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Predicting Attrition From Treatment Programs for Male Batterers

By: Jennifer Rooney, B. A.

**A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment
of the requirements for the degree of**

Master of Arts

Department of Psychology

Carleton University

Ottawa, Ontario

April 14, 1998

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the Faculty of Graduate Studies and Research
acceptance of the thesis

PREDICTING ATTRITION FROM TREATMENT PROGRAMS
FOR MALE BATTERERS

Submitted by: Jennifer Rooney, B. A.
in partial fulfillment of the requirements
for the degree of Master of Arts

Handwritten signature of P. K. Hanson, written in black ink over a horizontal line.

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Chair, Department of Psychology

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April , 1998

Abstract

Attrition in male battering treatment programs is a serious problem; approximately 30% to 50% of clients who begin treatment for wife assault drop out (DeMaris, 1989; Grusznski & Carrillo, 1988; Hamberger & Hastings, 1989). In order to devise interventions aimed at keeping clients in treatment, it is crucial to understand why clients drop out. The current study examined the contribution of both client and program characteristics in predicting dropout from treatment programs for male batterers. Data was collected at intake from 306 male batterers who sought treatment at four different sites. The rates of pre-program attrition (from intake to the first treatment session) varied considerably across the four sites, ranging from 3% to 46%. A long waiting period to get into the program was associated with a high rate of pre-program attrition. There was less variation in attrition once treatment began, with rates ranging from 36% to 42%. The hypothesis that clients characterized by an unstable lifestyle (e.g., substance abuse problems, criminal history, unemployed) would be more likely to drop out of treatment was supported. In addition, clients who did not finish treatment reported being more abusive towards their partners than completers. Results also supported a significant interaction between verbal aptitude and structure of program. A self-report measure of internal motivation was weakly related to attrition. External motivation, as measured by the Likely Consequences Scale, was not significantly related to attrition. From the results of this study, a 14-item risk scale for dropping out of treatment was developed and its predictive validity was supported. Other findings of the study are discussed and strategies at keeping high risk clients from dropping out are suggested.

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Introduction

Male battering is a staggering social problem. Canada's first national survey on violence against women found that more than one out of four women who have ever been married or in a common-law relationship have been assaulted by their male partners (Rodgers, 1994). In the 1970's, the women's movement brought attention to this issue and helped organize shelters for abused women. Shortly thereafter, counselling programs for male batterers began to be established across North America. The available research evidence has generally supported the effectiveness of these programs for reducing male violence towards women (Dutton, 1986; Palmer, Brown, & Barrera, 1992), although not all program evaluations have found treatment to be effective (Harrell, 1991). One serious problem with these treatment programs, however, has been high rates of attrition, ranging from 28% to 47% (DeMaris, 1989; Grusznski & Carrillo, 1988; Hamberger & Hastings, 1989; Faulkner, Cogan, Nolder, & Shooter, 1991). Attrition rates have risen up to 93% when measured from initial phone contact until treatment completion (Gondolf & Foster, 1991). In order to reduce rates of attrition, it is necessary to understand why clients are dropping out. The purpose of the present study is to examine the contribution of both client and program characteristics in predicting attrition from male battering treatment programs.

Treatment dropout is not exclusive to male batterer programs. Based on a review of the psychological treatment literature, Baekeland and Lundwall (1975) reported that 20% to 57% of psychiatric patients fail to return after the first visit, and 31% to 56% attend no more than four visits. The attrition rate was even higher for alcoholics who sought treatment: 52% to 75% of patients dropped out by the fourth session.

The present paper begins with a review of the literature on attrition from various treatment programs. As will be discussed, many of the predictors of attrition found in the general treatment dropout literature are also related to dropping out of treatment programs for male batterers. A general framework for understanding attrition is proposed and is discussed in terms of predicting dropout from treatment programs for male batterers.

The attrition research has examined a wide range of factors. Client characteristics have been frequently considered; as well, there has been ongoing research examining the characteristics of the program itself (e.g., duration, cost, group size), therapist characteristics, and client-therapist interactions. The variables most commonly associated with attrition in the general dropout literature can be grouped into the following general categories: lifestyle instability factors, motivational factors, program and therapist characteristics, and treatment congruence factors.

Lifestyle instability

The concept of lifestyle instability was suggested by Cadsky, Hanson, Crawford, and Lalonde (1996) to encompass many of the client characteristics associated with attrition. It describes a way of life characterized by frequent major life changes (e.g., jobs, residences) as well as the related personality characteristics of aimlessness, unproductiveness, irresponsibility, and low self-control. The concept of low-self-control/lifestyle instability is an important aspect of several theories of criminal conduct (Andrews & Bonta, 1994; Gottredson & Hirschi, 1990). Gottredson and Hirschi (1990) have gone so far as to propose that low self-control is the single factor underlying all criminal behaviour. According to their theory, those lacking in self-control not only

engage in crime, but they also have a history of unstable commitments to work, family and friends, a tendency to seek immediate gratification, and a lack of perseverance in all tasks (including treatment programs).

An unstable lifestyle can be related to personal characteristics such as lack of self-discipline, irresponsibility, low perseverance, and sensation seeking; however, it can also be influenced by social factors, such as the unavailability of long-term employment, inadequate housing, and fluctuating social services. For whatever reasons, those who do not maintain stable employment, housing, and social relationships would not be expected to remain in treatment programs either.

The most direct indicators of lifestyle instability are measures of changes in important aspects of the client's life (e.g., number of moves in the last five years; Cadsky et al., 1996). Numerous other factors, however, can also be linked to lifestyle instability, such as inadequate education, frequent unemployment, low social class, substance abuse, and criminal behaviour. Social class variables, such as low educational attainment can reflect low levels of perseverance and self-discipline and may subsequently limit access to stable long-term employment. As well, a history of engaging in high risk behaviour (e.g., drinking, crime, fighting) is a good behavioural indicator of impulsiveness (e.g., Prentky, Knight, Lee, & Cerce, 1995).

The relationship between lifestyle instability factors and attrition from psychological treatment is supported by many empirical studies. After reviewing 362 studies from various treatment programs, Baekeland and Lundwall (1975) reported on the characteristics most commonly associated with dropping out of treatment. A variety of treatment programs were reviewed in their paper including hospital treatment for

psychiatric patients, substance abuse programs, and outpatient psychotherapy. Dropouts compared to completers were lower in socioeconomic status, less socially stable, more likely to be single, more prone to substance abuse problems, and more likely to manifest sociopathic features.

In Garfield's (1986) review of 86 studies on psychotherapy dropout, minority status, low socioeconomic status, and a low level of education were found to be consistently associated with dropping out. Although this review focused mainly on individual and group therapy, several drug treatment programs were also included. Similar findings were found in Wierzbicki and Pekarik's (1993) meta-analysis of 125 studies on psychotherapy dropout; dropouts were more likely to be minorities, less-educated, and to have a lower income relative to those who completed treatment.

Someone who is generally low in conscientiousness is more likely to miss appointments due to forgetfulness or time mismanagement. Results from a study conducted by Berrigan and Garfield (1981) indicated that missed appointments were associated with dropping out but the number of cancellations were not. Although missed appointments is not a direct measure of lifestyle instability, it does indicate low levels of responsibility and conscientiousness on the part of the clients who did not bother to call ahead and cancel.

Just as lifestyle instability factors are related with dropping out of psychotherapy, these same factors are related to dropping out of substance abuse programs. Individuals who drop out of substance abuse treatment programs are more likely to have a lower level of education (Epstein, McCrady, Miller, & Steinberg, 1994; Wexler & DeLeon, 1977), lower economic status (Roffman, Klepsch, Weptz, Simpson, & Stephenson, 1993;

Wexler & DeLeon, 1977), be unemployed (Hahn & King, 1982), less socially stable (Epstein et al., 1994; Leigh, Ogbourne, & Cleland, 1984), less committed to their marriages (Epstein et al., 1984), have more alcohol related arrests (Hahn & King, 1982; Leigh et al., 1984), and to have started drinking at an earlier age (Hahn & King, 1982).

Motivation

Poor motivation for treatment is another important predictor of attrition. Over 80% of the studies reviewed in Baekeland and Lundwall's (1975) paper indicated that poor motivation was related to dropping out of treatment. Motivation for treatment may be intrinsic or external. Pressure from one's partner or work to attend treatment, being court-referred, or being referred to treatment by a significant other represent external motivators for treatment. Seeking treatment in order to better oneself (e.g., recognizing the need for treatment) is a sign of internal motivation.

In most of the available research, motivation has been inferred indirectly from clients' behaviour and/or attitudes rather than being assessed by standardized questionnaires or other direct measures. In Krasnoff's (1976) study of alcoholics attending a six week in-patient treatment program, dropouts were the most likely to report their drinking as rewarding, which the authors interpreted as a sign of poor treatment motivation. In another study of attrition from alcohol treatment (Baekeland, Lundwall, & Shanahan, 1973), those who completed treatment had previously attended AA, were abstinent on admission, and were self-referred. Again, the authors interpreted these factors as signs of treatment motivation. Similarly, Epstein and colleagues (1994) found

that those who failed to complete their homework assignments also failed to complete the treatment program.

Longo, Lent, and Brown (1992) conducted one of the few studies on attrition that used a standardized questionnaire to measure motivation for treatment. The Expectations About Counseling (EAC) questionnaire (Tinsely, Workman, & Kass, 1980) was administered to 139 university students who sought treatment at the school's counselling centre. This scale assesses an individual's desire to engage and persist in counselling (e.g., "I expect to see the counsellor for more than three interviews"). Results of their study supported the relationship between motivation to be rehabilitated and completing treatment.

The relationship between the type of referral and attrition has been investigated in several studies. It has sometimes been assumed that clients who seek treatment voluntarily are more motivated than those who are court-referred (Baekeland et al., 1973); however, there is no empirical evidence to support this assumption. In order to test whether this assumption is valid, one would need to assess an individual's motivation for change and/or attend treatment to both self-referred and court-ordered clients.

Nevertheless, Pekarik and Stephenson (1988) found that psychotherapy patients who were self-referred were more likely to complete than those referred by another source. However, other studies have shown that self-referred patients attending residential treatment programs are more likely to drop out compared to those who are court-referred (Collins & Allison 1983; Sidall & Conway, 1988). Clients from these residential programs faced a high probability of serving a jail sentence if they did not complete

treatment. Hence, it appears that it is the strength of the external motivator rather than simply the type of referral which plays a role in determining who will drop out.

Program Characteristics

Although certain types of clients are more likely to drop out, characteristics of the program may also influence rates of attrition (e.g., content of therapy, duration of program, type of approach/model). Very little research has been devoted, however, to investigating the relationship between program characteristics and attrition. This is unfortunate since research in this area could assist therapists in making modifications to their programs aimed at keeping clients who are at high risk for dropping from terminating prematurely. Practical barriers (e.g., cost of therapy, location) may also affect a client's decision to drop out of treatment. By examining these factors, programs can make modifications in order to increase client retention.

Pekarik and Stephenson (1988) conducted one of the few studies that examined the relationship between treatment characteristics and attrition. They found that clients were more likely to complete in individual psychotherapy as opposed to group therapy, in therapy with a humanistic orientation as opposed to psychoanalysis or family systems, and in brief therapy (1 to 10 sessions) as opposed to longer therapy (11 visits or more).

The length of delay between the initial assessment and the first treatment session has also been found to be associated with attrition. Leigh et al. (1984) found that clients who failed to show up to any of the treatment sessions were more likely to have a waiting period longer than two weeks. In a study conducted by Stern and Brown (1994), a significant relationship was found between waiting period and attendance in a child and

family clinic; individuals who had to wait longer to get treatment were less likely to show up at the first treatment session. Gondolf and Foster (1991), however, found that clients who waited a long period from intake to counselling attended more treatment sessions than clients who entered treatment after a short delay.

These conflicting results suggest that the relationship between the duration of waiting period and attrition is dependent upon how a dropout is defined. While a longer waiting period is positively associated with dropping out before treatment begins, it appears to be negatively associated with dropping out when attrition is defined as dropping out after attending several sessions. Clients who show up to the first treatment session and who have waited a long period before being accepted into treatment may be more motivated to complete therapy than those who did not have to wait.

The development of rapport between patient and therapist is also likely to influence whether or not a client will terminate prematurely. In Beckham's (1992) study on attrition from psychotherapy, clients who dropped out of treatment after the intake session viewed their therapists more negatively (e.g., less warm, empathetic, and genuine) compared to patients who attended more than one session. Leigh et al. (1984) conducted follow-up interviews with dropouts and reported that 30% of the clients indicated a dislike of the therapist as their reason for dropping out. These studies stress the importance of clients' impressions of their therapists on their decision to drop out.

Results from several studies have demonstrated that therapists with more clinical experience are more likely to retain clients in treatment (Epstein et al., 1994; Pekarik and Stephenson, 1988). These results suggest that inexperienced clinicians may have more difficulty in establishing rapport with their clients.

The literature examining the treatment characteristics associated with attrition is sparse. The few studies conducted in this area suggest that program accessibility (i.e., being accepted into treatment when the need arises) is related to pre-program attrition. On the other hand, clients who wait longer periods (and do not drop out before the first treatment session) appear to have a greater probability of completing therapy. Hence, programs with long waiting lists may be inadvertently screening out less motivated clients. Another important factor in influencing whether or not a client will remain in treatment is the early development of rapport with the therapist. Therapists who are perceived as empathic, warm, and genuine are more likely to retain clients in treatment.

Treatment Congruence

The match between clients' assessments of their own needs or problems and the content of therapy has been suggested to influence attrition (Garfield, 1986). Client-treatment congruence refers to the extent to which clients' assessments of their own needs are being addressed in therapy (Cadsky et al., 1996). The closer the match between a client's needs and the program characteristics, the more likely the client is to remain in treatment.

Whether or not the treatment fits the clients needs will depend upon the client's prior expectations about treatment. If a client's expectations regarding the nature of therapy are incongruent with what actually occurs, he or she may become dissatisfied and drop out of treatment. In Baekeland and Lundwall's (1975) review, all the studies that included patient/therapist expectations found that discrepant expectations regarding the goals and methods of treatment predicted treatment dropout. In a study of 40 clients from

a low social class, it was reported that these patients expected the therapist to play a more active role (Overall & Aronson, 1962). Clients whose expectations were the most inaccurate in terms of their therapists role were the most likely to drop out.

The expectations of clients with regard to the duration of treatment is also associated with attrition from treatment programs. Psychotherapy is typically designed for 40 or more sessions, yet clients may expect to finish earlier (Pekarik, 1985). In Pekarik's (1991) study of psychotherapy dropout, client and therapist expectations regarding treatment duration was found to be a better predictor of dropout than any of the other variables examined including education, race, marital status, and social class.

An incongruence between certain client characteristics (e.g., aptitude) and treatment characteristics (e.g., structure of therapy) may also influence a client's decision to terminate treatment prematurely. There is a lack of empirical research investigating the interaction between learning styles and treatment approaches in predicting attrition; however, research based on the Responsivity Principle has shown that the effectiveness of programs depends upon matching the styles and modes of treatment to the learning styles and needs of offenders (Andrews et al., 1990; Antonowicz & Ross, 1994).

In Shorts' (1988) study of attrition in a community-based program for delinquent youths, those who dropped out scored significantly lower on tests of general learning ability and verbal aptitude than those who completed treatment. These results demonstrate the need for designing specific interventions for clients with learning deficits and/or low verbal skills.

Treatment approaches requiring cognitive sophistication are apt to have difficulty retaining clients with low verbal skills and/or low intelligence. These types of clients

may fare better in programs that focus on learning new coping skills. For example, Baekeland et al. (1973) suggest that a psychodynamic model of alcoholism should be used for better educated clients, whereas the disease model of alcoholism is better suited for poorly educated clients.

In a study examining the effectiveness of psychotherapy for treating alcoholics, it was found that the higher functioning clients benefited more from interactional therapy whereas the lower functioning clients benefited more from coping skills training (Kadden, Cooney, Getter, & Litt, 1989). Clients higher in psychopathology were not expected to succeed in interactional therapy since these individuals lacked the necessary social skills to participate in this type of therapy, which relies on the development of good therapeutic relationships. This study highlights the importance of tailoring treatment approaches to certain client characteristics.

Research on the Conceptual Level Matching Model (CLMM) suggests that individuals characterized by rigid or dichotomous thinking and who have poor interpersonal skills are more likely to benefit from highly structured programs. Individuals at higher stages of conceptual level, who are above average on cognitive, interpersonal, and verbal skills, can cope with both high and low structure (Reitsma-Street & Leschied, 1988).

Since clients with low cognitive skills are not as likely to succeed or benefit in unstructured therapy sessions, it is likely that they become frustrated and are more likely to drop out. Individuals with low verbal skills may find unstructured treatment intimidating and stressful since they are required to play more of an active role. Clearly,

future research is needed to explore the relationship between verbal skills/general aptitude and the treatment setting in predicting attrition.

Clients suffering from multiple problems (e.g., substance abuse problems, depression, anger control) may be more likely to drop out if the treatment is not targeting all of their needs. In a study of clients seeking substance abuse treatment, depression was found to be a significant predictor of attrition after one year of treatment (Ravndal & Vaglum, 1994). In fact, clients who were suffering from severe depression were five times more likely to drop out after one year of treatment compared to non-depressed clients. The authors questioned the suitability of using the Phoenix House Model for substance abusers suffering from severe depression. It was suggested that the use of antidepressant medication and specific individual psycho-therapeutic approaches would be more helpful in treating clients with substance abuse problems who are also suffering from depression.

In contrast to the previous study, completers were more likely to have a history of primary depression in a study of clients attending an outpatient cocaine research clinic (Agosti, Nunes, Steward, & Quitkin, 1991). It was suggested that depressed patients may have been more attracted to the clinic because it offered antidepressant medication. Although the focus of treatment was medication management, patients received one hour of psychotherapy per week and were given the option of attending a self-help group. It is likely that depressed clients who sought help at this substance abuse clinic were not as likely to drop out because the treatment offered a variety of programs targeted to meet its clients' needs.

The previous studies suggest that treatment congruency may mediate the relationship between depression and dropout. Patients suffering from depression are not at any higher risk for dropping out of treatment as long as their depression is being treated; in fact, they may be more likely to remain in treatment. In general, it may be that clients are more likely to remain in treatment when their most important self-identified problems are being addressed.

Attrition from Male Battering Programs

The general framework for understanding attrition in the general dropout literature is useful for predicting attrition from male battering programs. The four main factors (lifestyle instability, motivation, program characteristics, and treatment congruency) are also associated with dropping out in male battering programs.

Lifestyle Instability

Social class has consistently predicted attrition in male battering programs: dropouts, compared to completers, are significantly more likely to be unemployed or to have a lower degree of education (Cadsky et al., 1996; Grusznski & Carrillo, 1988), have a lower employment level (DeMaris, 1989; Grusznski & Carrillo, 1988; Hamberger & Hastings, 1989; Pirog-Good & Stets, 1986; Saunders & Hanusa, 1986; Saunders & Parker, 1989). Dropouts have low social stability, report unstable work histories (Cadky, et al., 1996), are more likely to be single (Petrik, Petrik & Subotnik, 1993; Saunders & Hanusa, 1986) and have greater borderline tendencies (Hamberger & Hastings, 1989) than treatment completers.

Dropouts compared to completers evidence more impulsive behaviours. In Hamberger and Hastings (1989) study of 156 male batterers who were attending a counselling program, dropouts had higher rates of police contact for alcohol and drug related offences as well as other forms of acting out behaviour (e.g., disorderly conduct, reckless driving, reckless use of a gun). In DeMaris' (1989) study, men with a criminal history were almost twice as likely to drop out compared to those who had never been arrested.

The relationship between impulsivity and dropping out is also supported by the fact that male batterers who drop out of treatment are more likely to be violent outside the home (Cadsky et al., 1996). The generally violent batterer may be more likely to drop out of treatment due to a combination of low behavioural controls and low verbal skills. Males who are "family-only aggressors" are apt to have better behavioural controls than "generalized aggressors" (i.e., violent both inside and outside the home) since "family-only aggressors" are able to control their aggressive impulses outside the home.

The characteristics of men who drop out of treatment are strikingly similar to the generally violent/antisocial batterer, a subtype of batterers proposed by Holtzworth-Monroe and Stuart (1994). The three types (generally violent/antisocial, dysphoric/borderline, and family-only) are based upon three descriptive dimensions (i.e., severity of marital violence, generality of violence, and psychopathology or personality disorders). After reviewing the literature, they concluded that the generally violent/antisocial batterers, compared to the other groups, have the most extensive criminal history, have more drug and alcohol problems, are more likely to have an anti-social personality disorder, and are more likely to engage in violence outside the home.

Hence, one would expect the generally violent/antisocial batterer to drop out of treatment since this would be consistent with their general pattern of impulsive behaviour.

There is also some evidence that those with low behavioural controls may be particularly influenced by external sanctions. Saunders and Parker (1989) examined the relationship between the severity of violence, type of referral and attrition in a sample of 138 male batterers. Overall, those men who engaged in severe violence were less likely to complete treatment. However, when the severely abusive men were under court order to remain in treatment, their attrition rate was equal to that of the less severe batterers. These findings need to be considered cautiously since a subsequent study (Cadsky et al., 1996) failed to replicate Saunders and Parkers' (1989) results, and there is little reason to believe that external sanctions should be particularly effective with impulsive individuals.

Motivation

Although there is strong support for the relationship between lifestyle instability and attrition in male battering treatment programs, there is a lack of research examining the relationship between motivation to be rehabilitated and attrition. The only study which directly measured clients' motivation to change was DeMaris' (1989) study. Motivation was assessed by the following two questions: "How important is it to you to stop being violent with your partner?" and "How hard will you try to avoid being violent in the future?". Male batterers who did not consider it very important to stop being violent were almost twice as likely to drop out.

Indirect measures of motivation (i.e., type of referral) have been used in several studies. Cadsky et al. (1996) found that self-referred clients were more likely to complete

treatment compared to court-referred clients. However, several other studies have shown that men who are court-referred to counselling programs for male batterers are more likely to complete their program than those who are self-referred (Faulkner et al., 1991; Hamberger & Hastings, 1989; Pirog-Good & Stets, 1986). Whether or not court-referred clients drop out of treatment may depend on the type of sanction applied if they breach the conditions of their sentence. This may depend on the jurisdiction, since sanctions may not be enforced uniformly across different jurisdictions.

The relationship between the type of referral and attrition may also be mediated by other client characteristics. Saunders and Parker (1989) studied the relationship between client characteristics, the severity of violence, volunteer status, and treatment completion. Voluntary clients with more than a high school education had the highest completion rates. Among clients who were less educated, involuntary status was associated with higher rates of completion. It was suggested that the better educated clients are more internally motivated, whereas less-educated clients may need an external source of motivation such as legal sanctions in order to remain in treatment. Clients who are more educated may also have more self-discipline. Future research needs to validate this relationship since a subsequent study on male batterers found no significant interaction between client-characteristics, voluntary status, and attrition (Cadsky et al., 1996).

Pressure from one's partner is another source of external motivation. Men may be attending treatment because their partners have threatened to leave them if they do not change their abusive behaviour. In a U. S. national survey of male battering programs, 34% reported dropping out because either their wives left or their wives returned (Pirog-Good & Stets-Kealey, 1985). Future research needs to investigate the expectations of

males as to what they believe will happen if they continue to abuse their partners (e.g., partner will leave, legal sanctions). Men who expect negative repercussions to occur as a result of continued abuse may be more likely to remain in treatment.

Program Characteristics

There is a paucity of research examining the program characteristics in male battering programs. In Pirog-Good and Stets-Kealey's (1985) survey of 59 battering programs, programs with individual counselling reported to have lower attrition rates than group therapy. It was also reported in a subsequent summary (Pirog-Good & Stets, 1986) that programs shorter in duration and free of charge had lower attrition rates. However, caution must be used when interpreting these results since their survey has been criticized for serious methodological flaws, including a misapplication of multivariate techniques (Saunders & Parker, 1989). Since their published study does not include a description of their statistical procedures, no further details concerning the analysis can be provided.

Treatment Congruence

Client-treatment congruence, the extent to which clients' assessments of their own needs are being addressed during therapy, is of considerable importance in male battering programs. Many of these men have multiple needs such as alcohol addictions (Fitch & Papantonio, 1983; Leonard, Brommet, Parkinson, Day, & Ryan, 1985), depression (Saunders & Hanusa, 1986), childhood abuse (Dutton, 1995; Fagan, Stewart, & Hansen, 1983), low self-esteem (Murphy, Meyers, O'Leary, 1994), and behavioural deficits (Rosenbaum & O'Leary, 1981). Research demonstrating that male batterers with

substance abuse problems are more likely to drop out suggest that treatment may not be meeting all of their needs. It is likely that these clients would be more likely to remain in treatment if the program offered substance abuse counselling as well.

Support for the importance of client-treatment congruence in predicting attrition is evidenced in a study of 598 male batterers who sought treatment (Cadsky et al., 1996). Results showed that high levels of congruent problems were significantly related with decreased attrition. Men who admitted to spousal abuse during intake, were self-referred, and self-identified with problems of marital violence were more likely to complete treatment.

Although all treatment programs for male batterers have similar goals (e.g., reducing abusive behaviour), programs may differ in their structure, approach and intermediate objectives. There is a lack of research examining the relationship between the type of approach/model, client characteristics, and attrition. However, it appears that this type of study would be particularly fruitful given the importance of client-congruence in predicting dropout.

The cognitive-behavioral approach is based upon social learning theory and is one of the most frequently cited models (Rondeau, Brochu, & Lemire, 1994). Social learning theory views the male's aggressive acts towards his partner as being modeled after his family of origin either from witnessing parental violence or from being abused as a child. Since violent behaviour is viewed as learned behaviour, it is believed that violence can be unlearned. Hence, programs based on this model generally teach males alternative methods of self-affirmation, relaxation techniques, and cognitive restructuring (Saunders & Hanusa, 1986).

Programs based on the feminist model focus on changing sexist attitudes and stereotypes (Rondeau et al., 1994). The feminist perspective views familial patriarchy as the main source of men's violence against their partners. The male's acts of aggression are not seen as uncontrollable responses, but are seen in terms of their purposeful utility; battering incidents serve to maintain his power and control in the relationship. For this reason, therapy also focuses on developing and maintaining equality in the relationship.

A third approach used to treat male batterers is unstructured group therapy (see Buckley, Miller, & Rolfe, 1983; Jennings, 1987; Saunders, in press; Yalom, 1995). Such insight-orientated approaches focus on increasing men's self-awareness and on men taking responsibility for their actions. Violent behaviour is often attributed to psychological damage associated with traumatic childhood experiences. It is assumed that the anger these men experienced as children is displaced onto their partners. During treatment sessions, issues of childhood abuse are often dealt with through experiential regression and reconstruction. Some groups may use experiential techniques in order to get in touch with the "inner child". Therapists try to create and maintain a supportive environment so that the men are able to re-experience their childhood traumatic events, grieve their losses, give up control, and learn to empathize with others (Whitfield, 1987).

Each of these approaches may be suited to certain types of clients. Structured cognitive-behavioral programs, which focus on anger management and coping skills training, appear to be better suited to clients who have more lifestyle instability characteristics. These types of clients who are lacking in self-discipline and in their ability to organize their own lives may be more likely to remain in programs that have structured sessions.

Unstructured group therapy, which addresses such issues as childhood victimization, may be more likely to retain clients who have themselves been abused and have a need to discuss their own unresolved issues. Studies that have investigated the relationship between childhood victimization and attrition from treatment programs have found that being abused as a child is positively associated with dropping out (Cadsky et al., 1996; Grusznski & Carrillo, 1988; Palmer, Palmer, Williamson, Michiels, & Thigpen, 1995; but not DeMaris, 1989). Few explanations have been suggested to account for these findings; however, there is evidence to suggest that the relationship between childhood victimization and dropping out of treatment is mediated by two competing factors: lifestyle instability and treatment congruency.

The relationship between certain lifestyle instability characteristics (e.g., substance abuse, criminal behaviour) and being abused as a child is supported by several studies (Dembo, Williams, Berry, & Getreau, 1988; McCord, 1983; Widom, 1989). In Holtzworth-Monroe and Stuart's (1994) typologies of male batterers, the generally violent/antisocial batterers were the most likely to experience severe child abuse. This type was also the most likely to have a criminal record and substance abuse problems. Hence, the relationship between childhood abuse and dropping out of treatment may be attributed to lifestyle instability characteristics. The studies that examined the relationship between childhood abuse and attrition did not control for these factors.

The relationship between attrition from treatment and being abused as a child may also be mediated by treatment congruency. That is, clients may be dropping out because their treatment needs are not being addressed in therapy. The experience of being abused as a child may result in a need for meaningful discussions concerning the effects of their

own abuse. Both studies which supported the relationship between childhood abuse and dropping out of battering programs were conducted on cognitive-behavioural programs where it is unlikely that issues of childhood abuse are discussed.

Methodological Considerations

The research on attrition from treatment programs has generally supported the relationship between the four main factors (lifestyle instability, motivation, client-therapist characteristics, treatment congruency) and attrition from treatment programs. However, the findings have not been uniformly consistent across studies. For instance, several studies did not find a significant relationship between education and attrition (e.g., Beckham, 1992; DeMaris, 1989; Faulkner et al., 1991; Hamberger & Hastings, 1989). Baekeland and Lundwall (1975) reported that in 21 out of 41 studies, social stability was unrelated to attrition. The nonsignificant findings could be due to a number of factors: small sample sizes, different criteria used to define a dropout across studies, and varying selection criteria used for admitting clients into programs.

Some types of programs have screening measures and will only accept clients who fit certain criteria. Programs that have more rigorous standards may result in a “biased” sample of clients (e.g., some programs do not allow individuals abusing alcohol or drugs take part in their programs). This may influence the strength of the correlation due to a restricted range. In some programs, clients may be screened out if they do not have the financial means to pay. Again, individuals from a lower social class may be screened out, resulting in a restricted range.

The operationalization of a dropout has varied considerably across studies. There have been three major ways in which dropouts have been defined: the number of visits to therapy, the duration of treatment, and the therapist's judgment of treatment failure. Defining dropout based on the therapist's judgment is problematic since therapists may use different criteria for judging premature termination. The number of visits to measure dropouts as opposed to treatment duration (i.e., number of weeks) is a better method of defining dropouts since two programs of equal length may have a different number of sessions per week. Thus, two clients who go to the different clinics may be at a different stages of completion (Baekeland & Lundwall, 1975).

Although treatment dropout is usually defined as failing to return to treatment after at least one session, sometimes it is defined as when a client fails to show up at treatment after the initial assessment. For instance, in a study on an outpatient alcoholism treatment program, the authors stated that "the best predictors of dropout were the length of delay between appointments, and variables related to symptom levels such as the number of prior alcohol-related arrests, the use of illicit drugs and scores on the Michigan Alcoholism Screening Test" (Leigh et al. , 1984, p. 359). 'Dropouts' in this context referred to the 'no-shows', those who did not attend any of the treatment sessions after the initial assessment. This group was compared to the 'treatment attenders', those who kept at least one appointment. Additional analyses were performed between those who completed treatment and those who dropped out after one to two sessions. The only two variables which discriminated these two groups were social stability (a composite score based on living arrangements, family contact, and occupation) and having no dependents.

This study highlights how different results can occur depending on how a dropout is defined.

Although most studies have defined dropouts and completers in terms of number of sessions attended, some studies have defined it based on a therapist's judgment whether or not the client terminated prematurely. In Wierzbicki and Pekarik's (1993) meta-analysis, the most important factor related to dropout rates was the definition of dropout. Their results demonstrated that studies which defined dropout in terms of termination by failure to attend a scheduled appointment reported significantly lower dropout rates than did studies that defined dropouts in terms of either therapist judgment or number of sessions attended before terminating treatment.

The inconsistent findings could also be due to small sample sizes. In several studies, the sample size for dropouts was less than 16 (e.g., Faulkner et al., 1991; Gondolf & Foster, 1991; Shorts, 1988). In one study, analyses were performed to distinguish completers from dropouts in a sample of male batterers even though the number of dropouts was equal to ten (Petrik et al., 1993).

It has also been suggested that long waiting lists for some programs may produce a winnowed effect, resulting in a "biased" sample of clients who begin treatment (Baekeland & Lundwall, 1975). These clients may be more motivated than those who dropped out after the initial assessment. Those who drop out before treatment begins should be categorized separately from those who drop out after one or two sessions. The 'no-shows' should be included in the analysis and compared with clients who drop out after attending several sessions and compared with clients who complete treatment.

There have only been a few studies which have examined whether the variables associated with pre-program attrition are the same as those associated with dropping out after several sessions (Baekeland et al., 1973; Cadsky et al., 1996; Epstein et al., 1994). Baekeland et al. (1973) compared client characteristics between clients who dropped out after one session, clients who attended more than one session but subsequently dropped out, and treatment completers. Both the immediate dropouts (those that dropped out after one session) and the rapid dropouts (those that dropped out between one and four weeks of treatment) were both more depressed, more anxious, and were less motivated, compared to those who completed treatment.

Cadsky et al. (1996) reported a linear trend for all variables (e.g., income, education, type of referral) except age and abuse history. The rates of witnessing abuse were higher in men who attended a few sessions before dropping out compared to those who dropped out after the initial assessment. Compared to those who completed treatment, the rates of witnessing abuse were higher for men who began treatment but dropped out. It was suggested by the authors that those who witnessed abuse were more likely to drop out after attending several sessions because they were disappointed by the current problem-solving approach of treatment. A linear trend was not found among most variables in a study conducted by Epstein et al. (1994). However, the results of this study can be called into question because of missing data and small sample sizes (in some cells, the sample size was less than ten).

Conclusion

In general, the research suggests that the client characteristics associated with dropping out after several sessions (e.g., lifestyle instability and motivational factors) should also predict pre-program attrition. Since client-congruency is based upon the program content and structure, it is expected to be associated with dropping out after several sessions but should be less related with dropping out after the initial assessment.

There is strong evidence from previous research to support a positive relationship between lifestyle instability and attrition. The relationship between internal motivation and attrition has received some empirical support; however, indirect measures were often used. The relationship between the type of referral and attrition has yielded inconsistent results. The effect of other external motivators (e.g., partners' threats of leaving them) in influencing whether or not male batterers will remain in treatment has yet to be investigated. It is plausible that men who anticipate negative repercussions to occur as a result of their continued abuse (e.g., my partner would leave permanently) would be more motivated to change their behaviour and hence more likely to remain in treatment compared to those who do not expect negative repercussions.

While there are only a few studies which have examined the relationship between treatment characteristics and attrition, the available research suggests that the length of waiting period and clients' impressions of their therapists are likely to influence rates of attrition. The number of days between the initial assessment and the first treatment session is expected to be positively associated with pre-program attrition and to be negatively associated with dropping out early in the treatment program.

There is some evidence to support the relationship between treatment congruency and attrition. However, only one published study has explored this concept in male battering treatment programs (Cadsky et al., 1996). In addition, this study was limited to one treatment program so that interactions between client and program characteristics could not be examined. The presence of an interaction between client and program characteristics may explain some of the inconsistencies in the research. It is proposed in the present paper that the relationship between childhood abuse and attrition is influenced by both lifestyle instability and treatment congruency. The relationship between these variables is complicated since childhood abuse may both promote program attendance (in “congruent” programs) as well as promote attrition (due to its contribution to lifestyle instability). Nevertheless, when the two variables are considered simultaneously, lifestyle instability should show a consistent negative relationship with attendance, whereas childhood abuse should be positively associated with attendance in those programs that address childhood abuse issues.

Although previous research on program efficacy has supported the importance of matching certain client characteristics to the structure of therapy, this interaction has yet to be explored in studies on attrition. Males who score lower on verbal intelligence are expected to be more likely to dropout in unstructured treatment programs.

In order to examine the relationship between the type of program approach, client characteristics, and attrition, one would need to conduct a study comparing several treatment programs that use different approaches. It would also be necessary to collect data on a large number of subjects from each program in order to obtain a sufficient number of dropouts for statistical analyses.

The Multi-site Study of Male Battering Treatment Programs provides a unique opportunity for examining the relationship between client-treatment congruence and attrition because of the diversity of programs involved and the large number of clients participating in the study. This project, funded by the Solicitor General Canada, was designed to identify how batterers change during treatment and to identify the changes associated with reduced mental and physical abuse. Information was collected from four treatment programs across Canada on the factors associated with male battering (e.g., family history of violence, substance abuse, social class) and on the factors related to treatment success (e.g., motivation for change). Many of the factors that predict attrition are also risk factors for male battering (for a review see Tolman & Bennett, 1990). Consequently, data obtained in this study is valuable in furthering our understanding of why certain clients are more likely to drop out.

In the following section, a detailed description of the hypotheses tested in the current study is provided. Because this study is based on information collected from the Multisite Project, the hypotheses were constrained by the data available. Hence, a few of the factors that were found to be important predictors of attrition from previous research (e.g., prior expectations of therapy, generality of violence) are not included in the present study because these variables were not available in the data set. Nonetheless, data collected from the Multi-site provide sufficient information to test the four main factors of attrition.

Hypotheses

Lifestyle Instability

1. Attrition rates are expected to be higher for clients who report lifestyle instability.

Client characteristics such as unemployment, unstable work histories, low degree of education, criminal history, substance abuse problems, and unstable housing arrangements are expected to be associated with attrition.

Internal Motivation

2. A positive relationship is expected between motivation to change and completion of treatment. Men who demonstrate internal motivation for treatment (e.g., recognize the need to change) are expected to complete treatment compared to those who do not.
3. For clients who attend at least one treatment session, those who have waited longer to get into the program will be more likely to complete compared to those who wait a shorter period.

External Motivation

4. Men who expect negative repercussions to occur as a result of their abusive behavior (e.g., legal sanctions, partner leaving them, losing their job) will be more likely to complete compared to those who do not.

Treatment Characteristics

5. Pre-program attrition rates will be higher in programs that have longer waiting lists.
6. Attrition rates will be higher in longer programs (i.e., programs that have a greater number of sessions required to attend).
7. Attrition rates are expected to be higher for clients who report negative attitudes towards their treatment leaders.

Treatment Congruency

8. Attrition rates are expected to be lower for clients who report more marital problems and identify with problems of wife assault.
9. Attrition rates are expected to be higher for individuals with low verbal aptitude.
Males who score lower on verbal aptitude will be more likely to remain in treatment programs that are more highly structured.
10. After controlling for lifestyle instability factors, a positive relationship is expected between being abused as a child and remaining in programs that address abuse issues.
11. Lifestyle instability and motivational factors will contribute to attrition at all stages of

treatment (i.e., a linear trend). In contrast, treatment congruency factors (hypothesis #9 and #10) are expected to be related to dropping out after several sessions and to be less related with pre-program attrition.

Method

Participants

The Multi-site study involved a total of 482 males; 354 sought treatment for wife assault and 128 were controls from the community. Dropout information was collected for 307 of the male batterers. There are several reasons why dropout information was not collected for all individuals participating in the Multi-site study. For one, 19 clients entered into the Multi-site study late and dropout information had already been requested from the programs. Secondly, one program (New Leaf in New Glasgow) dropped out of the Multi-site. Although pre-treatment measures were administered to clients at this site, no follow-up information or dropout information was recorded. It was also not possible to record dropout information on another nine clients because of missing information (e.g., client's name was not recorded on questionnaire). Another case was also dropped because the client's score on the measure on verbal aptitude indicated that he did not have sufficient knowledge of the English language needed to answer the questionnaires. By the end of the current study, the Multi-site data (pre-treatment measures) had been received and coded. Hence, the sample size for the reliability analyses included all 353 male batterers.

Participants in this study sought treatment at one of the following treatment programs for male batterers: Responsible Choices in Calgary ($n = 75$), Hiatus House in Windsor ($n = 97$), Resolve in Richmond Hill ($n = 76$), and Après-Coup in Montreal ($n = 58$).

The average age of these men was 35.5 ($SD = 9.1$). The majority of the men (81.1%) reported having a current wife or girlfriend. Seventy-seven percent were

employed at intake and the average personal income (before tax deductions) was \$32,911.61. The average grade completed was 12 ($SD = 2.4$). More than two-thirds of the men (76.3%) were self-referred compared to only 23.7% who were court-referred.

A comparison group of males was selected from the community in order to assess the psychometric properties for the newly developed scales. Individuals were recruited by community announcements and by postings on bulletin boards. Each participant was paid \$20. A number of controls (20%) were seeking treatment other than for wife assault. They were recruited from a number of places including couples counselling services at the Pastoral Institute in Calgary, general counselling services at the Family and Credit Counselling Services in York, and a divorce mediation service in New Brunswick. The controls were similar to males seeking treatment for wife assault in terms of age ($X = 35.71$, $SD = 7.9$), employment status (79.5% were employed) and relationship status (75.2% reported having a wife or girlfriend) . Participants in the control group were excluded if they presented themselves as wife abusers or were seeking treatment for wife assault. However, a small percentage was expected to report some degree of abusive behavior.

Procedure

The current study used archival data (i.e., information collected from the Multi-site project); as well, new data was collected on information related to treatment dropout. J & J Research Associates were hired to collect the data for the Multi-site project. A standard package of measures, including consent forms (see Appendix A) were administered to both men and their partners. For the majority of cases, the questionnaires

were self-administered via pen and paper. In a small number of cases, the data were collected through an interview format; however, the exact number is unknown since this information was not recorded. The initial assessment took approximately two hours.

Data collected on their partners were used to assess the validity of some of the scales and to verify the degree of accuracy in the men's reports of abuse. Data were also collected on 128 community men. This data were used in the current study to help determine discriminant validity in some of the questionnaires. The control group is also included in the reliability analyses.

For the present study on dropout, the program supervisors of the four programs were contacted by phone to explain the purpose of the study and to request their participation. A list of names and/or ID numbers of male batterers who participated in the Multi-site Project was sent to each of their respective programs with a letter attached, requesting the information needed to perform the present study on dropout (i.e., date of the initial assessment, number of sessions attended, the last date of treatment attended, whether or not the client was expelled from treatment). An additional column was provided beside each client's name for any additional information.

Although program supervisors were asked to record whether or not clients were expelled from treatment, this information was not particularly useful for a number of reasons. For one, not all programs indicated whether or not clients were expelled. In addition, in several of the programs, clients are expelled after missing three or more sessions in a row. In such cases, it is unlikely that clients were planning on returning after missing several sessions in a row. For these reasons, it was decided to code expelled

clients as dropouts. In general, however, most program supervisors indicated that it was rare to expel clients from treatment.

Description of Programs

Five treatment programs for male batterers were selected based on their interest in participating in the study, and on the size and stability of the program. As previously mentioned, the New Leaf program subsequently dropped out of the Multi-site study. Although no follow-up information is available for clients at this site, an initial battery of measures was administered.

All the programs provide services for 100 or more men per year. Information about the four programs was obtained by the project manager of the Multi-site project, Dr. Karl Hanson, who visited the sites on several occasions. In addition to observing the treatment sessions, he interviewed the group leaders, program directors and other individuals involved. He also reviewed program manuals and other materials written about the program.

The following description of the programs was based on audiotaped interviews with the program supervisors, on program manuals, and on a summary report provided by Dr. Karl Hanson. The description will be limited to information relevant to the current study (e.g., type of treatment approach, duration, cost, and type of referral). The criteria for admission will also be provided since this factor may influence the composition of clients. A summary of program characteristics is provided in Table 1.

Table 1

Summary of Program Characteristics

	Après-Coup	Resolve	Hiatus House	Responsible Choices
Type of Structure	unstructured	semi-structured	unstructured	structured
# of sessions	25	18	12	14
# of clients per group	4 to 8	4 to 10	8 to 12	8 to 12
Fee for program?	yes	most clients do not pay fee	no	yes
% Court-referred	15.2	34.4	34.5	5.3
Waiting list	less than two weeks	several months	less than two weeks	less than two weeks
Likely to address issues of childhood abuse?	yes	not determined	yes	no

Responsible Choices, Pastoral Institute, Calgary

Responsible Choices is a structured treatment program in which therapists follow a leader's manual. The program is based upon the cognitive-behavioral model. This approach views aggression as a socially learned response. The purpose of therapy is to recognize and stop controlling/abusive behaviour, change thinking patterns, learn new behaviours, and develop problem solving and communication skills. The first four sessions address cognitive control skills and participants are taught to recognize and stop their abusive behaviour. During the next five sessions, participants work on problem solving and communication skills. This program includes a combination of direct instruction, homework assignments, behavioural rehearsal, role plays, and group discussions.

There are 14 weekly meetings, two hours each. The groups consist of approximately 10 participants. There is a sliding scale for the cost of the program. However, most clients pay approximately \$400 plus the initial assessment fee of approximately \$50. Occasionally a client does not have to pay based on the client's needs and availability within the program. There is a low number of court-probated clients, probably because these clients do not have the motivation to participate, nor the financial means to pay. There is usually a short waiting period between intake and the first session of treatment. New groups begin whenever there is sufficient demand.

Clients are screened out if they have severe drug or alcohol problems, are actively psychotic, or are suicidal. They are also screened out if they have low levels of literacy since this program has numerous written exercises and homework assignments. Clients are told that they will be evicted from the program if they do not follow the group rules

(e.g., maintaining confidentiality, remaining nonviolent, actively participating, abstaining from substance abuse), although in practice it is rare for this program to evict clients.

This program was described as having a moderate to high level of cohesion.

Hiatus House, Windsor, Ontario

Hiatus House uses unstructured group psychotherapy as described by Jennings (1987) and there is no treatment manual. The goal of treatment is long-term personality change. The orientations of the therapists are primarily humanistic and existential. Therapists are expected to run their groups according to their own styles and interests. At the beginning of each session, each participant is allowed the opportunity to address specific issues which may then guide the content of the session.

In general, violent behavior is attributed to psychological damage associated with childhood experiences. Hence, therapy is aimed at addressing early traumatic experiences through regression and reconstruction. The observed treatment sessions were described as devoting half of the time to current abuse incidents and the other half to other issues (e.g., experiencing abuse as a child, achievement, body image).

There are 8 to 12 clients who meet two hours on a weekly basis. There is no cost to the program. The court-ordered and voluntary clients have separate groups. Although the content and style of therapy is similar in both groups, there is more direction from the therapists in the probation groups. After court-ordered clients complete their 12 week program, they may join the voluntary group. The voluntary group is open, with new clients added as space becomes available. Most therapists believe that clients need to stay

in the open-ended program an average of one to two years for long-term change, although most clients terminate before their therapists consider them to be ready.

In order to be accepted into the program, the individual must identify a problem with marital violence and demonstrate some motivation for treatment and a capacity to work in group settings. Clients may be terminated from treatment for failure to work towards the primary goals of treatment (i.e., ending abusiveness), for failure to comply to the conditions of treatment (e.g., regular attendance, being intoxicated in the group), and failure to comply with specific contracts established with the therapist. Both groups (court-ordered and self-referred) evidenced a moderate to high degree of cohesion.

Resolve, Richmond Hill

Resolve is based upon the psychoeducational model developed by the Duluth program (Pence & Maymar, 1993). The group is structured and primarily educational; however, this program follows a more flexible schedule than the Duluth program. For example, some issues may be carried over into the following session and sessions may be adapted to address specific issues raised during therapy. The group meetings are not seen as therapy but rather as resocialization and reeducation. Sessions include discussions, role-plays, videos, and homework assignments. Male battering is viewed as a product of social learning. Although the program revised its structure during the course of the study, for the most of the time period, it consisted of a four to six week open orientating group plus 12 weekly meetings, two hours per meeting, led by both a male and female therapist. Court-ordered clients are not required to pay for treatment. Although voluntary clients

were requested to pay \$30 per group session, few actually paid and there was little effort to collect fees.

Men were not accepted into the program if they were extremely withdrawn, intellectually challenged, suffering from a major mental illness, disruptive in group settings, unable to complete written assignments, or denied a need for treatment. Clients on the waiting list often have to wait several months before a new treatment session begins. Group cohesion was described as being at times problematic.

Après-Coup, Montreal

Après-Coup uses unstructured group psychotherapy. Therapy is aimed at personality change (not just education or crisis intervention, although this may also be provided). The general goal of treatment is the cessation of violence and different therapists use different methods to achieve this end. There is an emphasis placed on having to take responsibility for your own behaviour. Issues discussed in therapy include childhood victimization, male emotional dependence on women, and male socialization of violence.

Each session begins with a relaxation exercise (e.g., slow breathing) and clients are asked to imagine something good that happened last week. During the meetings, each person describes their own violent behaviour. Other difficulties they may have encountered in the previous week are also explored. Occasionally, men are asked to complete written exercises. Each meeting concludes with each member saying something without anyone else responding.

There are four to eight members who meet two hours on a weekly basis. The cost of therapy is \$30 a week, totaling up to \$750 for the complete program (25 weeks). New members may join in open-ended groups. In order to be accepted into the program, clients must seek the program voluntarily, display motivation for change, and have the ability to identify and recognize their own abusive behaviour.

Clients are expelled from treatment if they miss two sessions in a row or if they violate the rules of the program (e.g., being punctual, being respectful of others in the group). This program was described as having a moderate to high level of cohesion.

Measures

Participants were administered 17 questionnaires for the Multi-site project. Only ten questionnaires were of interest for the present study.

Lifestyle Instability

Lifestyle instability was assessed using a self-report version of The Level of Service Inventory (LSI; Andrews, 1982). The LSI was developed in order to help case managers decide on appropriate levels of supervision for probationers. It is an interview-based assessment used with offenders to assess both their criminogenic needs and risk level. Although the LSI was not specifically designed to measure lifestyle instability, almost all of the variables measured by this scale (e.g., substance abuse problems, unstable employment, criminal history) are good indicators of an unstable lifestyle.

The LSI consists of 54 items which cluster into ten subscales: criminal history, employment/education, finances, relationships, unstable housing arrangements, leisure activities, companions, substance abuse, emotional/psychological, and attitudes. Each item on the scale is assigned a score of 0 or 1 based on the absence or presence of a risk or need factor. Items are summed to form a total score with higher scores indicating higher levels of risk and need. Previous research on the LSI has demonstrated internal consistency ($\alpha = .72$), interrater reliability ($r = .94$) and temporal stability over three months ($r = .80$) (Andrews, 1982; Andrews, Kiessling, Mickus, & Robinson, 1986).

The measure being used in the present study was based on Motiuk, Motiuk, and Bonta's (1992) self-report version of the LSI classification. There are 78 questions on the Self-Report Inventory (SRI) which are then recoded into the LSI. The reliability of this scale has been supported with an alpha level of .76. (Motiuk et al., 1992). Congruent validity was also established; correlations between the subcomponents of the SRI and LSI ranged from .41 to .80.

The version of the SRI used in the current study is presented in Appendix B. Several items of the current self-report measure were slightly modified in order to better suit this type of sample (e.g., questions assessing anti-social attitudes were modified specifically to assess attitudes towards spousal abuse) and several questions were added. Despite slight modifications, the coding scheme remained consistent with the self-report inventory of Motiuk et al. (1992) with possible scores ranging from 0 to 54. The recoded items of the SRI are presented in Appendix C.

The reliability of the scale using the current data was supported with an alpha level of .90. As expected, there were significant differences in the LSI between male

batterers and the community sample (see Table 2). LSI scores were significantly correlated with all of the measures (see Table 3) and all correlations were in the predicted direction.

Type of Referral

Participants were asked to fill in a Basic Information Questionnaire addressing mostly demographic information (see Appendix D). In this questionnaire, clients are asked whether they are court-ordered to attend treatment or whether they are voluntarily seeking treatment for wife assault.

Internal Motivation

The participants' motivation to address their problems was assessed using the Commitment to Change Scale (Hanson, 1993). Since this is a recently constructed scale, no previous information on the reliability and validity of the scale is available. This scale was designed to assess male batterers' motivation to address their problems and change their abusive behaviour. The questionnaire consists of 12 questions, each scored on a 5-point scale (see Appendix E). Males who are motivated to change their abusive behaviour would score high on questions 1, 3, 4, 5, and 10 (e.g., I want to change the way I treat my partner; I have made a commitment to change the way I treat my partner). Batterers who are in denial of their abuse and are not motivated to change would score high on questions 2, 6, 8, and 9 (e.g., My problems with my partner are mostly her fault; There is nothing that I can learn from a program on male battering).

Table 2

Comparison of Male Batterers and Community Sample on Predictor Variables

Variable	Male Batterers (<u>n</u> =328)		Community (<u>n</u> =111)		t / χ^2
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Age	35.43	(9.0)	35.71	(7.9)	.29
Highest grade completed	11.85	(2.4)	14.04	(3.5)	6.02***
Currently employed (%) ⁺	76.20		79.50		n.s.
Length of relationship with current partner (in months)	116.04	(98.2)	124.12	(120.3)	.72
Total LSI score	14.32	(8.1)	8.75	(6.5)	-6.74***
Commitment to Change	4.00	(0.7)	2.74	(0.7)	-14.97***
Short Marital Adjustment	75.34	(27.6)	100.92	(33.7)	8.44***
21-item PMWI	2.27	(.75)	1.47	(.42)	-11.47***
Clarke Vocabulary Scale	28.74	(6.3)	33.19	(5.6)	4.98***
BIDR Management	8.40	(4.1)	9.62	(4.1)	2.80**
BIDR Self-Deception	9.30	(3.4)	10.70	(3.6)	3.74***

- Note. 1. * $p < .05$, ** $p < .01$, *** $p < .001$
 2. Sample sizes vary somewhat between variables due to missing data.
 3. n reflects average sample size.
 4. ⁺ indicates χ^2 used as test statistic

Table 3

Inter-correlations Between Measures

	Status	LSI	CC	LC	SMAI	AIE	AIR	PMWI	FHQ	Clarke	BIM	BSD
Status	-											
LSI	.31**	-										
CC	-.04	.36**	-									
LC	.01	.13*	.07	-								
SMAI	-.02	-.25**	-.40**	.07	-							
AIE	.17*	.33**	.49**	.12	-.28**	-						
AIR	.20*	.25**	.45**	.07	-.24**	.53**	-					
PMWI	.15 ⁺	.40**	.61**	.02	-.42**	.48**	.62**	-				
FHQ	.02	.40**	.44**	.03	-.24**	.35**	.25**	.35**	-			
Clarke	-.10	-.21**	-.02	.12 ⁺	.14 ⁺	-.08	-.03	-.18*	.00	-		
BIM	-.18*	-.40**	-.31**	-.02	.21**	-.30**	-.25**	-.36**	-.27**	.06	-	
BSD	-.05	-.35**	-.37**	.01	.29**	-.30**	-.24**	-.35**	-.51**	-.09	.56**	-

Note: ⁺ $p < .05$, * $p < .01$, ** $p < .001$

Status - Dropout coded as 1, completer coded as 0

LSI - Level of Service Inventory

CC - Commitment to Change Scale

LC - Likely Consequences Scale

SMAI - Short Marital Adjustment Inventory

AIE - Abuse Inventory Ever

AIR - Abuse Inventory Recent

PMWI - Psychological Maltreatment of Women Inventory

FHQ - Family History Questionnaire

Clarke - Clarke Vocabulary Scale

BIM - Balanced Inventory of Desirability Responding (Impression Management)

BSD - Balanced Inventory of Desirability Responding (Self-Deception)

A principal component factor analysis was performed on items from this scale which yielded the following eigen values: 5.17, 1.22, 1.14, and 0.88 . These values when plotted on a factor scree plot suggest that the scale is composed of only one main factor.

The alpha value of the scale was .87 after deleting question #2 (i. e., My problems with my partner are mostly her fault). This scale significantly discriminated batterers from the community sample (see Table 2). Significant correlations were found between the Commitment To Change Scale and all other dependent measures with the exception of verbal aptitude (as measured by The Clarke Vocabulary Scale) and The Likely Consequences Scale (see Table 3). In addition to being internally consistent and demonstrating discriminate validity, the items in this scale show strong face validity.

External Motivation

Participants' expectations of negative repercussions occurring as a result of their abusive behaviour was assessed by The Likely Consequences Scale (Hanson, 1993). On the first 16 items, men are asked to rate on a 5-point scale the likelihood of certain events to occur following any further abuse (e.g., my partner would leave permanently; I would lose my job). On the 17th item, the client is asked to make a global assessment of how the relationship would fare if future abuse were to occur. The Likely Consequences Scale is presented in Appendix F.

Factor analysis using a principal components method of extraction yielded the following eigen values: 6.56, 2.17, 1.20, and 1.01. All items except one (question #1) had relatively high loadings on either one of two factors. Based on the factor scree plot, two factors were retained. The first factor measures expected legal consequences of abuse

(items 5, 12-16) and the second factor assesses expected social consequences of abuse (items 2,3,4,6,11-17). The reliability of the scale was supported with an alpha level for the men of .85, .89., and .89 for the social, legal, and overall consequence scales respectively. This scale was correlated with verbal aptitude and the LSI (see Table 3).

Treatment Characteristics

Questions #95 to #97 from the Level of Service Inventory were used to assess clients' initial impressions of their therapists. These three questions measure clients' attitudes towards people who have tried to help them change their abusive behavior (e.g., "I have a lot of respect for people who run treatment programs for abusive men"; "The people who have tried to help me change my abusive behaviour have been kind and fair"; "The people who have been concerned about how I treat my partner are generally people I do not like"). These items provide only a weak measure of therapist/client rapport. The hypothesis concerns the specific program whereas some of the items refer to the client's general impressions of people who have tried to change their abusiveness. However, it was expected that the responses to these three questions could give a general indication of how this sample of male batterers feel towards people who are trying to help them change their behavior, who in the majority of cases will be their therapists. Correlations between these three items yielded an alpha of .60.

Treatment Congruency Factors: Client Characteristics

1) Self-identified problems with marital problems, marital violence, and psychological abuse

The Locke-Wallace Short Marital Adjustment Inventory (Locke & Wallace, 1959) was used as a measure of self-identified problems of marital distress/happiness (see Appendix G). This is a widely used self-report measure assessing global relationship satisfaction. The reliability and discriminant validity of this scale has been previously supported (L' Abate & Goodrich, 1980; Locke & Wallace, 1959).

Mens' scores on this scale were significantly correlated with their partners scores ($r = .62, p < .001$). Male batterers reported significantly less marital satisfaction than the community controls (see Table 2). The internal consistency of the scale was supported in the current study ($\alpha = .78$). The Short Marital Adjustment Inventory was significantly correlated all other measures except the Likely Consequences Scale (see Table 3). It had the highest correlation with the Psychological Maltreatment of Women Inventory (PMWI), followed by the LSI, BIDR (self-deception subscale), The Abuse Inventory, childhood abuse, and the Impression Management component of the BIDR.

Mens' assessments of their own abusive behaviour was measured with The Abuse Inventory (Hanson, 1993; see Appendix H). This measure was constructed for the Multi-site study to get a global measure of physical, psychological, and sexual abuse. Clients are asked to report both on the abuse which occurred in the last three months and on abuse that occurred ever in the past. Questions 1 to 15 consist of questions relating to psychological abuse (e.g., she felt worthless because I treated her so badly). Individuals

are asked to report either yes (coded as 1), no (coded as 0), or don't know (coded as 0) to each of these questions. A total score is calculated from summing these scores ranging from 0 to 15.

Questions 19 to 21 deal with sexual abuse, and questions 22 to 27 address physical abuse. On these questions, males are asked to rate the degree of abuse on a 5-point scale (0 = never, 5 = more than 20 times). Answers are summed to form a sexual abuse component and a physical abuse component. Questions 16 to 18 are to be answered if the client has children and questions 28-41 address abuse that can occur during periods of separation (these questions were excluded from analyses due to the low response rate). The scores of the three subcomponents (i.e., psychological, sexual, physical) were transformed into z-scores in order to control for the different rating scales and were summed to form a total score. A separate total was calculated for abuse that occurred ever in the past and recent abuse.

Before combining the three subscales, correlations between them were calculated. For abuse that occurred ever in the past, the correlations between the three subscales ranged from $r = .18, p < .01$ to $r = .46, p < .001$. For recent abuse, the correlations ranged from $r = .11, p < .10$ to $r = .38, p < .001$. The sexual abuse subscale had the lowest correlation with the other subscales. This is likely due to a restricted range since very few men reported sexually abusing their partners.

The total score of The Abuse Inventory (ever in the past) and the three subscales (psychological, sexual, physical abuse) yielded alpha values of .85, .89, .77, and .67 respectively. For recent abuse, the alpha values were .83, .83, .66, and .77 for the total score, psychological, sexual, and physical abuse subscales. All subscales (with the

exception of recent sexual abuse) significantly discriminated male batterers from the controls (see Table 4). The total scores of The Abuse Inventory (both recent and ever in the past) correlated with all predictor variables except verbal aptitude and The Likely Consequences Scale (see Table 3). Men's reports of abuse were significantly correlated with their partners' reports of abuse both for recent abuse ($r = .57, p < .001$) and abuse ever in the past ($r = .60, p < .001$).

A shortened version of Tolman's Psychological Maltreatment of Women Scale was used to assess the level of psychological abuse reported by male batterers (Tolman, 1989). The original 58-item scale was reduced to 21 items (see Appendix I). The items chosen for the Multi-site had the 10 highest factor loadings on the Emotional-Verbal and Dominance-Isolation subscales in Tolman's (1989) original article. The first 10 items assess Emotional-Verbal Abuse (e.g., yelled and screamed at her). The next 11 items assess Dominance Isolation (e.g., was suspicious of her friends). These items are scored on a 5 point scale according to how frequently they occurred in the last three months (1 = never, 5 = very frequently). A mean was calculated from items 1 to 21. The items in this scale were shown to be internally consistent ($\alpha = .93$). This scale also demonstrated discriminant validity; male batterers scored significantly higher than the community sample (see Table 2). This scale was found to be significantly correlated with all measures except The Likely Consequences Scale (see Table 3).

Table 4

Differences Between Male Batterers and Community Sample on Abuse Inventory

Variable	Male batterers (<u>n</u> = 330)		Community Sample (<u>n</u> = 117)		<u>t</u>
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Psychological Abuse					
Ever	4.69	(4.0)	.80	(1.53)	-10.22***
Recent	3.70	(3.4)	.75	(1.47)	-9.20***
Sexual Abuse					
Ever	1.13	(2.2)	.63	(1.82)	-2.14*
Recent	.40	(1.3)	.36	(1.56)	-.25
Physical Abuse					
Ever	3.54	(4.7)	.25	(0.95)	-7.61***
Recent	1.49	(2.7)	.09	(0.53)	-5.63***
Total Abuse ¹					
Ever	.18	(0.78)	-.49	(0.39)	-8.86***
Recent	.14	(0.74)	-.38	(0.50)	-6.95***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

¹ Total score is based on a z-score transformation

2) History of Childhood Abuse

The Family History Questionnaire (Hanson, 1993) was administered to participants in order to assess the degree of abuse experienced during childhood (see Appendix J). The questionnaire consists of three parts: questions pertaining to experiences of abuse from their mother, questions pertaining to experiences of abuse from their father, as well as questions regarding their parents' relationship. Each relationship questionnaire is composed of four subscales (e.g., positive emotional support, negative parenting, physical abuse, and identification with parent). The subscales yielded alpha levels of .92, .92., .81, and .80 respectively. The total score yielded as alpha of .95.

Physical abuse was assessed using questions 13 to 16. Participants are asked to rate on a five-point scale (1 = never, 5 = often) how often their mother or father physically abused them. Participants were coded as having experienced abuse if they scored a four or greater (4 = occurred frequently) on any of the following three items: "physically hurt me (e.g., hit, kick, slap, burn)", "hurt me so much I had injuries that lasted for days (e.g., bruises, cuts)" and "hurt me so much I had injuries that lasted for weeks or months (e.g., broken bones, deep cuts)". Using this criteria, 31.9 % of male batterers were categorized as having been abused compared to 4.3% of the controls.

Because the categorization of abuse is somewhat arbitrary, it was decided to also include a continuous measure of abuse. A mean score was calculated from items 1 to 16 and item 18 from both parental figures. The total score and all subscales significantly discriminated male batterers from the controls (see Table 5). The Family History

Table 5

Differences Between Male Batterers and The Community Sample on The Family History Questionnaire

Variable	Male Batterers (<u>n</u> = 333)		Community (<u>n</u> = 120)		<u>t</u>
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Lack of Emotional Support	2.68	(1.0)	2.01	(0.9)	-6.31***
Negative Parenting	2.21	(0.8)	1.61	(0.6)	-7.60***
Physical Abuse	1.21	(0.5)	0.88	(0.3)	-6.63***
Total	2.10	(0.7)	1.52	(0.5)	-8.16***
Childhood Abuse (%)	31.9		4.3		35.37*** (χ^2)

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Questionnaire was correlated with the LSI, The Commitment to Change, social desirability, and measures of abusive behaviour (see Table 3).

3) Verbal Aptitude

Verbal intelligence was assessed by The Clarke Vocabulary Scale, a 40-item multiple-choice questionnaire (see Appendix K). The difficulty of this scale increases in ascending order with each new question being more difficult than the previous one. Each correct item is coded as one point with a total possible score being 40. Incorrect answers and unanswered items are coded with a zero. Norms for this scale are presented by Paitch (1977). Verbal aptitude differed significantly between the male batterers and the community sample (see Table 2). Verbal aptitude was significantly correlated with the LSI, the PMWI, and The Short Marital Adjustment Inventory.

Social Desirability

The Balanced Inventory of Desirability Responding (BIDR-3; Paulhus, 1984) was administered to participants in order to control for social desirability (see Appendix L). This 40 item scale is composed of two subscales: the self-deception subscale, which was intended to assess honest yet positively biased responding and the impression management subscale which was intended to assess participants purposely presenting themselves in a positive light. The 40 items are stated as propositions (e.g., I always throw my litter into waste baskets on the street) and participants are asked to rate their agreement with each statement on a 7-point Likert scale (1 = not true, 7 = very true). The scoring of the scale is dichotomous. After reversing negatively keyed items, one point is

added for each extreme item (rated with either a 6 or a 7). This is to ensure that high scores on the scale will be attained only by individuals who report exaggerated biased responses.

Scores on each of the subscales can range from 0 to 20. Previous research on the BIDR has supported its reliability with alpha values ranging from .68 to .80 for the self-deception subscale and .75 to .86 for the impression management scale (Mellor, Conroy, & Masteller 1986; Paulhus, 1984; Paulhus, 1988). In the current data, the alpha values were .69, .76, and .82 for the self-deception scale, the impression management scale and the total score respectively. The correlation between the two subscales was $r = .56$, $p < .001$. Both subscales correlated with all measures except verbal aptitude and The Likely Consequences Scale (see Table 3).

The control group scored significantly higher on both subscales than male batterers (see Table 1). This was not surprising considering that the self-deception subscale has been found to be significantly correlated with measures of adjustment, such as self-esteem and depression (Paulhus, 1986). That is, well-adjusted individuals tend to have a positively biased view of themselves. As was previously mentioned, many men who abuse their wives suffer from depression (Saunders & Hanusa, 1986) and are characterized with low self-esteem (Murphy, Meyers, & O'Leary, 1994). The reason why male batterers scored lower on the impression management subscale may be due to the fact that many of the items are indicative of an unstable lifestyle.

The BIDR was originally intended to be used as a measure of social desirability in order to control for biased responding. It was believed that the desire of some clients to appear in a positive light would affect the accuracy of some of the self-report measures

(e.g., The Commitment to Change Scale; The Abuse Inventory). However, correlations between the BIDR and other measures suggested that it was not an appropriate measure to control for biased responding. For example, the impression management subscale of the BIDR had a correlation of $-.40$ with the LSI. This high correlation was also not surprising considering that many of the items on this subscale were measuring unlawful behaviour, irresponsibility, and procrastination (e.g., I am sometimes late for appointments; I have taken things that didn't belong to me; I have taken sick-leave from work or school even though I wasn't sick; I sometimes put off today until tomorrow what I should do today). Hence, it was decided to use this measure as a predictor of attrition rather than a control measure.

Although a more recent version of the scale is now available (Paulhus, 1991), this version was not available when the Multi-site study was first implemented. The revisions in the new version affected primarily the self-deception subscale where an increased emphasis was placed upon exaggerated claims of positive attributes (e.g., being overconfident in one's judgments).

Treatment Congruence Factors: Program Characteristics

The programs were classified according to the following characteristics: a) whether issues of childhood abuse are addressed in therapy, and b) the structure of therapy (i.e., low, medium, high). The treatment programs were divided into the categories based on the following information: detailed descriptions of each of the programs provided by Dr. Karl Hanson, audiotaped recordings of interviews with

program supervisors and treatment leaders, and whether or not the programs followed treatment manuals.

Classification of Programs

Responsible Choices (Calgary) is classified as a highly structured program and is less likely to address issues of childhood abuse. The therapists follow a leader's manual and the program does not dedicate any sessions to addressing issues of childhood victimization.

Hiatus House (Windsor) and Après-Coup (Montreal) are both classified as low structure. The leaders do not follow a manual; in fact they are encouraged to lead the groups according to their own style. The programs are based on unstructured group psychotherapy and content of the sessions are guided by issues that clients want to address. Since many of the therapists at these programs attribute violent behaviour to psychological damage associated with childhood experiences, an emphasis is placed on addressing childhood traumatic experiences.

Resolve (Richmond Hill) is coded as a medium structured program. Although it is primarily structured, the sessions may be adapted to allow clients' concerns to be discussed. The information reviewed did not give any clear evidence whether or not issues of childhood abuse were discussed. Consequently, this program will be excluded from the analyses involving the interaction between childhood abuse and treatment program.

Analytic Strategy

Survival analysis was employed to test the majority of hypotheses (see Cox & Oakes, 1984; Kalbreish & Prentice, 1980). This statistical technique has traditionally been used in medical studies in order to analyze the survival time after the diagnosis of a disease (Feigl & Zelen, 1965; Pike, 1966) and has more recently been employed in criminology research as a method to analyze recidivism (e.g., Hanson, Steffy, & Gautier, 1993). In the current study, survival analysis was used to predict attrition from treatment.

Survival analysis is useful when the dependent variable is the length of time between an initial event and the termination of that event. Survival time is the term used to describe the period of time between the initial event and a status event. If the status event has not yet occurred by the time of the analysis, the observation is said to be censored. In the current study, the status event was defined as dropping out of treatment and censored events were defined as completing treatment. The dependent variable, the duration of time in treatment before dropping out, was operationalized as the session at which the client terminated treatment. The date of the last session attended was used to code the session at which the client terminated treatment. For individuals who completed treatment, the dependent variable was coded as the last treatment session in that particular program.

For the majority of hypotheses, survival analyses were conducted twice. The first analysis was conducted with the initial treatment assessment coded as Time 1 and the first treatment session coded as Time 2 and so on. Analyses were repeated a second time selecting out the no-shows (i.e., those who filled out the initial assessment but dropped

out before attending the first treatment session) and coding the first treatment session as Time 1.

Information concerning the date of the last treatment session attended was not collected from Hiatus House. However, it was indicated for some clients at what session they dropped out. Although information was provided as to whether or not clients completed the cycle and the number of treatment sessions attended, the exact session at which clients dropped out was not collected for 19 clients. For the purposes of conducting the survival analysis, the number of sessions attended was coded as the dependent variable for these cases. Although it is acknowledged that the number of sessions attended could be one or two sessions less than the session at which the client terminated treatment (due to missed appointments), it is not expected to have a significant effect on the results.

All survivor functions have a negatively accelerating extinction curve (i.e., a terminal event cannot be reversed). $s(i) \geq s(i+1)$ plots the probabilities of surviving (i.e., not having experienced the terminal event) at time t . Another related function, which can mathematically derived from the survival function, is the hazard rate. The hazard function detects fluctuations in the survivor function's slope. The hazard at time t refers to the conditional probability that an individual will terminate at time t , given that he or she survived the previous time period. Peaks on the curve represent periods of elevated risk for dropping out.

There are hazard models based on various “default” slopes (e.g., lognormal, exponential, logistic, and Weibull); however, the proportional hazards model of Cox (1972) allows one to estimate the effect of individual characteristics on survival time

without having to assume a particular form for the distribution of time until failure. The name “proportional hazards” reflects the assumption that for two cases, the ratio of their hazards is constant for all time points.

The general form of the model is $h(t)=h_0(t)e^{(B_1X_1+ B_2X_2+ \dots B_pX_p)}$. $h_0(t)$ represents an unspecified baseline function which depends only on time. This baseline function is comparable to the constant in multiple regression in that the hazard rate increases or decreases from the baseline rate depending on the values of the significant predictor variables. X_p represents the individual predictors and B_p represents the corresponding regression coefficients. The exponents of these coefficients indicate the percentage change in hazard rates for unit increases in predictor variables.

Each hypothesis was tested separately using Cox’s regression. For most of the analyses, the data was collapsed across the four sites. In order to control for the various factors associated with differential dropout rates across the four sites, such as differences in client characteristics (see Appendix M), geographical factors, community factors, and general program characteristics, program membership was entered as strata in Cox’s regression model. By entering program as strata, separate baseline functions are estimated for each program. The effects of the predictor variables are still assumed to be the same in all groups. Separate analyses were also conducted by dummy coding program membership and entering these variables into the regression equation. This method of controlling program characteristics yielded approximately the same results as when program membership was entered as strata.

Variables which yielded significant univariate relationships with attrition were entered together in Cox's regression. By entering variables together, the unique contribution of each variable was calculated with the other variables controlled for.

Analysis of Variance (ANOVA) was also conducted for each predictor variable in order to test whether there were significant differences between no-shows, dropouts (i.e., those who attended at least one session but dropped out before completing the program), and completers.

In order to test the relationship between the length of delay between the initial assessment and the first treatment session and dropping out of treatment (Hypothesis #3), the independent variable was coded as the number of days between the initial assessment and the first treatment session. Individuals who failed to show up to the first treatment session were excluded from the analysis. Hiatus House was the only site to provide data appropriate to the hypothesis; hence analyses will be limited to this program.

In order to test the interaction between verbal aptitude and the structure of the program, an interaction term was calculated (verbal aptitude multiplied by structure). Hiatus House was coded with a 0 (low structure), Resolve was coded with a 1 (medium structure), and Responsible Choices was coded with a 2 (high structure). The Clarke Vocabulary scale was not administered to participants in Après-Coup because the scale was not available in French; consequently this site was excluded from the analysis. The no-shows were excluded from this analysis. Cox's regression model was also used to test the unique proportion in the DV accounted by the interaction. Similar analyses were used to test the interaction between childhood abuse and program.

Data Screening

After the data for the Multi-site project was entered into the computer, a second person verified all data using SPSS Data Entry II (verification mode). The data was also checked by running frequencies for each of the variables. Before testing the hypotheses, the measures were plotted separately for each program in order to screen for outliers. A univariate outlier was considered to be a data point that was more than three standard deviations from the mean. One outlier was identified for The Clarke Vocabulary Scale. The participant scored six on this scale out of a total of 40. After a closer examination of the client's responses, it was presumed that the client did not have sufficient knowledge of the English language to be able to comprehend the rest of the questionnaires and so this case was subsequently deleted from the data set. Another outlier was identified for the LSI. It was decided to leave the value in the analysis unchanged since the value was a legitimate value and was just slightly above three standard deviations from the mean.

Results from evaluations regarding assumptions of normality and homogeneity of variance were acceptable. The only variable that was somewhat of a concern was the Level of Service Inventory, which violated Levene's test for homogeneity of variances. However, the differences in variances in LSI scores between the three groups (e.g., no-shows, dropouts, completers) is not expected to have a consequential effect on the results for the following reason. Studies concerning the effect of unequal sample sizes and unequal variances on F have indicated that a negative correlation between sample size and variance (e.g., small sample sizes paired with large variances) produces an inflated alpha rate (for a review see Harwell, Rubinstein, Hayes, & Old, 1992). Results from

Harwell et al.'s (1992) review also indicate that a 2:1 ratio of variances, as it applied in the current case, would result in an inflated alpha value of .08 instead of .05. Considering that the effects of the LSI in the current study were strong ($p < .001$), the slightly inflated error rate is not expected to have a meaningful effect.

In order to test the proportional hazards assumption for the LSI (i.e., that for two cases, the ratio of their hazards is assumed to remain constant for all time points), scores were classified into two levels of risk. Scores less than 13 were recoded as low risk and scores greater than 23 were recoded as high risk. The log-minus log plot of the two groups was plotted and the proportional hazards assumption was supported (i.e., the lines representing the different groups were proportional).

Despite the length of the questionnaires administered (60 pages in total), missing data was less than 10% for all measures with the exception of The Clarke Vocabulary Scale. Missing data constituted 13.2% for this scale. In terms of demographic information, the last grade completed was missing for 31.3% of the cases. This was mostly attributed to the Montreal site, since the French version of this question was incorrectly translated for this particular question to read "in what year did you finish school?". Although a number of participants indicated a grade level, data was coded missing for 70.7% of the cases at this site. In the majority of these cases, a calendar year was given and was subsequently coded as missing. The type of referral was missing in 14.7% of the cases.

Results

Attrition Rates Across the Four Sites

The rates of in-program attrition were similar across the four sites; out of clients who attended at least one treatment session, 36% dropped out at Après-Coup, 42% at Resolve, 42% at Hiatus House and 39% at Responsible Choices. However, the rates of pre-program attrition varied greatly across the programs. Of clients who sought treatment at Resolve, 46% dropped out before the first treatment session compared to 13% in Hiatus House, 4% in Responsible Choices, and 3% in Après-Coup (see Table 6). Of the total number of no-shows, 66% came from Resolve. Hence, any analyses involving the no-shows will be heavily weighted by clients from this program.

Figure 1 plots the survival curves for each of the sites when the no-shows are included in the analysis. As can be seen on this graph, the survival curve for Resolve falls sharply at time zero. Although it appears that substantial differences exist in attrition rates across the four sites, this is mostly due to the difference in pre-program attrition rates. In Figure 2, the cumulative survival curves are plotted for each programs after the no-shows are selected out of the analysis. As can be seen on the graph, the differences in attrition rates are marginal.

Using Cox's regression, program membership significantly predicted attrition. This was true both when Time 1 was specified as the initial assessment and also when the no-shows were excluded from the analysis and Time 1 was coded as the first treatment session. The differences in in-program attrition rates (defined as dropping out after the

Table 6

Comparison of Dropout Status Between Treatment Programs

	Après-Coup (n=58)	Resolve (n=76)	Hiatus House (n=97)	Responsible Choices (n=75)
No-shows	2 (3.4%)	35 (46.1%)	13 (13.4%)	3 (4.0%)
Dropouts	20 (34.5%)	17 (22.4%)	35 (36.1%)	28 (37.3%)
Completers	36 (62.1%)	24 (31.6%)	49 (50.5%)	44 (58.7%)
Total	(100%)	(100%)	(100%)	(100%)

Figure 1

Survival Curves For Dropping Out of Treatment (No-Shows Excluded)

Figure 2

Survival Curves for Dropping out of Treatment (No-Shows Excluded)

first session) between programs were small and were not significant when using the less sensitive chi-square analysis.

Information as to why 46% of clients at Resolve did not participate in any of the treatment sessions was provided for 22 clients. The following reasons were given for not commencing treatment: decided not to participate in treatment ($n = 12$), file returned to probation office ($n = 4$), took counselling elsewhere ($n = 3$), probation period ended therefore client not required to take treatment ($n = 2$) and client moved away ($n = 1$). In cases where it was indicated that the file was returned to the probation office, it is likely that the probation order expired before a space in the treatment program became available.

The high rates of pre-program attrition may have been due to the long waiting lists in this program. In seven of the cases, information was provided as to the duration of time between the initial assessment and when treatment was offered. The average length of wait was seven months. Descriptions provided by the program supervisors from the other sites indicated that the length of wait to get into these programs was less than two weeks.

Comparing Demographics Between No-shows, Dropouts, and Completers

The no-shows, dropouts, and completers differed on a number of demographic variables (see Table 7). In comparison to completers, dropouts (including no-shows) were younger, were more likely to be unemployed, had more criminal convictions, moved residences more frequently, and had been together with their partner for a shorter amount

Table 7

Comparison of Demographic Information Between No-shows, Dropouts, and Completers

Variable	No-shows (<u>n</u> = 49)		Dropouts (<u>n</u> = 86)		Completers (<u>n</u> = 141)		F/χ^2
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Age	33.5 ^a	(9.0)	33.5 ^a	(8.6)	37.4 ^b	(9.0)	7.04**
% Currently With Partner ⁺	82.4		79.1		81.8		0.85
Time Together (in months)	99.8	(99.9)	95.1	(80.9)	135.1	(105.1)	5.58**
# of convictions	2.3	(4.4)	2.6 ^a	(7.0)	1.1 ^b	(2.3)	3.56*
Last grade completed	11.7	(2.1)	12.1	(2.3)	12.1	(2.5)	0.62
# of residence moves	0.9	(1.3)	1.2	(1.5)	0.6	(1.4)	3.84*
Currently Employed (%) ⁺	74.0		64.5 ^a		86.0 ^b		15.36***
Court-referred (%) ⁺	35.0		17.6		23.5		4.58

- Note: 1. * $p < .05$, ** $p < .01$, *** $p < .001$
 2. Values with different subscripts were significantly different from each other using Sheffe's test for post-hoc comparisons.
 3. n reflects average sample size among the variables.
 4. Sample sizes varied somewhat between variables due to missing data.
 5. ⁺ indicates χ^2 used in analysis

of time. The type of referral (i.e., court-referred or self-referred) and education level did not significantly discriminate dropouts and completers.

Lifestyle Instability

Overall, the average score for the LSI was 13.96 ($SD = 8.0$) with scores ranging from 0 to 40. In general, the LSI scores were relatively low compared to scores obtained from prison samples. A comparison of scores obtained in the current study with scores reported in previous studies can be found in Appendix N. Although court-referred clients scored a few points higher on the LSI ($M = 16.44$, $SD = 9.1$) compared to self-referred clients ($M = 13.48$, $SD = 7.8$), their scores were still much lower than the average inmate.

All of the subscales significantly discriminated completers from dropouts except for subscales D, F, and I (family relationships, anti-social companions, and psychological problems). Although subscales D, F, and I did not significantly discriminate completers from dropouts, the effects were in the predicted direction. Results from a one-way ANOVA demonstrated that there were significant differences in scores between the no-shows, dropouts, and completers (see Table 8). Generally, the no-shows had higher scores than the completers but lower scores than the dropouts. Post-hoc tests were conducted to see which of the groups (i.e., no-shows, dropouts, completers) differed significantly from each other. Using Sheffe's test for post-hoc comparisons, dropouts were found to have significantly higher scores on LSI scores compared to completers. The no-shows did not differ significantly from the dropouts nor completers.

Table 8

Differences on Measures Between No-shows, Dropouts, and Completers

Variable	No-shows (<u>n</u> = 52)		Dropouts (<u>n</u> = 92)		Completer (<u>n</u> = 148)		<u>F</u>
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
LSI	14.49	(8.6)	16.92 ^a	(9.0)	11.95 ^b	(6.4)	11.99***
C. to Change	3.75 ^a	(0.8)	4.02	(0.8)	4.09 ^b	(0.7)	4.04*
L. Consequences	3.80	(0.7)	3.67	(0.8)	3.64	(0.8)	0.42
Pos. Attitudes towards helpers	4.09	(0.8)	4.11	(0.8)	4.27	(0.7)	1.85
SMAI	74.98	(32.4)	75.58	(26.5)	76.39	(26.0)	0.06
Abuse Inventory (Ever)	0.00	(.75)	0.16 ^a	(.86)	-0.09 ^b	(.64)	3.29*
Abuse Inventory (Recent)	-0.10 ^b	(.62)	0.20 ^a	(.91)	-0.08 ^b	(.57)	5.44**
21-item PMWI	2.19	(0.7)	2.42	(0.8)	2.19	(0.7)	2.98
Clarke Scale	27.96 ^a	(6.0)	28.57	(5.6)	29.93 ^b	(5.6)	2.37
BIDR (manage.)	9.19 ^b	(4.4)	7.44 ^a	(4.1)	9.02 ^b	(3.9)	5.28**
BIDR (deception)	9.71	(3.6)	8.96	(3.2)	9.39	(3.6)	0.84
Family History (Abuse)	2.03	(0.7)	2.12	(0.7)	2.10	(0.7)	0.31
Child. Abuse (%)	25.0		39.3		28.5		4.09 (χ^2)

Note: 1. * $p < .05$, ** $p < .01$, *** $p < .001$

2. Values with different subscripts were significantly different from each other using Sheffe's test for post-hoc comparisons.

A table of cell means was conducted in order to see if there appeared to be an interaction between LSI scores, attrition, and type of program. The same pattern of scores emerged from Après-Coup, Hiatus House, and Responsible Choices. In all three programs, dropouts had higher scores than the no-shows and completers. In Richmond Hill, contrary to what was predicted, dropouts had lower scores than both the no-shows and completers. A two-way interaction between program and status (i.e., dropout, completer) was found to be significant, $F(3, 236) = 5.78, p < .01$. The no-shows were not included in this analysis because there were less than four no-shows from both Après-Coup and Responsible Choices. The differences in LSI scores between the dropouts and completers across the four sites are displayed in Table 9.

Pearson product correlations were calculated between each of the measures and dropout status (dropouts included the no-shows). The Level of Service Inventory was the only measure which was significantly correlated with dropout status, $r = .26, p < .001$. After selecting out the no-shows, the correlation between the LSI and dropping out increased to $r = .31, p < .001$.

Cox's regression was used to test whether the LSI significantly predicted attrition. A separate baseline function was calculated for each program by selecting program membership as the strata. Results of Cox's regression indicated that the total score was a significant predictor of attrition ($B = .04, p < .001$). When the no-shows were selected out of the analysis and Time 1 was specified as the first treatment session, the prediction increased marginally ($B = .06, p < .001$). Hence, for individuals who attended at least one session, an increment of one point on the LSI results in a 6% increase in the hazard rate for dropping out of treatment ($e^{.06} = 1.062$).

Table 9

Differences in LSI scores Between Dropouts and Completers Across Treatment Programs

	Dropouts (<u>n</u> = 92)		Completer (<u>n</u> =148)		
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>t</u>
Après-Coup	18.67	(10.6)	12.47	(6.5)	2.61*
Resolve	9.08	(4.1)	11.82	(7.5)	-1.21
Hiatus House	21.00	(8.63)	12.65	(6.8)	4.93***
Responsible Choices	14.28	(6.9)	10.80	(5.0)	2.43*

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Motivation

The average score on The Motivation to Change Scale was relatively high ($M = 4.00$, $SD = .75$) with scores ranging from 1.18 to 5. Results from a one-way analysis of variance indicated The Commitment to Change Scale could significantly discriminate between no-shows, dropouts, and completers (see Table 8). Multiple comparisons were conducted using Sheffe's test which indicated that the no-shows had significantly lower scores than completers. This finding is probably attributed to clients who sought treatment at Resolve since the majority of no-shows (66%) were from this site and since clients from this site generally reported lower scores on The Motivation to Change Scale (see Appendix M). Individual t-test were conducted between dropouts and completers for each of the sites and no significant differences were found for any of the programs.

Using Cox's regression, The Commitment to Change was not significantly related to dropping out. This was true both when Time 1 was coded as the initial assessment and also when Time 1 was coded as the first treatment session attended.

The Likely Consequences Scale, which was used as a measure of external motivation, was not significantly related to dropping out of treatment. Scores on this scale ranged from 1 to 4.94 with an average score of 3.67 ($SD = 0.8$). Three types of analyses (i.e., Cox's regression, ANOVA, and t-tests) all yielded non-significant results.

The length of delay between the initial assessment and the first treatment session was not significantly related to attrition when tested with Cox's regression model. T-tests between completers and dropouts on the number of days waiting were also non-significant; however the effects were in the predicted direction. In Hiatus House,

dropouts waited an average of 9.1 days ($SD = 26.8$) compared to completers who waited an average of 11.1 days ($SD = 26.6$).

Treatment Characteristics

As can be seen in Table 8, the difference between dropouts and completers regarding their attitudes towards treatment leaders, although not significant, was in the predicted direction. Completers reported more positive attitudes compared to dropouts. Results from Cox's regression, with Time 1 coded as the first treatment session, indicated that positive attitudes towards treatment leaders was not significantly related to dropping out of treatment.

Although it was predicted that longer programs would have higher attrition rates, results from a chi-square analysis revealed that there were no significant differences among the four sites in attrition rates (no-shows were selected out of the analysis). The shortest program with 12 sessions had an attrition rate of 42% compared to the longest program with 25 sessions which had an attrition rate of 36%.

Treatment Congruency - Reporting Marital Problems and Abuse

Out of the three scales used to examine the relationship between reporting treatment congruent problems and dropping out of treatment, The Abuse Inventory was the most sensitive scale to discriminate dropouts from completers. However, contrary to what was predicted, dropouts reported more abuse than completers (see Table 8). Post-hoc comparisons indicated that dropouts differed significantly from completers in terms of abuse reported to occur ever in the past. In terms of recent abuse, dropouts also

reported significantly more abuse towards their partners compared to both the no-shows and completers.

Using Cox's regression model with Time 1 defined as the first treatment session, the total score of The Abuse Inventory-Ever ($\underline{B} = .33$, $p < .05$) and The Abuse Inventory-Recent ($\underline{B} = .31$, $p < .01$) significantly predicted attrition. However, when the initial assessment was defined as Time 1, neither recent reported abuse nor past abuse significantly predicted dropping out of treatment (although the effect was in the predicted direction).

A correlational analysis further supported the above findings; when the initial assessment was included in the analysis, the correlation between dropout status and both measures of abuse was $\underline{r} = .13$, $p < .05$. When the no-shows were selected out, the correlation increased to $\underline{r} = .17$, $p < .01$ for the Abuse Inventory (Ever) and $\underline{r} = .20$, $p < .01$ for the Abuse Inventory (Recent).

Although not statistically significant, dropouts had higher scores on the 21-item Psychological Maltreatment of Women Inventory (PMWI) compared to completers and no-shows (see Table 9). When tested with Cox's regression model with Time 1 coded as the initial assessment, the PMWI significantly predicted dropout ($\underline{B} = .21$, $p < .05$). When the no-shows were selected out of the analysis, the prediction increased marginally ($\underline{B} = .28$, $p < .05$). The exponent of the regression coefficient ($e^{.28} = 1.33$) indicates that an increment of one unit on the PMWI predicts a increase of 33% in the hazard rate. However, it must be remembered that this scale is limited to values ranging from one to five.

A Pearson product correlation was also conducted between status and PMWI. The correlation was not significant when the no-shows were included in the analysis.

However, when the no-shows were removed, the PMWI was significantly correlated with dropout status, $r = .15$, $p < .05$.

The Short Marital Adjustment Inventory did not significantly discriminate dropouts from completers (see Table 8). The average score on this scale was 75.88 ($SD = 27.3$) with scores ranging from 8 to 155. This scale did not significantly predict dropout status when tested with Cox's regression model.

Verbal Aptitude

Overall, the average score of The Clarke Vocabulary Scale was 29.11 ($SD = 5.7$) with scores ranging from 11 to 39. A one-way ANOVA revealed that there were no significant differences between the no-shows, dropouts, and completers. However, as can be seen in Table 8, the differences in averages between the three groups demonstrate a linear trend. Cox's regression analysis (both with time 1 specified as the initial assessment and as time 1 specified as the first treatment session) failed to yield significant findings.

Interaction Between Verbal Aptitude and Structure of Program

A table of cell means comparing scores of The Clarke Vocabulary Scale between dropouts and completers across the different sites is presented in Table 10. As predicted, in the unstructured program (Hiatus House), dropouts scored significantly lower on The Clarke Vocabulary Scale compared to completers. In the structured program

Table 10

Differences in The Clarke Vocabulary Scale Between Dropouts and Completers Across Different Types of Treatment Programs

	Dropouts			Completers			<i>t</i>
	<u><i>n</i></u>	<u><i>M</i></u>	<u><i>SD</i></u>	<u><i>n</i></u>	<u><i>M</i></u>	<u><i>SD</i></u>	
Unstructured (Hiatus House)	29	26.52	(5.8)	46	30.30	(4.5)	-3.16**
Semi-structured (Resolve)	13	27.54	(7.4)	20	27.60	(7.5)	-.02
Structured (Responsible Choices)	27	31.19	(3.3)	45	30.60	(5.4)	.51

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

(Responsible Choices), dropouts scored marginally higher than dropouts, although this was not statistically significant. No significant differences were found in the semi-structured program (Resolve). A test of the interaction between program, verbal aptitude, and dropping out using Cox's regression model yielded significant results ($B = .07$, $p < .01$).

Childhood Abuse

Of the clients in the current study, 31.3% reported being severely abused as children by either one of their parents (e.g., was physically hurt "frequently"). The highest rates of childhood abuse were at Après-Coup (38.9%) and Hiatus House (37.9%). Interestingly, these were also the two programs which indicated that issues of childhood abuse were addressed during therapy. Rates of childhood abuse at Resolve and Responsible Choices were 21.9% and 26.5% respectively.

Although results from a chi-square analysis indicated that there were no significant differences in reported abuse between dropouts and completers, the results were in the predicted direction. Out of those who dropped out of the program, 39.8% were categorized as having experienced childhood abuse compared to 28.3% of completers. Results of Cox's regression indicated that being abused as child was not significantly related to dropping out of treatment.

The continuous measure of abuse did a poor job of discriminating dropouts from completers. The average score on The Family History Questionnaire for dropouts was 2.13 ($SD = 0.7$) compared to 2.10 ($SD = 0.7$) which was the average score of completers. Cox's regression model also yielded non-significant results.

Interaction Between Being Abused , Type of Program and Dropping Out

A two-way interaction between being abused, type of program and dropping out of treatment was found to be non-significant when tested with Cox's regression model. The two-way interaction between The Family History Questionnaire, type of program and dropping out of treatment was also found to be non-significant. Although it was predicted that clients who were abused themselves as children would be more likely to stay in treatment programs that address issues of childhood abuse, the results in Table 12 suggested otherwise. In the treatment program that did not address issues of childhood abuse, clients who were abused were more likely to complete. Alternatively, in programs that address such issues, clients who were abused themselves were more likely to dropout. A test of the interaction with Cox's regression model yielded non-significant results.

Relationship Between Childhood Abuse, Type of Treatment Program and Time of Dropout

In the previous analysis, the interaction between being abused and the structure of program approached significance, albeit in the opposite predicted direction. This was true for clients who had attended at least one treatment session. It was predicted that the interaction between being abused as a child and the type of treatment program would not predict attrition for clients who did not attend any of the sessions. However the disproportionate number of no-shows from the Richmond Hill program was not expected.

Table 12

Percentage of Clients Who Were Abused as Children

Program	Dropouts <u>n</u>	% Abused in Dropouts	Completers <u>n</u>	% Abused in Completers	χ^2
Address Issues of Abuse (Hiatus House/ Après-Coup)	49	49.0	81	32.1	3.68*
Does not Address Issues of Abuse (Responsible Choices)	24	20.8	41	31.7	.89

Note. * $p < .05$

The no-shows are so highly correlated with the Richmond Hill program that an independent test of the interaction was not be feasible.

Balanced Inventory of Desirability Responding (Impression Management Subscale)

Results from conducting a one-way ANOVA revealed that the overall F was significant (see Table 8). Post-hoc comparisons indicated that the dropouts had significantly lower scores on the impression management subscale compared to both no-shows and completers.

Cox's regression analysis yielded significant results both when Time 1 was defined as the initial assessment ($B = -.05$, $p < .05$) and also when Time 1 was defined as the first treatment session ($B = -.08$, $p < .01$). Pearson product correlations also confirmed these results. When the status event included the no-shows, the correlation approached significance, $r = -.11$, $p < .10$ and when the status event excluded the no-shows the correlation (r) increased to $-.18$, $p < .01$.

Individual Contribution of Measures in Predicting Dropout

Variables which significantly predicted dropout (i.e., LSI, Abuse Inventory - Recent, BIDR impression management subscale) were entered into Cox's regression in order to test for the unique proportion of variance attributed to each variable, while controlling for all other variables entered into the equation. Although all variables were correlated with each other, they were not so highly correlated as to render an unstable matrix inversion.

When all three variables were entered into Cox's regression, the LSI accounted for most of the variance ($r = .12$, $p < .001$). The partial correlation of the impression management subscale with dropout was $r = -.04$, $p < .10$ as compared to $r = -.10$, $p < .01$ when the subscale was entered in the equation by itself. The unique amount of variance attributed to The Abuse Inventory was not significant when entered with the other two variables ($r = .03$, $p = .10$).

Risk Scale for Dropping out of Treatment

From the results of this study, an attempt was made to develop a short risk scale to identify clients at high risk for dropping out of treatment. The 14 items for the scale were chosen based on a combination of the following criteria: a relatively high correlation with dropout status (usually higher than $r = .20$), empirical support from previous research and on the face validity of the items. The resulting scale is a slightly modified, shortened version of the LSI. Three items were chosen from the following LSI subscales: criminal history (questions #1, 4, and 6 from the self-report LSI), employment (questions #10, 12, and 14), finances (questions #23, 24, and 29), and substance abuse (questions # 74, 77, 84). Another question was added to the scale from the Commitment to Change Scale (i.e., "I have committed myself to ending male violence towards women" and one from The Social Desirability Scale (i.e., "I have taken sick-leave from work or school even though I wasn't sick"). In terms of calculating the total score, all items were weighted equally.

The scale was found to be internally consistent ($\alpha = .81$). A principal component factor analysis was also conducted which yielded the following eigen values:

4.30, 2.36, 1.29, 1.21, and .95. These values when plotted on a factor scree plot suggest that the scale is composed of only one main factor. With the exception of three items (one from The Commitment to Change and items 74 and 77 from the self-report LSI), all items had relatively high loadings on this factor.

A Pearson product moment correlation was calculated and yielded a high correlation ($r = .42$) between the total score on the risk scale and dropout status. The scale also significantly discriminated dropouts ($M = 3.91$, $SD = 2.68$) from completers ($M = 1.8$, $SD = 1.8$; $t = 6.74$, $p < .001$).

The best-fitting Receiver Operator Characteristic curve was plotted in order to calculate the predictive accuracy of the scale (see Figure 3). A ROC curve plots the probability of a “hit” (e.g., the percentage of dropouts identified at any selection criteria) versus the probability of a “false positive” (e.g., the percentage of completers identified at this selection criteria). For example, as can be seen on the graph, if a score of five was chosen on the scale as a selection criteria for identifying dropouts, 41% of the dropouts would be identified versus 8% of the completers. Points of the graphs ($x = .08$, $y = .41$) correspond to the selection criteria of five.

The area under the curve is a measure of predictive accuracy: the greater the area, the better the prediction. With a perfect prediction, the points would fall on the lines from (0,0) to (0,1) to (1,1). If the accuracy was no better than chance, the area would be .50 and all points would fall all the line denoted by points (0,0) to (1,1). Using ROCFIT software, developed by Metz, Shen, and Wang (1989), the area under the curve was .74 ($SD = .04$). Therefore, the area was significantly greater than the chance expectation of .50.

Figure 3

Discussion

The present study is an attempt to increase our understanding of the factors involved in predicting attrition from male battering treatment programs. The variables examined were grouped under the following four main headings: lifestyle instability characteristics, motivation, treatment characteristics, and treatment congruence factors. Lifestyle instability, as measured by the Level of Service Inventory, was the single strongest predictor of attrition. As predicted, verbal aptitude interacted significantly with the type of treatment program. While clients low in verbal aptitude were more likely to drop out of an unstructured program, those with higher verbal skills were more likely to drop out of a structured program. There was also evidence to support a positive relationship between the duration of waiting period to get into the program and pre-program attrition. Results also demonstrated that dropouts, compared to completers, reported to be more abusive towards their partners compared to completers. Other variables, such as motivation and childhood abuse, were weak predictors of attrition. In general, while many of the variables examined were related to dropping out of treatment, the effects were small.

The findings from this study demonstrated that client characteristics had little relationship to pre-program attrition. Program characteristics, however, were important. There was a high rate of pre-program attrition (46%) in the program that had a long delay between the initial assessment and the first treatment appointment. In contrast, there was very little pre-program attrition (3% to 13%) in programs with short waiting periods

(usually less than two weeks). The following section will include a more detailed discussion of the major areas of investigation.

Lifestyle Instability

Consistent with previous results (Cadsky et al., 1997), the current study provided strong support for the relationship between lifestyle instability and attrition. One can be relatively confident in the results, given that the relationship between the LSI and attrition was supported using three different statistical models. Dropouts compared to completers tended to be younger, unemployed, and have more financial problems. They also tended to have more extensive criminal histories, unstable living arrangements, and substance abuse problems.

The LSI was originally designed to measure risk level and needs of offenders in order to help determine whether offenders should be released into the community. Items from the scale are well established risk factors for re-offending (Andrews & Bonta, 1994). Given that the characteristics related to re-offending (e.g., criminal history, substance abuse problems) are also risk factors for dropping out, the scale was deemed an appropriate measure for predicting dropout. Characteristics of an unstable lifestyle have also been identified as predictors of wife battering (Tolman & Bennett, 1990).

Although those who drop out are higher risk, higher need cases compared to completers, male batterers in the current study scored low on the LSI compared to criminal samples. The average score for clients in the current study ($\bar{X} = 13.96$, $SD = 8.0$) was just barely above the Low-risk/Needs category (i.e., scores ranging from 0 to 13)

as classified by the LSI (Andrews & Bonta, 1995). The low LSI scores could be the result of high risk clients being screened out after the initial assessment.

These results were consistent across all programs except for Resolve. Contrary to what was expected, completers at this site had slightly higher scores on the Level of Service Inventory (although the effect was not significant). No satisfactory explanation for this finding was elicited; however, these conflicting results may have something to do with the overall low LSI scores at this site. Since the average score was low, there may have been insufficient variability in lifestyle instability to show a relationship with attrition.

As an alternative explanation, clients who are characterized by an unstable lifestyle may be better suited to a certain type of structure or approach. For instance, clients who are unable to organize their own lives may be better suited to a program that is more structured. However, no apparent type of interaction between structure and LSI scores was evident in the current study. It may be worthwhile to investigate this relationship in future studies, since a recent study has shown that male batterers with more anti-social traits are more likely to benefit from structured treatment than an unstructured program (Saunders, in press).

Characteristics of dropouts were organized under the term lifestyle instability and operationalized by the LSI. Although results of this study identified the risk factors related to dropping out, the underlying personality dimensions can only be inferred from this study (e.g., low-self control, lack of discipline). The Conscientious subscale of the NEO Personality Inventory may prove to be a useful personality measure for predicting dropout. Individuals scoring high on this dimension are characterized as being highly

purposeful, well-organized, and self-disciplined (McCrae & Costa, 1987). Previous research has already demonstrated its importance in predicting compliance to health behaviours (Christensen & Smith, 1995).

To summarize, those who drop out are generally characterized with a less stable, less disciplined lifestyle. The results are not particularly surprising; those who have trouble committing to work, abiding by the law, or controlling their alcohol intake would also be expected to have trouble committing themselves to therapy. Although clients characterized by an unstable lifestyle are generally more likely to drop out, they may be less likely to do so in a more structured format. Future investigations are needed to explore this interaction.

Motivation

Although motivation and dropping out has received considerable support in the general dropout literature, studies examining this relationship in male battering treatment programs are rare. In the current study, two indirect measures of motivation were employed (i.e., number of days waited before getting into the program and type of referral), as well as two direct measures of motivation (i.e., The Commitment to Change Scale and The Likely Consequences Scale).

Although it was hypothesized that motivation would be a strong predictor of dropout, results indicated that the Commitment to Change Scale had a small significant effect. The weak relationship may be due to deficiencies in the scale. Although this scale was designed to measure an individual's motivation to stop abusing his partner, its high correlation with PMWI ($r = .61, p < .001$) suggest that high scores on this scale may in

fact indicate high levels of abuse rather than high levels of motivation. For example, scoring high on the question “I have a problem with the way I treat my partner” was designed to measure recognition of a problem and hence motivation to change; however, scoring high on this question may also indicate more severe abuse. It is important to ensure in future studies that items measuring motivation are not confounded with amount or degree of abuse.

The high average score on this scale, $\bar{M} = 4.00$, $SD = .75$ (out of a maximum of 5) is another indication that it may be a weak measure of motivation. The high scores reported on this scale may have resulted in a restricted range, thereby affecting the strength of the correlation.

Furthermore, although the Commitment to Change Scale measured general motivation for change (e.g., “I am committed to ending violence against women”), it lacked items measuring specific motivation for treatment (e.g., “I expect that counselling will help me change my behavior”; “I expect to attend all treatment sessions”). To date, the relationship between motivation for treatment and dropping out has not been examined in male battering programs.

In addition to using direct measures of motivation, the current study employed an indirect measure of motivation (i.e., number of days waited to get into the program). As predicted, completers compared to dropouts waited longer to get into the program (although not significantly longer). However, this relationship was only examined in one treatment program and the results were not statistically significant.

One way of keeping clients in treatment is to offer different types of treatment for clients at different levels of motivation. The Transtheoretical Model of Change

(Prochaska & DiClementi, 1982) posits that there are different stages of behavioural change which are dependent on the client's motivation for change. The implication for intervention is that treatment can be effective only when it is targeted to the client's stage of motivation for change.

This type of model is put into practice to some degree in some programs where there are separate treatment groups for court-mandated and voluntary clients. There is an assumption that court-mandated clients are not as motivated to attend treatment as voluntary clients. Hence, the treatment is modified somewhat so that in the court-mandated groups, the leaders provide more structure and direct instruction.

Research in the area of external motivation and dropping out is sparse. Generally, being court-referred to treatment is viewed as an external motivator for attending treatment. Studies examining the type of referral and attrition have been conflicting (Cadsky et al., 1996; Hamberger & Hastings, 1989). In the current study, type of referral did not significantly discriminate dropouts and completers; however, a slightly greater percentage of completers were court-referred compared to dropouts.

A direct measure of external motivation was used in the current study, which measured men's expectations of what would happen if they continued to abuse their partners. The scale measured expected legal consequences (e.g., "I would be arrested") and social consequences (e.g., "My partner would leave permanently"). Given that male batterers have an exaggerated fear of being abandoned by their partners (Dutton, 1995), it follows that their partners' threats of leaving them should be an important reinforcer for attending treatment. However, results indicated that scores on the Likely Consequences Scale were not related to dropping out.

The non-significant findings could be due to a number of reasons. For one, the measure could be a poor measure of external motivation. Although the measure was internally consistent and had relatively high face validity, it was not highly correlated with any of the other measures. The non-significant findings could also be due to the fact that expected consequences is not a good predictor of attrition. The actual changes in the relationship (e.g., partner leaves) may be more important than men's expectations. Interviews with several therapists in the current study have also confirmed that many men discontinue the program after their partners have left them. In addition, the current scale measured expectations in regards to continued abuse. In future studies, it may be more appropriate to administer a scale measuring men's expectations of what will occur if they leave counselling.

The current study was unable to clarify the relationship between motivation and dropping out. With better measures, it is plausible that the relationship between motivation and dropping out will strengthen. In addition to using standardized measures of motivation, a more direct way of assessing what motivates clients to stay in treatment is to ask them directly.

Treatment Characteristics

There was tremendous variation in pre-program attrition rates across the sites, ranging from 3% to 46%. With the exception of one site, the rates of pre-program attrition were very low compared to those reported in previous studies (e.g., Cadsky et al., 1997; Gondolf & Foster, 1991). Although not tested specifically, results suggested that decreasing waiting lists may decrease pre-program attrition. This was supported by the

fact that three programs with short waiting lists had low pre-program attrition rates and one program with a very long waiting list had a very high pre-program attrition rate.

Although the sites varied considerably in terms of pre-program attrition, the rates of dropout once treatment began were similar, ranging from 36% to 42%. The fact that the various types of treatment modalities had similar attrition rates suggest that the characteristics of the four programs did not have a large impact on attrition. The rates were similar to those reported in previous studies (e.g., Cadsky et al., 1997; DeMaris, 1989).

Contrary to what was predicted, the duration of the program (i.e., number of sessions required to attend) did not influence whether or not clients terminated prematurely. Clients were actually less likely to drop out of a program with 25 sessions compared to programs with 12 and 14 sessions. However, this may have more to do with factors such as the type of approach, the cohesion of the group, and the qualifications and experience of therapists than the actual duration of treatment.

Positive attitudes towards therapists was also expected to reduce attrition. Results indicated that the effect was not statistically significant. However, the measure of attitudes was not ideal since it was measured at the time of the assessment and may have been heavily weighted by the client's feelings for previous therapists. Although the importance of establishing client-therapist rapport is well documented (Corey, 1985; Prochaska, 1984, Rogers, 1942), there is a lack of empirical evidence examining the relationship between rapport and attrition, especially in male battering treatment programs. Future studies need to assess clients' attitudes at more regular intervals throughout treatment.

Given the variety of treatment programs offered to men who abuse their partners, the paucity of research examining the relationship between treatment characteristics and attrition is surprising. This is probably due to the cost and time involved in conducting a Multi-site study. Fortunately, the Multi-site Evaluation of Male Battering Treatment Programs provided an excellent opportunity to examine the relationship between program characteristics and attrition.

Treatment Congruency - Reporting Marital Problems and Abuse

A recent study indicated that clients who reported congruent problems (e.g., reported marital abuse) were less likely to drop out (Cadsky et al., 1997). Findings from the current study suggested otherwise; results indicated that clients who reported to be more abusive towards their partners were more likely to drop out of treatment. These results were consistent with those of Saunders and Parker (1989).

The results suggested that reporting abuse may not be a very good measure of treatment congruency. It may be more appropriate to conceptualize abuse as a lifestyle instability characteristic. As was mentioned in the introduction, research conducted on typologies of batterers have indicated that those who engage in moderate to severe violence are more likely to have a criminal history and substance abuse problems (Holtzworth-Monroe & Stuart, 1994), variables which have been shown to correlate with attrition. The relationship between severity of abuse and lifestyle instability is also demonstrated by the high correlation between reported wife assault and The Level of Service Inventory ($r = .33, p < .001$).

It has been suggested that male batterers who deny or minimize their abuse are more likely to drop out (Demaris, 1989). This was supported by Cadsky et al.'s (1997) study where only three out of the 34 clients who denied abuse completed treatment. One way of assessing the degree of minimization by clients is by comparing men's reports of abuse to their partners' reports of abuse. The larger the discrepancy, the more likely the client would be expected to drop out. Another way of measuring denial and minimization would be to incorporate items measuring victim-blaming (e.g., "my wife deserves to be hit"). A measure of victim blaming to predict dropout seems promising, given that sexist attitudes has been found to be a significant predictor of attrition (Hanson, 1998).

The high correlation between partners' reports of abuse and men's reports of abuse, ranging from .57 to .60, suggested that couples generally agreed on the level of abuse in their relationship. A recent study conducted by Moffitt et al. (1997) similarly found correlations of .53 and .58 between men's and women's reports of psychological and physical abuse.

Although the hypothesis regarding the relationship between reported abuse and dropping out was not supported, a more detailed examination of the results indicated that it may not have been an ideal measure of congruency. Admitting to wife assault does not necessarily mean a client wants to change. A better indicator appears to be one in which the client reports taking responsibility for his actions, or alternatively the client denies or minimizes his actions. However, constructing such a measure is not an easy task given that denial may be confounded with the actual amount of abuse. That is, some men who deny abusing their wives may in fact engage in less violence than men who admit to abusing their partners.

Verbal Aptitude

It was predicted that clients with low verbal aptitude would be more likely to drop out of treatment than clients more proficient in verbal ability. It was assumed that deficits in verbal aptitude would lead to difficulties in understanding instructions and homework assignments. Frustration caused by these difficulties was expected to put the client at risk for dropping out. Contrary to what was expected, there were no significant differences in verbal aptitude between dropouts and completers.

Although the results did not support a main effect for verbal aptitude, the findings did support a significant interaction between verbal skills and structure of the program. Matching the structure of the program to the learning styles of clients has been previously examined in terms of predicting treatment efficacy in offender populations (Andrews et al., 1990). Results from these studies have demonstrated that offenders, who are generally characterized by anti-social traits, benefit more from structured treatment.

It was hypothesized in the current study that since clients with low verbal skills are not as likely to benefit from unstructured treatment, they may become frustrated and drop out. The results suggest that clients low in verbal skills may have difficulty expressing their feelings in words and may feel frustrated in an unstructured group setting where there is more of an onus on clients to lead the group discussions. These results have important implications in terms of devising treatment programs which are suited to clients at lower levels of cognitive, verbal, and social functioning. During intake assessments, therapists may need to consider verbal and learning deficits when deciding which treatment group to recommend clients.

Results from a recent study conducted by Saunders (in press) supported a significant interaction between client characteristics and type of treatment in predicting treatment efficacy in male battering treatment programs. While those with anti-social traits were less likely to be violent after attending the more structured program, clients characterized as a dependent personality benefited more from the less structured process-oriented treatment. Although this study did not examine the interaction between verbal aptitude and structure in predicting dropout, the results demonstrate the importance of matching the type of treatment to client characteristics.

Despite these promising results, future studies need to investigate this relationship more carefully. An oral test of verbal aptitude may be more sensitive in detecting verbal deficits than the written test used in the current study (Paitich, 1977). In addition, future studies could improve upon the current study by categorizing the structure of the program in a more objective matter.

Childhood Abuse

Reported childhood abuse among male batterers was comparable to those reported in previous studies. Murphy, Meyer, and O'Leary (1993) reported that 87.5% of their sample of male batterers reported some degree of childhood physical abuse; 22% were categorized as having experienced minor abuse, 19% as moderate, 25% as serious and 21% as severe. In the current study, 71% of male batterers reported mild abuse (i.e., physically hurt a few times or more by one or both of their parents), and 31.9% reported severe abuse (i.e., reported being physically abused frequently) Although neither the dichotomous measure of abuse nor the continuous measure of abuse discriminated

dropouts from completers, the results were in the predicted direction. The dichotomous measure appeared to be better at discriminating dropouts and completers. This is probably due to the fact that the dichotomous measure isolated males who had been the most severely abused as children.

The results between the interaction between being abused and the type of treatment approach were not significant. In fact, the results were in the reverse direction to what was predicted. In programs that addressed issues of abuse, dropouts were more likely to have been abused. In the program that did not address issues of abuse, completers were more likely to be abused compared to dropouts. These findings were consistent with results from a previous study which indicated that men who were abused as children were more likely to drop out of the Process-Psychodynamic Treatment (PPT) model compared to the Feminist-Cognitive Behavioral Treatment (FCBT) model (Chang & Saunders, 1993). While PPT places a heavy emphasis on uncovering childhood traumatic events, the FCBT treatment focuses on improving communication skills, changing sexist attitudes, and teaching relaxation techniques.

One possible explanation to account for these findings might be the fact that those who are abused as children do not necessarily want to talk about their own abuse. In programs that address issues of childhood abuse, abused men may feel uncomfortable to deal with these issues and subsequently drop out. It would have been more appropriate in this study to have asked “Were you ever physically abused as a child?” and “Is this something you might want to discuss in therapy?” However, because this study used archival data, it was not always possible to have the most appropriate measures.

These results have important implications for designing treatment programs, especially when considering the high rates of childhood abuse among male batterers. Stosny (1994) reported using a videotape early in treatment in order to arouse men's compassion towards their own abused experiences. Results from the current study suggest that addressing abuse issues early in treatment could prompt clients who are not ready to deal with their childhood pain to drop out.

The Balanced Inventory of Desirable Responding

Although the BIDR is typically used to control for biased responding when administering self-report measures, in the current study the impression management subscale proved to be valuable in predicting dropout. This is probably due to the fact that many of the items are indicative of irresponsible behaviours ("I am sometimes late for appointments"; "I have taken sick-leave from work or school even though I wasn't sick"). In a previous study, the impression management subscale was negatively correlated with Factor 2 of the Psychopathy Checklist-Revised (PCL-R), $r = -.37$, $p < .003$ (Brown, 1995). This factor is intended to measure a chronically unstable, antisocial, and socially deviant lifestyle.

The results of these two studies raise concerns about using the BIDR as a control measure for certain self-report measures, especially those tapping into anti-social behaviours. When attempting to control for social desirability, researchers may inadvertently run the risk of reducing predictive validity. Since anti-social behaviour appears to be confounded with the impression management subscale of the BIDR, the latter should not be controlled in assessments of anti-social behaviour.

Risk Scale for Identifying Dropouts

The majority of studies in the area of treatment dropout have attempted to identify client characteristics which predict dropout. Despite the value in this type of research, a measure designed specifically to identify high risk clients for dropping out has been lacking. From the results of the current study, a risk scale for identifying those at high risk for dropping out was developed and its predictive accuracy was supported. Whether the scale will cross validate with other populations remains to be further investigated.

This type of risk scale is particularly useful to therapists who could administer the scale at intake assessments. After identifying the client's risk level for dropping out, the therapist can use his or her discretion in what action to take next. On one hand, identifying those at high risk for dropping out could be useful in situations where there is a high demand for the program so that those who are more likely to persevere will be accepted. However, there are ethical implications to consider when turning away male batterers who are at high risk for dropping out, especially if they are likely to use more frequent and severe violence. Alternatively, when there is a waiting list, therapists could decide to accept high risk clients first in the program. Furthermore, this type of information would be valuable in terms of victims' safety in that females could be forewarned in advance the likelihood of their partners dropping out of treatment.

Limitations of the Current Study

One of the limitations of the current study is that participants were not randomly assigned to the treatment conditions and hence confounding variables were not controlled. Since the four programs are based in different cities, random assignment was not possible. Another problem which made the interpretation of results difficult was the overrepresentation of no-shows from Responsible Choices. This meant that the results involving the no-shows were heavily weighted by clients who sought treatment at this particular site.

A further limitation is that the programs were not categorized according to an objective rating scale. Rather, they were classified based on information acquired through interviews with the program supervisors and group leaders, on observations of treatment sessions, and on whether or not therapists follow a leader's manual. In addition, not all treatment sessions were observed and it is not known whether issues of childhood abuse were raised in every therapy group. It is known, however, that issues of abuse are addressed in *Après-coup* and *Hiatus House* when an individual has a need to discuss these issues. These issues are not as likely to be addressed in Calgary since the leaders follow a treatment manual and issues of childhood abuse are not part of the agenda.

Since this study is partially based on archival data, hypotheses in the present study are limited to the measures used in the Multi-site project. While the Multi-site project provided good measures for testing hypotheses regarding lifestyle instability and verbal aptitude, the measures used to test the relationship between childhood abuse and the

structure of the program were not ideally suited. For the present study, it would have been more appropriate to measure an individual's need or desire to address issues of childhood abuse. This data were not collected for the Multi-site; instead male batterers were administered a self-report questionnaire measuring the degree of abuse they experienced as a child. Being abused as a child may not necessarily lead to a need to discuss issues surrounding the abuse. In fact, some individuals may not want to talk about their childhood abuse. However, self-identifying childhood abuse may indicate at least some willingness to talk about it.

Although the majority of participants in this study were administered questionnaires via paper and pencil, in a few cases, data was collected orally through an interview. Unfortunately it was not possible to find out whether there were differences between these two groups in terms of responding because the type of administration (e.g., paper-and pencil vs. oral) was not recorded. However, only a small number of males is estimated to have been administered the questionnaires through an interview.

In a recent study conducted by Simourd (1997), scores were found to be significantly lower on a measure of criminal attitudes when administered orally compared to paper-and-pencil. The authors were not surprised by these findings given that individuals are less likely to engage in self-disclosure in social compared to private situations. These findings suggest that in the current study males who were administered the test orally might have been less likely to disclose information about their abusive behaviour.

Issues To Consider When Conducting Attrition Research

At first glance, conducting research in the area of dropout appears relatively straightforward. However, a number of issues emerged while conducting this project. The first issue is the operationalization of a dropout. For instance, should a person who drops out after the 11th session in a 12 week program be considered a dropout? If not, then when should the cut-off be? What about the person who attends the treatment program until the last session but missed four or five treatment sessions in between? No matter how a dropout is defined (e.g., percentage of sessions attended or last session attended), there will always be a few cases which will be difficult to classify.

The best scenario would be one in which researchers could collect or obtain attendance sheets from the treatment program. With detailed attendance records, researchers would have greater confidence when classifying uncertain cases. When possible, the number of missed appointments should be collected and included as a predictor variable. Even better would be the ability to code which appointments were canceled ahead of time and which appointments were missed without prior notice.

Another issue is whether to consider expelled clients as “dropouts”. Expelled clients may be at a higher risk for abusing their partners. They may also score highest on the risk scale due to lifestyle instability characteristics (e.g., missing appointments, abusing alcohol). Since several of the programs in the current study expelled clients if they missed more than two successive sessions, a decision was made to code expelled clients as dropouts. In these cases, it is likely that the client was already planning on dropping out. In addition, clients are usually informed that they will not be allowed back into the program if they violate certain conditions. The reason why clients are expelled

(e.g., showing up to treatment intoxicated versus missing too many sessions) may be important in determining whether or not they should be considered dropouts.

Implications of Current Study and General Conclusions

The present study on attrition was valuable in that it provided strong support for the relationship between lifestyle instability and attrition and also shed new light on client-treatment interactions. The Multi-site study provided an ideal opportunity to study client-treatment interactions due to the large number of clients participating in the study and the diversity of programs involved. Although the nature of multi-site studies makes the interpretation of results more difficult compared to studies conducted on one site, multi-site studies are advantageous in that consistent effects help to support the generalizability of the results.

The Level of Supervision Inventory proved to be a useful measure for predicting dropout. However, one major drawback of the LSI is its length; the self-report version consists of 78 questions. In the current study, a short risk scale was developed by incorporating certain items from the LSI. This type of measure could be administered with relative ease at an intake assessment. By identifying who is at high risk for dropping out, therapists can apply special interventions aimed at keeping those clients in treatment (e.g., contacting them in person if they do not attend, getting their probation officer to follow-up on court-orders).

In addition to providing further support for the relationship between lifestyle instability and attrition, results suggest that matching client and program characteristics is

important in terms of reducing the rates of attrition. The results point to the need of offering both low and high structured treatment programs for different types of clients.

There was mild evidence suggesting that clients who are abused as children are more likely to drop out in programs that address childhood abuse issues. Given the high rates of childhood abuse reported by male batterers, intake assessments should include questions regarding childhood abuse and whether or not a client wishes to address these issues during therapy. Questionnaires should be devised to assess clients' needs at different stages during treatment so that the content of therapy can be modified to address these issues. Moreover, the relationship between substance abuse problems and dropping out (as demonstrated by the attrition risk scale) suggests that treatment is not targeting all of their self-identified problems. Men who are alcoholics may be more likely to stay in treatment for wife abuse when they are receiving counselling for substance abuse as well.

Keeping male batterers in treatment has many important implications. From a research perspective, attrition causes a problem in the interpretation of outcome research data. From a clinical perspective, high dropout rates may have a negative impact on therapists who may feel that they have failed with their clients. However, one of the most important implications is in terms of the well-being and safety of the partners. Based on a review of the literature on male batterer programs, Rondeau et al. (1994) concluded that the programs reviewed appeared to have a positive impact with regards to decreasing the frequency and severity of violence. For some clients, dropping out means that they will not receive the full potential benefit from treatment.

Clearly the problem of attrition is a serious concern, especially to those in the delivery of treatment services. It is hoped that this study will provide useful information

to therapists who work with male batterers in terms of making changes to their programs that will increase client retention.

References

Agosti, V., Nunes, E., Steward, J. W., & Quitkin, F. M. (1991). Patient factors related to early attrition from an outpatient cocaine research clinic: A preliminary report. The International Journal of the Addictions, 26, 327-334.

Alterman, A. I., Bedrick, J., Howden, D., & Maany, I. (1994). Reducing waiting time for substance abuse treatment does not reduce attrition. Journal of Substance Abuse, 6, 325-332.

Andrews, D. A. (1982). The Level of Supervision Inventory (LSI): The first follow-up. Toronto: Ministry of Correctional Services of Ontario.

Andrews, D. A., Bonta, J. L. (1994). Psychology of criminal conduct. Cincinnati, OH: Anderson.

Andrews, D. A., & Bonta, J. L. (1995). LSI-R: The Level of Service Inventory - Revised.

Andrews, D. A., Kiessling, J.J., Mickus, S. G., & Robinson, D. (1986). The construct validity of interview-based risk assessment in corrections. Canadian Journal of Behavioural Science, 18, 460-470.

Andrews, D. A., Zinger, I., Hoge, R.D., Bonta, J., Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis, Criminology, 28, 369-404.

Antonowicz, D. H., & Ross, R. R. (1994). Essential components of successful rehabilitation programs for offenders. International Journal of Offender Therapy and Comparative Criminology, 38, 97-104.

Baekeland, F., & Lundwall, L. (1975). Dropping out of treatment: A critical review. Psychological Bulletin, 82, 738-783.

Baekeland, F., Lundwall, L., & Shanahan, T. J. (1973). Correlates of patient attrition in the outpatient treatment of alcoholism. The Journal of Nervous and Mental Disease, 157, 99-107.

Beckham, E. E. (1992). Predicting patient dropout in psychotherapy. Psychotherapy, 29, 177-182.

Berrigan, L. P., & Garfield, S. L. (1981). Relationship between missed psychotherapy appointments to premature termination and social class. The British Journal of Clinical Psychology, 20, 239-242.

Brown, S. L. (1995). Sexual aggression and psychopathy among convicted rapists: Static, dynamic, and motivational precursors. Unpublished master's thesis, Carleton University, Ottawa, Ontario, Canada.

Buckley, L. B., Miller, D., & Rolfe, T. A. (1983). A Windsor model. Social Work With Groups, 6, 189-195.

Cadsky, O., Hanson, R. K., Crawford, M., & Lalonde, C. (1996). Attrition from a male batterer treatment program: Client-treatment congruence and lifestyle instability. Victims and Violence, 11, 51-64.

Chang, H., & Saunders, D. G. (1993, May). An analysis of attrition in batterers' counselling. Paper presented at the ninth annual symposium on empirical group work, Ann Harbour, Michigan.

Christensen, A. J. , & Smith, T. W. (1995). Personality and patient adherence:

Correlates of the five-factor model in renal Dialysis. Journal of Behavioral Medicine, 18, 305-313.

Collins, J. J., & Allison, M. (1983). Legal coercion and treatment for drug abuse. Hospital Community Psychiatry, 34, 1145-1149.

Corey, G. (1985). Theory and Practice of Counselling and Psychotherapy (3rd ed.). California: Brooks/Cole.

Cox, D. R., & Oakes, D. (1984). Analysis of Survival Data. London: Chapman & Hall.

DeMaris, A. (1989). Attrition in batterers' counseling: The role of social and demographic factors. Social Service Review, 63, 142-154.

Dembo, R., Williams, L., Berry, E., & Getreau, A. (1988). The relationship between physical and sexual abuse and illicit drug abuse: A replication among a new sample of youths entering a juvenile detention centre. International Journal of The Addictions, 23, 1101-1123.

Dutton, D. G. (1986). The outcome of court-mandated treatment for wife-assault: A quasi-experimental evaluation. Violence and Victims, 1, 163-175.

Dutton, D. G. (1995). The domestic assault of women. Psychological and criminal justice perspectives. Vancouver: UBC Press.

Epstein, E. E., McCrady, B. S., Miller, K. J., & Steinberg, M. (1994). Attrition from conjoint alcoholism treatment: Do dropouts differ from completers? Journal of Substance Abuse, 6, 249-265.

Fagan, J. A., Stewart, D. K., & Hansen, K. V. (1983). Violent men or violent husbands? Background factors and situational correlates. In D. Finkelhor, R. J. Gelles,

G. T. Hotaling, & M. A. Strauss (Eds.), The Dark Side of Families: Current family violence research (pp. 59-67). Beverly Hills, CA.: Sage.

Faulkner, K. K., Cogan, R., Nolder, M., & Shooter, G. (1991). Characteristics of men and women completing cognitive/behavioral spouse abuse treatment. Journal of Family Violence, 6, 243-254.

Feigl, P., & Zelen, M. (1965). Estimation of exponential survival probabilities with concomitant information. Biometrics, 21, 826-838.

Fitch, F. J., & Papantonio, A. (1983). Men who batter: Some pertinent characteristics. The Journal of Nervous and Mental Disease, 171, 190-192.

Garfield, S. L. (1986). Research on client variables in psychotherapy. In S. L. Garfield & A. E. Bergin (Eds.), Handbook of Psychotherapy and Behavior Change, 3rd ed. (pp. 213-256). New York: Wiley.

Gondolf, E. W., & Foster, R. A. (1991). Pre-program attrition in batterer programs. Journal of Family Violence, 6, 337-349.

Gottfredson, M. R., & Hirschi, T. (1990). A general theory of crime. Stanford, CA: Stanford University Press.

Grusznski, R. J. & Carrillo, T. P. (1988). Who completes batter's treatment groups? An empirical investigation. Journal of Family Violence, 3, 141-150.

Hahn, J., & King, K. P. (1982). Client and environmental correlates of patient attrition from an inpatient alcoholism treatment center. Journal of Drug Education, 12, 75-86.

Hamberger, L. K., & Hastings, J. E. (1989). Counseling male spouse abusers:

Characteristics of treatment completers and dropouts. Violence and Victims, 4, 275-286.

Hanson, R. K. (1993). The Abuse Inventory. Unpublished Questionnaire.

Hanson, R. K. (1993). The Commitment to Change Scale. Unpublished Questionnaire.

Hanson, R. K. (1993). The Family History Questionnaire. Unpublished Questionnaire.

Hanson, R. K. (1993). The Likely Consequences Scale. Unpublished Questionnaire.

Hanson, R. K. (1998). Attitudes as a risk factor for wife abuse. Unpublished raw data.

Hanson, R. K., Steffy, R. A., & Gauthier, R. (1993). Long-Term Recidivism of Child Molesters. Journal of Consulting and Clinical Psychology, 61, 646-652.

Harrell, A. (1991). Evaluation of court-ordered treatment for domestic violence offenders: Final Report. Baltimore, MD: State Justice Institute.

Harwell, M. R., Rubinstein, E. N., Hayes, W. S., Olds, C. C. (1992). Summarizing Monte Carlo results in methodological research: The one and two-factor fixed effects ANOVA cases. Journal of Educational Statistics, 17, 315-333.

Holtzworth-Munroe, A., & Stuart, G. L. (1994). Typologies of male batterers: Three subtypes and the differences among them. Psychological Bulletin, 116, 476-497.

Jennings, J. L. (1987). History and issues in the treatment of battering men: A case for unstructured group therapy. Journal of Family Violence, 2, 193-213.

Kadden, R. M., Cooney, N. L., Getter, H., & Litt, M. D. (1989). Matching alcoholics to coping skills or interactional therapies: Posttreatment results. Journal of

Consulting and Clinical Psychology, 57, 698-704.

Kalbleisch, J. D., & Prentice, R. L. (1980). The Statistical Analysis of Failure Time Data. New York: John Wiley & Sons.

Krasnoff, A. (1976). Differences between alcoholics who complete or withdraw from treatment. Journal of Studies on Alcohol, 37, 1666-71.

L'Abate, L., & Goodrich, M. E. (1980). Marital Adjustment. In R. H. (Ed.), Encyclopedia of Clinical Assessment. Vol 1. San Francisco: Jossey-Press.

Lefebvre, A., Sommerauer, J., Cohen, N., & Waldron, S., & Perry, I. (1983). Where did all the 'no-shows' go? Canadian Journal of Psychiatry, 28, 387-390.

Leigh, I., Ogborne, A. C., & Cleland, P. (1984). Factors associated with patient dropout from an outpatient alcoholism treatment service. Journal of Studies on Alcohol, 45, 359-362.

Leonard, K. E., Brommet, E. J., Parkinson, D. K., Day, N. L., & Ryan, C. M. (1985). Patterns of alcohol abuse and physically aggressive behavior in men. Journal of Studies on Alcohol, 46, 279-282.

Locke, H. J., & Wallace, K. M. (1959). Short marital adjustment and prediction tests: Their reliability and validity. Marriage and Family Living, 21, 251-255.

Longo, D. A., Lent, R. W., & Brown, S. T. (1992). Social cognitive variables in the prediction of client motivation and attrition. Journal of Counseling Psychology, 39, 447-452.

Loza, W., & Simourd, D. J. (1994). Psychometric evaluation of The Level of Supervision Inventory (LSI) among male Canadian offenders. Criminal Justice and

Behavior, 21, 468-480.

McCord, J. (1983). A forty-year perspective on the effects of child abuse and neglect. Child Abuse and Neglect, 7, 265-270.

McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. Journal of Social Psychology, 52, 81-90.

Mellor, S., Conroy, L., & Masteller, B. K. (1986). Comparative trait analysis of long-term recovering alcoholics. Psychological Reports, 58, 411-418.

Metz, C. E., Shen, J., & Wang, P. (1989). ROCFIT (computer software). Chicago: Authors.

Moffit, T. E., Caspi, A., Krueger, R. F., Magdol, L., Margolin, G., Silva, P. A., et al. (1997). Do partners agree about abuse in their relationship? A psychometric evaluation of interpartner agreement? Psychological Assessment, 9, 47-56.

Motiuk, M. S., Motiuk, L. L., & Bonta, J. (1992). A comparison between self-report and interview-based inventories in offender classification. Criminal Justice and Behavior, 19, 143-159.

Murphy, C. M., Meyer, S., & O'Leary, K. D. (1993). Family of origin violence and MCMI-II psychopathology among partner assaultive men. Violence and Victims, 8, 165-175.

Murphy, C. M., Meyer, S., & O'Leary, K. D. (1994). Dependency characteristics of partner assaultive men. Journal of Abnormal Psychology, 103, 729-735.

Overall, B., & Aronson, H. (1962). Expectations of psychotherapy in lower socio-economic class patients. American Journal of Orthopsychiatry, 32, 271-272.

Paitich, D. (1977). The Clarke Vocabulary Scale. Toronto, Ontario: Clarke

Institute of Psychiatry.

Palmer, S. E., Brown, R. A., & Barrera, M. E. (1992). Group treatment program for abusive husbands: Long-Term Evaluation. American Journal of Orthopsychiatry, 62, 276-283.

Palmer, J. A., Palmer, L. K., Williamson, D., Michiels, K., & Thigpen, B. (1995). Childhood abuse as a factor in attrition from drug rehabilitation. Psychological Reports, 76, 879-882.

Paulhus, D. L. (1984). Two-component models of socially desirable responding. Journal of Personality and Social Psychology, 46, 598-609.

Paulhus, D. L. (1986). Self-deception and impression management in test responses. In A. Angleitner & J. S. Wiggins (Eds.), Personality Assessment Via Questionnaire (pp. 142-165). New York: Springer.

Paulhus, D. L. (1988). Assessing self-deception and impression management in self-reports: The Balanced Inventory of Desirable Responding. Unpublished Manual, University of British Columbia, Vancouver, Canada.

Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), Measures of Personality and Social Psychological Attitudes, (pp. 17-59). Academic Press

Pekarik, G. (1985). Coping with dropouts. Professional Psychology: Research and Practice, 16, 114-123.

Pekarik, G. (1991). Relationship of expected and actual treatment duration for child and adult clients. Journal of Clinical Child Psychology, 20, 121-125.

Pekarik, G., & Stephenson, L. A. (1988). Adult and child client differences in dropout research. Journal of Clinical Child Psychology, 17, 316-321.

Pence, E., & Maymer, M. (1993). Education groups for men who batter: The duluth model. New York: Springer.

Petrik, N. D., Petrik, R. E., & Subotnik, L. C. (1993). The prediction of completion of treatment for male abusers: A pilot study. Research and Treatment Issues, 9, 20-22.

Pike, M. C. (1966). A method of analysis of certain class of experiments in carcinogenesis, Biometrics, 22, 142-161.

Pirog-Good, M. A., & Stets-Kealey, J. (1985). Male batterers and battering prevention programs: A national survey. Response to the Victimization of Women and Children, 8, 8-12.

Pirog-Good, M. A., & Stets, J. (1986). Programs for abusers: Who drops out and what can be done. Response to the Victimization of Women and Children, 9, 17-19.

Prentky, R. A., Knight, R. A., Lee, A. F., & Cerce, D. D. (1995). Predictive validity of lifestyle impulsivity for rapists. Criminal Justice and Behaviour, 22, 106-128.

Prochaska, J. O., & DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. Psychotherapy, Theory, Research and Practice, 19, 276-288.

Ravndal, E., & Vaglum, P. (1994). Self-reported depression as a predictor of dropout in a hierarchical therapeutic community. Journal of Substance Abuse Treatment, 11, 471-479.

Reitsma-Street, M., & Leschied, A. W. (1988). The conceptual-level matching

model in corrections. Criminal Justice and Behavior, 15, 92-108.

Rodgers, K. (1994). Wife assault: The findings of a national survey. Juristat Service Bulletin, 14, 1-21.

Roffman, R. A., Klepsch, R., Weptz, J. S., & Simpson, E. E., & Stephenson, R. S. (1993). Predictors of attrition from an outpatient marijuana-dependence counseling program. Addictive Behaviors, 16, 553-566.

Rogers, C. R. (1942). Counseling and Psychotherapy. Cambridge: Houghton Mifflin Company.

Rondeau, G., Brochu, S., & Lemire, G. (1994). Review of the literature on treatment programs for men who are violent within their familial relations. Ottawa: Solicitor General of Canada.

Rosenbaum, A., & O'Leary, K. D. (1981). Marital violence: Characteristics of abusive couples. Journal of Consulting and Clinical Psychology, 49, 63-71.

Saunders, D. G. (in press). Feminist-cognitive-behavioral and process-psychodynamic treatments for men who batter: Interaction of abuser traits and treatment models. Victims and Violence.

Saunders, D. G., & Hanusa, D. (1986). Cognitive-Behavioral treatment of men who batter. The short-term effects of group therapy. Journal of Family Violence, 1, 357-377.

Saunders, D. G., & Parker, J. C. (1989). Legal sanctions and treatment follow-through among men who batter: A multivariate analysis. Social Work Research and Abstracts, 25, 21-29.

Shorts, I. (1988). A community-based vocational preparation/training programme for delinquent youths: General Aptitudes as predictors of attrition? International Journal of Offender Therapy and Comparative Criminology, 32, 179-184.

Sidall, J. W., & Conway, G. L. (1988). Interactional variables associated with retention and success in residential drug treatment. The International Journal of the Addictions, 23, 1241-1254.

Simourd, D. J. (1997). The Criminal Sentiments Scale-modified and Pride and Delinquency Scale. Criminal Justice and Behavior, 24, 52-70.

Stern, G., & Brown, R. (1994). The effect of a waiting list on attendance at initial appointments in a child and family clinic. Child Care, Health, and Development, 20, 219-230.

Stosny, S. (1994). "Shadows of the heart": A dramatic video for the treatment resistance of spouse abusers. Social Work, 39, 686-694.

Tinsley, H. E., Workman, K. R., & Kass, R. A. (1980). Factor analysis of the domain of client expectancies about counseling. Journal of Counseling Psychology, 27, 561-570.

Tolman, R. M. (1989). The development of a measure of psychological maltreatment of women by their male partners. Violence and Victims, 4, 159-177.

Tolman, R. M., & Bennett, L. W. (1990). A review of quantitative research on men who batter. Journal of Interpersonal Violence, 5, 87-118

Weirzbicki, M., & Pekarik, G. (1993). A meta-analysis of psychotherapy dropout. Professional Psychology: Research and Practice, 24, 190-195.

Wexler, H. K., & DeLeon, G. (1977). The therapeutic community: Multi-variate

prediction of retention. American Journal of Drug and Alcohol Abuse, 4, 145-151.

Whitfield, C. L. (1987). Healing the inner child. Deerfield Beach, FL: Health Communications.

Widom, C. S. (1989). Child abuse, neglect, and adult behavior: Findings on criminality, violence and child abuse. American Journal of Orthopsychiatry, 59, 355-367.

Yalom, I. D. (1995). The theory and practice of group psychotherapy (4th ed.). New York: Basic Books.

APPENDIX A

AGREEMENT TO PARTICIPATE IN THE STUDY

I have been asked to participate in a study which is looking at the effectiveness of the Anger Management Treatment at the Pastoral Institute. This study is also taking place in four other programs in other parts of Canada. This study is sponsored by the Corrections Research Branch, Ministry Secretariat, Solicitor General of Canada and the actual research is being done by J & J Research Associates Ltd. of New Brunswick.

I understand that my participation in the study is completely voluntary. I understand that my decision whether to participate in the study will not affect how I or my partner are treated by the Pastoral Institute.

I understand that all information I provide will be kept confidential and known only to the researchers. No information that I provide will be given to my partner. Nor will the researchers tell me what my partner said about me. The person who collects the information I provide will be different from the person who collects the information from my partner. All reports of the research will present only group information so that it will be impossible for anyone to identify individual participants in the study. As well, all identifying information, such as this form, will be kept separately and in a secure location to which only the Project Director has access.

I understand that I will be asked to answer questions concerning my history, behaviour and attitudes several times during the next 12 months. These times are as follows:

- 1) When I start the program;
- 2) When I complete the program;
- 3) Six months after I complete the program.

I understand that each set of questions will take me approximately one and a half hours to complete and that I will be paid \$20.00 for each set of questions or I can have the first payment applied to the fee for my program.

I understand that I can withdraw from the study at any time and have my record of participation removed.

I understand that my partner (or, in some cases, my ex-partner) will be asked to give her perspective at each of the above times.

I understand that the researchers may want to know if anyone participating in the study gets into trouble with the law in coming years. I agree that my criminal record can be examined at any time by the research staff for this research purpose only.

I have read and understood the above description of the research study and I agree to participate.

Signature: _____ Date: _____

Name (Please Print): _____

We hope that you will feel able to participate in this important study. If you have any questions or concerns about the study, please feel free to contact us.

Dr. R. K. Hanson
Project Director
Corrections Research
Ministry Secretariat
(613)991-2840

Dr. C. James Richardon
J & J Research Associates
416 Charlotte Street
Fredericton, N. B. E3B 1L8
(506) 457-1000

APPENDIX B

Self-Report Version of Level of Service Inventory

This is a questionnaire that asks you to tell us about your life and present situation.

Read each question and statement very carefully. You will be required to answer some statements by circling "true" (T) or "false" (F), some questions by circling "yes" or "no", and some by simply filling in the appropriate number.

Subcomponent A

1. How many times have you been convicted of a criminal offence since your 16th birthday (do not count any present convictions)? __
2. How many offenses are you convicted of at present? __
3. Have you ever been arrested as a juvenile (under age 16)? Yes No
4. Have you ever served a jail sentence before (do not count this present sentence)?
Yes No
5. Have you ever escaped from an institution? Yes No
6. How many times have you been punished for an institutional misconduct? __
7. Have you ever been arrested while on probation or parole? Yes No
8. If you have been on parole, was it ever suspended/revoked? Yes No
9. Have you ever been convicted of any of the following offenses: assault, attempted murder, rape, armed robbery, robbery, manslaughter, indecent assault? Yes No

Subcomponent A __

Subcomponent B

10. During the past year, how many months were you fully employed? ____

11. For how many months or years was your longest job? ____

12. Have you ever been fired from a job? Yes No

13. Are you currently employed Yes No

14. How long have you had your current job _____

15. What is your current job (describe briefly) _____

16. If you are working, complete the following "true" or "false" questions:
(If you are unemployed, go to section C. If you are in school, go to question#19)

a) I hate my job because it is boring and it gives me no satisfaction.
 T F

b) I see my job as only a way of making money and I'd leave if something else
 came along. T F

c) Whenever I feel like having some time off, I simply call in sick at work.
 T F

d) I get along well with my co-workers. T F

e) I usually spend my coffee breaks or have lunch with my co-workers. T F

f) I find my co-workers are friendly, cooperative and always willing
 to help each other out. T F

g) I find my boss unfair and I often refuse to follow his/her orders. T F

h) I would never speak to my boss about personal problems T F

i) I spend very little time with my boss after work. T F

17. What is your last grade completed? ____

18. Have you ever been suspended or expelled from school? Yes No
19. If you are in school, complete the following "true" or "false" questions:
(If you are working, then you have already completed section #16, therefore go to next section; If you are unemployed and not in school go to the next section)
- a) I skip classes once in a while. T F
 - b) I almost always finish my homework on time. T F
 - c) I spend a lot of time working on my school grades. T F
 - d) I get along well with my classmates. T F
 - e) My best friends go to my school. T F
 - f) I either argue a lot with my classmates or just ignore them. T F
 - g) I usually avoid talking to the teachers, either
because I don't like them or find them boring. T F
 - h) Most of my teachers seem to dislike me. T F
 - i) I have been in trouble at school for which I was sent
to the principal's office. T F

Subcomponent B __

Subcomponent C

20. I have an excellent credit rating and have no trouble repaying my loans. T F
21. I have a credit card and pay the balance on time. T F
22. I have had a credit card taken away because I did not pay what I owed. T F
23. I have never been able to get a credit card. T F
24. I have a mortgage or could get a mortgage if I wanted one. T F
25. I am in debt "up to my ears" and should probably declare personal bankruptcy.
T F
26. I have been on welfare. T F
27. I have been on Unemployment Insurance. T F
28. I have received welfare during the last three months. T F
29. During the last three months, I have received Unemployment Insurance.
T F
30. What was your total personal income during the last year _____
31. What was the total income of your household during the past year _____.

Subcomponent C ____**Subcomponent D**

32. Do you have a wife or girlfriend right now? Yes No
33. If you have a wife or girlfriend, answer the following
"true" or "false" questions:
- a) My wife/girlfriend and I have a very close and positive relationship T F
- b) We have very few arguments. T F

- c) We have complete trust and faith in each other. T F
34. Both my parents are deceased. Yes No
35. I have not seen my parents in a long time and I have no plans no see them.
Yes No
36. If you have parents or foster parents, answer the following "true" or "false" questions:
- a) I find it easy to talk to my parents. T F
 - b) I see, or write to, my parents regularly. T F
 - c) I think it is important to try and do well for your parents. T F
 - d) My parents are very supportive and will stand by me whenever I need them. T F
37. I like most of my relatives (brothers, sisters, uncles, aunts, cousins, grandparents).
T F
38. I see, or write to, my relatives regularly. T F
39. I can count on most of my relatives for their help. T F
40. No one in my family (parents, wife, brothers, or other relatives) has a criminal record. T F

Subcomponent D __

Subcomponent E

41. In the past year, how many times have you moved (do not count being in a jail or prisons)? __
42. I know a lot of people with criminal records who live in my neighbourhood. T F
43. I have no fixed address. T F
44. I don't like the place where I live. T F
45. I can't wait to move from my place. T F

Subcomponent E __

Subcomponent F

46. During the past year, I have been an active member of one of the following: an union, service clubs, sports clubs and teams, church. T F
47. During my spare time, I enjoy doing sports, watching T.V. or listening to music at home. T F
48. I spend a lot of time with my hobbies (e.g., stamp collecting, model building, weightlifting) T F
49. During my spare time, I usually go out to a bar or to a friend's place, to drink and/or get high. T F
50. During my spare time, I spend a lot of time in criminal activity or "planning a job". T F

Subcomponent F __

Subcomponent G

51. I am somewhat of a loner. T F
52. How many people do you know have a criminal record or have been involved in crime? _____
53. How many of your close friends have a criminal record or have been involved in crime? _____
54. How many of your close friends have never been involved in crime and have no criminal records? _____
55. How many people do you know have never been involved in crime and have no criminal records? (use scale provided)
- all most about half less than half none

Subcomponent G ____**Subcomponent H**

56. In the last three months, I drank (circle one of the following):
 never sometimes most of the time all the time

57. I think that I drink too much T F

58. My drinking has caused problems at home during the past few months T F

59. My drinking has caused problems at work or school during the past few months
 T F

60. When I drink, I tend to get into trouble with the law T F

61. When I drink, I become verbally abusive T F

62. When I drink, I become physically abusive T F

63. My drinking has caused arguments with my parents T F

64. I have lost a job because of drinking T F

65. I has been sent home from school or work because I drank too much T F

66. My doctor has told me to stop drinking T F

67. I have passed out from drinking too much T F

68. In the morning after a drinking binge, my hands shake. T F

69. Once I have one drink, it is hard for me to stop. T F

70. Although I have quit drinking now, I used to drink heavily.
 (Answer only if you have quit drinking.) T F

71. List the drugs (non-prescribed) that you have taken in the
 last three months _____

72. How many times in the last three months did you smoke hash or pot? _____
73. How many times in the last three months did you have any other street drugs? _____
74. My drug use has caused problems at home during the past few months T F
75. My drug use has caused problems at work or school during the past few months
T F
76. When I am high on drugs, I tend to get into trouble with the law. T F
77. When I am high on drugs, I become verbally abusive T F
78. When I am high on drugs, I become physically abusive T F
79. My drug use has caused arguments with my parents T F
80. I have lost a job because of drug-taking T F
81. I have been sent home from school or work because I did too many drugs. T F
82. My doctor told me to stop taking drugs. T F
83. I have overdosed from taking too many drugs. T F
84. Once I have smoked a joint, or popped a pill, or done a line, it is hard for me to stop.
T F
85. I used to take a lot of drugs, but I do not anymore
(Answer only if you have quit taking drugs.) T F

Subcomponent I

86. Have you ever been ordered by a judge to undergo a psychological or psychiatric assessment? Yes No
87. Have you ever been to a psychologist or a psychiatrist? Yes No
88. Have you ever been committed to a psychiatric hospital? Yes No
89. Have you ever attempted suicide? Yes No
90. Are you presently receiving psychological or psychiatric treatment (e.g., individual counselling or relaxation training)? Yes No
91. Do you think that you should be seen by a psychologist or psychiatrist? Yes No

Subcomponent I ____**Subcomponent J**

Please answer the following questions using the rating scale provided:

1. Strongly Disagree
2. Disagree
3. Neutral/Cannot Say
4. Agree
5. Strongly Agree

_____ 92. Hitting your wife or partner a few times is not something that should be against the law.

_____ 93. If my partner gets hurt when we are fighting, that is nobody's business but our own.

_____ 94. If my partner is unhappy with the way I treat her, she should try treating me better.

_____ 95. I have a lot of respect for people who run treatment programs for abusive men.

_____ 96. The people who have tried to help me change my abusive

behaviour have been kind and fair.

_____ 97. The people who have been concerned about how I treat my partner are generally people I do not like.

Subcomponent J _____

APPENDIX C

Level of Service Inventory

A. CRIMINAL HISTORY ()

1. Any prior convictions, adult/number ()
2. Two or more prior convictions
3. Three or more prior convictions
4. Three or more present offences/number ()
5. Arrested under age 16
6. Ever incarcerated upon conviction
7. Escape history-institution
8. Ever punished for institutional misconduct/number ()
9. Charge laid or parole/probation suspended during/prior supervision
10. Official record of assault/violence

EDUCATION/EMPLOYMENT ()

11. Currently unemployed
12. Frequently unemployed
13. Never employed for full year
14. Ever fired
15. Less than grade 10
16. Less than regular grade 12
17. Suspended or expelled at least once

18. Participation/Performance

19. Peer interactions

20. Authority interactions.

LC. FINANCIAL ()

21. Problems
22. Social Assistance (past)
23. Social Assistance (present)

LD. FAMILY/MARITAL ()

24. Nonrewarding, parental
25. Nonrewarding, other relatives
26. Criminal -Family/Spouse

LE. ACCOMODATION ()

27. Unsatisfactory
28. 3 or more address changes last year/number

29. High crime neighborhood

LF. LEISURE/RECREATION ()

30. No recent participation in an organized activity
31. Could make better use of time

LG. COMPANIONS ()

32. A social isolate
33. Some criminal acquaintances

- 34. Some criminal friends
- 35. Few anti-criminal friends
- 36. Few anti-criminal acquaintances

LH. ALCOHOL/DRUGS ()

- 37. Alcohol problem, ever
- 38. Drug problem, ever
- 39. Alcohol problem, currently
- 40. Drug problem, currently
- 41. Law violations
- 42. Marital/Family
- 43. School/Work
- 44. Medical
- 45. Other clinical indicators

LI EMOTIONAL/PERSONAL ()

- 46. Moderate interference
- 47. Severe interference
- 48. Psychiatric treatment. past
- 49. Psychiatric treatment, current
- 50. Psychological assessment indicated

LJ. ATTITUDE/ORIENTATION ()

- 51. Supportive of wife assault
- 52. Victim blaming
- 53. Poor, toward treatment leaders
- 54. Poor, toward other pro-social

APPENDIX D

Basic information Questionnaire

Initial Assessment Date:

Your family name:

First Name:

Middle:

Other names used:

Birth date: day month year

Age:

Your partner's name:

First Name:

Middle:

Birth date: day month year

Age:

In this questionnaire, you will be asked different types of questions about yourself and your relationships. Read each question carefully.

Here are some examples:

1) I am a male. YES NO

(You have to circle either Yes or No)

2) How many times did you watch the news on TV last week?

never once 2-5 times 6 or more times

(circle the closest number)

3) Using the scale provided, answer the following question:

1. strongly agree
2. agree
3. neither agree nor disagree
4. disagree
5. strongly disagree

I enjoy watching hockey games 1 2 3 4 5
(You are to circle the number that seems right for you).

How long have you been with your current partner? _____

Are you currently:

legally married?	yes	no
in a common-law relationship?	yes	no
living with your partner?	yes	no
separated/divorced?	yes	no

If you are separated from your most recent partner, how often do you see her in person?

1. never
2. once every couple of months or less
3. about once a month
4. about once a week
5. a few times a week
6. daily

If you are separated from your most recent partner, how often do you talk to her on the telephone?

1. never
2. once every couple of months or less
3. about once a month
4. about once a week
5. a few times a week
6. daily

If you are currently separated from your partner, do you think that you will reconcile with her?

1. definitely yes
2. probably yes
3. don't know
4. probably no
5. definitely no

Have you ever been legally married:

never once twice 3 or more times

Have you ever been in a common-law relationship:

never once twice 3 or more times

Are you currently:

a.	under court order to receive treatment for wife assault	yes	no
b.	voluntarily seeking treatment for wife assault	yes	no
c.	seeking treatment/counseling for problems other than wife assault	yes	no
d.	not seeking treatment/counseling of any kind	yes	no

APPENDIX E

Commitment to Change Scale

Please answer the following questions using the rating scale provided.

1. strongly disagree
2. disagree
3. don't know, neutral
4. agree
5. strongly agree

1. I have a problem with the way I treat my partner(s). 1 2 3 4 5
2. My problems with my partner are mostly her fault. 1 2 3 4 5
3. I want to change the way I treat my partner. 1 2 3 4 5
4. If I don't get help I will continue to treat my partner(s) badly. 1 2 3 4 5
5. I have made a commitment to change the way I treat my partner(s) 1 2 3 4 5
6. I have never had any serious problems with my partner(s). 1 2 3 4 5
7. I have to be careful if I am not going to keep abusing my partner. 1 2 3 4 5
8. The only reason I am going (or went) to the program is because I had to. 1 2 3 4 5
9. There is nothing that I can learn from a program on male battering. 1 2 3 4 5
10. I have committed myself to ending male violence towards women. 1 2 3 4 5
11. I am ashamed at how I have treated my partner(s). 1 2 3 4 5
12. When I think of what I have done to my partner(s), I wonder how many women would want to live with me. 1 2 3 4 5

APPENDIX F

Likely Consequences Scale

If you were to assault your partner sometime in the future, how likely would it be for the following things to happen?

1. certainly would not happen
 2. some chance, but unlikely
 3. may or may not happen
 4. probably would happen
 5. certainly or almost certainly would happen
-
1. my partner would somehow get back at me 1 2 3 4 5
 2. my partner would be upset for a long time 1 2 3 4 5
 3. our relationship would be ruined 1 2 3 4 5
 4. I would feel ashamed for a long time 1 2 3 4 5
 5. my partner would call the police 1 2 3 4 5
 6. my partner would leave temporarily 1 2 3 4 5
 7. my partner would leave permanently 1 2 3 4 5
 8. my family would find out 1 2 3 4 5
 9. if my family found out,
 they would be angry with me 1 2 3 4 5
 10. my friends would find out 1 2 3 4 5
 11. if my friends found out,
 they would be angry with me 1 2 3 4 5
 12. I would be arrested 1 2 3 4 5
 13. I would be convicted 1 2 3 4 5
 14. I would go to jail 1 2 3 4 5
 15. I would be forced to take treatment 1 2 3 4 5

16. I would lose my job 1 2 3 4 5
(if unemployed, it would be harder
to get a job)

17. Overall, I would expect things would be about

slightly the same the same quite a bit worse a lot worse

APPENDIX G

-
- A horizontal dot plot representing a scale from 'Very Unhappy' to 'Perfectly Happy'. There are seven dots plotted along the scale at approximately 10%, 25%, 40%, 55%, 70%, 85%, and 95% positions.
Happiness Level	Count (Number of Dots)
Very Unhappy	1
Slightly Unhappy	1
Moderately Unhappy	1
Slightly Happy	1
Moderately Happy	1
Nearly Happy	1
Perfectly Happy	1

	Always Agree	Almost Always Agree	Occasionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
2. Handling family finances						
3. Matters of recreation						
4. Demonstrations of affection						
5. Friends						
6. Sex relations						
7. Conventionally (right, good, or proper conduct)						
8. Philosophy of life						
9. Ways of dealing with in-laws						

10. When disagreements arise, they usually result in

- ☐ husband/male partner giving in
- ☐ wife/female partner giving in
- ☐ agreement by mutual give and take

11. Do you and your partner engage in outside interests together?

- ☐ all of them
- ☐ some of them
- ☐ very few of them
- ☐ none of them

12. In leisure time do you generally prefer:

- ☐ to be "on the go"
- ☐ to stay at home

Does your partner generally prefer:

- ☐ to be "on the go"
- ☐ stay at home

13. Do you ever wish you had not married? If common-law, do you wish you had not committed yourself to your current relationship?

- ☐ frequently
- ☐ occasionally
- ☐ rarely
- ☐ never

14. If you had your life to live over, do you think you would:

- ☐ marry/choose the same person
- ☐ marry/choose a different person
- ☐ not marry at all

15. Do you confide in your partner:

- ☐ almost never
- ☐ rarely
- ☐ in most things
- ☐ in everything

APPENDIX H

The Abuse Inventory

The following questions concern how you think your partner has ever felt about you:

1. My partner did things my way because she was afraid of me. Yes No Don't Know
2. She felt in danger around me. Yes No Don't Know
3. She was worried that I would hurt her Yes No Don't Know
4. She thought I might kill her. Yes No Don't Know
5. She felt that it was safe to argue with me. Yes No Don't Know
6. My partner felt that she had to be careful not to make me angry. Yes No Don't Know
7. She felt that I would destroy possessions precious to her Yes No Don't Know
8. She wanted to leave me but was afraid of what I might do. Yes No Don't Know
9. She felt that if she left I would kill our family pet. Yes No Don't Know
10. She felt controlled by me. Yes No Don't Know
11. She felt free to make her own decisions. Yes No Don't Know
12. I made her feel that she was a bad person. Yes No Don't Know
13. She felt that she could not please me no matter what she did. Yes No Don't Know
14. She felt that I treated her so badly that she was ashamed to talk about it. Yes No Don't Know
15. She felt worthless because I treated her so badly. Yes No Don't Know

Answer the following questions if you have children:

16. My partner was afraid of what I might do to the children. Yes No Don't Know

17. The children were afraid of me. Yes No Don't Know

18. The children were upset by how I treated my partner. Yes No Don't Know

How many times have you ever done the following things.

19. Made her do sexual things that she did not want to do

Never once 2-5 6-10 11-20 more than 20 times

20. Hurt her sexually

Never once 2-5 6-10 11-20 more than 20 times

21. Made her have intercourse when she did not want to

Never once 2-5 6-10 11-20 more than 20 times

22. Threatened to hurt my partner physically (e.g., by hitting, kicking, slapping)

Never once 2-5 6-10 11-20 more than 20 times

23. Physically hurt my partner

Never once 2-5 6-10 11-20 more than 20 times

24. Hurt her so much that she had injuries that lasted for days (e.g., bruises, cuts, burns)

Never once 2-5 6-10 11-20 more than 20 times

25. Hurt her so much that she had injuries that lasted for weeks or months (e.g., broken bones, deep cuts) YES NO

If yes, please describe

26. Are any of the above injuries likely to be permanent? YES NO

If yes, please elaborate

Answer the following questions if you were separated from your partner for some period in the past.

27. I attempted to contact her when she did not want me to. YES NO

28. I threatened to hurt myself if she did not return. YES NO

29. I followed her. YES NO

30. I would not leave when she wanted me to. YES NO

Answer the following if you had children when you were separated from her.

31. I threatened to hurt the children if she did not return. YES NO

32. I was uncooperative/manipulative with the children.

Never a few times frequently most of the time always

33. Were there other things that you have ever done that made your partner feel hurt, scared, and/or abused? YES NO

If yes, please describe

APPENDIX I

21-Item Psychological Maltreatment of Women Scale

**We are interested in what you have been doing in your relationship recently.
During the last three months, how frequently have you done the following things:**

- 1 - never
- 2 - rarely
- 3 - sometimes
- 4 - frequently
- 5 - very frequently

1. Was insensitive to her feelings.	1	2	3	4	5
2. Said something to spite her.	1	2	3	4	5
3. Brought up something from the past to hurt her.	1	2	3	4	5
4. Called her names.	1	2	3	4	5
5. Swore at her.	1	2	3	4	5
6. Yelled and screamed at her.	1	2	3	4	5
7. Treated her like an inferior.	1	2	3	4	5
8. Did not let her talk about her feelings.	1	2	3	4	5
9. My moods changed radically, from calm to angry, or vice versa.	1	2	3	4	5
10. Blamed her when I was upset about something, even when it had nothing to do with her.	1	2	3	4	5
11. Became upset if dinner, housework, or laundry was not done when I thought it should be done.	1	2	3	4	5
12. Acted like she was my personal servant.	1	2	3	4	5
13. Ordered her around.	1	2	3	4	5
14. Monitored her time and made her account for where she was.	1	2	3	4	5
15. Was stingy in giving her money to run our home.	1	2	3	4	5
16. Was jealous or suspicious of her friends.	1	2	3	4	5

17. Was jealous of other men.	1	2	3	4	5
18. Accused her of having an affair with another man.	1	2	3	4	5
19. Tried to keep her from doing things to help herself.	1	2	3	4	5
20. Tried to convince her friends, family, or children that she was crazy.	1	2	3	4	5
21. Demanded obedience to my whims.	1	2	3	4	5

APPENDIX J

Family History Questionnaire

Mother

When you were a child, the adult female who did the most to raise and care for you was:

- a) your biological mother
- b) a step-mother
- c) a foster-mother
- d) other female figure
- e) there was no adult female who helped raised me. (If you had no mother around and nobody acted like a mother to you, go to the next section)

When you were a child how frequently did your mother (or step-mother, foster mother) do the following things:

- 1. never
- 2. a few times
- 3. occasionally
- 4. frequently
- 5. almost all the time

1. was kind and supportive	1 2 3 4 5
2. understood what I wanted	1 2 3 4 5
3. treated me with respect	1 2 3 4 5
4. made me feel that I was loved	1 2 3 4 5
5. yelled and screamed at me	1 2 3 4 5
6. made me feel that I was no good	1 2 3 4 5
7. ignored my needs	1 2 3 4 5
8. neglected me	1 2 3 4 5
9. humiliated me	1 2 3 4 5
10. scared me	1 2 3 4 5
11. threatened to leave me	1 2 3 4 5

12. threatened to physically hurt me 1 2 3 4 5
(e.g., hit, kick, slap, burn, etc.)

13. physically hurt me 1 2 3 4 5
(e.g., hit, kick, slap, burn)

14. hurt me so much I had injuries that
lasted for days (e.g., bruises, cuts) 1 2 3 4 5

15. hurt me so much I had injuries that
lasted for weeks or months 1 2 3 4 5
(e.g., broken bones, deep cuts)

if yes, please describe briefly

16. Did your mother ever hurt you so much that you have permanent injuries? YES NO

if yes, please describe briefly

17. Do you think that your mother needed to hit or hurt you in order to make you behave?

definitely yes probably yes don't know definitely no probably no

18. Overall, do you think that the way your mother treated you was too harsh and/or abusive?

definitely yes probably yes don't know definitely no probably no

19. Would you want to treat your children the same way that your mother treated you?

definitely yes probably yes don't know definitely no probably no

Father

When you were a child, the adult male who did the most to raise and care for you was:

- a) your biological father
- b) a step-father
- c) a foster-father
- d) other male figure
- e) there was no adult male who helped raised me. (If you had no father around and nobody acted like a mother to you, go to the next section)

When you were a child how frequently did your father (or step-father, foster father) do the following things:

- 1. never
- 2. a few times
- 3. occasionally
- 4. frequently
- 5. almost all the time

1. was kind and supportive	1	2	3	4	5
2. understood what I wanted	1	2	3	4	5
3. treated me with respect	1	2	3	4	5
4. made me feel that I was loved	1	2	3	4	5
5. yelled and screamed at me	1	2	3	4	5
6. made me feel that I was no good	1	2	3	4	5
7. ignored my needs	1	2	3	4	5
8. neglected me	1	2	3	4	5
9. humiliated me	1	2	3	4	5
10. scared me	1	2	3	4	5
11. threatened to leave me	1	2	3	4	5
12. threatened to physically hurt me	1	2	3	4	5

(e.g., hit, kick, slap, burn, etc.)

13. physically hurt me 1 2 3 4 5
(e.g., hit, kick, slap, burn)

14. hurt me so much I had injuries that
lasted for days (e.g., bruises, cuts) 1 2 3 4 5

15. hurt me so much I had injuries that
lasted for weeks or months 1 2 3 4 5
(e.g., broken bones, deep cuts)

if yes, please describe briefly

16. Did your father ever hurt you so much that you have permanent
injuries? YES NO

if yes, please describe briefly

17. Do you think that your father needed to hit or hurt you in
order to make you behave?

definitely yes probably yes don't know definitely no probably no

18. Overall, do you think that the way your father treated you was
too harsh and/or abusive?

definitely yes probably yes don't know definitely no probably no

19. Would you want to treat your children the same way that your
father treated you?

definitely yes probably yes don't know definitely no probably no

APPENDIX K

The Clarke Vocabulary Scale

Below is a list of words. On the left, a word is underlined. Beside it are four choices. Please circle the choice that most closely matches the underlined word. Some of the words are common and some of the words are uncommon. You are not expected to know all of the words. It is O.K. to guess, but do not feel that you have to answer all of the questions.

a -book	A.	is to read	B.	is a ball	C.	is blue	D.	is to run with
a car	A.	is a dance	B.	is to drive	C.	is black	D.	is to eat
a horse	A.	has four legs	B.	is small	C.	lives in a house	D.	flies
a clock	A.	keeps you dry	B.	is deep	C.	tells time	D.	is for cats
a hammer	A.	grows on a tree	B.	is a tool	C.	is for your leg	D.	has a shell
a pillow	A.	is an animal	B.	is hard	C.	is to open jars	D.	is to sleep on
a glove	A.	goes on your hand	B.	goes on your head	C.	is to work with	D.	is a tree
a saw	A.	is to cut with	B.	is to sit on	C.	is to point with	D.	is a page
fur	A.	is blue	B.	is animal hair	C.	is sweet	D.	is on birds
jewel	A.	round	B.	sky	C.	flower	D.	diamond
connect	A.	spill	B.	part	C.	join	D.	feel
shovel	A.	farm	B.	spade	C.	cry	D.	ace
weapon	A.	sword	B.	correct	C.	lip	D.	pecan
nuisance	A.	baby	B.	help	C.	worse	D.	bother
ridiculous	A.	silly	B.	ruined	C.	poor	D.	defenseless
nimble	A.	fat	B.	active	C.	brave	D.	sick
wager	A.	court	B.	dice	C.	gamble	D.	strike
magnify	A.	make smaller	B.	distant	C.	make bigger	D.	handle
fable	A.	fur	B.	watch	C.	rhyme	D.	story
facetious	A.	hungry	B.	witty	C.	weighty	D.	ugly
blemish	A.	flaw	B.	abuse	C.	vaunt	D.	clean
strife	A.	try	B.	verse	C.	battle	D.	wine
seclude	A.	ensure	B.	dream	C.	isolate	D.	obtain
recede	A.	withdraw	B.	deny	C.	repeat	D.	dine
profusion	A.	glitter	B.	plenty	C.	noise	D.	glory
adversary	A.	opponent	B.	explosive	C.	light	D.	grammar
effrontery	A.	bombing	B.	boldness	C.	triviality	D.	belief
impending	A.	valuable	B.	prominent	C.	imminent	D.	obese
abyss	A.	confusion	B.	suicide	C.	monastery	D.	chasm
diverge	A.	asset	B.	vacation	C.	distress	D.	wander
devoid	A.	planet	B.	vacuum	C.	missing	D.	insect
arduous	A.	laborious	B.	shapeless	C.	sterile	D.	proud
vigilant	A.	watchful	B.	careful	C.	literal	D.	winning
relinquish	A.	food	B.	plague	C.	distress	D.	surrender
catacomb	A.	deep valley	B.	Japanese garden	C.	ruined city	D.	underground
indemnity	A.	penalty	B.	subsidy	C.	amity	D.	ordinance
reprobation	A.	approval	B.	censure	C.	slander	D.	verification
dilatory	A.	slow	B.	expanded	C.	selfish	D.	uncertain
requite	A.	admonish	B.	love	C.	repay	D.	commend
imprecation	A.	inaccuracy	B.	scruple	C.	curse	D.	rarity

APPENDIX L

Using the following scale as a guide, write a number beside each statement to indicate how much you agree with it.

	Not True		Somewhat		Very True	
	1		2 3 4 5 6		7	
1. I always throw my litter into waste baskets on the street.	1		2	3	4	5 6 7
2. I have received too much change from a salesperson without telling him (her).	1		2	3	4	5 6 7
3. When I hear people talking privately I avoid listening.	1		2	3	4	5 6 7
4. I have taken things that didn't belong to me.	1		2	3	4	5 6 7
5. I sometimes tell lies if I have to.	1		2	3	4	5 6 7
6. I always keep my promises, no matter how inconvenient it might be to do so.	1	2	3	4	5	6 7
7. I have taken a sick-leave from work or school even though I wasn't really sick.		1	2	3	4	5 6 7
8. I like to gossip about other people's business.		1	2	3	4	5 6 7
9. I have done things that I don't tell other people about.		1	2	3	4	5 6 7
10. I say only good things about my friends behind their backs.	1		2	3	4	5 6 7
11. I sometimes put off until tomorrow what I should do today.	1		2	3	4	5 6 7
12. I always declare everything at customs.	1		2	3	4	5 6 7
13. I have some pretty awful habits.	1		2	3	4	5 6 7
14. I always tell the truth.	1		2	3	4	5 6 7
15. I am sometimes late for appointments.	1		2	3	4	5 6 7

16. I always obey traffic laws even
if I'm unlikely to get caught. 1 2 3 4 5 6 7
17. When I was a child I obeyed my parents. 1 2 3 4 5 6 7
18. I sometimes pick my nose. 1 2 3 4 5 6 7
19. I am always polite to others including my
friends and family. 1 2 3 4 5 6 7
20. I have never cheated on a test
or assignment in any way. 1 2 3 4 5 6 7
21. I have sometimes hated one or both of my parents. 1 2 3 4 5 6 7
22. I am always free of guilt. 1 2 3 4 5 6 7
23. Seeing any attractive person of the opposite sex
makes me think about having sex. 1 2 3 4 5 6 7
24. I have sometimes felt like I wanted to kill someone. 1 2 3 4 5 6 7
25. I could easily quit any of my bad habits if I wanted to. 1 2 3 4 5 6 7
26. I always accept criticism if it is accurate. 1 2 3 4 5 6 7
27. I have felt physically attracted to at least one person
of the same sex. 1 2 3 4 5 6 7
28. I have felt joy over someone else's failure. 1 2 3 4 5 6 7
29. I always return a favour without hesitation. 1 2 3 4 5 6 7
30. It's alright with me if some people
happen to dislike me. 1 2 3 4 5 6 7
31. I'm not interested in knowing what other
people really think about me. 1 2 3 4 5 6 7
32. My parents only punished me when
I really deserved it. 1 2 3 4 5 6 7

33. I sometimes get jealous over the good fortune
of others. 1 2 3 4 5 6 7
34. My parents always loved me no matter what
I did. 1 2 3 4 5 6 7
35. I often have sexual fantasies. 1 2 3 4 5 6 7
36. I have always been certain that I am not
homosexual. 1 2 3 4 5 6 7
37. I have always been confident about my
ability as a sex partner. 1 2 3 4 5 6 7
38. I usually enjoy my bowel movements very much. 1 2 3 4 5 6 7
39. At times I have wanted to rape or be
raped by someone. 1 2 3 4 5 6 7
40. I have thought of committing suicide to
get back at someone. 1 2 3 4 5 6 7

APPENDIX M

Comparison of Measures Between Different Treatment Programs

	Après-Coup (<u>n</u> = 55)		Resolve (<u>n</u> = 70)		Hiatus House (<u>n</u> = 93)		Responsible Choices (<u>n</u> = 72)		
Variable	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>F</u>
LSI scores	14.44	(8.7)	12.64	(8.0)	16.04 ^a	(8.5)	11.99 ^b	(5.8)	4.52**
C. to Change	4.37 ^a	(0.6)	3.67 ^b	(0.7)	4.02 ^c	(0.7)	4.05 ^{ac}	(0.8)	10.31***
L. Consequences	3.38 ^a	(0.7)	3.70	(0.8)	3.85 ^b	(0.8)	3.63	(0.8)	4.34*
Pos. Attitudes	4.23	(0.7)	4.04	(0.8)	4.20	(0.7)	4.26	(0.7)	1.33
SMAI	73.17	(27.1)	75.96	(26.0)	76.97	(30.3)	76.16	(24.9)	0.24
Abuse Inventory (Ever)	-.20 ^a	(0.7)	0	(0.8)	.18 ^b	(0.8)	-.06	(0.6)	3.39*
Abuse Inventory (Recent)	-.05	(0.6)	-.10	(0.7)	.04	(0.9)	.10	(0.7)	1.14
21-item PMWI	2.38	(0.8)	2.08	(0.7)	2.30	(0.8)	2.29	(0.7)	2.04*
Clarke Scale			28.38 ^a	(6.9)	28.11 ^a	(5.7)	30.88 ^b	(4.8)	5.85**
BIDR (manage.)	7.67 ^a	(3.6)	9.88 ^b	(4.6)	8.38	(4.1)	8.08	(3.6)	3.87*
BIDR (deception)	8.96	(2.9)	10.45 ^a	(3.6)	9.10	(3.5)	8.77 ^b	(3.6)	3.43*
Family History	2.33	(0.7)	2.07	(0.7)	2.28	(0.7)	2.17	(0.7)	1.86
Childhood Abuse (%)	38.9		21.9		37.9		26.5		6.96 (χ^2)

Note. 1. * $p < .05$, ** $p < .01$, *** $p < .001$

2. Values with different subscripts were significantly different from each other using Sheffe's test for post-hoc comparisons.

APPENDIX N

Comparison of Scores on Measures Between Current Study and Previous Studies

Measures	Current Study		Previous Studies		Sample	References
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
Level of Service Inventory	13.96	(8.0)	23.70	(9.0)	offender sample	Motiuk et al., 1992
Short Marital Adjustment Inventory	75.79	(27.3)	71.70 ¹		maladjusted couples	Locke-Wallace, 1959
BIDR (Impression Management)	8.5	(4.1)	4.3	(3.1)	male college students	Paulhus (1988)
BIDR (Self-Deception)	9.3	(3.5)	7.5	(3.2)	male college students	Paulhus (1988)
Mild Childhood Abuse (%)	71.0		87.5		male batterers	Murphy, Meyer, & O'Leary (1993)
Severe Childhood Abuse (%)	31.9		21.0		male batterers	Murphy, Meyer, & O'Leary (1993)

Note: ¹ standard deviation was not reported

IMAGE EVALUATION TEST TARGET (QA-3)

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