# THE UNIVERSITY OF CALGARY

Self-Esteem and Relapse in the Treatment of Substance Abuse

by

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# THE UNIVERSITY OF CALGARY FACULTY OF GRADUATE STUDIES

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#### Abstract

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Professionals working in the field of substance abuse treatment have long been concerned about the high rates of recidivism following treatment and the many variables which seem to impinge on recovery. One of the variables which has been identified to be strongly associated with substance abuse problems is the issue of self-esteem. Individuals with substance abuse problems consistently rate themselves below the norms compared to the population of individuals who are not experiencing substance abuse problems.

This study examined the relationship between selfesteem as a multidimensional construct and relapse among 68
respondents following inpatient treatment. The findings
indicated that respondents with lower self-esteem following
treatment were more likely to relapse than those with higher
self-esteem. A discriminant analysis of the 11 subscales of
the Multidimensional Self-Esteem Inventory (MSEI) revealed
that 5 of the subscales were significantly related to
relapse. Moreover, based on the MSEI posttest scores in
this sample, it was possible to successfully predict 70% of
the time whether a respondent would abstain or relapse
following inpatient treatment for substance abuse.

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#### CHAPTER 1

#### INTRODUCTION

The notoriously high rates of recidivism for individuals following treatment for alcohol and drug abuse have long been recognized as both a clinical and a personal problem in the addictions field. Some studies have found that as many as 90% of the clients were unable to maintain abstinence over a 2 year period following treatment (Marlatt, 1985), with similar studies reporting abstinence rates of only 31% after a period of one year (Gordon & Zrull, 1991). As a result of such high rates of recidivism, detox facilities, and to a lesser extent inpatient treatment programs, sometimes take on a revolving door appearance as many individuals return to try the It is only in the last few decades that recovery process. studies have begun to converge on some of the individual components and personality characteristics which have now been identified as factors in the relapse process (Annis & Davis, 1991) and to integrate the concepts into treatment programs.

# RESEARCH QUESTION

My experience in the addictions field has led to the question of whether or not there is an association between self-esteem and relapse following treatment. Do individuals with lower self-esteem relapse more often

following inpatient treatment for addiction than persons with a higher self-esteem?

# PURPOSE OF THE STUDY

The purpose of this exploratory study is to add to the knowledge base regarding relapse prevention by examining the role of an individual's self-esteem in that process. After having worked a number of years in the addictions field, it is the experience of the writer that clients entering inpatient treatment for substance abuse appear to be severely lacking in self-esteem and a positive self-Furthermore, Furnham and Lowick (1984) assert that low self-esteem has been the most popular explanation of substance abuse and that clients attending treatment for addiction problems typically report levels of self-esteem far below the norm for the non-addicted population. prior to running clinical measures on the population to be studied it is quite apparent that there are significant deficits regarding how many of these individuals view themselves and how they struggle to cope with the rigors of daily living.

Although low self-esteem has been well documented in nonexperimental studies on alcohol and drug abuse, how self-esteem and/or self-concept actually factor into the recovery or the relapse process continues to be explored in the literature. Skager and Kerst (1989) point out, however, that the failure to implement appropriate research

designs has opened the doors of criticism to the meaningfulness of some of the data regarding self-esteem and alcoholism. In essence, the criticism is that low self-esteem in alcoholics or drug addicts "may be a result of experiences associated with the addiction rather than a 'causal' condition" (Skager & Kerst, 1989, p. 263).

While a causal connection between low self-esteem and substance abuse may be difficult, if not impossible to establish, self-esteem workshops are routinely offered as components of both inpatient and outpatient treatment Indeed, the Lander Treatment Centre in programs. Claresholm, Alberta, where this study was conducted, offers a self-esteem component as part of their inpatient treatment program. The effectiveness of the intervention, however, is somewhat difficult to track and to evaluate due to the nature of the overall complexity of the program and the lack of repeated standardised measures with the clientele involved in the particular self-esteem component of the program. Whether the intervention strategy to enhance self-esteem is globally based on previous research or on the specific needs of individual clients is not always clear as well, but there appears to be an underlying assumption in the treatment of addictions that the enhancement of an individual's self-esteem has the potential to strengthen the relapse prevention process following treatment. As the issue of self-esteem is

discussed in the following chapter, it becomes apparent that when viewed as a multifaceted construct, it permits a great variety of research and intervention strategies. And furthermore, that it is a fairly safe assumption to include it as a component of treatment programs without the need for assessments on an individual basis.

#### THE RELEVANCE TO CURRENT PRACTICE

In an attempt to understand and to effectively intervene in the addiction process, both theory and practice have evolved over the years. Treatment programs for substance abuse, both past and present, have traditionally adopted the disease model of drug and alcohol abuse introduced in the late 1940's by E. M. Jellinek and his colleagues at the Yale Center for Alcohol Studies (Jellinek, 1960). Although this model has been effective in describing and adding insight into the process and stages of addiction, it may serve as more of a stepping stone from which some alternative and very practical treatment models are now being launched (Alexander, 1987). Notwithstanding the incredible challenges sometimes inherent in addressing addictive behaviors, there continues to be an air of optimism and encouragement in the field as clinicians are more able to address specific relapse prevention issues (Marlatt & Gordon, 1985; Baker & Cannon, 1988; Annis & Davis, 1991; Miller, 1992). It is this optimism that has led this writer to want to explore

further the potential association between self-esteem and the relapse process and how treatment may somehow be adapted to more fully and effectively address these concerns.

Miller (1992) notes that even though the clinical outcome literature on the treatment of substance abuse includes hundreds of studies, about half of them have appeared since 1980. Interestingly enough, the concept of self-esteem is also fairly new from a research perspective and a substantial portion of the body of the literature in this field has been published since the 1960's (Battle, 1991). Dr. James Battle, author of over 40 articles that address the issue of self-esteem, teaches out of the University of Alberta's Department of Psychology. He notes that the recent upsurge in interest in the construct of self-esteem is almost revolutionary in the mental health profession. For example, since the development and publication of his series of self-esteem inventories called The Culture-Free Self-Esteem Inventorie's for Children and Adults in 1981, Battle states that over 500 masters and doctoral dissertations have used these scales to assess the self-esteem of participants (Battle, 1990). It appears that although there is a fairly large body of empirical research on self-esteem and substance abuse beginning in the 1940's (Skager & Kerst), early studies were often descriptive and nonexperimental. A more inferential

exploration of the association between self-esteem and relapse in addictions may also have been limited by the frames of reference surrounding both concepts and the considerable time factor required to study any real changes over time in both self-esteem and recovery issues.

The road to recovery from drug and/or alcohol abuse is certainly a process, not an event, and the implementation and the testing of fairly new concepts and strategies do not appear to come quickly. As the knowledge base increases and theory and research move into the realm of practice, even a decade is a relatively short period of time for research studies to track the effects of changes at a treatment and recovery level. Well established treatment programs which have been in place for years have slowly been obliged to examine their methodologies as new approaches to treatment come to the forefront.

This change process, however, is slow and can become complicated not only by internal conceptual factors regarding addictions, but also by external administrative factors. And in times of fiscal restraint such as we are presently experiencing in the province of Alberta, an agency's energy and focus may be more directed to cutting and streamlining the program to meet budgetary measures as opposed to proactively adopting and implementing more effective program components for the benefit of the clientele.

As more recent research into substance abuse has unfolded, it has become apparent that recovery from an addiction problem is much more complex than simply not using the addictive substance and remaining abstinent, and treatment modalities need to respond appropriately to the individual needs of the clients engaged in the recovery process. While the goal of most treatment programs is still abstinence (as opposed to controlled drinking), those who are capable of maintaining abstinence from their drug of choice after the first attempt are still among the minority (Teichman, 1986). Paradoxically, much can be learned from those who do relapse as well as those who are able to remain abstinent. The study of the relapse process and the particular demographics of individuals who relapse following treatment is very enlightening and individual patterns for relapse are now being identified, explored, and addressed in treatment (Marlatt, 1985).

This particular study was motivated by a recognition of the fact that self-esteem is certainly part of the addiction process and probably needs to be more systematically and effectively addressed as part of the treatment and relapse prevention process. Initial studies which have focussed on the association between perceived self-efficacy and relapse prevention appear to be very promising (Marlatt, 1985), and since self-efficacy has been identified as a component of a healthy self-esteem

(Bandura, 1977) it seems logical that self-esteem may also be associated with a healthy recovery process. Bednar, Wells and Peterson (1989) expand on this concept and state that:

"The self-evaluative processes that follow the challenge of any difficult task, interpersonal or object-oriented, are the fundamental mental contributors to the construction of self-esteem" (p. 53).

The challenge in the field of substance abuse treatment appears to be one of constructing experiences for clients in a way that they will successfully learn to cope with the challenges in recovery to the point that they will confidently be able to master actual threats to sobriety following treatment. In theory, the accumulation of personal mastery skills for specific tasks in the early stages of recovery not only affects the self-efficacy expectations, but also enhances the self-esteem of the individual. The goal in recovery is that these skills and perceptions will be generalized to other unexpected high risk situations in the future.

This study will therefore explore the consistent theme of self-esteem and the role it appears to play in both addiction and recovery from addictions. As the nature of the relapse process following treatment continues to be explored, and a more clear picture of the complex relationship between the substance abuse process, recovery,

relapse, and self-esteem continues to unfold, it is the hope of the writer that the accompanying treatment process will also become more effective in meeting the needs of those who may be seeking the assistance of the helping professions.

#### FEASIBILITY

Although access to the identified population is sometimes difficult because of the nature of addictions and the stigma which often accompanies the problem being studied, this barrier was greatly lessened by the fact that the writer was employed at the institution (Lander Treatment Centre, Claresholm, Alberta) where the research was conducted. The Alberta Alcohol and Drug Abuse Commission (AADAC) maintains stringent guidelines regarding third party research with its clientele, and their willingness to participate and fully cooperate in this study greatly improved the level of feasibility.

The data were made accessible by means of a questionnaire completed by the clients as they appeared for intake at the treatment centre. Even though the clients were aware that they were participating in a research project, the study was conducted in a manner which was as unintrusive as possible for the clientele and it was integrated as much as possible into the routine of the centre. There continues to be an interest in studies such as this regarding program development and practice, and the

results of this study will hopefully prove beneficial for that purpose.

#### ETHICAL ACCEPTABILITY

Previous studies of a similar nature have been successfully conducted at the Lander Treatment Centre and in numerous other treatment facilities. In this study there were no apparent risks to those individuals who participated in the study and the issues of anonymity and confidentiality were overtly addressed. The eventual goal of this study is to improve the overall quality of service to individuals such as those participating in the study and to significantly add to the knowledge base of those working in the addictions field of practice. With those principles in the forefront, any ethical concerns were easily Taking into consideration the notion that the answered. respondents may be considered to be a captive population, individual informed consent was obtained and clients were made aware that failure to participate would in no way affect treatment at the centre.

In summary then, it is clear that the high rates of relapse following treatment for substance abuse is a concern that has been addressed for decades in the literature and it appears that it is not about to just go away. In times of economic and fiscal restraint, treatment program directors are being encouraged to take a hard look

at program components and to retain or adopt those which have been proven to be most influential and effective for the clientele as a whole. In recent years this process has been made somewhat easier by the fact that a number of different variables have been identified which either impinge on recovery and/or add to the addiction cycle and, as a result, program components are being added to address these issues. Studies have shown that the level of selfesteem for individuals involved in alcohol and drug abuse is far below the norm for the population as a whole, and there are suggestions that low self-esteem may even be a variable which may be associated with the relapse process following treatment. It is the opinion of the writer that there remains a significant amount of latitude in the literature regarding the relapse process, and that association between self-esteem and relapse warrants further exploration. In the following chapter, the complex issues of self-esteem and relapse prevention will be examined, and how these concerns also reflect the need for a better understanding of recovery from addictions and the many variables which appear to be part of the process.

# CHAPTER 2

# LITERATURE REVIEW

Treatment and recovery issues in the field of substance abuse are wide and varied and have been influenced by research, practical experience, and theoretical perspectives. This chapter considers a number of previous studies which have addressed the issues selfesteem and/or self concept, their apparent influence on the addiction process, and how these concepts can sometimes factor into the process of relapse and recovery from substance abuse.

#### THE GLOBAL IMPORTANCE OF SELF-ESTEEM

At the outset there is a need to succinctly explore the concept of self-esteem and the vital role it plays in us all, whether or not the issue of substance abuse is even a consideration. In recent years much has been written about self-esteem from a self-help perspective and this increased exposure has certainly brought the concept to the forefront and added a new impetus at the research and practice level (Bednar, Wells, & VandenBos, 1991; Frey & Carlock, 1989; Mecca, Smelser, & Vasconcellos, 1989). As the interest in research regarding self-esteem has expanded, implications for clinical practice have also increased and instruments for measuring a client's self-esteem are now quite commonplace in many agencies.

The concept of self-esteem appears to be one of the central elements of the human condition and need not be treated with ambivalence simply because of its inherent definitional and/or conceptual difficulties (Smelser, 1989). Nevertheless, the global importance of a healthy self-esteem may not be fully appreciated or understood by practitioners and the associated issues may simply remain unaddressed. Skager and Kerst (1989) assert that "there is no doubt that self-esteem is central to the consciousness of troubled human beings". They note as well that psychotherapists report that individuals "who seek help typically suffer from low self-esteem" (p. 250). Individuals attending treatment for substance abuse certainly fit into this category even though all are not in attendance of their own volition and may not all be openly "seeking" help for their problems. Bednar and Peterson (1990) point out that:

"The importance of self-esteem to emotional well-being is undeniable. ... The degree to which we find a sense of psychological contentment and happiness is largely determined by our level of self-esteem" (p. 9).

High self-esteem and a positive self-concept seem to be related to a variety of positive conditions including being better adjusted emotionally, happier, more successful, more confident, better problem-solvers, and better communicators (Bednar & Peterson, 1990; Luhtanen & Crocker, 1991; Markus

& Wurf, 1987).

At the other end of the spectrum, low self-esteem has been associated with numerous personal and social problems. A mammoth research project called the California Task Force to Promote Self-Esteem (1990) examined a number of different factors relating to self-esteem and confirmed the seriousness of the effects of low self-esteem on both an individual and a societal level. This study went so far as to suggest a "causal direction" (Smelser, 1989, p. 14) between a number of factors including: low self-esteem and having been abused (or maybe even the tendency to be abusive); low self-esteem leading to quitting either school or work; and low self-esteem and depression leading to alcohol and drug abuse. O'Brien (1980) also notes that low self-esteem was found to be related to problems such as depression, daydreaming, a preoccupation with personal problems, and psychosomatic complaints which often accompany anxiety.

The situation quickly begins to take on a circular appearance, however, as potential sources of low self-esteem are explored in more depth. More particularly, from a substance abuse perspective, it begs the question of whether low self-esteem simply contributes to the addiction problem or does the addiction problem exacerbate the deterioration of one's self-esteem? What further confuses the matter is that we could feel quite safe in responding

affirmatively to both questions. Although it could be easy to become entrenched and sidetracked by the attractiveness of this debate, such a argument is not the central element or focus of this study.

Not surprisingly, interventions for increasing one's self-esteem are accordingly not as clearly delineated as they might otherwise be due to the multifaceted nature of self-esteem and the many variables which potentially impinge on it (Battle, 1991; Smelser, 1989). As mentioned in the previous chapter, there has been a recent accelerated interest in the construct of self-esteem which has led to the development of a variety of programs and approaches to address the concern.

Battle (1991) suggests that the cognitive movement of the sixties and seventies has been partially responsible for these new developments as we have begun to be more aware of how we think about ourselves. From a treatment perspective, however, it then seems a bit ironic to note that interventions in addictions are still largely influenced by more dated radical behavioralism from the earlier part of this century. Perhaps it is this behavioral perspective which continues to drive some of our attempts to come up with systematic approaches relating to both treatment and prevention. Establishing a "cause and effect" relationship between self-esteem and influential factors then may appear to be as much a problem of

semantics and definition as it is of research design and measurement.

Smelser (1989) and his colleagues have spent considerable effort addressing these very concerns with respect to self-esteem and state that:

"the guidelines for intervention and policies aimed at rehabilitation, prevention, and institutional reform will be as murky as the state of our knowledge of the phenomena concerned" (p. 21).

Such a pronouncement does not mean that as practitioners we need to become discouraged in our attempts to ameliorate this particular human condition, but that we need to participate more freely and intently in exercises such as this research project in order to strengthen not only the knowledge base but also our overall effectiveness in practice.

# UNIDIMENSIONAL AND MULTIDIMENSIONAL SELF-ESTEEM

A number of standardized measures for self-esteem have been developed over the years, but for the most part they are relatively short and unidimensional trait measures. In the 1960's the conceptual nature of self-esteem was reflected in the implementation of a number of widely used unidimensional instruments such as the Rosenberg Self-Esteem Scale (1965), the Eagly Self-Esteem Scale (1967), and the popular Coopersmith Self-Esteem Scale (1967).

Once conceptualized of as a relatively general,

global, unidimensional, and fairly stable construct, selfesteem is now more routinely viewed as being a dynamic component of the multifaceted self-concept (Bednar, Wells, & Peterson, 1989). Even though Coopersmith's own theoretical base (O'Brien, 1980) suggests that self-esteem is a multidimensional construct which includes competence, power, significance, and virtue, his assessment scale was still developed as a unidimensional measure. Nevertheless, others have followed his theoretical lead and agree that the measurement of self-esteem should be more consistent with a broader conceptual model even though self-esteem is often taken as a global measure of oneself without taking into account its multifaceted nature (O'Brien, 1985). essence, it appears that the standards of measurement have slowly followed the development of a multifaceted theory, yet the unidimensional instruments are still widely used and accepted.

Accompanying the expansion of a multifaceted approach to self-esteem is the apparent relationship to the construct of self-concept. Even though there are varying definitions and conceptualizations for both self-esteem and self-concept, standardized measures have been developed that have the potential to address these concerns. In a historical review of the literature, the terms "self," "self-esteem," and "self-concept" are often used interchangeably even though it is possible to make

meaningful distinctions (Frey & Carlock, 1989).

Appropriate distinctions will be made when the term "self-esteem" is operationalized further in this study.

In an effort to gain a more comprehensive understanding of the relationship between the many facets of self-esteem and the relapse process, the Multidimensional Self-Esteem Inventory (O'Brien & Epstein, 1988) was selected for this study. This standardized instrument measures self-esteem on 11 different subscales and includes an assessment of "faking good" which also appears to be a factor in addictions. A more complete description of the instrument will be provided in the following chapter.

#### SELF-ESTEEM AND ALCOHOL AND DRUG ABUSE

As stated in the previous chapter, it has been well established that low self-esteem is associated with individuals who are experiencing substance abuse problems, however, the association is often more descriptive than inferential in nature. Bennett (1988) recognized this pattern in the research literature and summed up the problem by stating:

"While there have been no longitudinal studies of relapse that provide direct support for the proposition that low self-esteem in recovery indicates a high risk to resume drinking, interest in self-concept as a measure of psychological health for alcoholics has produced a copious literature" (p. 153).

Other studies were unable to find any significant connection, and still others even assert that there have been increases in self-esteem as the result of substance abuse (Berg, 1971; California Task Force, 1990). While the latter results may be somewhat confusing at first glance, this particular phenomenon is fairly well understood within the addictions field. Individuals who drink to excess or use mood altering drugs often do so to "feel good" and may temporarily and superficially inflate their perceptions of themselves, even though they may be exacerbating a deeper problem of addiction.

The alcoholic faces a very serious dilemma in recovery. Bennett (1988) reviews the dilemma and suggests that:

"The process of becoming alcoholic involves an increasing reliance on alcohol to manage negative feelings about the self. Alcohol becomes a major means of self-enhancement when the alcoholic faces stressful events and the demands of daily living. However, the progressive ill effects of alcoholism eventually prove this coping style to be maladaptive and life threatening" (p. 153).

When addressing such a circular problem, it is difficult to find a starting point and to assess change. Studies such as the California Task Force (1990) point out as well that there are specific limitations and drawbacks when employing some of the more global or unidimensional measures of selfesteem which do not take into account certain marginal or multidimensional changes in self-esteem. Nor do such

unidimensional measures assess the natural tendency of "faking good" which is inherent in addictions and protected by an individual's rigid defense mechanisms (Skager & Kerst, 1989). This position is not a new discovery and is strongly supported throughout much of the literature on self-esteem. Branden (1969) asserts, for example, that self-esteem is an actual need that cannot be avoided and that individuals who fail in a significant degree to achieve self-esteem will quite naturally strive to fake it.

Initially, the connection between low self-esteem and substance abuse was derived from studies conducted from nonexperimental designs or surveys administered to those who were experiencing substance abuse problems in their personal lives. The feelings of low self-worth, low self-esteem, disliking of self, and inferiority were found to be quite common in alcoholism (Wallace, 1978; Cox, 1985) yet these problems continue to be among the most difficult personal characteristics and/or belief systems for the recovering addict to change.

In an early study which examined self-esteem in nonalcoholics, Charalampous, Ford, and Skinner (1976) reported that alcoholics scored lower on the Rosenberg Self-Esteem Scale (1967) than did nonalcoholics. As a condition of their probation, the subjects (N = 100) appeared for a diagnostic evaluation for referral purposes. The sample included 88 men and 12 women, from which a total

of 19 of the subjects (3 women) were independently assessed and classified as being alcoholic. As part of the screening process they also completed the 10-item Rosenberg Self-Esteem Scale. The distribution of the scores on the self-esteem scale indicated that significantly more alcoholics scored at the lower levels and more nonalcoholics scored at the higher levels (chi square = 13.54, df = 4, p < .01). This study tends to lend support to the hypothesis that alcoholics have significantly lower self-esteem than do nonalcoholics.

In a more recent study, Smith (1993) reports on a fairly typical descriptive study concerning self-esteem and substance abuse problems. His study was with recovering nurses (N = 41) who were also administered the 10-item Rosenberg Self-Esteem Scale at different time intervals in their recovery process. Findings indicated that self-esteem scores for the sample were generally low (39% of the scores) or moderate (28% of the scores) and that "there was a trend", although not statistically significant, (Smith, 1993, p. 62) for those individuals with a longer period of sobriety to have higher levels of self-esteem.

A rather interesting study on how alcoholics view not only themselves, but also significant others, was conducted by Pushkash and Quereshi (1980) which tested the hypothesis that the level of self-esteem not only reflects a person's perception of self, but also one's perception of persons

who are significant or prominent in one's life. Alcoholic and nonalcoholic adult males and females (N=100) judged themselves and significant others (father, mother, and spouse/girl or boy friend) on four personality characteristics. The Michill Adjective Rating Scale (MARS) which has been used with a variety of populations, including alcoholics (Quereshi & Soat, 1976) was one of the instruments administered to the subjects as they assessed themselves and significant others.

The multivariate F ratio as well as the univariate Fratio results for this study indicated a significant difference (p < .001) between how alcoholics and nonalcoholics view themselves and others. With respect to self-esteem, there is a great deal of similarity between the self-esteem of alcoholics and how they evaluated their father's possession of certain social and personal characteristics. The authors of the study strongly suggest that understanding and treating alcoholics should take into account not only their individual self-evaluations, but also their views of significant others who may an extension of the alcoholic's own poor self-esteem. This study seems to confirm some of the perceptions of the writer in that recovering addicts generally seem to be much more positive and realistic about their present intimate relationships in recovery if they have an improved view of themselves.

#### INFLUENTIAL FACTORS OF SELF-ESTEEM IN RECOVERY AND RELAPSE

Researchers and practitioners are now becoming more aware of some of the variables which appear to impinge on an individual's chances for recovery as well as those activities which may actually enhance and support the recovery process (Marlatt, 1985; Miller, 1992). Alcohol and drug abuse is now seen as a symptom of the problem and not necessarily the presenting problem and other issues often need to be dealt with as part of a healthy recovery program (Alexander, 1987). A more current perspective is to view substance abuse problems as "a set or cluster of components" in which the actual addictive behavior is exacerbated by problems in relationships, social support systems, stress related issues, low self-esteem and self-image, and depression (Congdon & Holland, 1988, p. 25).

# Sexual Abuse, Self-Esteem, and Substance Abuse

As previously noted, a number of variables have been identified which appear to play a role in the addiction and/or recovery process as well as one's self-esteem.

These factors are wide and varied and include issues such as sexual abuse (Chiavaroli, 1992; Singer, Petchers & Hussey, 1989) and the individual's ability to cope with the trauma. The relationship between low self-esteem and sexual abuse is already well established in the literature (Chiavaroli, 1992; Skorina & Kovach, 1986) and those who also become involved in substance abuse seem to be caught

in a circular double jeopardy process of guilt, shame, and low self-esteem.

In a comparison study of male (N=181) and female (N=48) clients in a substance abuse program, Wallen (1992) reported that 9.4% of the males and 32.6% of the females were sexually abused as children and that almost all of these individuals were reluctant to address the abuse as part of the treatment program. Wallen (1992) discusses the controversy which still exists in treatment programs for substance abuse as to whether the treatment should openly address issues such as sexual abuse problems concurrently with the addiction issues. In essence, there appears to be a growing consensus that failure to address sexual abuse in treatment is a gross disservice to the clientele.

Chiavaroli (1992) succinctly summarizes some of the work done by Brieve and Runtz (1987) regarding the relationship between sexual abuse, self-esteem, and substance abuse by stating:

"Substances are acknowledged as a means of inducing dissociation and sheltering the victim from directly experiencing the trauma of sexual abuse. Due to the victim's perception of low self-esteem and feelings of powerlessness, there is a high degree of drug dependence and revictimization in adult relationships" (p. 352).

Related studies also indicate greater rates of recidivism and less progress in the recovery process in those individuals who failed to address issues of sexual abuse

(Chiavaroli, 1992). Gelinas (1983) notes as well that individuals may initially seek treatment for corollary problems such as substance abuse which is actually a disguised presentation of a deeper and more sensitive concern such as sexual abuse.

# Gender, Social Status, and Self-Esteem

Somewhat aligned with the issue of sexual abuse are the gender, culture, and social class of the client in recovery. Weiner, Wallen and Zankowski (1990) note that a particular segment of the female population is at greater risk for relapse not solely because of the higher incidence of sexual abuse (Rohsenow, Corbett & Devine, 1988) but also because of their lower socioeconomic status, their less than adequate life-management skills, and their limited social support systems.

In an attempt to understand some of the personal and social difficulties experienced by men and women who are being treated for substance, Beckman and Amaro (1986) studied a sample of 67 Anglo men and 54 Anglo women who were currently in treatment. The subjects were judged on a number of different criteria including background characteristics, attitudes about alcoholism and their perception of the efficacy of treatment, self-esteem, and social and situational factors. Only 27% of the women as compared to 47% of the men were either in full-time or part-time employment, and overall the women were

"relatively disadvantaged economically" (p. 139) compared to the men. Upon entering treatment 48% of the women reported experiencing family problems, problems with friends, or money problems compared to only 20% of the males who reported such problems (chi square = 9.79, p = .01).

The above findings were similarly consistent with previous studies by Beckman (1978) when she reported that women also had lower self-esteem than men at intake to treatment, however, within a year after beginning treatment their self-esteem was comparable to the male's level of self-esteem. At this point there appears to be a measure of contradiction in some the literature. Notwithstanding their exceptional resilience in treatment, chemically dependent women continue to appear to be at greater risk for relapse because of their significantly low level of self-esteem (Bennett, 1988; Marr & Fairchild, 1993).

# Social Support, Self-Esteem, and Substance Abuse

The problem of inadequate or ineffective social support is a general concern for individuals who are attempting recovery from addictions. Even though alcoholics may have fairly intricate and well-developed social networks with many friends, they are unlikely to maintain very many positive supports with individuals who are actually interested in their personal recovery program (Gordon & Zrull, 1991). Billings and Moos (1983) note as

well that alcoholics who are able to remain in a recovery program emphasizing abstinence as a post-treatment goal have the prospect of functioning as well or better than their nonalcoholic neighbours.

Alcoholics Anonymous (AA) continues to be the best known social support for alcoholics, but the establishment of other more natural informal supports is also seen as being a factor which can improve not only an individual's chances of recovery but also the level of self-esteem (Kitano, 1989; Waisberg, 1990). These social support systems, whether formal or informal, have been found to play a significant role in the reduction of stress, and stress by itself has also been identified as a factor in the relapse process (Bennett, 1988; Congdon & Holland, 1988; Marlatt & Gordon, 1985). Intertwined in the network of social supports are naturally enhanced feelings of confidence and a significant increase in the level of self-esteem for the individual in recovery (Bennett, 1988).

The nature and quality of relationships for individuals in recovery from substance abuse problem are generally regarded to be important considerations. Frawley (1988) suggests that an individual's self-esteem needs to be reinforced in a professional environment or by a support group that is not carrying "excess baggage" (p. 38) from the past regarding the individual in recovery. One's self-esteem can then be enhanced by honest, appropriate, and

accurate feedback and acceptance of the individual, rather than focussing on the anger at the chemical and/or at oneself for having been involved in the addiction process (Frawley, 1988; Smith, 1993). While it is hopeful that a healthy support system might naturally exist for a client following treatment, this is often not the case. Relationships often deteriorate to the point where alternative supports may need to be accessed and maintained until family and friends are even prepared to once again engage which the individual who is in recovery.

## INFERENTIAL STUDIES OF SELF-ESTEEM AND TREATMENT OUTCOME

As stated earlier, there are relatively few studies which have addressed the question as to whether the level of self-esteem has any significant effect on whether an individual would be more prone to relapse following treatment (Bennett, 1988). Such findings continue to be somewhat elusive in spite of the fact that alcoholics seeking treatment have a very low self-esteem and that it routinely improves with treatment (Castor & Parsons, 1977; Cooper, 1983).

As noted earlier, self-esteem and self-concept are different yet inter-related constructs, and it is interesting to explore the similarities as well as the differences in the research literature with respect to substance abuse and treatment. Cooper (1983) examined the relationship between a client's self-concept at intake to

treatment and then the eventual treatment outcome. study included 50 individuals (38 men, 12 women) from both inpatient and outpatient treatment for substance abuse The clients were administered a standardized problems. measure called The Interpersonal Checklist (Leary, 1957) which rates interpersonal behavior on eight dimensions, all of which relate to an assessment of self-concept. The study used a cluster analysis of the data which allowed for the examination of multiple outcomes when comparing pretest and posttest scores. Although self-concept did improve from pretest to posttest (p < .01), a client's self-concept was not a significant predictor of the outcome of the treatment process (p < .91). In other words, a client's self-concept in this study did not appear to be a good predictor of whether or not a relapse was imminent following treatment. The above study further reinforces the necessity of precise conceptual definitions of selfesteem and/or self-concept and to be aware of some of the potential misinformation that can be propagated if not addressed properly. In light of findings of this present study, it would have proved interesting to have concurrently assessed the above sample with respect to self-esteem and then to have compared the findings to those of self-concept.

Over the last decade there has been a significant increase in the study of self-efficacy and the role it

plays in relapse following treatment (Marlatt & Gordon, 1985; Rollnick & Heather, 1982; Velicer, DiClemente, Rossi, & Prochaska, 1990). Although self-efficacy and self-esteem are clearly not identical constructs, self-efficacy, or an evaluation of self-referent expectations or one's competency, is one of the general constructs which is also considered by the Multidimensional Self-Esteem Inventory in this present study. It is hoped that the results might parallel some of the studies by Marlatt and Gordon (1985) with respect to how self-efficacy improves an individual's chance for recovery.

In an interesting study on the relationship between self-efficacy and relapse, Burling, Reilly, Moltzen, and Ziff (1989) assessed clients' levels of self-efficacy before and after completing inpatient treatment for substance abuse. Self-efficacy ratings were obtained by means of the Situational Confidence Questionnaire (SCQ) for substance abuse (Annis, 1982) which assesses an individual's estimate of confidence on a 0-100% rating scale for specific high risk situations. Although, both abstainers and relapsers indicated some systematic change across treatment, there was not a significant interaction between the two groups with respect to relapse and the SCQ scores. However, a significant difference was noted regarding the absolute amount of change in the SCQ scores between intake and discharge in that the abstainers

exhibited a significant increase of 31.3 points (p < .05) on the SCQ scale across treatment compared to a nonsignificant increase of only 17.5 points for the relapsers.

In summary, the issue of relapse following treatment for substance problems continues to be a serious concern and the recidivism rates are resonant warnings that there is much more to be learned and to be done in order to improve the overall effectiveness of our intervention strategies. Low self-esteem has been identified over the years as both an outcome and a precursor to the addiction process, and a review of the literature clearly indicates that studies such as this one are timely and appropriate. The following chapter will integrate some of the conceptual constructs from the literature and apply them to an actual study of relapse and self-esteem following inpatient treatment for substance abuse problems.

# CHAPTER 3

#### METHODOLOGY

In order to gain a better understanding of the relationship between self-esteem, alcohol and drug abuse, and relapse following treatment for substance abuse, a survey questionnaire was designed to gather information regarding those individuals who participated in the recovery program at the Lander Treatment Centre. This chapter reviews the selection and description of the variables to be measured, the development of the questionnaire and its components, the method of data collection, and the limitations of the methodology of the study.

# RESEARCH QUESTION

Experience in the treatment of substance abuse and the review of the literature has led to the question of whether there is a real association between self-esteem and relapse following inpatient treatment for individuals with substance abuse problems. Do individuals with a lower self-esteem relapse more often following inpatient treatment compared to those persons with a higher self-esteem?

#### HYPOTHESIS

Individuals who have lower self-esteem following inpatient treatment for substance abuse problems will be

more likely to relapse than those individuals with higher levels of self-esteem.

# RESEARCHABILITY OF RESEARCH QUESTION

In spite of some apparent definitional struggles, the issue of self-esteem or self-concept (Frey & Carlock, 1989) in terms of relapse following treatment for substance abuse is a researchable concern. Similar concerns have existed regarding what is sometimes viewed as a lapse, a slip, or a relapse, yet such matters generally have not been problematic in the existing literature.

This chapter will address those concerns which are relevant to this study as part of the review of the conceptual frameworks for each of the variables. With the additional data that this present study could provide, it has the potential to address the impact that enhancing self-esteem could have on the relapse process as well as to increase the knowledge base from which we base our practice strategies.

Admittedly, the measurement of the relationship between the two concepts of relapse and self-esteem, however, is somewhat more challenging due to the sensitive nature of the subject matter, the level of self-disclosure required in the process, and the stigma which is often attached to drug and alcohol abuse in general. This study explores two potentially vulnerable areas of the recovering addict's past and present life (self-esteem and relapse),

and cooperation and candidness are very real and practical concerns when collecting the data. There has been considerable speculation in the past as to the validity of client self-reports in addictions and the role that denial plays in the process, however, there is "growing body of evidence suggesting the information obtained from alcoholics is highly reliable and valid" (Hesselbrock et al., 1983, p. 605).

## **VARIABLES**

This study examines the relationship between selfesteem as a multidimensional variable and relapse as it
relates to individuals who have participated in the
inpatient treatment program for alcohol and drug abuse at
the Lander Treatment Centre in Claresholm, Alberta. Each
of the central variables will be explored in terms of
conceptual definitions, how they were operationalized for
this particular study, and the specific measurement which
was employed to address the each of the variables.

#### Self-Esteem

Conceptual definition: As noted in the previous chapter, the concept of self-esteem has evolved over the years as research has enhanced and enlarged upon the original theoretical perspectives. Self-esteem has been defined as "the experience of one's personal self-worth" (Skager & Kerst, 1989, p. 249) and is an indicator of

mental well-being, just as blood pressure and body temperature are indicators of physical well-being. Battle (1993) similarly notes that "self-esteem refers to the perception the individual possesses of his/her own worth" (p. 18). Self-esteem is not an all-or-nothing construct, but gradually develops and differentiates with maturity and life experience.

Although the terms "self-esteem" and "self-concept" are often used interchangeably (Frey & Carlock, 1989), they are not the same constructs. Frey & Carlock (1989) point out that self-esteem is "an evaluation of the emotional, intellectual, and behavioral aspects of self-concept" (p. 7). Battle (1993) addresses this concern and asserts that self-concept is the "totality of perceptions an individual has and customarily maintains regarding himself or herself" (p. 188). These perceptions include one's self-esteem. In a somewhat similar vein of thought, self-esteem is viewed by Demo (1985) as "a specific component of self-concept" (p. 1490), all the while still conceptualizing self-esteem as a multidimensional construct.

More recent conceptual definitions of self-esteem have revolved around the construct of it being multifaceted (Bednar, Wells, & VandenBos, 1991), having a number of ingredients or multiple building blocks (Borba, 1989), or components (Reasoner, 1986), or that it is multidimensional in nature (O'Brien & Epstein, 1988). This expanded

definition and direction regarding self-esteem has led to the adoption of the Multidimensional Self-Esteem Inventory (MSEI) by O'Brien and Epstein (1988) for this particular study.

Operational Definition: For the purposes of this study self-esteem is operationally defined as a multidimensional construct with a number of self-evaluative elements (O'Brien & Epstein, 1988). The MSEI, as developed by O'Brien and Epstein (1988) proposes these elements are structured in a hierarchial fashion:

- 1. Global Self-esteem as the most general and highest evaluation of self-worth.
- 2. Eight components of self-evaluation at an intermediate level including: Competence, Lovability, Likability, Self-control, Personal Power, Moral Self-approval, Body Appearance, and Body Functioning.
- 3. A measure of global self-concept referred to as *Identity Integration*.
- 4. And a validity measure referred to as *Defensive*Self-enhancement, or the degree to which a person is inflating his or her self-perception.

The intention of this study is to assess self-esteem as a broader construct, and to follow the development of theory and instrumentation in this area. The rationale to use the MSEI follows the development of theory, and the belief that the more specific we can become in the measurements of self-esteem, the greater success we may have in trying to predict associated behaviors (substance abuse in this case) and attitudes (Gecas, 1982; Marsh & Shavelson, 1983).

Measurement of self-esteem: As noted in the previous chapter, a number standardized scales have been employed over the years to assess self-esteem in populations experiencing substance abuse problems. These instruments, however, are for the most part unidimensional in nature, and the intent of this study is to try to become more descriptive and specific in examining the apparent relationship between the multifaceted construct of self-esteem and relapse and substance abuse.

The self-esteem scale chosen for this study, which addresses many of the self-esteem issues faced by individuals in recovery for substance abuse problems, is the Multidimensional Self-Esteem Inventory or MSEI (O'Brien & Epstein, 1988). According to E. O'Brien (personal correspondence, June 16, 1994) the MSEI continues to attract positive attention in the research literature including well over 50 citations and has been employed in researching the field of alcohol and drug abuse.

The MSEI Professional Manual (O'Brien & Epstein, 1988) indicates that the MSEI was initially normed on college age students and that it is rated at about a grade 10 reading level. A 1990 evaluation of the education level of clients attending the Lander Treatment Centre reported that 80% of the respondents had a grade 10 or higher level of education (Brown & Thompson, 1990). In the present study, respondents at the intake level of treatment reported that

25% of them had less than a grade 10 level of education.

The MSEI instrument is comprised of 116 items and is divided into two sections. For Section 1, the respondents are directed to use a 5-point Likert scale to indicate how accurately the first 61 statements describe them. The five response options for this section range from 1, "completely false" to 5, "completely true". Similarly, in Section 2 the respondents are given 55 items regarding how often they experience a variety of situational thoughts and feelings. The five response options for Section 2 range from 1, "almost never" to 5, "very often".

The Professional Manual which accompanies the MSEI provides normative scores (percentiles and T scores) which facilitate the interpretation of individual scores and patterns. Since significant differences were reported between gender in some of the normative raw data, percentiles and T scores are also presented separately for males and females for the MSEI. Raw scores on the 11 selfesteem subscales range from 11-64 and individual T scores range from 20-80 (mean = 50, SD = 10). Approximately two-thirds of the T scores are within the range of 40-59 on any given MSEI subscale. Scores in the range of 30-39, and 60-69, are respectively considered to be moderately low and high. Any T scores above 70 or below 30 occurred in only

<sup>&</sup>lt;sup>1</sup>. The complete MSEI assessment package can be purchased from "Psychological Assessment Resources", P.O. Box 998, Odessa, FL. 33556.

2% of the normative sample and should be considered significantly high or low.

Low scores will be of concern since they suggest areas of low self-esteem. An overly high score on the Defensive Self-enhancement scale, however, is typically a cause for concern since it suggests a biased or inflated self-representation. As mentioned earlier, the concept of "faking good" make be an integral part of the self-concept and one of the protective strategies of an individual involved in alcohol and drug abuse problems, and the Defensive Self-enhancement scale may add insight into this particular phenomenon. Table 3.1 provides the raw scores of the normative data for the individual MSEI subscales (O'Brien & Epstein, 1988, p. 5).

Table 3.1

Means and Standard Deviations for MSEI Scales

Scale	Males (n = 298)		Females ( <i>n</i> = 487)	
	M`	ŚD	M	SD
Global Self-esteem (GSE)	34.56	6.63	32.65	7.10
Competence (CMP)	36.99	5.52	35.53	5.92
Lovability (LVE)	35.43	6.74	36.90	7.24
Likability (LKE)	34.40	5.40	35.66	5.23
Self-control (SFC)	35.11	5.40	34.21	6.22
Personal Power (PWR)	34.81	5.80	33.37	6.17
Moral Self-approval (MOR)	37.59	. 5.69	39.50	6.06
Body Appearance (BAP)	33.01	6.55	31.22	6.76
Body Functioning (BFN)	36.28	6.77	32.31	6.82
Identity Integration (IDN)	33.95	6.56	33.06	7.01
Defensive Self-enhancement (DEF)	43.95	7.53	47.43	7.81

Reliability and Validity: The MSEI Professional
Manual provides a comprehensive overview of the development
and validation process for the each of the self-esteem
subscales included in the MSEI. The analyses include
reports on individual item analysis, crossvalidation, scale
revisions, internal consistency, stability, validity, and
factor analysis. All scales demonstrated respectable
internal consistency reliability (alpha) coefficients of at
least .80, with some scales approaching or equalling the
.90 level. One exception was Defensive Self-enhancement
scale which demonstrated a reliability coefficient of .78.

Stability of the MSEI was assessed by examining the test-retest correlations after a one month interval period. Substantial test-retest reliabilities were demonstrated by

all of the MSEI scales with most of the scales being greater than or equal to .85, and only two of the scales slightly under .80 (Likability = .79; Identity Integration = .78).

Convergent and discriminant validity studies were also conducted with the MSEI scales and three global self-evaluation scales: the Eagly (1967) and Rosenberg (1965) global self-esteem scales and the Generalized Expectancy of Success Scale (Fibel & Hale, 1978). MSEI subscale correlations ranged between .87 (Global Self-esteem) and .36 (Body Functioning).<sup>2</sup>

# Relapse

Conceptual definition: A consistent definition and workable measures for relapse have been a point of discussion throughout the research in substance abuse. The disease model (Jellinek, 1960) or the Alcoholics Anonymous approach, for example, stress life-long abstinence as the only acceptable approach or solution to alcoholism and that a full-blown relapse will be the inevitable outcome of drinking in any amount. Therefore, from an abstinence based perspective, any use of alcohol or drugs following treatment is defined as a relapse.

One of the main reasons there has been some discussion

 $<sup>^2</sup>$  A more complete report on the original development and standardization process of the MSEI can be found in the Doctoral Dissertation of E. J. 0'Brien (1980).

regarding relapse, is the potential effect such definitions and concepts can present from a treatment perspective: How does a recovering addicted individual openly address the stark reality of threatening relapse situations when there is such a stigma attached to the "all or nothing" approach to recovery? From personal experience, the writer has encountered numerous individuals attending treatment for substance abuse who would rather lie about one "slip" in recovery than to admit to his/her peers in the AA program the realities of recovery from addictions. Recovery is a process, not an event; briefly falling back into old selfdefeating behaviors does not necessarily mean that one cannot learn from the precarious process and how to better prepare for future high risk situations (Wanigaratne, Wallace, Pullin, Keaney, & Farmer, 1990; Marlatt & Gordon, 1985).

Within the last few decades, alternative and more innovative views on recovery have opened the door not only to more effective treatment interventions, but also to research exploring relapse and increased awareness of recovery issues. The Relapse Prevention Model (Marlatt & Gordon, 1985; Brownell, Marlatt, Litchenstein, & Wilson, 1986), for example, clearly distinguishes between a lapse and a relapse in the recovery process. The theory is that a "slip" or a lapse following inpatient treatment is a highly probable occurrence and may be an integral part of

recovery if one is able to learn from the setback rather than to ignore or conceal it. Corrective measures or improved coping strategies can then be implemented the next time that particular high risk situation is encountered by the person in recovery. In essence, the conceptual definition of relapse might well determine the intervention from a treatment perspective all the while maintaining abstinence as the ultimate goal.

Operational definition: Although the concept of relapse varies from a "slip" of one time use of the substance of abuse to a full-blown return to past behaviors, both concepts include the fact that the individual has once again participated in some level of substance abuse. The very nature of substance abuse problems dictates that one of the primary goals of recovery is to no longer use that particular substance.

Operationally defining relapse in terms of any substance use or total abstinence is a common and accepted approach in the addictions field. Therefore, for this study, relapse is operationally defined as any substance abuse following inpatient treatment.

Measurement of relapse: Once operationalized as a dichotomous variable, the measurement of relapse in this study was straight forward process. Upon returning to the treatment centre to complete the final one week phase of the inpatient program for substance abuse, the clients were

asked to respond "yes or no" to the question regarding relapse.

# DESCRIPTION OF INPATIENT TREATMENT PROGRAM

The Lander Treatment Centre is a 48 bed residential treatment centre for substance abuse which provides intensive, short term treatment in an interactive, group based environment which operates from an abstinence-based approach to addictions. When fully staffed, the centre employs 12 addictions counsellors, 3 supervisors, and a 24hour nursing/client care staff. The primary component of the treatment program is a two week inpatient stay at the This initial treatment phase is then followed by an outpatient period of approximately 6 to 8 weeks during which time the individuals return to their own communities to work on their individual recovery programs. then return to the centre for a one week inpatient aftercare program which addresses ongoing struggles "which usually occur in the early stages of recovery and strategies for coping with high risk situations encountered after completing the initial phase of treatment. Unfortunately, clients who have experienced serious difficulties in recovery are not deemed appropriate for the aftercare inpatient phase of the program and are encouraged to repeat the primary treatment phase.

#### Lander Treatment Model

The treatment program implements a combination of selected strategies and program delivery techniques. daily program regime is characterized by interactive workshops, structured learning exercises, the use of questionnaires and homework assignments and various cognitive and behavioral coping strategies. A strong emphasis is placed on the small group process and the development of healthy relationships, relapse prevention The program is based on research strategies and skills. that some of the most powerful methods of behavior change in addictions are performance based, and it incorporates a substantial segment of the relapse prevention treatment approach (Marlatt & Gordon, 1985). Although the program is not centred around the AA model of recovery, attendance at the AA or NA (Narcotics Anonymous) evening meetings is a mandatory component of treatment and is strongly encouraged as part of an effective aftercare program following inpatient treatment.

# QUESTIONNAIRE DEVELOPMENT AND DATA COLLECTION

In addition to completing the MSEI, clients entering the Lander Treatment Centre were asked to fill out a survey questionnaire. The study included questions relating to personal demographics, and other issues which have been identified in the past to be potential contributing and/or associated factors in alcohol and drug abuse. Some of the

questions have been adopted from the Lander Treatment Centre's own intake process as well as adapted from the Addiction Severity Index (ASI) (McLellan et al., 1992). The ASI, now published in 9 languages, is a comprehensive assessment instrument which has become a standard in identifying and assessing influential factors in the addictions field. Some of the relevant factors regarding relapse will be presented and explored in later chapters.

# Pre-Testing the Assessment Package

Prior to the actual implementation and distribution of the questionnaire and the MSEI to clientele at the intake level, the questionnaire was reviewed by the treatment centre's managerial staff as well as AADAC's research staff in Edmonton and appropriate adjustments were made. assessment package and administration process were then given a complete experimental "run through" with a group of clients at the centre and minor changes were made to a few questions which were perceived as being a bit unclear by some of the respondents. The initial adminstration was introduced to the respondents by three or four different staff members and it was quickly discovered that the manner of presentation of the research project had a significant impact on the level of client participation. This concern was openly addressed with management and the staff participating in the project and staff members were instructed on how to introduce the research project in

order to attain maximum participation. It became evident that converting the staff to the overall beneficial nature of the research project was a central issue in the effective administration of MSEI and the intake questionnaire.

The issue of improving self-esteem in treatment has been a component of previous AADAC program evaluations (see Brown & Thompson, 1990), and the present management and research department expressed an active interest in participating in further studies since previous studies at the Lander Treatment Centre had employed unidimensional measurements of self-esteem (Hudson, 1982) and were not always conclusive with regards to any directional association between self-esteem and relapse. It appeared, however, that even though the writer may have had a fairly good understanding of the intent of this project from the beginning, it proved to be somewhat unrealistic to assume complete cooperation from the staff at the centre. Without a mutual understanding of how research such as this could potentially improve the quality of treatment for the clientele, there seemed little point for some of the staff to want to cooperate. Once understood, implementation became more of a team effort. In their discussion of research designs, Grinnell and Stothers (1988) concur with the need to have a representative sample of the population, and how a consistent positive presentation of the proposed

study is an important part of the process of obtaining that sample.

In September, 1993, after receiving the approval of The Ethics Committee at the University of Calgary, the data collection process was inaugurated with clients in the initial phase of the treatment program. This first group of clients then began to return to the centre for the final phase of treatment in the latter part of October at which time they reported on their progress in the recovery process (yes or no to the relapse question). This latter data collection process continued until the Lander Treatment Centre closed for their annual Christmas break.

#### RESEARCH DESIGN

# Study Purpose and Goal

The purpose of this study was to examine the nature of relapse following inpatient treatment for substance abuse and the apparent role of self-esteem in that process. In light of the preceding operational definition of self-esteem as a multidimensional construct, this study might assist in identifying certain dimensions of self-esteem which are potential factors in the relapse or recovery process.

As noted in the review of the literature to date, low self-esteem and substance abuse problems seem to go hand in hand, and individuals in recovery generally experience a higher level of self-esteem than those entering treatment.

In order to gain a better understanding of the nature of this association as it pertains to this present study, a pretest of the Multidimensional Self-Esteem Inventory (MSEI) was conducted with participants being studied prior to treatment. This initial pretest measurement also serves as a normative measure for the MSEI instrument for the sample being studied since no data was available for the MSEI and substance abuse. Secondly, there is a need to once again assess the level of self-esteem of those individuals participating in the study as they leave the initial phase of treatment in order attain a posttest level of measurement for the MSEI.

# Choice of Research Design - O<sub>1</sub> X O<sub>2</sub> O<sub>3</sub>

In a large part, the nature of the research design of this particular study was governed by the format of the treatment program at the Lander Treatment Centre. The present inpatient treatment program lends itself well to either a pretest-posttest design or that of time-series designs. The program, however, does not easily accommodate either a comparison group or an experimental group. All potential respondents for the study are simply part of a fairly homogenous population who typically would attend the Lander Treatment Centre.

Previous studies in the addictions field have struggled to maintain true experimental designs due to the logistics of tracking this somewhat transient and secretive

population over a specific time period. The issue becomes clouded further when considering the ethics involved in withholding treatment in a control group setting. As a general rule, individual motivation is a major contributing factor in the recovery process from substance abuse (Chernoff, 1991). To knowingly withhold treatment from a client in this population who has finally responded to promptings and encouragement to enter treatment does not appear to be in anyone's best interest. As previously stated, this study has an exploratory and a descriptive dimension to it, and conducting a survey of as many respondents as possible in a 3 or 4 month period of time was deemed the best research option.

For the purposes of this study, a pretest-posttest one group design with follow-up (O $_1$  X O $_2$  O $_3$ ) was chosen, where:

 $O_1$  = pretest of the MSEI instrument

X = treatment program intervention

 $O_2$  = posttest of the MSEI instrument

 ${\rm O_3}$  = measurement of dependent variable regarding relapse upon return to the final treatment phase.

In the present study, we have a dichotomous dependent variable which requires a "yes or no" response regarding relapse. The respondent is asked to report any use of alcohol or drugs between the time of completing the initial

phase of treatment until once again returning to complete the final phase of inpatient treatment.

# Disadvantages of Using the Time-Series Design

- 1. One of the major weaknesses of this design is that it does not control for any intervening variables (Grinnell & Stothers, 1988). While this is usually a fairly significant concern in most studies, in actual fact we are not evaluating the program per se, nor are we assessing the actual level of change in self-esteem between pretest and posttest. The point in question is whether or not individuals with low self-esteem following inpatient treatment are more likely to relapse than those individuals with low self-esteem.
- 2. This study is also lacking a comparison group, nor were the respondents selected by random selection. In many respects this limits the extent to which the results can be generalized to the population as a whole, however, Grinnell and Stothers (1988) state that the subjects actually become their own controls and that the pretest can serve as a baseline for the sample being studied.

# Logistical Concerns in Design Implementation

Although the structure and program design at the treatment centre lends itself well to a study such as this, and provides access to a population which is often somewhat awkward and intrusive to study, not all aspects of the

design were positive. The dropout rate in a time-series study is always a concern, and clients who were staff-discharged from the initial phase of the treatment program for a variety of reasons were categorically eliminated from being part of the data collected in the final phase of treatment. Other clients chose to exercise their option to withdraw from the study part way through the initial phase of treatment and did not complete the MSEI posttest, while still others chose not to complete the final questionnaire regarding relapse upon returning to complete the final phase of treatment.

Tracking respondents following treatment in any study can be onerous, time consuming, and quite costly. Being familiar with the above concerns and having limited resources, it was the choice of the writer to slightly lengthen the study in order to obtain a representative sample of the population as opposed to considering the more costly chore of tracking the respondents following treatment. Although some of the clients may have been excluded in one way or another from the final data analysis process, the MSEI intake scores may serve as a valuable resource in establishing a normative measure for the assessment instrument with this population in the future.

## THREATS TO VALIDITY

The time-series research designs are basically an extension of the pretest-posttest one-group design and

carry with them many of the same threats to validity. Some of the major threats that we need to be aware of and look for in this particular study are history, instrumentation, and mortality.

# History

To state that self-esteem will have an effect on relapse following treatment may be a relatively safe position in light of the present literature. Considerably less solid, however, is our information about the behaviors or the environments of the participants throughout the time period that they are away from the centre after completing the initial phase of treatment. Some individuals are incarcerated and may be on mandatory drug testing following treatment and have little or no opportunity or desire to jeopardize their probation or parole at that time. It is quite possible, therefore, for an individual to have a significantly low self-esteem and still be totally abstinent under these conditions yet still in denial.

On the other hand, a client could easily leave treatment with an overly inflated sense of self and record a high level of self-esteem and still relapse if caught in a high risk situation without being prepared for it.

Supportive families might also have a positive effect on an individual following treatment and the person's success in recovery may have more to do with this support than the initial surge in self-esteem.

## Instrumentation

Closely tied to the history effects is the concern of instrumentation. The major concern is whether or not our measures have sufficient reliability and validity to track the particular phenomenon over time. As noted earlier, a couple of the subscales lacked respectable convergent validity and this may present itself to be an issue with regards to instrumentation. Grinnell and Stothers (1988) also remind us of the importance of consistency in the administration process of the instrument and this issue seemed to be adequately addressed by inviting a willing member of the Lander Treatment Centre staff to assume almost total responsibility for this task.

# Mortality

It appears that the transient nature of this particular population has often been a concern in research and this has led some researchers to speculate about the nature of those individuals who do not continue to participate in the study. The writer is aware of a fairly general assumption in the addictions field that individuals who do not complete treatment or who choose not to return for the final phase of treatment are most likely to have struggled with their recovery program. Teichman (1986) states, for example, that "dropping out of treatment is often associated with relapse" (p. 133) and that it is a complex issue in addictions research. Studies have clearly

indicated that relapse rates are generally found to be the highest within a short period of time following the initial intervention or treatment phase (Wanigaratne et al., 1990) and this heightens the level of concern for clients who fail to complete treatment.

Research mortality rates are also a concern with clients who are mandated to attend treatment. It is not uncommon for them to openly state that they will not be back again for the final phase if not required to do so and that they have little or no intention of remaining abstinent. Even though a fairly high mortality rate in addictions treatment is to be expected, it is part of the process and need not invalidate the results of those individuals who actually complete treatment. There is real concern, nevertheless, that mortality creates a selection artifact and that those individuals who complete the posttest could actually comprise a unique group themselves.

#### SAMPLING

The respondents to the MSEI and the accompanying questionnaire were all participants in the inpatient treatment program at the Lander Treatment Centre.

# The Sampling Frame

The sampling process began in September 1993 and concluded in December of the same year and was based primarily on those individuals who completed both the

initial and the final phases of the treatment program at the centre. The sampling frame at the treatment centre for the fiscal year of September 1993 to August 1994 for those individuals who completed both phases of the program was 228 clients. This project was successful in obtaining usable responses from 68 clients (M = 55, F = 13) from that population over a 4 month period. This sample therefore represents 29.8% of the individuals who completed the program over that one year period, or approximately 89% of those individuals who would have completed both phases of treatment in that 4 month time frame from September to the end of December.

# DATA COLLECTION METHODS

Data collection was done primarily by the intake workers at the treatment centre as the clients presented themselves for treatment. Intake is usually done on Sundays during which time there are relatively few program components running and clients have the opportunity to complete this type of assessment without a lot of distractions. It was also felt that the opportunity for direct personal contact with an intake worker would improve the likelihood of increased participation in the research project, and this appeared to be the case.

After completing the required paperwork for admission to the treatment program, the potential respondents were introduced to the nature of the research project and asked if they would agree to participate. The respondents were advised of their right to not participate in the project as well as being assured that their responses would remain both confidential and anonymous and that treatment at the centre would not be affected in any way by their decision. Those individuals who agreed to participate were then asked to sign an informed consent which summarized the above information. At that time they were then given the MSEI assessment instrument and the intake questionnaire. The time required to complete the assessment package varied between 15 and 30 minutes depending on the individual client.

Those clients who completed the initial assessment were then identified and given an ID number for further reference in the research project. Upon completion of the inpatient treatment program the respondents were once again contacted by a staff member prior to being discharged and were asked to complete the MSEI posttest and a brief questionnaire regarding their plans for accessing any aftercare programs or appropriate support systems.

The final stage of the data collection process occurred when the clients returned to complete the final phase (one week) of the inpatient treatment program some 8 weeks later. At that time they were asked to report on any substance abuse (yes or no) following the initial phase of treatment. As well, they were asked to report on specific

high risk situations and whether or not they accessed aftercare support following treatment.

#### RETURN RATE

The actual return rate is difficult to assess since clients have a choice as to when they return to complete the final phase of treatment. Although it is strongly encouraged to return within the first 90 days, individual work schedules often interfere with that process and clients are simply given permission to complete the final inpatient phase any time within the next 12 months.

The intent of this study, however, was not to track all individuals who went through the initial phase of the treatment program, but to assess relapse in those individuals who chose to participate in the project, who completed the MSEI pretest and posttest, and who also answered the question regarding whether or not they had relapsed following treatment. As previously stated, this study focussed on 68 respondents out of 228 for the year for which the treatment centre would have been able to have actual statistics regarding relapse upon returning to the final phase of treatment.

#### DATA ANALYSIS

The nature of the research design  $(O_1 \times O_2 O_3)$  and focus of the research question basically determine the type of statistical analyses which can be performed on this data

set. The demographic data, for example, was analyzed with descriptive statistics. Responding to the research question and hypothesis regarding self-esteem and its role in the relapse process, however, requires the use of more inferential and higher exploratory statistics.

The levels of self-esteem on the different subscales of the MSEI instrument, the rates of relapse, and their apparent interactions with each other and other demographic variables were analyzed primarily with the use of discriminant analysis and T tests. This research design included a dichotomous dependent variable (yes or no regarding relapse) which by nature excludes some of the more commonly used statistical analyses.

The discriminant analysis statistic was therefore chosen since it accommodates analyses which have dichotomous dependent variables and ratio or interval level independent variables. This study also has an exploratory dimension to it and the discriminant analysis process has the potential to address the major differences between the groups (relapsers and abstainers in this case). The statistic can also classify subjects into groups based on a battery of measurements (Stevens, 1992). In this study, the classification into groups of relapsers or abstainers would be based on the measurements of self-esteem on the different subscales. Providing there is an adequate sample size, this statistical analysis also has the capacity to

separate the groups along one function which is unrelated to the separation along another function. This would be particularly useful in identifying which subscales of the MSEI significantly interact with the relapse variable and which subscales do not.

The results of the statistical analyses of the data set will be presented in the following chapter.

#### CHAPTER 4

## ANALYSIS AND FINDINGS

This chapter will focus on the analysis of the results of the MSEI assessment and the survey questionnaire as administered to the sample respondents from the Lander Treatment Centre. The findings of this exploratory study will be presented as determined by the appropriate statistical analyses performed with the different variables in the study. For the purposes of this study, the level of acceptable statistical significance was determined to be .050 or higher, a level which is considered a general convention for this type of study in social work (Weinbach & Grinnell, 1991).

In an attempt to answer the research question as to whether individuals with lower self-esteem relapse more often than those with a higher level of self-esteem and to also respond to the original hypothesis, the results and findings will be presented in two basic segments. One will focus on the demographic descriptions of the study sample with comparisons relating to the MSEI pretest and posttest scores. The other more weighty component will explore the nature of the relationship between the MSEI subscales and the relapse variable. In order to effectively present these findings, tables and/or graphs will also be employed to aid in the description of the variables.

#### THE DEMOGRAPHICS OF THE SAMPLE

A total of 68 (M = 55, F = 13) respondents participated in this research project and a summary of some of the demographics of the sample is provided in Table 4.1. Even though the sample has a large proportion of male respondents, it is fairly representative of the typical population at the treatment centre.

As noted in Table 4.1, descriptive demographics for this sample appear to be quite similar for males and females. An interesting difference, however, is in the area of legal issues. Even though both males and females indicated they presently have outstanding legal problems, the problems appear to be somewhat different (M = 30.9%, F = 30.8%). In this study only 2 females reported having had one impaired driving charge, while 28 males (50.9%) reported having 2 or more impaired driving charges.

Analysis of the demographic data for this sample also reveals that all 55 males and 13 females completed both the pretest and the posttest for the MSEI instrument as well as responded to the question as to whether or not they had relapsed. For the males, the mean age was 38.2 years (range of 20 to 64 years) and for females the mean age was 34.3 years (range of 21 to 48 years).

Table 4.1

Demographic Summary of Study Participants

Variables		Number	Percent
Gender:	Males Females	55 13	80.9 19.1
Mean Age of Participants:	Males Females Combined	38.1 34.3 37.4	
Indicated Required to Attend Treatment:	Males Females	16 3	29.1 23.1
Indicated Outstanding Legal Problems:  Marital Status:	Males Females	17 4	30.9 30.8
Married or common-law Single Divorced Separated		28 16 14 10	41.2 23.5 20.6 14.7
Education Level: Grade 10 or less Grade 12 or equivalent Some college or vocational training College or university graduate		17 14 29 8	25.0 20.6 41.6 11.8
Employment Status: Receiving social assistance Unemployed Working part-time Working full-time		9 24 2 33	13.2 35.3 2.9 48.5
Major Substance of Abuse: Alcohol Alcohol and drugs Cocaine Multi-drug user Marijuana, hash, oil Prescription drugs		53 9 2 2 1 1	77.9 13.2 2.9 2.9 1.5 1.5

Prior to attending the inpatient treatment at the Lander Treatment Centre at this time, 47% (N=26) of the males and 62% (N=8) of the females reported that they had not taken any outpatient counselling for addiction problems. For those who had reported that they had accessed counselling in preparation for inpatient treatment, only 26% (N=14) of the males and 23% (N=3) of the females indicated that they had attended more than twice. On a more positive side, 64% of the total respondents who returned for the final phase of treatment indicated that they were attending Alcoholics Anonymous or Narcotics Anonymous at least once a week.

With respect to family and other relationships, 58% (N=32) of the males and 31% (N=4) of the females reported that they had experienced the break-up of a relationship as a direct result of their drug or alcohol problems. Almost two-thirds (63%) of the sample indicated that in their estimation, either a parent or a fellow sibling also has an alcohol or drug problem. For those individuals who reported that they had relapsed, 58% reported that someone in their immediate family had a drinking or drug problem. In terms of educational background, 25% (N=17) of the respondents reported completing less than grade 10.

# Demographics Regarding Relapse

Analysis of the sample data reveals that 48.5% (33 out of 68) of the respondents indicated that they had used alcohol or drugs during the interim period following the initial inpatient treatment. A recent evaluation of the Lander Treatment Centre program indicated that a majority of the clients (84%) who participated in their study reported that they had been completely abstinent or had one relapse during the 3 month period following treatment (Brown & Thompson, 1990). Results from this present study indicated that 69% of the respondents had been completely abstinent from alcohol or had one relapse day in the previous month. With respect to drug use, a higher percentage (92%) indicated that they had been abstinent or had only one relapse day in the previous month.

Even though the research sample has an overly high representation of males, relapse was fairly equally distributed with regards to gender, with 46% (N=6) of the females and 49% (N=27) of the males relapsing before returning to complete the final phase of treatment. The marital status of individuals did not appear to be an overly significant issue in recovery. Upon intake, 28 respondents (41.2%) indicated that they were either married or living common-law. Of those who relapsed, 14 or 42.2% were married or living common-law. Table 4.2 summarizes some of the demographics regarding relapse.

Table 4.2

Summary of Relapse Demographics

Variables	Relapse Number (N = 33)	Percent
Total Number of Respondents Who Relap Ma Fema	les 27 of 55	48.5 49.0 46.1
Family Members with Alcohol/drug Probler No one in family using Father or mother using Brother or sister using Parents and siblings using	ns: 13 5 4 11	39.4 15.1 12.1 30.3
Required to Attend Treatment:	9	27.3
Employment Status: On social assistance Unemployed Combined	4 15 19	12.1 45.5 57.6
Number of Times Attending Treatment: First time Second time	27 6	81.8 18.2
Respondents' Reporting of Abuse Issues: Sexual abuse Emotional abuse Physical abuse	4 15 9	12.1 45.5 27.3
Perceived Level of Comfort with the Subst Not comfortable or unsure being around Fairly comfortable around it being used Very comfortable around it being used	d it 25	78.1 12.1 12.1
Marital Status: Married or common-law Single Divorced Separated	14 9 4 6	42.4 27.3 12.1 18.2

#### NORMATIVE SCORES FOR THE MSEI AND SUBSTANCE ABUSE

As noted in the Chapter Two in the review of the literature on alcoholism and self-esteem, individuals with alcohol and drug problems typically report levels of selfesteem which are significantly lower than the population as This study appears to replicate previous studies a whole. in this area as noted in Table 4.3 for males and Table 4.4 for females entering treatment for substance abuse at the Lander Treatment Centre. The MSEI pretest scores for males varied from 6.83 points lower for the Global Self-esteem subscale to 2.17 points lower than the instrument normative scores for the Competence subscale. For females entering treatment, pretest MSEI scores ranged from 8.30 points lower than the normative scores for the Self-control subscale to only 1.40 points lower than the norm for the Body Appearance subscale. Not only was self-esteem at intake consistently lower than the normative data for the MSEI, but the Defensive Self-enhancement (or faking good) scores for males were slightly higher than the norm (2.21 points). This may suggest an attempt to enhance or somewhat exaggerate their perception of themselves even when their actual measured self-esteem on the other MSEI subscales is in reality somewhat lower in every other case.

Table 4.3

Comparison of the Pretest and MSEI Normative Scores for Males: Mean Scores and Standard Deviations

	Pretest (n =	Scores 124)	MSEI I (n = )		Mean Diff
Scale	M	SĎ	M	SD	M
Global Self-esteem (GSE)	27.73	6.71	34.56	6.63	- 6.83
Competence (CMP)	34.82	6.09	36.99	5.52	- 2.17
Lovability (LVÈ)	30.93	6.44	35.43	6.74	- 4.50
Likability (LKE)	31.97	5.01	34.40	5.40	- 2.43
Self-control (SFC)	28.78	6.07	35.11	5.40	- 6.33
Personal Power (PWR)	31.69	5.91	34.81	5.80	- 3.12
Moral Self-approval (MOR)	33.65	6.92	37.59	5.69	- 3.94
Body Appearance (BAP)	30.10	5.99	33.01	6.55	- 2.91
Body Functioning (BFN)	31.77	7.58	36.28	6.77	- 4.51
Identity Integration (IDN)	28.99	6.54	33.95	6.56	- 4.96
Defensive Self-enhancement (D	EF) 46.16	8.47	43.95	7.53	+ 2.21

Table 4.4

Comparison of the Pretest and MSEI Normative Scores for Females: Mean Scores and Standard Deviations

	Pretest (n =	Scores 33)	MSEI I (n=		Mean Diff
Scale	M	SD	M	SD	M
Global Self-esteem (GSE)	26.00	6.70	32.65	7.10	- 6.65
Competence (CMP)	32.12	6.19	35.53	5.92	- 3.41
Lovability (LVÈ)	30.36	6.86	36.90	7.24	- 6.54
Likability (LKE)	33.39	6.66	35.66	5.23	- 2.27
Self-control (SFC)	25.91	4.71	34.21	6.22	- 8.30
Personal Power (PWR)	28.39	6.37	33.37	6.17	- 4.98
Moral Self-approval (MOR)	32.88	6.00	39.50	6.06	- 6.62
Body Appearance (BAP)	29.82	6.77	31.22	6.76	- 1.40
Body Functioning (BFN)	27.42	6.79	32.31	6.82	- 4.89
Identity Integration (IDN)	27.24	6.90	33.06	7.01	- 5.82
Defensive Self-enhancement (DE	F) 45.06	9.57	47.43	7.81	- 2.37

The pretest data for the MSEI in Tables 4.3 and 4.4 is for all individuals for whom data was collected upon entering the inpatient phase of treatment during the time of the research project (Males = 124, Females = 33). Once graphically charted, the pretest MSEI mean scores for males and females are noticeably lower than the normative data for the MSEI instrument. Figure 4.1 compares the male MSEI pretest scores and Figure 4.2 compares the female MSEI pretest scores to the normative data for the MSEI instrument.

Figure 4.1

Graphic Comparison of MSEI Pretest Mean Scores for Males to the Normative Data for the MSEI Instrument

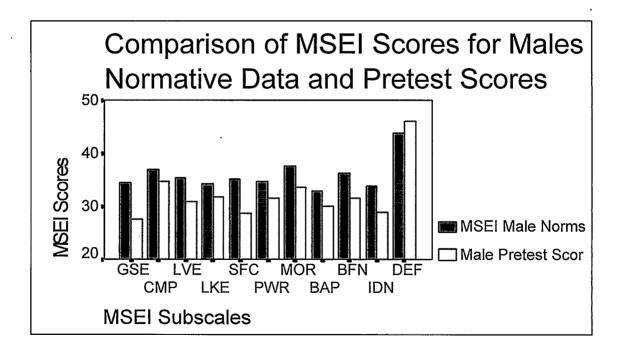
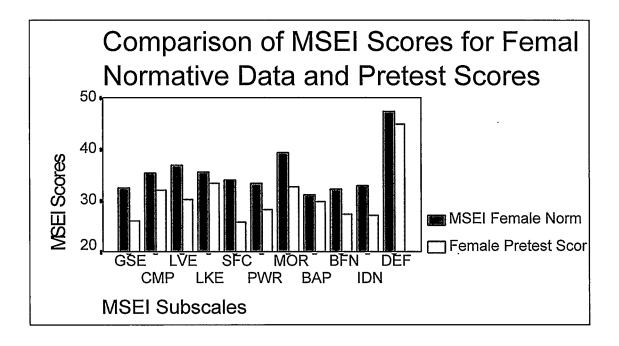


Figure 4.2

Graphic Comparison of MSEI Pretest Mean Scores for <u>Females</u> to the Normative Data for the MSEI Instrument



### POSTTEST FINDINGS AND SELF-ESTEEM SCORES

As expected and indicated in previous research studies, the self-esteem scores of the participants improved over the course of the treatment period. Tables 4.5 and 4.6 summarize the MSEI subscale posttest scores for males and females and compare them to the baseline pretest scores for the all clients as they entered the treatment centre. Improvements in self-esteem mean scores between pretest and posttest for males (Table 4.5) ranged from .25 (Likability) to 3.03 (Global Self-esteem). Females' mean score differences (Table 4.6) ranged from a minus .28 (Body Appearance) to + 4.40 (Self-control).

Table 4.5

Comparison of MSEI Pretest and Posttest Mean Scores for Males: Means and Standard Deviations

	Pretest (n = 124)		Posttest ( <i>n</i> = 55)		Diff	
Scale	M	SD	IVI .	SD	M	
Global Self-esteem (GSE)	27.73	6.71	30.76	6.22	3.03	
Competence (CMP)	34.82	6.09	35.64	4.95	.82	
Lovability (LVÈ)	30.93	6.44	31.85	6.36	.92	
Likability (LKE)	31.97	5.01	32.22	4.62	.25	
Self-control (SFC)	28.78	6.07	30.80	5.01	2.02	
Personal Power (PWR)	31.69	5.91	33.71	4.72	2.02	
Moral Self-approval	33.65	6.92	35.00	5.26	1.35	
Body Appearance (BAP)	30.10	5.99	32.29	5.50	2.19	
Body Functioning (BFN)	31.77	7.58	32.51	6.70	.74	
Identity Integration (IDN)	28.99	6.54	31.42	6.30	2.43	
Defensive Self-enhancement (D	DEF) 46.16	8.47	48.02	7.17	1.86	

Table 4.6

Comparison of MSEI Pretest and Posttest Mean Scores for Females: Means and Standard Deviations

		etest = 33)		ttest = 13)	Diff
Scale	M.	ŚD	M.	SD	M
Global Self-esteem (GSE)	26.00	6.70	29.77	5.82	3.77
Competence (CMP)	32.12	6.19	34.00	5.61	1.88
Lovability (LVE)	30.36	6.86	31.00	5.37	.64
Likability (LKE)	33.39	6.66	35.08	5.24	1.69
Self-control (SFC)	25.91	4.71	30.31	5.33	4.40
Personal Power (PWR)	28.39	6.37	29.85	6.34	1.46
Moral Self-approval (MOR)	32.88	6.00	36.00	6.49	3.12
Body Appearance (BAP)	29.82	6.77	29.54	6.72	28
Body Functioning (BFN)	27.42	6.79	30.62	6.85	3.20
Identity Integration (IDN)	27.24	6.90	31.62	3.93	4.38
Defensive Self-enhancement (DEF)	45.06	9.57	48.31	5.68	3.25

As noted in Table 4.5 for males in the sample, there was an increase in the posttest mean scores over the pretest mean scores for the MSEI at intake, higher mean scores signifying higher levels of self-esteem. As well, there was a general trend of decrease in the standard deviations for the subscales.

Even though the sample size for the females is much smaller in comparison to the males (Males = 55, Females = 13), there is a clear trend for the posttest mean scores to be higher than the pretest scores. In some cases the incremental changes are relatively small, but self-esteem by nature is a construct which does not change quickly and in great measure. For the purpose of this study, however, the direction of the change is more the issue than the quantity of change and the analysis of the sample data indicates that the levels of self-esteem improved for both males and females from pretest to posttest.

Perhaps more illustrative of the apparent relationship between self-esteem and relapse is found in comparing the MSEI posttest mean scores of those respondents who relapsed with those who were totally abstinent following treatment. The point needs to be stressed that the MSEI posttest scores were taken just prior to leaving the initial phase of treatment. The respondents' report regarding relapse following treatment was given several weeks later upon returning to the treatment centre for the final phase of

treatment. If the posttest score had been taken as the respondents returned to complete the final one week phase of inpatient treatment, it could be argued that the lower levels of self-esteem may have been associated with the actual relapse process. However, in this study it is obviously not the case since the relapse measurement was taken several weeks after the MSEI posttest. As outlined in Table 4.7, for each subscale the MSEI posttest mean scores were higher for those respondents who maintained abstinence.

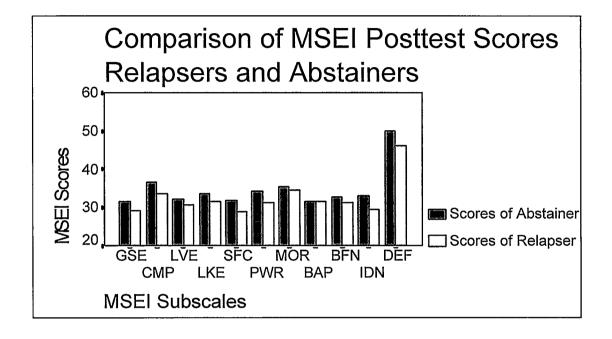
Table 4.7

Independent *T*- test Comparison of the IVISEI Posttest IVIean Scores for Relapsers and Abstainers (*N* = 68)

	Relapsers	Abstainers		
Scale	(n = 33)	(n = 35)	Diff	p
Global Self-esteem (GSE)	29.36	31.71	2.35	.114
Competence (CMP)	33.79	36.77	2.98	.014
Lovability (LVÈ)	30.97	32.37	1.40	.352
Likability (LKE)	31.76	33.71	1.95	.096
Self-control (SFC)	29.18	32.14	2.96	.014
Personal Power (PWR)	31.42	34.43	3.01	.017
Moral Self-approval (MOR)	34.73	35.63	.90	.502
Body Appearance (BAP)	31.70	31.83	.13	.926
Body Functioning (BFN)	31.36	32.89	1.53	.354
Identity Integration (IDN)	29.52	33.29	3.77	.007
Defensive Self-enhancement (DEF	) 46.09	49.94	3.85	.020

Figure 4.3

Graphic Comparison of MSEI Posttest Mean Scores: Relapsers and Abstainers



## DISCRIMINANT ANALYSIS OF THE MSEI AND RELAPSE RELATIONSHIP

Discriminant analysis of apparent relationships between variables is appropriate when the predictor variables (the MSEI subscales) are at an interval or ratio level and the criterion variable (relapse) is at a continuous or nominal level. Stevens (1992) notes that discriminant analysis is formally equivalent to multiple regression for two different groups. In this study the two groups are the relapsers and the abstainers. Based on a collection of variables (the MSEI subscales) it is the function of discriminant analysis to identify the particular variables that are important in distinguishing

among the relapse and abstainer groups. Ideally, if the sample is large enough, a procedure can then be developed for predicting into which group individuals will be classified based on their MSEI subscales scores.

The following reporting procedure for presenting the findings for discriminant analysis of the research sample will closely follow that outlined in the SPSS manual for Professional Statistics (Norusis, 1993). From the sample data set, Table 4.8 indicates that no cases were excluded from analysis since there were no relevant missing data. All of the respondents in the sample had completed the MSEI pretest and posttest and responded to the question concerning relapse. If they had not completed all three components, SPSS would have excluded the appropriate cases from the discriminant analysis process.

Table 4.8

Summary of Sample Cases Processed

- 68 (Unweighted) cases were processed.
  - 0 of the cases were excluded from the analysis.
- 68 (Unweighted) cases will be used in the analysis.

# Number of cases by group

Relapse	Unweighted	Weighted	Label	
1 2	35 33	35.0 33.0	no yes	•
Total Cases	68	68.0		

Table 4.9

Relapse and Abstainer Group Means:
MSEI Subscale Posttest Scores

Group Means				
Relapse	BAP2	BFN2	CMP2	DEF2
(no) 1 (yes) 2 Total	31.82857 31.69697 31.76471	32.88571 31.36364 32.14706	36.77143 33.78788 35.32353	49.94286 46.09091 48.07353
Relapse	GSE2	IDN2	· LKE2	LVE2
(no) 1 (yes) 2 Total	31.71429 29.36364 30.57353	33.28571 29.51515 31.45588	33.71429 31.75758 32.76471	32.37143 30.96970 31.69118
Relapse	MOR2	PWR2	SFC2	
(no) 1 (yes) 2 Total	35.62857 34.72727 35.19118	34.42857 31.42424 32.97059	32.14286 29.18182 30.70588	

From Table 4.9 we can see, for example, that respondents scored highest on DEF2 MSEI subscale (Defensive Self-enhancement posttest) or that the Global Self-esteem posttest mean score (GSE2) was the lowest of all the subscales. As well, in each MSEI subscale those who indicated that they had relapsed had lower mean scores than those who did not relapse.

Table 4.10

Tests for Univariate Equality of Group Means

# Wilks' Lambda (U-statistic) and univariate F-ratio with 1 and 66 degrees of freedom

Variable	Wilks' Lambda	F	Significance
BAP2	.99987	.0086	.9263
BFN2	.98699	.8700	.3544
CMP2	.91255	6.3250	.0143 *
DEF2	.92026	5.7186	.0196 *
GSE2	.96253	2.5694	.1137
IDN2	.89622	7.6426	.0074 **
LKE2	.96848	2.8591	.0956
LVE2	.98684	.8800	.3516
MOR2	.99314	.4556	.5020
PWR2	.91677	5.9921	.0170 *
SFC2	.91230	6.3445	.0142 *
* p < .05 ** p < .01			

## Wilks' Lambda Considerations

The lambda statistic is the ratio of within-groups sum of squares to the equal sum of squares when all the variables (MSEI subscales) are considered individually. When all the observed group means are equal a lambda of 1 occurs. A lambda value closer to 0 occurs when the within-groups variability is small compared to the total variability. In other words, most of the total variability is attributable to measured differences between the means of the groups. From Table 4.10, CMP2 (Competency), DEF (Defensive Self-enhancement), IDN2 (Identity Integration),

PWR2 (Personal Power), and SFC2 (Self-control) are the subscale variables whose means are most different for relapsers and abstainers.

### Estimating the Coefficients for the Variables

One of the advantages of discriminant analysis and other multivariate statistical procedures over descriptive statistics and univariate tests of significance is that discriminant analysis places an emphasis on analyzing the variables together, not one at a time (Norusis, 1993). In the process, the information which is contained in multiple independent variables such as the MSEI subscales can then be summarized into a single index called the discriminant score.

In this present study, for example, by identifying weighted average self-esteem variables (see Table 4.10) such as Competency, Defensive Self-enhancement, Identity Integration, Personal Power, and Self-control, it is possible to obtain a score that can ideally distinguish individuals who relapse following treatment from those do not. The weights are estimated in the discriminant analysis in such a way that the result is the "best" separation between the groups of relapsers and abstainers. Once applied to the appropriate linear equation, a discriminant score can be calculated for each individual case in the study.

The discriminant equation for this process as

identified in the SPSS manual is:

$$D = B_0 + B_1 X_1 + B_2 X_2 + ... + B_p X_p$$

where: B =estimated coefficients for the data

X = values of the independent variables.

If the discriminant function is to be able to distinguish between those individuals who relapse and those who do not, then the two groups by nature must differ in their D values as calculated by the discriminant equation. The B values, or coefficients for the 11 MSEI variables as calculated by SPSS are listed in Table 4.11.

Table 4.11
Unstandardized Canonical Discriminant Function Coefficients

Variable	Function 1	
BAP2	0821395	
BFN2	0164510	
CMP2	.0853199	
DEF2	.0236918	•
GSE2	0596630	
IDN2	.1028757	
LKE2	.0491537	
LVE2	4.67702507E-03	
MOR2	1072487	
PWR2	.0281239	
SFC2	.1596768	•
(constant	) - 6.2414938	

# Calculation of the Discriminant Scores

Once the coefficients for each self-esteem subscale variables are determined, it is then possible to calculate

the discriminant score for each individual case in the study. This can be done manually by multiplying the unstandardized coefficient values of the variables in Table 4.11 by the actual values of the variable, then summing these products, and then adding the constant as provided in the same table. This process was completed by SPSS as part of the overall process of the discriminant analysis and is provided in table 4.12. The resulting discriminant scores can then be used to classify the individuals into the two groups of relapsers or abstainers.

# Probability of Appropriate Classification

This study is an attempt to answer the research question as to whether individuals with lower self-esteem relapse more often following inpatient treatment than those with higher self-esteem. In this study, 35 (51.5%) of the individuals indicated that they belonged to group 1 (abstainers), and 33 (48.5%) belonged to group 2 (relapsers). The prior probability of belonging to group 1 is then 0.515, and the prior probability of belonging to group 2 is 0.485. A comparison is then made based on the prior probability of belonging to either group compared to the classification determined on the basis of the discriminant scores. In essence, it is an attempt to accurately classify each case based on their MSEI subscale scores into either the relapser or the abstainer group.

Table 4.12

SPSS Classification Output
Actual Group Membership Compared to Calculated Probabilities

Case Actual	Hig	hest Prob	ability	Discriminant
Number Group	Group	P(D/G)	P(G/D)	Scores
1	12112121212112121111221111122	.1642 .7080 .1751 .6607 .0024 .8706 .9633 .8250 .6216 .7922 .9690 .7526 .6922 .6104 .5818 .7943 .8473 .8563 .7943 .8563 .7908 .5686 .2201 .7910 .8971 .7337 .5865 .2844 .8183 .6299 .5570 .0486 .9059 .5845 .8743 .0259	.9044 .5373 .9099 .7648 .9815 .6235 .6485 .6937 .5040 .5967 .6285 .5827 .5314 .5290 .7866 .5689 .5080 .6868 .7089 .5962 .7902 .8748 .7040 .6323 .7443 .7853 .8684 .5788 .5073 .5072 .9477 .6352 .5968 .9555	1.93512024 1.8999 .9829 - 3.6124 .3811615579810843 .28055381 .22881811 .0345 1.0947316304057696 .7251 .2787 1.1141 - 1.80318420 .4147 .8842 1.0879 1.6145341409510434 2.5157 .425800284188 - 2.8046

Table 4.12 (continued)

Case Number	Actual Group	Highe Group	est Probal P(D/G)	bility Dis P(G/D)	scriminant Scores
36	2	2	.1868	.8859	- 1.8970
37	1	1	.9967	.6664	5481
38	1	1	.5669	.7907	1.1166
39	1	1	.5933	.7834	1.0781
40	1 **	2	.6673	.5219	1471
41	2 1	2 2 1	.4072	.8174	- 1.4058
42		1	.7408	.5784	.2132
43	2	2 1	.5573	.7733	- 1.1638
44	1	1	.9842	.6604	.5243
45	1	1	.8700	.6233	.3803
46	1	1	.4431	.8245	1.3110
48	2 **	1	.8996	.6961	.6702
49	2 ** 2 ** 2 ** 2 1	1	.8340	.6112	.3344
50	2 **	1	.5878	.5199	.0019
51	2	2 1	.2274	.8724	- 1.7840
52	1	1	.9685	.6751	.5835
53	1	1	.8127	.7217	.7809
54	1 **	2	.5614	.7721	- 1.1577
55	2 ** 2 **	1	.5552	.5064	0460
56	2 **	1	.6364	.5383	.0679
57	1	1	.5302	.8007	1.1717
58	2 **	1	.9806	.6592	5197
59	1 2 * * 2 ·2 * * 2 2 1	. 1	.6530	.5164	1274
60	·2 **	. 1	.7176	.5700	.1824
61	2	2	.6540	.5168	1288
62	2	2	.0199	.9601	- 2.9062
63	2	2 2 2 1	.2236	.8737	- 1.79 <del>4</del> 0
64		1	.9332	.6441	.4601
65	1 **	2 1	.9516	.6228	5163
66	1		.2328	.8834	1.7373
67	1	1	.6567	.5471	.0996
68	2	2	.3541	.8332	- 1.5036

 $<sup>^{\</sup>ast}$   $^{\ast}$  indicates cases which were predicted to be in one group but were actually a members of the other group

# Classification Summary

From Table 4.12 we find that in 48 of the 68 cases studied (70.59%) that we are able to successfully predict into which group a respondent would most likely be grouped. This process in based on results using the discriminant equation and the values from the MSEI subscales which were previously deemed as being significant in Table 4.10 (CMP, DEF, IDN, PWR, and SFC). A sixth subscale (Likability) was also somewhat significant at the .0956 level. In other words, from a self-esteem perspective, the scores from only 5 of the 11 MSEI subscales enable us to successfully group 70.59% of the respondents based on their MSEI posttest scores. The following table summarizes the classification results from the SPSS calculations.

Table 4.13

Classification Results: Actual and Predicted Group Membership

	Number	Predicted Group Membership		
Actual Group	of Cases	1	2	
Group "no"	35	28	7	
(abstainers)		80.0%	20.0%	
Group "yes"	33	13	20	
(relapsers)		39.4%	60.6%	

Percent of "grouped" cases correctly classified: 70.59%

- 68 (Unweighted) cases were processed.
- 0 cases had at least one missing discriminating variable.
- 68 (Unweighted) cases were used for the printed output.

#### SUMMARY

From a demographic perspective, there did not appear to be too many outstanding factors with regards to relapse, however, it was not the focus of this study to explore these associations in any great depth. Males and females in this study relapsed at about the same rate and marital status did not seem to be a significant issue in this sample. One interesting finding did occur, which noted that of those who relapsed, 78.1% of the respondents indicated that they were not comfortable being around someone else who was using alcohol and/or drugs when they left treatment after completing the initial phase. This seems to beg the question at to whether or not they attempted to be manage a high risk situation for which they were not prepared and then relapsed.

In response to the research question as to whether or not individuals with lower self-esteem relapse more often than those with higher self-esteem, the findings in this study clearly follow the trend that such is the case. Even though this exploratory study was originally conceived as a result of unimperical observations on the part of the writer that individuals with lower self-esteem seem to struggle more often in recovery, it is somewhat surprising to discover that the respondents' posttest mean scores for all 11 MSEI subscales (see Figure 4.3) were universally lower for those who relapsed following inpatient treatment.

On the basis of these findings, we can therefore reject the null hypothesis that there would be no difference between relapsers or abstainers based on self-esteem. Concurrently, we can then retain the research hypothesis that individuals with lower self-esteem following inpatient treatment for substance abuse problems will be more likely to relapse than those individuals with higher levels of self-esteem.

Given that almost half (48.5%) of the respondents did relapse, this fairly even split in actual numbers provided an excellent opportunity to try to explore further if there were in fact any substantive differences between the groups, and self-esteem appears to be one of those differences. The discriminant analysis statistic is able to respond to this challenge since it has the inherent capacity to be "used as an exploratory tool" (Norusis, 1993, p. 20) as well as to answer the more inferential concerns of the study. From this perspective, not only is self-esteem associated with relapse following treatment, but on the basis of 5 of the 11 MSEI subscales, we were able to predict with a fair amount of accuracy (70.59%) into which group a respondent would most probably belong.

While it is not surprising that the research hypothesis was retained in this study, it was unexpected that the MSEI instrument as a whole would be as consistent as it was in being able to differentiate between relapsers

and abstainers. The direction of the association was expected but not the potential inferences which then arise as a result of the exploratory findings regarding relapse and self-esteem.

#### CHAPTER 5

#### DISCUSSION AND CONCLUSIONS

The purpose of this study was to explore in more depth the apparent relationship between self-esteem and the relapse process following treatment for substance abuse problems. More specifically, in terms of the research question, it is an attempt to explore in greater depth the question as to whether individuals with lower self-esteem are more likely to relapse following treatment for substance abuse problems than those individuals with a higher level of self-esteem. Much has been written in the addictions field regarding the high rates of relapse following treatment and there is an ongoing concern among helping professions regarding the emotional carnage which so often accompanies addictions on personal, family, and societal levels. Recent emphasis on the overall importance of self-esteem and the struggles which sometimes accompany those individuals lacking in self-esteem has greatly influenced the decision of the writer to further explore how these two important issues may be interconnected on a clinical level in the recovery process following treatment for substance abuse.

#### STUDY FINDINGS

The results of the analyses of the research data in this study suggest that relapse continues to be an

important issue in the field of substance abuse treatment and that almost half (48.5%) of the respondents in this particular study relapsed. Self-esteem and its noted connection with addictions (Charalampous, Ford, & Skinner, 1976) is a concurrent issue in this study since individuals entering treatment rate themselves significantly below the norms for the population as a whole (see Figure 4.1 and Figure 4.2). When combined, these two concerns (relapse and self-esteem) become much more salient from a treatment perspective since we note that in this particular study respondents who relapsed consistently presented a lower mean score for self-esteem than those who maintained abstinence (see Table 4.7 and Figure 4.3). These findings are centrally important in this study since the self-esteem posttest measurement was taken a minimum of 6 to 8 weeks prior to the time of reporting the relapse, and therefore the low self-esteem scores can in no way be perceived to be a result of a relapse situation following treatment.

While the focus of this study was ostensibly exploratory and descriptive in nature, the results of the discriminant analysis component of the research data have added a predictive or inferential dimension. Not only is low self-esteem associated with relapse, but when explored as a multifaceted construct as measured by the Multidimensional Self-Esteem Inventory, it was then possible to successfully predict approximately 70% of the

time whether a respondent would relapse or not based on the MSEI and discriminant scores. These conclusive and somewhat inferential findings would not have been possible if this study had been conducted using a unidimensional assessment for the self-esteem variable but were possible using the MSEI to measure self-esteem as a multidimensional construct.

Cooper (1983) addressed the apparent need to employ multidimensional assessment instruments as a way of improving both the reliability and validity of studies in the field of addictions and this exploratory study from the Lander Treatment Centre seems to reflect these very concerns. For example, if treated as a single unidimensional construct, the Global Self-esteem subscale (GSE) of the MSEI by itself could not have produced the type of results obtained by having multiple independent variables. From Table 4.10 we find that even though GSE2 (posttest) had a somewhat respectable significance of .1137, it was not at a level appropriate to be even be included in the discriminant equation.

These findings also tend to concur with previous studies regarding the ongoing relationship between low self-esteem and substance abuse problems (Skager & Kerst, 1989; Furnham & Lowick, 1984) and add support to the research hypothesis that individuals with lower self-esteem are more likely to relapse following treatment for

substance abuse problems (Bennett, 1985; Cooper, 1983). While it unrealistic to make the quantum leap to the notion of "cause and effect" based on the results and design of this study, the direction of the results is positive and noteworthy. Self-esteem is a complex construct, and to expect enormous changes over a two-week period of inpatient treatment is unrealistic. Skager and Kerst (1989) note that self-esteem is not susceptible to the "quick fix" as is often assumed in some substance abuse prevention and treatment programs. Rather, these authors assert that "lasting enhancement of self-esteem requires the development of a positive and rigorous self-concept or identity" (p. 257). It is therefore not surprising to note that in some cases of this present study that the level of self-esteem improved only marginally. While admitting that the quantity of change is certainly an important issue in recovery, it is more the direction of the change that is the focus of the research hypothesis in this study.

#### LIMITATIONS OF THE STUDY FINDINGS

A number of concerns arise when we attempt to take the findings of a study such as this an generalize them to the greater population, even if the greater population in this case refers to only those individuals in society who have alcohol and/or drug problems. While the results are apparently real, meaningful, and fairly significant, unfortunately they only apply to the sample from which they

were taken and because of the exploratory nature of the study, implications need to be addressed with regards to future studies and potential program development.

The nature of the chosen research design does not provide for an adequate comparison or control group, which in turn limits the extent to which the results can be generalized to the population as a whole. An appropriate control or comparison group with regards to both selfesteem and substance abuse is difficult to establish, however, since those individuals who have yet to present themselves for treatment represent a substantially different segment of the population than those individuals who actually request and attend treatment. The results do, nevertheless, provide insight into the greater need to address self-esteem as a significant factor in relapse.

From a self-esteem perspective regarding this population, Charalampous, Ford, and Skinner (1976) report that:

"alcoholics who are entering treatment voluntarily or who have had treatment in the past exhibit lowered self-esteem, but those not seeking treatment have higher self-esteem" (p. 993).

Apparently the issue is not whether or not the individuals have a drug or alcohol problem, but more their perception of the problem and how they see themselves being affected by it, and consequently their perceived need for help which

may in turn affect their self-esteem. An appropriate control group may then be made up of those individuals who are on the waiting list and are fully intending to complete the treatment program. The limitations of the study, therefore, are not simply within the nature of the exploratory design or in the statistical analyses, but somewhat inherent in the nature of the subjects being studied.

Bloom (1986) notes the importance of being able to manipulate or control for certain factors within a study in order to come closer to the concept of causality. However, by design it was not possible to incorporate this valuable precept into this study. Such a process would require greater resources than were made available for this project and the long term cooperation of AADAC and their clientele. This aspect of the study certainly offers direction for future research in this area of recovery which can potentially be dove-tailed into this study's findings with regard to self-esteem and relapse.

In defense of the research design chosen for this study, the opportunity presented itself to study this somewhat secretive and stigmatized population while the writer was employed by AADAC. At the commencement of the project it was prudently necessary to implement a design which would complement the general format of the inpatient treatment program at the centre. A pretest/posttest

approach worked best under the circumstances, however, this approach allowed for virtually no monitoring of the subjects between the time they completed the initial phase of treatment and when they returned several weeks later for the final inpatient phase. The only exception to this process would be if a client happened to telephone the centre or if the referring professional had contacted the centre for consultation purposes during this interim period.

One further concern with respect to sampling in a study such as this is the high dropout rate which often occurs over the course of the time required to conduct the study. Although it is safe to say that high dropout rates are indigenous to the population being studied, return rates of between 50 and 60 percent are less than desirable numbers, especially when there is an overriding assumption in this field of practice that those who do not return for the final phase treatment are generally those who are struggling in their recovery program (Teichman, 1986). Certainly this aspect of addictions is an area that is worthy of extensive research and it could shed some valuable light on studies such as this one which are quite limited in their resources and scope. The research sample, however, was fairly representative of the population who actually attend the final phase of treatment at the Lander Treatment Centre. Based on the intake statistics for the

centre, the sample represented approximately 89% of those individuals who would have normally completed both phases of treatment in that particular 4 month time frame at the treatment centre.

From a statistical analysis standpoint, the sample size is relatively small in view of the number of independent variables included in the discriminant analysis The concern is that the results for this sample may not hold up with another sample from the same population. Stevens (1992) suggests that unless the sample size is fairly large (around 200) we need to be cautious in interpreting the results if the ratio of sample size to variables is less than about 20 to 1 in the study. Confidence in the findings of the statistical analysis for smaller samples, however, may be obtained by replicating the results in subsequent studies or combining the data to increase the sample size. Both options would substantially increase the time needed to complete the study, which in this case would have required about a year to complete at the Lander Treatment Centre.

#### IMPLICATIONS FOR SOCIAL WORK PRACTICE

In a very general sense, it is the role of social work practice not only to assist individuals to gain access to available resources to help meet their needs, but to also improve the effectiveness and quality of the resources (Yelaja, 1985). Without even considering the primary

addiction problem itself, Bailey (1963) estimates that as many as 35% of clients in social service agencies present a secondary problem related to alcohol abuse. In times of fiscal restraint and cutbacks in services such as we are presently experiencing in the province of Alberta, it may be unrealistic to focus on implementing new programs which address the primary addiction problems when programs such as the Lander Treatment Centre are currently in jeopardy. What is realistic, however, is the goal of improving the effectiveness of treatment programs which are already in place and to ensure that those practitioners working in the addictions field are well informed and appropriately skilled in practice models and strategies which show promise. At this point in time is not necessary to advertise in order to get more clients into treatment, since there seems to be an unending supply of candidates. A simple decrease the recidivism rates through effective interventions and appropriate aftercare programs seems to be a more judicious and practical approach from a treatment perspective.

This study has once again provided empirical confirmation that individuals with substance abuse problems are significantly lacking in self-esteem, a construct that seems to be fairly well understood and clinically measured. Measurements for self-esteem in the past, however, have often been global or unidimensional. The implementation of

the MSEI assessment instrument in this study has potentially opened the door to more specific interventions, program components, and further research which could explore individual deficits in self-esteem.

As with many other assessment instruments, the authors of the MSEI suggest that the individual subscales should not be extracted from the larger instrument and be administered and interpreted separately. A significance level of .0074 (see Table 4.10) for the Identity

Integration subscale, however, might influence the implementation of program components which may assist clients in this apparently important area. In his original dissertation regarding the development of the MSEI, O'Brien (1980) outlines the importance of the Identity Integration subscale. From his assertions, it is not too difficult to understand how struggles in this particular dimension could possibly contribute to relapse situations in recovery from addictions. He states:

"Failure of self-integration may be manifest by states of inner confusion, feelings of unreality, identity diffusion, depersonalization or emptiness. The person may mutually contradictory self-states which alternate as if the person were two separate individuals" (p. 68).

The above state of intense confusion closely describes individuals who have completed treatment, yet who also continue to find themselves in high risk situations which have the potential to contribute to a relapse. Part of

them seems to desire an abstinent lifestyle, and part of them is still quite comfortable with the "old self" who found a level of familiarity in the active addictive state. It is not too surprising, therefore, to discover that in this particular study that higher Identity Integration mean scores could be associated with abstinence following treatment for substance abuse.

From a treatment planning perspective, how the issue of low self-esteem is addressed continues to be as varied as the treatment programs. Skager and Kerst (1989) note that it is not usually productive in the treatment of alcoholics and addicts to work directly to change levels of. These improvements are more of an off-shoot self-esteem. of specific changes in how the addicted person is learning to more effectively cope on a daily basis. approach to treatment closely follows the framework for a healthy self-esteem put forth recently by Bednar, Wells, and VandenBos (1991). They clearly assert that lower or higher self-esteem is "the natural consequence of a person's tendency to cope with or avoid what one fears" (p. Such an approach does not dwell on superficial daily affirmations of self, but is based on an a renewed rational self-evaluative process of personal growth. The authors argue that an improved self-esteem would then be "the inevitable consequence of learning to consistently cope with what one previously tended to avoid" (Bednar, Wells, &

VandenBos, 1991, p. 124).

The relapse prevention (RP) model of substance abuse treatment as outlined by Marlatt and Gordon (1985) closely aligns itself with the above principles and is gaining wide acceptance in the addictions field at the present time. The model focusses on the concept of improving a client's perceived ability to cope with high risk situations by learning alternative coping strategies. This process can in turn directly affect his/her feelings of perceived selfefficacy which has been identified as a being a significant component of a healthy recovery from substance abuse (DiClemente, 1986; Burling et al., 1989; Velicer et al., 1990). Recovery, therefore, becomes an individual process based on insight, skills, and abilities, rather than on raw human will and stubborn determination. By the same token, adherents to this theory and intervention model need not view the relapse process as a moral weakness on the part of the individual, a judgemental perception which can only serve to decrease their already poor sense of self and distance the worker relationship.

If individuals entering treatment for substance abuse problems possess levels of self-esteem significantly lower than the norm as they did in this study (see Tables 4.2 and 4.3), then how these clients are treated in treatment needs to reflect a professional awareness of their somewhat fragile emotional state (Chernoff, 1991). Failure to

acknowledge the fact that their attendance in treatment is actually one of those things that they "previously tended to avoid" might well be a significant oversight on the part of the practitioner. Treatment usually succeeds to the "extent that it enhances self-esteem and self-esteem gathering opportunities" (Peele, 1985, p. 226) and we need to be keenly aware of the many opportunities which present themselves throughout the treatment process.

Professionals working in the field of addictions need to be cognizant of the stages of addiction and the roles that self-esteem and denial play in that process. itself may be the very defense mechanism that protects the client from the reality of his/her own low self-esteem or the actual extent of the problem (Amodeo & Liftik, 1990). To discount the clients' views of their own reality is often demeaning and counterproductive and usually only serves to strain the client/worker relationship and certainly does not empower a client or improve his or her self-esteem. The appropriateness of intense confrontational tactics, particularly in the initial stages of treatment seems to be counter-indicated and often ineffective. Unaware or unskilled practitioners who may be faced with these issues, compounded by the problems of resistance and/or denial, could actually do more harm to a client's self-esteem if the proper intervention strategy is not employed with the appropriate timing.

On a more functional vein within social work practice, the actual skill of confrontation may need to be explored with respect to addictions; when the counsellor challenges inconsistencies is just as important as to how the intervention is done. To the unskilled professional, reluctance of a client to participate in a group as a result of low self-esteem or poor self-concept, for example, may be misread by the worker as resistance. ensuing intervention or confrontation might easily be based on an error in judgement and decrease one's sense of self rather than enhance it. Annis and Chan (1983) note that individuals with low self-esteem showed detrimental effects from confrontational psychotherapy, yet blatant confrontation is often used by counsellors trying to break through the denial stage in addictions. Relying solely on the skill of confrontation has also produced a negative anti-therapeutic condition called "attack therapy" which is not conducive in any way to the change process (Rachman & Heller, 1974). A more appropriate confrontational intervention may be one of empathetically pointing out incongruencies and/or inconsistancies and adding insight into some of the client's internal conflicts.

The issue of client/worker engagement and motivation for change in recovery has also been explored regularly in the literature and some interesting findings come to light from a treatment perspective. Miller (1991) suggests, for

example, that client motivation is more an outcome of an interaction between the client and the worker than an actual client trait. As a result, experts in the field of addictions today are much leerier of harsh confrontational tactics, particularly when used in the "fragile beginnings of treatment" (Chernoff, 1991, p. 2). If we return to the original premise that most clients who enter treatment for substance abuse problems suffer from low self-esteem and are somewhat vulnerable or "fragile", then perhaps we need to seriously challenge the effectiveness of some of counter-indicated interventions and explore alternatives which have a strong theoretical base and are hopefully more respective of their present circumstances.

#### SUGGESTIONS FOR FURTHER RESEARCH

The unexpected results of potential predictability regarding relapse or abstinence following treatment when using the MSEI assessment instrument in very encouraging for the profession from a treatment and research perspective. Attempts to replicate the results of this somewhat exploratory study have the potential to further add to a knowledge base which is presently lacking from an inferential and practical perspective. Further studies, however, may need to be conducted on larger sample sizes and to also include some form of control or comparison group.

Even though the authors of the MSEI assessment

instrument indicate that the MSEI has been previously administered in the field of substance abuse, this writer was unable to uncover any normative data for the instrument in this area. For that reason, it would be considered very useful to continue to establish some solid baseline normative means for the MSEI for this population for future reference. This was originally done in this study by implementing the MSEI pretest. Since this process is fairly unintrusive, it could be incorporated with other studies as part of an ongoing pretest procedure at intake to inpatient treatment.

Since this study is largely exploratory in nature, it may appear that an inordinate amount of emphasis may have been presented in this chapter regarding the implications of this study from a treatment perspective, but it appears that the emphasis is warranted. There have been suggestions in the literature that abstinence alone can improve self-esteem, and it would be interesting to conduct some actual treatment comparisons on how different intervention influence self-esteem, if in fact they really A three group comparison would be appropriate. group could include the Alcoholics Anonymous model of recovery which is often perceived as being fairly confrontive. Another group could be one which is attending in a treatment program based on the Relapse Prevention model which clearly focusses on self-efficacy. And a final

group might include no specific treatment intervention other than the goal of abstinence. In the latter instance, an individual may attend a hospital or detox facility which would focus primarily on maintaining abstinence without addressing personal issues as part of the recovery program. If self-esteem is indeed affected by the therapy or intervention style, this study may actually demonstrate this.

As previously mentioned, a confusing area in addictions research is simply not knowing what happens to those people whom we never hear from again following the initial phase of treatment or after the first outpatient interview. With statistical mortality rates as high as 50 and 60 percent, there is a great gulf in the literature regarding those who drop out of treatment. Are there factors here which may be associated with this phenomenon, or do they simply choose not to return? As well, it would be interesting to explore the results of a discriminant analysis of the MSEI independent variables with respect to predictability regarding the likelihood of clients to return to complete the final phase of the treatment program.

#### SUMMARY

The main focus of this study was to respond to the hypothesis that individuals with lower self-esteem following inpatient treatment for substance abuse problems

are more likely to relapse than those with a higher selfesteem. On the basis of the MSEI assessment instrument,
the hypothesis was supported. Moreover, there appeared to
be a level of acceptable predictability for the sample in
that we were able to successfully classify individuals into
either the relapser or abstainer group for approximately
70% of the cases.

These findings are in general agreement with the literature to date, however, much of the self-esteem testing has been conducted with unidimensional measures. The application of the Multidimensional Self-Esteem Inventory shows great promise in this area and is recommended for use in further research in the addictions field.

While certainly meaningful, the nature of the research design limits the extent to which these results can generalized to the population as a whole. In terms of the Lander Treatment Centre, however, the findings adequately represent those individuals who typically complete both the initial and final phases of the treatment program and offer significant insight into program development regarding the variables of self-esteem and relapse.

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Canada Inc.

Appendix A
University of Calgary Ethics Approval



Faculty of SOCIAL WORK

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Research Services, Faculty of Social Work

2500 University Drive N.W., Calgary, Alberta, Canada T2N 1N4

#### **CERTIFICATE OF APPROVAL**

by

### THE RESEARCH ETHICS COMMITTEE FACULTY OF SOCIAL WORK

me	PROJECT/THESIS entitled:		•
	Self-esteem as a Variable	in Relapse Prevention and Imp	olications
	or Interventions in Trea	tment	
	· · · · · · · · · · · · · · · · · · ·		
of	Keith H. Dudley	#8777 <u>54</u>	(student)
in the	e judgement of this Comm rements for research with h	ittee, has met The University of numan subjects.	Calgary ethical

## Appendix B

Treatment Centre Letter of Approval



Memorandum

Our file I-METH-TPR

A.A.D.A.C. յսնկծութա

Your File

Telephone 427-4275

From Art Dyer

An dyer INFORMATION AND PROGRAM DEVELOPMENT SERVICES

To Howard Faulkner Director

Institutions and Funded Agencies

Subject

KEITH DUDLEY'S THIRD PARTY RESEARCH AT LANDER TREATMENT CENTRE

#### The Applicant and Application

Mr. Dudley is a graduate student in Social Work at the University of Calgary and a current Lander Treatment Centre employee. During the course of his research, he will be a full-time student. His thesis supervisor, Michael Rothery, PhD has approved the proposal and ethical approval has been granted. The research has the support of Lander Treatment Centre management and staff and appears feasible.

#### The Proposed Research - An Overview and Some Issues

The proposal aims to understand how improvements in self-esteem affect the quality of recovery or the risk of relapse among LTC clients attending the Phase I and Phase III parts of the LTC program. Measures will be taken at intake to Phase I, discharge from Phase I and intake to Phase III. Measures include:

a brief Phase I intake questionnaire covering demographics, presenting problems and history of consequences of drug abuse

the Multidimensional Self-Esteem Inventory (O'Brien and Epstein, 1988) to be administered at Phase I intake and discharge and Phase III intake and

a brief Phase III intake questionnaire covering relapse, use of treatment resources, drinking behaviour and drinking intentions.

Self-esteem is widely regarded by counselling staff as an important element in treatment and recovery. Research to date has produced findings precisely opposite to the experience of counselling staff. A survey of Grande Prairie school students found that self esteem positively correlated with drinking and approval of drinking (Bortolotto, 1984). Evaluations of adolescent treatment programs have found that elevated self-esteem at treatment discharge positively predicted relapse among male adolescents post-treatment (Patricia Harrison, PhD., private communication). Similar findings have been reported elsewhere. These studies have used brief global self-esteem scales.

The Multidimensional Self-Esteem Inventory (MSEI) is not a global measure of self-esteem. If self-esteem is the important factor that clinical staff percieve, then the MSEI has a real potential to clarify the controversy.

## Appendix C Permission to Include the MSEI in Thesis

#### Mæmo

To:

Keith H. Dudley

From:

Edward J. O'Brien, Ph.D., Professor of Psychology Ed Brund

Date:

November 8, 1994

Re:

Citation of MSEI in Thesis

It is alright with me if you place a copy of the MSEI in an Appendix of your thesis. I cannot imagine that the publisher would have a problem with this, though I have not asked them. As the holder of the copyright for the MSEI, PAR is probably the more authoritative source for such permission. Again, I do not think it would be an issue for them, but you might want to call and ask.

I would suggest you consider another alternative which I used in my own dissertation (which involved validation of the MSEI). That is, you might want to cite illustrative items from each of the scales you used. This approach gets around the copyright problem but also allows you to give the reader a flavor of the items included in the scales. Such an approach would be most appropriate, even required, in a published article which cites testing materials developed by others. To reiterate, though, for a thesis I think you should have more latitude and consider this note to be my permission to use the MSEI Item Booklet as an appendix to your thesis.

I would indeed be very interested in having a copy of your thesis. The results look quite intriguing and I would like to consider citing the results of your work in a revised manual for the MSEI. I am in the process of developing a proposal to PAR for updating the work cited in the manual and your work looks to add some interesting new findings about an important clinical group. I would also be interested in whatever normative data you have collected and would urge you to hold onto any raw data as I may be requesting your permission to include your data in normative samples we have collected.

Thanks for your interest in work with the MSEI. Good luck with your examining board meeting. You may be interested to know that the MSEI was reviewed in the most recent version of the Mental Measurements Yearbook (MMY). Feedback from reviewers was quite positive, though they noted that there is a need for further work of the type you have completed which links the MSEI to a wider variety of clinical groups. In the paper copy of this note I will include a copy of the MMY reviews.

# Appendix D Copy of the Multidimensional Self-Esteem Inventory (MSEI) Questionnaire

#### Section 1

Use the following scale for your responses to Section 1:

Fill in ① if the statement is completely false.

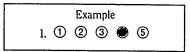
Fill in ② if the statement is mainly false.

Fill in 3 if the statement is partly true and partly false.

Fill in @ if the statement is mainly true.

Fill in (s) if the statement is completely true.

For example, if you believe that a statement is *mainly true* in describing you, fill in the © circle for that statement on your rating sheet.



① Completely false ② Mainly false ③ Partly true and partly faise ④ Mainly true ⑤ Completely true

- 1. I often fail to live up to my moral standards.
- 2. I nearly always feel that I am physically attractive.
- I occasionally have doubts about whether I will succeed in life.
- I have trouble letting others know how much I care for and love them.
- 5. No matter what the pressure, no one could ever force me to hurt another human being.
- 6. I am very well-liked and popular.
- On occasion, I have tried to find a way to avoid unpleasant responsibilities.
- 8. I occasionally worry that in the future I may have a problem with controlling my eating or drinking habits.
- It is often hard for me to make up my mind about things because I don't really know what I want.
- 10. I am not easily intimidated by others.
- 11. I am usually able to demonstrate my competence when I am being evaluated.
- 12. I don't have much of an idea about what my life will be like in 5 years.
- 13. I nearly always feel that I am physically fit and healthy.
- 14. I usually do the decent and moral thing, no matter what the temptation to do otherwise.
- 15. There are times when I doubt my sexual attractiveness.
- 16. I sometimes have a poor opinion of myself.
- There are times when I have doubts about my capacity for maintaining a close love relationship.
- 18. The thought of shoplifting has never crossed my mind.
- I sometimes feel disappointed or rejected because my friends haven't included me in their plans.
- There have been times when I have felt like getting even with somebody for something they had done to me.

- 21. I feel that I don't have enough self-discipline.
- In general, I know who I am and where I am headed in my life.
- 23. I am usually a lot more comfortable being a follower than a leader.
- Most people who know me consider me to be a highly talented and competent person.
- 25. I often feel that I lack direction in my life—i.e., that I have no long-range goals or plans.
- I nearly always feel that I am better physically coordinated than most people (of my own age and sex).
- I almost always have a clear conscience concerning my sexual behavior.
- There have been times when I felt ashamed of my physical appearance.
- 29. I put myself down too much.
- In times of uncertainty and self doubt, I have always been able to turn to my family for encouragement and support.
- 31. I have never felt that I was punished unfairly.
- 32. My friends almost always make sure to include me in their plans.
- There have been times when I intensely disliked someone.
- 34. I am sometimes concerned over my lack of self-control.
- 35. Once I have considered an important decision thoroughly, I have little difficulty making a final decision.
- 36. I have no problem with asserting myself.
- There are no areas in which I have truly outstanding ability.
- Sometimes it's hard for me to believe that the different aspects of my personality can be part of the same person.

- Most of the people I know are in better physical condition than I am.
- 40. I often feel guilty about my sexual behavior.
- 41. I usually feel that I am better looking than most people.
- 42. All in all, I would evaluate myself as a relatively successful person at this stage in my life.
- There have been times when I have felt rejected by my family.
- 44. It hardly ever matters to me whether I win or lose in a game.
- 45. On occasion I have avoided dating situations because I feared rejection.
- 46. There have been times when I have lied in order to get out of something.
- I often give in to temptation and put off work on difficult tasks.
- I seldom experience much conflict between the different sides of my personality.
- 49. I feel that I have a lot of potential as a leader.
- 50. I am usually able to learn new things very quickly.

- I often feel torn in different directions and unable to decide which way to go.
- 52. I occasionally have had the feeling that I have "gone astray," and that I am leading a sinful or immoral life.
- 53. I have occasionally felt that others were repelled or "put off" by my physical appearance.
- 54. I nearly always have a highly positive opinion of myself.
- 55. I occasionally feel that no one really loves me and accepts me for the person I am.
- 56. I have almost never felt the urge to tell someone off.
- 57. People nearly always enjoy spending time with me.
- There have been occasions when I took advantage of someone.
- I have difficulty maintaining my self-control when I am under pressure.
- I have often acted in ways that went against my moral values.
- I am usually very pleased and satisfied with the way I look.

#### Section 2

In Section 2, you are to describe how often you experience the thoughts and feelings described in each item. Use the following scale for your responses to Part 2:

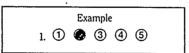
Fill in ① if you almost never experience them.

Fill in ② if you seldom or rarely experience them.

Fill in 3 if you sometimes experience them.

Fill in (a) if you experience them *fairly often*. Fill in (b) if you experience them *very often*.

For example, if you seldom or rarely experience the thoughts and feelings described, fill in the ② circle for that statement on your rating sheet.



#### ① Almost never ② Seldom or rarely ③ Sometimes ④ Fairly often ⑤ Very often

- 62. How often do you expect to perform well in situations that require a lot of ability?
- 63. How often do you lose when you get into arguments or disagreements with others?
- 64. Do you ever "stretch the truth" and say things that aren't completely true?
- 65. How often do you feel confident that you have (or someday will have) a lasting love relationship?
- 66. When you are meeting a person for the first time, do you ever think that the person might not like you?
- 67. How often do you feel proud of the way that you stay with a task until you complete it?

- 68. How often do you feel dissatisfied with yourself?
- 69. How often do you feel that others are attracted to you because of the way you look?
- 70. How often do you feel a sense of vitality and pleasure over the way your body functions in physical activities?
- 71. How often do you feel uncertain of your moral values?
- 72. How often do you feel self-conscious or awkward while you are engaged in physical activities?
- 73. How often do you feel very certain about what you want out of life?

Continued on next page.

- 74. How often do you have trouble learning difficult new tasks?
- 75. When you are involved in group discussions, how often do you feel that your ideas have a strong influence on others?
- 76. Do you ever gossip?
- 77. How often do members of your family have difficulty expressing their love for you?
- 78. How often do you feel certain that people you meet will like you?
- 79. How often are you pleased with yourself because of the amount of self discipline and willpower that you have?
- 80. How often do you feel that you are a very important and significant person?
- 81. How often do you wish that you were more physically attractive?
- 82. How often does your body perform exceptionally well in physical activities, such as dancing or sports?
- 83. How often do you (by your behavior) set a good moral example for others younger than yourself?
- 84. How often do you feel clumsy when you are involved in physical activities?
- 85. How often do you feel conflicted or uncertain about your career plans?
- 86. How often do you feel that you can do well at almost anything you try?
- 87. How often are you able to be assertive and forceful in situations where others are trying to take advantage of you?
- 88. Have you ever felt irritated when someone asked you for a favor?
- 89. How often do you feel able to openly express warm and loving feelings toward others?
- 90. Does it ever seem to you that some people dislike you intensely, that they "can't stand" you?
- 91. How often do you feel that you are more successful than most people at controlling your eating and drinking behavior?
- 92. How often do you feel really good about yourself?
- 93. How often are you complimented on your physical appearance?
- 94. How often do you feel in top physical condition?
- 95. How often are you pleased with your sense of moral values?

- 96. How often does your body feel "out of sorts" or sluggish?
- 97. Have you ever felt that you lack the intelligence needed to succeed in certain types of interesting work?
- 98. Do you enjoy it when you are in a position of leadership?
- 99. Have you ever felt jealous of the good fortune of others?
- 100. Have you ever felt alone and unloved?
- 101. When you go out with someone for the first time, how often do you feel that you are well-liked?
- 102. How often are you able to exercise more self-control than most of the people you know?
- 103. How often do you feel highly satisfied with the future you see for yourself?
- 104. How often do you feel unattractive when you see yourself naked?
- 105. How often do you enjoy having others watch you while you are engaged in physical activities such as dancing or sports?
- 106. How often do you feel highly satisfied with the way you live up to your moral values?
- 107. How often do you feel that you are not as intelligent as you would like to be?
- 108. How often do you feel uneasy when you are in a position of leadership?
- 109. How often is it hard for you to admit it when you have made a mistake?
- 110. How often do people whom you love go out of their way to let you know how much they care for you?
- 111. How often do you feel that you are one of the most popular and likable members of your social group?
- 112. How often are you able to resist temptations and distractions in order to complete tasks you are working on?
- 113. How often do you feel lacking in self-confidence?
- 114. How often do you approach new tasks with a lot of confidence in your ability?
- 115. How often do you have a strong influence on the attitudes and opinions of others?
- 116. How often do you gladly accept criticism when it is deserved?