants catch up. This can also irritate the existing group participants who have already reviewed the material and can be stressful for the incoming participant. While both formats bring their benefits, unfortunately, there is not enough substantiated evidence to suggest which format is more appropriate in successfully addressing offender risk, need and responsivity (Marshall & Williams, 2001). In the end, the decision to adopt one format over another will depend on a combination of factors including the profile of the participants, the design of the program and the regime at the site.

One example of a CSC program designed with continuous intake is the Women Offenders' Substance Abuse Program (WOSAP). This program consists of three modules, two of which are delivered as continuous intake. The first is a low intensity module that is open to all women offenders and delivered on a frequent basis so there is no immediate necessity to offer this module with continuous intake (Sherri Doherty, personal correspondence, March 25, 2009).

8

The first cycle of the WVPP was facilitated with continuous intake in order to reduce the length of time women would have to wait for program admission (CSC, 2008a); however, it was found in the first phase of the pilot that adding participants during the program cycle caused disruption, resistance and affected the cohesiveness of the group as the women were not all at the same stages. Overall, it was decided that continuous intake was not beneficial for high risk/high needs women offenders and the program is no longer being offered on a continuous entry basis for the rest of the pilot phase (CSC, 2008b). Similarly, administrative problems were experienced with efforts to launch the Moderate Intensity Violence Prevention (MIVPP) program in a modular format. Consistent with the decisions made by on the Women's Substance Abuse Program, the MIVPP program is now being run only as a closed group program (Yazar, 2008).

Survey of facilitators on modularised program delivery in CSC

Since there is little empirical evidence to commend one format over the other we have designed a brief piece of research that involved interviewing facilitators within CSC who have used both the closed group and open group formats. The description of the survey and the results are presented below.

Method

Ten telephone interviews were conducted with experienced correctional program facilitators. Their responses were coded and later analysed. The questions to be posed were sent to the facilitators prior to the interview to save on interview time. All the facilitators had at least 2 years of experience within CSC and some had over 15 years of program experience (Mean = 8.5 years). All had delivered the standard CSC programs as well as versions of the modularised program format at least twice. All regions were represented although the greatest number of interviews was conducted with facilitators from the Prairie region. Six respondents delivered programs in the institutions and four in the community. The type of programs delivered by respondents that involved a modularised or continuous entry format were: Community Maintenance (4), Violence Prevention Program (2) and Women Offenders' Substance Abuse Program (4).

Results

       Table 1 presents the frequencies of the main responses provided by the participating facilitators to the question, "What are the advantages of a modularised format?" The most common advantage cited for the modularised format is the reduction in wait times for offenders (N = 9) and increased flexibility to tailor the program to the specific needs of the offender (N = 4).

Table 1

Advantages of a Modularised Program Delivery Format

Positive features of a modularised program delivery format	Number agreed (%)
1. Reduces wait times/offender can start program right away	9 (90%)
2. Increased flexibility/can better tailor program to meet the needs of the offender (i.e. do not have to assign the entire program, can focus only on necessary modules)	4 (40%)
3. Having new members join group can have positive effect on group dynamics (roles do not become fixed/reduces impact of negative members)	2 (20%)
4. Existing members can model acceptable rules/expectations/skills for new members	2 (20%)
5. Offender can leave the program after a module and then come back at a later date without having to redo entire program	2 (20%)
6. Allows offenders to retake certain modules if needed, without having to retake entire program	1 (10%)
7. New participants joining group increases learning and motivation for others/ seeing older members graduate and succeed is motivating for new members	1 (10%)
8. Having new members join provides opportunity to practice skills of meeting new people and adapting to new environments	1 (10%)
9. Works well in a multilevel facility, as people are continuously rotating anyway	1 (10%)
10. Report writing is spread out, does not need to be completed all at once	1 (10%)

Table 2 presents the most common problems that facilitators noted with the modularised format. The most frequently cited problems are: Increased workload/report writing (N = 9); Disruptive to group dynamics/group cohesion (N = 8) and Challenge to constantly repeat information and bring new members up to speed when they join (N = 6).

Table 2

Disadvantage of a Modularised Program Delivery Format

Issues with delivery of a modularised program delivery format	Number agreed (%)
1. Increase in workload/report writing	9 (90%)
2. Disruptive to group dynamics and cohesion/reduces trusts/reduces level of sharing and participation	8 (80%)
3. Must repeat information every time new member joins/challenge to bring new members up to speed quickly	6 (60%)
4. Modules build on each other and are not self-contained	2 (20%)
5. Harder to accommodate different skill levels/different needs of the group when members constantly change	2 (20%)
6. Building motivation is more challenging	1 (10%)
7. OMS does not accommodate for modular report writing/not able to track modules in OMS	1 (10%)
8. "Sunset clause" (whereby all modules need to be completed within a specified period of time) should be changed. Not always feasible/realistic for offender to complete in timeframe/can lead to higher incompletion rates	1 (10%)
9. Increased risk of burnout for facilitators	1 (10%)
10. Hard to track completions if not on top of referrals	1 (10%)
11. Hard to stop program as new members are constantly joining	1 (10%)
12. Format is confusing for offenders/ hard for them to keep track of where they are in their program	1 (10%)

When asked which format they prefer delivering, 50% of the facilitators said they prefer the standard format; 30% said that both formats had their strengths and 20% preferred the modularised or continuous entry format. Although this was a small sample size there appeared to be clear difference in preference of format based on site. Facilitators working in the institutions

preferred the standard closed entry format (67%) while those in the community were ready to deliver either format.

Program format: Summary

Despite its challenges, the modularised format does provide flexibility and the potential to tailor program delivery to individual offender need. Based on interviews and recommendations from facilitators the following circumstances are those in which the format works best:

1. When the group is relatively homogenous, i.e., participants have similar offence histories or criminogenic needs. (It should be noted, however, that the CMP is able to integrate offenders from diverse background into a continuous entry program);
2. When the group participants are *not* high risk or high need;
3. When the participants come from a previous program background so that the material is not entirely new to them;
4. When the program is offered in the community.

Obviously, when all four criteria are met the continuous entry or modularised format has ideal conditions in which to be implemented. Using a modularised program delivery format in the institutions in CSC has proven to be very difficult. Administratively, it is unlikely that an offender who completes one of the modules at one institution and is transferred out can expect to pick up the same program at the right time to complete the next module. Monitoring of compliance on report writing and program completion rates is also difficult. Continuous entry in the institutions poses another set of problems when high risk or high needs offenders react negatively to the constant integration of new participants. It should be noted that there are successful exceptions to this. For example, a continuous entry option (or rolling program) has been offered to sex offenders in the British Prison Service for several years and those practionners find the format manageable. Sex offenders, however, are generally recognised as more motivated and more compliant than offenders with other offence patterns. One alternative to a complete modularised program format is a modified modularisation that could be implemented in an institutional setting. This would involve offenders in an initial generic module common to all program approaches and offence patterns. Such a module would introduce

offenders to the group program process, the vocabulary of programs and help them acquire a basic understanding of their offence patterns. Similar brief interventions to build motivation to participate in further programming has been reviewed in the literature and found to improve later program completions (Burke, Arkowitz & Mencola, 2003).

References

Andrews, D.A., & Bonta, J. (2006). *The psychology of criminal conduct,* 4th ed. Newark, NJ: LexisNexis.

Bond, G.R. (1984). Positive and negative norm regulation and their relationship to therapy group size**.** *Group, 8*(2), 35-44.

Broome, K. M., Flynn, P. M, Knight, D. K.& Simpson, D. D. (2007). Program Structure, Staff Perceptions, and Client Engagement in Treatment. *Journal of Substance Abuse Treatment, 33*(2), 149–158.

Burke, B., Arkowitz, H., & Menchola, M. (2003). The Efficacy of Motivational Interviewing: A Meta-Analysis of Controlled Clinical Trials. *Journal of Consulting and Clinical Psychology, 71* (5), 843–861

Castore, G. F. (1962). Number of verbal interrelationships as a determinant of group size. *Journal of Abnormal and Social Psychology*, *64*(4), 56-8.

Correctional Service of Canada (2008a). *Women's violence prevention program: Facilitator manual.* Ottawa, Ontario: Correctional Service of Canada.

Correctional Service of Canada (2008b). *Minutes from WVPP post pilot, phase one meeting Sept. 9-11, 2008.* Ottawa, Ontario: Correctional Service of Canada.

Correctional Service of Canada (2004). *Detailed programs descriptions.* Ottawa, Ontario: Correctional Service of Canada, Reintegration Programs Division.

Correctional Service of Canada (2003). *Standards for correctional programs, 726-1.* Ottawa, Ontario: Correctional Service of Canada.

Correctional Service of Canada (n.d.). *Program accreditation case file: Substance abuse programs. High intensity substance abuse program.* Ottawa, Ontario: Correctional Service of Canada.

Cox, G. L., & Merkel, W. T. (1989). A qualitative review of psychosocial treatments for bulimia. *Journal of Nervous and Mental Disease, 177,* 77–84.

Erickson, R. C. (1982). Inpatient small group psychotherapy: A survey. *Clinical Psychology Review. 2*(2), 137-151.

Fettes, P. A. & Peters, J. M. (1992). A meta-analysis of group treatments for bulimia nervosa. *International Journal of Eating Disorders, 11*(2), 97-110.

Fulkerson, C. C. F., Hawkins, D. M., & Alden, A. R. (1981). Psychotherapy groups of insufficient size. *International Journal of Group Psychotherapy, 31,* 73-81.

Goodman, M. & Weiss, D. (2000). Initiating, Screening, and Maintaining Psychotherapy Groups for Traumatized Patients. In R.H.Klein & V. L. Schermer (Eds.), *Group Psychotherapy for Psychological Trauma* (pp. 47-63). New York: Guilford Press.

Hartmann, A., Herzog, T., & Drinkmann, D. (1992). Psychotherapy of bulimia nervosa: What is effective? A meta analysis. *Journal of Psychosomatic Research, 36,* 159–167.

Hollon, S. D. & Shaw, B. F. (1979). Group Cognitive Therapy for Depressed Patients. In A.T.Beck, A. J. Rush, B. F. Shaw, & G. Emery (Eds.), *Cognitive Therapy of Depression* (pp. 328-353). New York: Guilford Press.

John Howard Society (2004). *Perspectives on Canadian drug policy (vol 2).* Kingston, Ontario: The John Howard Society.

Levine, B. (1979) *Group Psychotherapy: Practice and Development.* Englewood Cliffs, NJ: Prentice-Hall.

Linhorst, D. (2000). *Summary of key findings of a process evaluation of the Ozark Correctional Center drug treatment program* Kansas City, MI.: National Institute of Justice.

Marshall, W. L. & Williams, S. (2001). The assessment and treatment of sexual offenders. In L.L. Motiuk & R.C. Serin (Eds.) *Compendium 2000 on effective correctional programming.* Ottawa, Ontario: Correctional Service of Canada.

McCaughrin W. C. & Price R. H. (1992). Effective outpatient drug treatment organizations: Program features and selection effects. *International Journal of the Addictions, 27*(11), 1335–1358.

Mitchell, J. E. (1991). A review of the controlled trials of psychotherapy for bulimia nervosa. *Journal of PsychosomaticResearch, 35,* 23–31.

Oesterheld, M. D., McKenna, M. S., & Gould, N. B. (1987). Group psychotherapy of bulimia: A critical review. *International Journal of Group Psychotherapy, 37,* 163–184.

Ross, E. C., Polaschek, D. L .L., & Ward, T. (2008). The therapeutic alliance: A theoretical revision for offender rehabilitation. *Aggression and Violent Behavior, 13,* 462-480.

Rutan, J. S., & Stone, W. N. (1984). *Psychodynamic group psychotherapy.* Lexington, MA: Collamore.

Scott, M. J., & Stradling, S. G. (1990). Group cognitive therapy for depression produces clinically significant change in community-based settings. *Behavioural Psychotherapy*, *18*, 1–19.

Slavson, S. R., (1957). Are there "group dynamics" in therapy groups? *International Journal of Group Psychotherapy, 7,* 131-154.

Thorn, B. & Kuhajda, M. (2006). Group cognitive therapy for chronic pain. *Journal of Clinical Psychology, 62* (11), 1355-1366.

Weis, J. (2003**).** Support groups for cancer patients. *Supportive Care in Cancer, 11*, 763–768.

Yalom, I. D. (1975). *The Theory and Practice of Group Psychotherapy.* New York: Basic Books.

Yalom, I. D. & Leszcz, M. (2005). *The theory and practice of group psychotherapy*. (5th ed.) New York: Basic Books.

Yazar, R. (2001). The Violence Prevention Program: Intensive correctional treatment. *Corrections Today, 63,* 102-107.

APPENDIX A
GROUP SIZE

Author	Report	Date	Group size recommendation
CSC	Specific guidelines for methadone maintenance treatment. Section F: Substance abuse intervention http://www.csc-scc.gc.ca/text/pblct/methadone/f-eng.shtml	2003	-maximum group size of 10
McKisack,C. & Waller, G.	Factors influencing the outcome of group psychotherapy for bulimia nervosa. International Journal of Eating Disorders, 22(1), 1-13	1996	-group psychotherapy for eating disorders can be effective with large group numbers if conducted in efficient manner -however, large group size may negatively affect attendance rates and group cohesion
Linhorst, D.	Summary of key findings of a process evaluation of the Ozark Correctional Center drug treatment program. U.S. Department of Justice http://www.ncjrs.gov/pdffiles1/nij/grants/181647.pdf	March 8, 2000	-optimal group size 12, maximum 16
John Howard Society	Perspectives on Canadian Drug Policy http://www.nald.ca/library/research/drugs/perspect/volume2/volume2.pdf	2004	-group size should be linked to program intensity, characteristics of participants, and experience of deliverers. -groups size should be no less than 8 and no more than 12
CSC	The offender substance abuse program pre-release program: Analysis of intermediate and post-release outcomes http://www.csc-scc.gc.ca/text/rsrch/reports/r40/r40e_e.pdf	1995	-program facilitators trained by CSC are trained to limit group size to 10 offenders -offender rates of re-admission back into custody increased according to program group size.
Morrison, N.	Cognitive group therapy: Treatment of choice or sub-optimal option? Behavioural and Cognitive Psychotherapy, 29, 311-332	2001	-group size should range from 6 to 12 -in larger group sizes, care must be taken to avoid development of sub-groups
Satterfield, J.	Integrating group dynamics and cognitive-behavioural groups: A hybrid model. Clinical Psychology: Science and Practice, 196	1994	-therapy group should typically consist of 6 to 10 members, based on clinical experience of therapist and pragmatic limitations -research not yet verified optimal number of group members
Bond, G.	Positive and negative norm regulation and their relationship to therapy group size. Group, 8(2), 35-44.	1984	-small groups achieved more norm regulations than larger groups.
Erickson, R.	Inpatient group psychotherapy: A survey. Clinical Psychology, 2, 137-151	1982	-clinical custom is 8 members
Yalom, I	Theory and Practice of Group Psychotherapy (3rd ed.) New	1985	-8 is optimal number of group members

York: Basic Books

Weis, J.	Support groups for cancer patients. Supportive Care in Cancer, 11, 763-768	2003	-optimal group size is 8, but can range from 5 to 12
Fulkerson, C., Hawkins, D. & Alden, A.	Psychotherapy groups of insufficient size. International Journal of Group Psychotherapy, 31, 73-81.	1981	-groups of 5 were most satisfying to members -5 proposed as minimum number needed to foster therapeutic group process -group should not exceed 10
Rutan, J. & Stone, W.	Psychodynamic group therapy. Lexington, MA: Collamore	1984	-optimal groups size will depend on considerations of therapist comfort, meeting length, room size, theoretical orientation.
Broome, K.M., Flynn, P. M, Knight, D.K.& Simpson, D.D	Program Structure, Staff Perceptions, and Client Engagement in Treatment. *Journal of Substance Abuse Treatment.* 33(2), 149–158.	2007	- larger capacity programs appear to be less productive environments for both clients and staff, -
Castore, G. F	Number of verbal interrelationships as a determinant of group size. *Journal of Abnormal and Social Psychology*, 64(4), 56-8.	1962	-demonstrated sharp drops in verbal interrelations when the group reached nine and seventeen members, -five to eight members is optimal for patient participation.
Hollon, S.D. & Shaw, B.F.	Group Cognitive Therapy for Depressed Patients. In, A.T. Beck, A.J. Rush, B.F. Shaw and G. Emery (eds), *Cognitive Therapy of Depression*, Guilford Press, New York.	1979	-six participants is maximum number practical for a single therapist to handle
Levine, B.	*Group Psychotherapy: Practice and Development.* Englewocd Cliffs, NJ: Prentice-Hall.	1979	-5 to 7 clients per group
McCaughrin W.C. & Price R.H	Effective outpatient drug treatment organizations: Program features and selection effects. *International Journal*	1992	-smaller groups are associated with superior treatment outcomes

of the Addictions, 27(11), 1335–1358.

Ross, E.C., Polaschek, D.L.L., & Ward, T	The therapeutic alliance: A theoretical revision for offender rehabilitation. *Aggression and Violent Behavior, 13,* 462-480.	2008	-working effectively with a large group of offenders many of whom may have learning problems, language barriers, brain injury, personality disorders and come from very diverse cultural backgrounds may be beyond the scope of any one therapist.
Scott, M. J., & Stradling, S. G	Group cognitive therapy for depression produces clinically significant change in community-based settings. *Behavioural Psychotherapy*, *18*, 1–19.	1990	-group therapy was as effective as individual and treatment gains were still demonstrated at 6 months. -increasing the group size from 6 to 8 did not diminish the effectiveness of the therapy. -for the average group size of six patients, there was a saving of 42% of therapist time, and for eight patients that figure would be 50%
Slavson, S. R.,	Are there "group dynamics" in therapy groups? *International Journal of Group Psychotherapy, 7,* 131-154.	1957	-defines a group as having three or more members - a minimal number of individuals is necessary in order to foster meaningful relationships. -the size of psychotherapy groups often ranges between five to ten participants
Thorn, B. & Kuhajda, M	*Group cognitive therapy for chronic pain;* Journal of Clinical Psychology, 62(11), 1355-1366.	2006	-5 to 7 patients per group