Self-Esteem Or Self-Concept?:
Clarifying the Relationship to Delinquency

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Self-Esteem or Self-Concept?: Clarifying the Relationship to Delinquency

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Abstract

Self-concept and self-esteem are two of the factors hypothesized to underlie the emergence and/or continuance of delinquent behaviour. Young offenders (N = 137) were tested to determine the relationship between different aspects of self-concept, and self-esteem. Information was derived from the Rosenberg Self-Esteem Scale, the Offer Self-Image Questionnaire, and a measure of personal importance. The results indicate that only certain aspects of self-concept significantly affect the self-esteem of young offenders. It was found that youths had greater self-esteem when they had high self-concept scores in the areas of Impulse Control, Emotional Tone, Body and Self-Image, Social Relationships, Sexual Attitudes, Family Relationships, Mastery of the External World, and Psychopathology. The self-concept areas of Morals, Vocational and Educational Goals, and Superior Adjustment were unrelated to self-esteem. The personal importance of each aspect of self-concept demonstrated a main effect for some areas in the prediction of self-esteem, but did not add to the capacity of self-concept to predict self-esteem. Preliminary analyses suggest that the "delinquent self" is a separate aspect of self-concept that is not related to self-esteem. The program and treatment implications of these findings are discussed.
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INTRODUCTION

"In the world at large, crimes committed by young people have become increasingly alarming" (Mercieca, 1983). This statement was made approximately one decade ago. Since then, the attention devoted to juvenile delinquency has increased dramatically. Statistics Canada reported that 139,161 male and 32,092 female adolescents were charged with criminal offenses in the year 1991. During that year, there was an average daily count of 4294 young offenders in custody across Canada (including individuals remanded to custody while awaiting their court hearings). These statistics tell us that the crime committed by young people is too substantial to be ignored. The prevalence of juvenile delinquency has lead to the recognition that it is a serious problem at a familial, psychological, social, and legal level.

Although others disagree, some researchers have described a certain degree of delinquency as "developmentally a fairly typical phase for many adolescents" (Fisher-Dilalla & Gottesman, 1990; p. 339). Brudner-White (1986) cites evidence indicating that regardless of other variables, delinquency peaks between 15 and 17 years of age. There is a distinction that must be drawn between delinquency and criminality. Delinquency refers to law breaking behaviour engaged in by adolescents that may or may not involve criminal intent. Criminality is defined as the
continuance of criminal behavior throughout the lifespan, which may have begun as delinquency (Fisher-Dilalla & Gottesman, 1990). The question still being debated in the research is "What factors lead an adolescent to turn to delinquency, and how do we stop it from growing into criminality?"

Theoretical explanations for delinquent behaviour that are based on societal precursors are repeatedly found in the literature. Many authors have offered variations on the Societal Failure Theory of delinquency development (e.g., Brudner-White, 1986; Hogan & Sloan, 1984; Vigil, 1988). Briefly, this theory states that conventional institutions of socialization, such as the family and schools, are "breaking down" and failing today's youths. The end result is that conventional methods of achieving a sense of self-worth are shunned, and the peer group is given greater power to influence the self-identification of adolescents. This is hypothesized to be fertile ground for the growth of delinquent behaviour.

Therefore, societal factors spur a psychological state that is believed to be instrumental in the emergence of delinquency. This psychological state is often one in which the adolescent feels s/he does not "belong" anywhere. The adolescent frequently does not have a strong sense of his/her own identity and feels badly about him/her self. The mechanisms by which this state arises and contributes to delinquency on an individual level, have been a focus for psychologists in this field for the past two decades.
As with any body of literature, the research results quickly become intricately entwined and confusing. One area of confusion concerns the fact that the above stated psychological state involves more than one factor. Further confusion occurs due to the inconsistent use of terminology to refer to this state. In the previous paragraph, two terms were used: self-identification, and self-worth. Other terms that are used in the literature are: self-esteem, self-concept, identity, "selves" (e.g., family self, social self, etc.), and so on. These terms are used interchangeably by many authors, while others draw distinct boundaries.

For the purposes of this literature review, self-esteem and self-concept are the terms used to refer to the two main psychological constructs that are believed to be involved as "precursors" of delinquency. (These two constructs are separate but influenced by each other) Self-esteem refers to the general extent to which one feels positively or negatively about oneself (e.g., Rosenberg, 1979). Self-concept is multifaceted and refers to one's identity. One's identity is comprised of many aspects or roles that collectively represent "Who I am". Thus, self-concept refers to how one perceives one's functioning in each of the various aspects of one's life (e.g., Offer, 1983). Self-concept incorporates, but is not limited to, Badura's notion of self-efficacy. It is hypothesized that one's self-esteem may be bolstered by the acknowledgement that one functions well in some aspects of one's life.)
When conventional institutions of socialization "fail" a youth, s/he suffers not only from lowered self-esteem, but has fewer, if any, opportunities to develop a solid (and positive) self-concept. Delinquency is hypothesized to provide an opportunity for the adolescent to solidify an identity. In this instance, delinquency would be an important aspect of the self-concept and as such may have the further function of increasing self-esteem. This is due, in part, to the experience of peer acceptance and approval. Delinquency may be one of the few activities that the adolescent has engaged in that did not result in feelings of failure (see Self-enhancement Theory, p. 8).

Closer inspection of the self-concept construct reveals it to be complex. As a result of continuing interactions with the environment and other individuals, each individual gradually internalizes a representative model of the self, referred to as self-concept (Golombek, Marton, Stein, & Korenblum, 1989). Originally this representation was thought to be an "averaged" view of the self (i.e., average functioning across all the roles one occupies). However, soon researchers were musing "How could this crude, undifferentiated structure sensitively mediate and reflect the diversity of behaviour to which it was supposedly related?" (Markus & Wurf, 1986, p. 301). Theorists such as Goffman, an early self-psychologist, pointed out that one's conception of oneself depends upon the situation that one is in (cited in Hansen & Maynard, 1973). Considerations such as this supported the necessity of regarding self-concept as
Self-concept

multifaceted; including more than one aspect of "self" within the broader boundaries of "identity". For example, one's conceptualization or representation of one's identity often includes the roles one occupies within the family (familial self), school (academic self), and society (social self). Each "self" differing in content and importance within the self-concept of different individuals.

The self-representations that comprise the self-concept can be conceptualized to fall along each of three dimensions (Markus & Wurf, 1987). The first dimension is the most obvious: positivity-negativity. The current research project investigates both positive and negative aspects of the self. Two points will be made concerning this dimension. First, one must be careful not to impose one's own judgements when interpreting an aspect of self to be positive or negative. It is crucial that each person be approached from his/her internal frame of reference, rather than from an imposed external frame (Fitts, 1972). Second, a positive or negative aspect of self only has meaning to the degree that it is important to the individual's overall self-concept. This will be described in greater detail as the interactive hypothesis. In other words, the impact it has on the overall self-concept (and indirectly upon the self-esteem) is determined by how strongly the individual identifies with that particular aspect of the self (see dimension three: centrality).

The second dimension of self-concept refers to whether or not each aspect of self has actually been achieved. Markus and
Nurius (1986) theorized that among each individual's set of self-conceptions are possible selves. These aspects of self-concept refer to roles that the individual does not currently occupy. Some aspects of self have neither been achieved, nor are they currently possible. These aspects are hoped-for ideals (Higgins, 1987). Ideals can either be what one would like to become (ideal self), or what one believes one should become (ought self). The latter are often internalized through exposure to the opinions of those we respect. These are often compared to the individual's representation of what s/he is (actual self). This structure is further complicated by "own" versus "other" representations. "Own" refers to an individual's own opinion of those three selves. "Other" refers to how the individual thinks others conceptualize him/her in terms of the ideal, ought, and actual selves.

Tory Higgins has conducted several studies investigating the impact of an existing discrepancy between two or more of these six representations. Higgins (1987) found that self-esteem (how positively or negatively one feels about oneself) is directly related to the degree to which the actual/own self is discrepant from either the ideal or ought self (own or other). These discrepancies are also related to the emotions associated with depression (Higgins, Klein, & Strauman, 1985). However, the generalizability of these findings is somewhat confined, since Higgins's research was conducted largely with university students.

According to the Societal Failure Theory of delinquency,
Self-concept

delinquents have turned away from the societal conventions and authority figures that failed them. This is in contrast with university students who, by virtue of being students, must embrace these factors to some extent. Therefore, it may be that delinquents consider the opinions of authority figures far less, and possibly their peer reference groups more often, than do university students in the development of their "other" selves. An actual/own:ideal/ought/other discrepancy may result in the same ends (lowered self-esteem) for both delinquents and socially conforming individuals, but the process by which this occurs may be quite different. Future research will bear the burden of clarifying this confusion. It would appear that the most prudent place to begin would be to clarify the role of currently achieved aspects of self within the delinquent population. Therefore, this is the focus of the current study.

Centrality is the third dimension that aspects of self-concept can be differentiated on. Some aspects of the self-concept are more important, or salient, than other, more peripheral, aspects. Thus, the impact that any given aspect of self-concept has on the overall identity depends largely on the importance each person places on that aspect. One can never fully understand the significance of any given aspect of self-concept unless the importance of that aspect is taken into account. For example, a person may have many positive aspects of self-concept and only a few negative aspects; but if the negative aspects are also the most salient, they will have the greater
impact on the overall identity regardless of their small number. The interactive hypothesis has referred to this process as the means by which self-concept influences self-esteem (e.g., Marsh, 1986). This is one of the main hypotheses examined in the current study.

To recapitulate, the current study focuses on the interaction between the negativity/positivity and the importance or salience of aspects of self-concept (actual self) in the determinance of self-esteem. However, before the self-concept and delinquency literature is reviewed, the background literature that it is built upon will be addressed. As has been discussed, self-esteem is the more broad-based construct to which self-concept is linked. Research on self-concept and delinquency developed, in part, on the basis of results acquired from the self-esteem/delinquency studies. Therefore, the self-esteem and delinquency literature will be addressed first.

**Self-Esteem and Delinquency**

This section will examine the research that has been conducted in the past two decades on self-esteem (and where indicated, self-concept) and delinquency. The terms that the researchers themselves used will be reiterated, followed by editorial comments whenever their use of the term disagrees with the definitions specified in the previous section of this paper. This will serve the dual function of highlighting the inconsistency in the usage of these terms within the literature,
while (hopefully) lending clarity to the confusion this commonly creates.

There is one basic hypothesis linking self-esteem and delinquency that has been tested by many researchers (e.g., Kaplan, 1986). This hypothesis follows directly from the Societal Failure Theory discussed earlier, and was briefly described in the previous section. Simply stated, it postulates that delinquency defends against a "derogated self-image" (the term used by Kaplan to refer to low self-esteem). Societal institutions such as the family and the school are viewed as having failed to provide the adolescent with validation of self-worth. Therefore, normative patterns of responding are no longer motivating, as they have only led to feelings and attitudes of self-derogation. The Self-Esteem Motive postulates that people characteristically behave in ways that minimize negative self-attitudes and maximize positive self-attitudes. Therefore, the adolescent will have a natural tendency to turn away from those institutions that "failed" him/her, in order to minimize negative self-attributions, and seek out new means of validating his/her self-worth.

In the search for alternative means to enhance self-esteem, the adolescent turns to less conventional methods, often considered by authorities to be deviant or delinquent. However, not all adolescents turn to delinquency at this stage. Some adolescents are considered to be more prone to choose delinquency than others, due to life circumstances and experiences. This
brings us to the crucial part of the theory: engaging in the deviant or delinquent acts is hypothesized to actually increase self-esteem. This is believed to be due to two factors: (1) the adolescent is engaging in a behaviour that does not engender feelings of failure; and (2) it may be the first time the adolescent has been accepted and encouraged by a peer group. This hypothesis will be referred to as the **Self-Enhancement Hypothesis (S/E Hypothesis)** of delinquency. In it's simplest form, this theory has two parts: (1) low self-esteem enhances the probability of delinquent behaviour; and (2) delinquent behaviour enhances self-esteem. This theory has been the focus of numerous research articles and has become a battleground of controversy.

**A. The Gold and Mann Data**

One of the first studies conducted examining the self-esteem/delinquency connection specifically looked at the influence of poor academic performance on this relationship (Gold & Mann, 1972). Data for this study were drawn from the National Survey of Youth conducted in 1967 on a sample of 847 adolescents aged 13 to 16 years. These subjects were considered representative of the population in general, and were rated more or less delinquent by virtue of their responses to 16 items of delinquent behaviour.

Lower school grades were associated with increased rates of delinquency when: (1) the individual's self-image was rated as
quite masculine; and (2) the individual's peers were perceived by the individual to be delinquent. This supports the hypothesis that the option of delinquency is more available to some adolescents than others. Perhaps only under certain circumstances, such as those measured above, can delinquency be used to derive feelings of self-worth.

Those males indicating high rates of delinquency had even higher rates of self-esteem than expected (i.e., similar to nondelinquents), regardless of grades. Although these early results are supportive of the S/E Hypothesis that delinquency increases self-esteem, these researchers did not acknowledge it as an explanation. Gold and Mann (1972) explain their results by hypothesizing that it is conscious self-esteem that has been improved (defended) by delinquent behaviour, leaving a low level of unconscious self-esteem to continually provoke the delinquent pattern. Although they conducted a further study to provide evidence for this hypothesis, any measure of "unconscious" self-esteem is questionable. Subsequent research has not pursued the influence of unconscious self-esteem, instead focusing on the S/E Hypothesis.

B. The Kaplan Studies

Howard Kaplan has written a series of articles and a book (1980) examining the link between low self-esteem (self-derogation) and subsequent delinquent behaviour, and between delinquent behaviour and subsequent high self-esteem (self-
enhancement). (Kaplan consistently refers to delinquent behaviour as "deviant" behaviour, therefore his usage of the term will be maintained in the description of his work.) Kaplan administered a 209-item questionnaire to the seventh grade students in 18 randomly selected high schools for the first time in the spring of 1971 (T1), and twice thereafter at annual intervals (T2, T3). It is this data that he has analyzed in various ways in his many articles.

It is important to note that all subjects were junior high school students rated more or less delinquent by virtue of their self-reports on 28 acts chosen to indicate delinquency (ranging from "skipped school without an excuse" to "used force to get money or valuables", and most interestingly "sent to a psychiatrist, psychologist, or social worker"). On a theoretical level these individuals may not represent the population referred to by Vigil (1988) and others as victims of societal failure (after all, these individuals are still in school). On a practical level this group is different in many ways from adolescents that have been recognized, or labeled, by the legal system as delinquent. This is a problem with generalization throughout most of the literature. Studies that have investigated populations labelled delinquent by the legal system will be examined at a later point in this paper.

The measure of self-derogation used by Kaplan was a seven-item shortened version of the Rosenberg Self-Esteem Scale (1979). This is a well-validated and frequently-used measure of general
self-esteem (i.e., how good one feels about oneself). Kaplan's first article (1977a) addressed the hypothesis that an increase in measured self-derogation from T1 to T2 would be correlated with an increase in delinquency reports from T2 to T3. Results for 19 of 22 deviant acts supported the hypothesis. Kaplan also showed that T1 measures of self-derogation were associated with the adoption of deviant acts at T2, whether they continued reporting the acts at T3 or not. All comparisons were in the expected direction, and significant for 34 of 44 comparisons. This may provide support for the first part of the S/E Hypothesis; low self-esteem appears to be correlated with increases in delinquent behaviour, but that it is an antecedent for such behaviour can only be inferred. Thus far, we are left with only an uninterpretable association between self-derogation and delinquent behaviour.

Kaplan (1977) investigated the mediating effects of seven variables on the self-derogation/delinquent behaviour relationship. The following variables were postulated to indicate a "disposition toward deviance": (1) perception of self-devaluing experiences in the family (e.g., My parents are usually not very interested in what I say or do); (2) perception of self-devaluing experiences in the school (e.g., My teachers usually put me down); (3) perception of self-devaluing experiences in the peer group (e.g., Most of the kids at school do not like me very much); (4) valuing of contranormative patterns (e.g., The law is always against the ordinary guy); (5)
high measures of defenselessness/vulnerability (e.g., Do you often feel downcast and dejected?); (6) high avoidance of personal responsibility (e.g., You can do very little to change your life); and (7) awareness of deviant response patterns (e.g., Do many of the kids at school carry razors, switchblades, or guns as weapons?).

The results showed that higher scores on these variables, with the exception of (3) and (5), were associated with the adoption of deviant/delinquent behaviour. The findings were equivocal for (3), possibly due to the importance of peer influence and support in the adoption of a delinquent response pattern (e.g., Eisikovits & Baizerman, 1983), and the correlation for (5) only held for the less risky delinquent behaviours.

It is interesting to note that the first three variables described above clearly refer to self-concept in three areas (family self, academic self, and social self). Subjects who scored high on these scales were more inclined to suffer continued decreases in self-derogation than those who scored low (Kaplan, 1980). This seems to suggest that self-concept is influencing self-esteem and possibly mediating the self-esteem/delinquency connection. However, since those three variables were not statistically separated from the influence of the other four, the effect of self-concept is confounded with the effect of the other variables. A further weakness of this study is the lack of evidence offered to support Kaplan's choice of questions for the above seven scales. This leads one to question
what was actually being measured.

Despite this lack of clarification, Kaplan, Martin, and Johnston (1986) continued to build on the foundation described above. They revised Kaplan's earlier formulations to state that a true measure of self-rejection must include both a global self-esteem measure (the seven questions previously used to measure self-derogation), and the perception of self-devaluing circumstances. The latter refers to rejection by parents and school, and the "lack of socially desirable attributes". This corresponds to variable scales one, two, and four described above as indicating disposition toward deviance. As mentioned above, scales one and two are measures of self-concept. This supports the theoretical stance of this paper that self-esteem and self-concept are separate yet complimentary components of an individual's overall self-image. However, although both self-esteem and self-concept are taken into account, the individual influence of each is confused by using a composite measure called "self-rejection".

Kaplan et al. (1986) postulated that self-rejection indirectly affects delinquent behaviour through a direct effect on the disposition toward deviance. Disposition toward deviance was revised to only include measures of disaffection from family, school, and the conventional community. Even at this preliminary glance there is a remarkable similarity between this measure and the measure of self-rejection. A face-value analysis of the items themselves confirm the suspicion of similarity. Therefore,
the reader is not surprised to be informed that self-rejection measured at T2 is significantly correlated with disposition toward deviance measured at T3.

As well, disposition toward deviance at T2 is correlated with deviant behaviour at T3 more strongly than is self-rejection at T2. This is interesting in light of the fact that the key difference between self-rejection and disposition toward deviance is that the former involves a measure of general self-esteem. Therefore, the smaller effect for self-rejection on deviance may be due to a confounding of self-esteem with self-concept. This seems to suggest that self-concept has the greater effect, but interpretation is difficult when two theoretically separate constructs are mixed.

Another difficulty with interpreting the results of this study is that the deviant acts measure was used differently than it was in previous studies (e.g., Kaplan 1976, 1978). In this study, subjects were considered to be deviant if there was one count of a rare deviant behaviour (e.g., vandalism) or at least two of a common one (e.g., smoke marijuana). It seems befitting to question whether this will inappropriately encompass developmental acting-out, rather than measuring criminality. In fact, in an earlier study Kaplan (1978) made a point of focusing on deviant patterns of behaviour (present at T1 and T2) rather than a measure of deviance at one time interval because he felt it would be more likely to tap actual delinquency rather than developmental delinquency.
Kaplan, Johnson, and Bailey (1986) sought to improve on the analysis conducted by Kaplan et al. (1986a). First, they improved the "disposition to deviance" measure by excluding those items that on face validity replicated the "self-devaluing experiences" included in the self-rejection measure. Those items were then replaced by a measure of "antisocial defenses". It is interesting that four of the six questions comprising this measure refer to how one would respond if insulted. This may bias the measure to tap "antisocial defenses" only in certain situations.

Second, the self-derogation measure was expanded from the original seven items (from the Rosenberg Self-Esteem scale), to a 13-item scale. The new scale includes questions pertaining to perceived changes in attitude as well as "nature" of self-attitude. The rationale for the expansion of this measure was not well explained. This is a problem that permeates throughout Kaplan's work, measures are continuously modified without thorough explanation, making comparison among studies difficult.

Nevertheless, "the postulated causal chain whereby self-rejection influences disposition to deviance, and disposition to deviance influences deviant behaviour, finds strong support in the analysis" (p. 120). The results confirm those of the earlier analyses and further indicate that this correlation is most strongly represented in those already demonstrating deviance at T1. The authors do not address an explanation of the initial deviance at T1. If deviant behaviour is engaged in at such an
early date, should not self-enhancement become manifest rather than the continuance of self-rejection? Furthermore, self-rejection did not demonstrate a positive effect on deviance for all subjects. Self-rejection was found to have a negative effect on deviance for a substantial subset of subjects. This is counter to the theory postulated by Kaplan. The authors hypothesize that it may be due to the need to conform as well as to feelings of inefficacy, but these constructs were not measured in the investigation. Perhaps the formula only holds for some adolescents, and if so, which ones? Unfortunately, this is a crucial question that Kaplan fails to clarify.

Now let us turn to the second part of the S/E Hypothesis: will engaging in delinquent acts elevate low self-esteem? Results from the 1975 study showed that there were greater increases in self-derogation (negative global self-esteem) for those subjects that reported deviant behaviours at all points in time (T1-T3). As well, Kaplan et al. (1986a) found that early deviance (T1) positively influences the self-rejection/disposition to deviance/deviance formula. These results seem to be contrary to what one would predict based on the theory. Continuing delinquent behaviour should lead to decreases in self-derogation if the theory holds true.

Kaplan (1978) investigated the relationship between a deviant response pattern and self-enhancement. Self-enhancement was said to have happened when decreases were observed in self-derogation scores from T2 to T3 (initial levels of self-
It was hypothesized that among initially high self-derogating subjects, self-enhancement would correlate with the presence of a deviant response pattern. For this study, deviant response pattern was measured by affirmative responses at both T1 and T2 to the deviant acts questionnaire.

Results showed that for both high and low SES males, the above hypothesis held true, males initially high in self-derogation demonstrated a correlation between the presence of a deviant response pattern and self-enhancement. Kaplan (1978) interpreted this result as providing support for the self-enhancement of deviant acts and to suggest that we should revise our thinking concerning the adverse effects of deviant behaviour. However, it seems problematic that he has shown T1-T2 increases in self-derogation to be correlated with T2-T3 increases in deviance; and T1-T2 continuance of deviance to be correlated with T2-T3 decreases in self-derogation. How does one interpret T1-T2 continuance of deviance and T1-T2 increase in self-derogation? Although Kaplan does not address these findings, they appear to provide evidence contrary to the S/E Hypothesis. It would have been preferable for there to have been another testing period so that a true longitudinal analysis could have been done.

In sum, Kaplan has conducted a series of interesting analyses on the data he collected from 1971 to 1973. However, the only strong evidence these analyses appear to proffer, is an indecipherable inverse correlation between self-esteem and

delinquency that may be mediated by SES. There is also a suggestion that self-concept plays a role in influencing deviant behaviour in a way that is different from self-esteem. At this point that role is still unclear.

C. The "Youth in Transition" Analyses

There have been a series of articles published analyzing the data produced by the longitudinal Youth in Transition study directed by Jerald Bachman at the Institute for Social Research (University of Michigan). The study began with a widespread sampling (N=2213) of tenth grade males in 1966. These subjects were then followed up five times over an eight year period. The studies concerned with delinquency and self-esteem used various sections of this data. Again, as with Gold and Mann (1972) and Kaplan (1975, 1977a, 1977, 1978, 1980, 1986a, 1986), the subjects were in school and only considered more or less delinquent via their answers to a delinquency questionnaire. This means that one should be tentative in generalizing to a legally recognized group of delinquents.

Rosenberg and Rosenberg (1978) utilized the data from the first two waves of testing in the Youth in Transition Study (T1, T2) for the purpose of examining whether self-esteem has a greater effect on delinquency than delinquency has on self-esteem. Delinquency can effect self-esteem in two contrary ways: (1) As Gold and Mann (1972) and Kaplan (1975) suggested, it may defend and increase self-esteem; or (2) As labeling theory
suggests, an individual, once labeled as a delinquent, will internalize the negative attitudes that society holds for that label and suffer low self-esteem. Labeling theory is consistent with the findings of Higgins (1986), discussed on page five. One feels badly about oneself if the way one thinks one should be (ought self) is different from the way one is (actual self).

These researchers made a point of distinguishing between self-esteem, an overall feeling of self-worth, and self-concept, one's view of one's identity (a distinction highlighted in the present study). Rosenberg and Rosenberg (1978) stated that "the distinction between the specific perception of oneself as delinquent and one's overall feeling of self-worth is still an open question" (p. 280). This highlights the fact that a specific aspect of self-concept does not necessarily reflect overall self-esteem. Moreover, one may view an area of self-concept positively that society views negatively. However, this was not addressed by Rosenberg and Rosenberg as the influence of self-concept was not measured. Self-esteem was measured by a ten-item questionnaire designed to be general and content-free (i.e., reference to any specific aspect of the self-concept was avoided).

The results provided by the comparison of cross-lagged panel correlations indicated that (a) low self-esteem at T1 was more strongly associated with delinquency at T2 than was (b) delinquency at T1 associated with low self-esteem at T2. Correlation (a) is true even when delinquency levels at T1 are
partialled out; but Correlation (b) is nonsignificant for those with equivalent levels of self-esteem at T1. The authors interpret this as evidence supporting part (1) of the S/E Hypothesis; low self-esteem is often a precursor of delinquency. As well, it may provide tentative support for the second part of the S/E Hypothesis as low self-esteem at T2 was not strongly correlated with delinquency at T1. (The S/E Hypothesis states that delinquency should increase self-esteem.) In any case, expectations based on labeling theory were not supported.

Additionally, the correlations between self-esteem and delinquency are stronger for those of lower SES. This may support the hypothesis of Gold and Mann (1972) that delinquency is more available as an option to defend against a derogated self-image for some adolescents than for others. These results prompted the authors to suggest that the focus should be on providing alternative activities for these referent groups to help engender a feeling of self-respect. However, these recommendations are based on the evidence of small correlations, and are considered by at least one researcher to be "premature and probably wrong" (McCord, 1978, p. 292).

Bynner, O'Malley, and Bachman (1981) extended Rosenberg and Rosenberg's analyses by: (1) including the third wave of data from the Youth in Transition Study; (2) investigating both the first and second components of the S/E Hypothesis; (3) controlling for "exogenous variables" (unspecified) that have been shown to influence both delinquency and self-esteem; and (4)
employing a "causal modeling approach" using the LISEREL computer program. The last modification was made because these authors felt that the cross-lag correlation procedure used by Rosenberg and Rosenberg was done in such a way as to make a self-esteem-to-delinquency correlation unlikely, thereby confounding the earlier results.

Contrary to Rosenberg and Rosenberg's findings, results from these analyses indicate that reduction in self-esteem, even when educational attainment and socioeconomic status are controlled for, does not consistently lead to greater delinquency. However, for those initially low in self-esteem, delinquent behaviour appears to aid in restoring self-esteem. Thus, although part one of the *S/E Hypothesis* is not supported, part two is; delinquency does defend self-esteem. Although Bynner et al. (1981) do not support all of Rosenberg and Rosenberg's results, they do support the assertion of the importance of providing alternate activities for "referent" groups by stating "schools need to recognize the positive benefits of many of these teenage culture activities rather than dismiss them as antithetical to school aims" (p. 433). The implication is that adolescents will turn to crime less if they are provided with alternate means of "defending" self-esteem.

Finally, Wells and Rankin (1983) also reanalyzed the data from the first three waves of the Youth in Transition Study using path analytic techniques. Results show that T1 self-esteem is correlated with T2 school grades, family relationships and social
rejection, but not with delinquency. Therefore, self-esteem is related to self-concept in those areas (academic self, familial self, and social self). A possible interpretation of these results is that self-concept is a mediator between self-esteem and delinquency. Furthermore, T2 delinquency was not found to have an enhancing effect on subsequent self-esteem (T3), instead demonstrating a trend toward diminishing subsequent self-esteem.

These results are contrary to those generated by Rosenberg and Rosenberg (1978) and Bynner et al. (1981), although the same data were analyzed. Wells and Rankin speculate that this is due to the sensitivity of the results to slight changes in statistical procedure. This suggests that "the findings of prior research may represent strong interpretations of fairly weak effects (which happen to be statistically significant in large samples)" (p. 20). Wells and Rankin also speculate that the apparent discrepancy between their results and those obtained by Kaplan (using different data) may be due to age-specific esteem-enhancement properties of delinquency. Kaplan found evidence for esteem-enhancement with a sample of 12 to 14 year olds, whereas Wells and Rankin failed to with a sample of 15 to 18 year olds.

Wells and Rankin propose that by mid-adolescence the adolescent identity crisis may be largely resolved, pre-empting the esteem-enhancement properties of delinquency. One's identity is composed of the representations one has developed of oneself in different roles or areas in one's life. For the purposes of this paper these aspects of the self have been referred to
collectively as the self-concept. Therefore, the proposal proffered by Wells and Rankin assumes that delinquency enhances self-esteem exclusively through its affect on the self-concept. Although this may be possible, the research conducted thus far is not sensitive enough to ascertain it as fact.

This concludes the analyses conducted on the second set of longitudinal data collected to investigate the self-esteem/delinquency relationship. Two new pieces of the puzzle have been suggested. It is possible that the self-esteem/delinquency relationship is influenced (or confounded) by age as well as SES. As well, implicit in the results is the suggestion that self-concept is the mediating variable between self-esteem and delinquency. However, these "new leads" were uncovered in the midst of contrary results obtained from the same data. At this point one begins to experience the quandary of uncovering one piece of the puzzle only to find the others have changed their shape! Results have continued to be conflicted and clouded as to the nature of the self-esteem/delinquency relationship; to the point that at least one researcher has stated that "the causal relation between self-esteem and delinquency does not routinely exist" (Wells Rankin, 1983, p. 21).

D. The McCarthy and Hoge Data

McCarthy and Hoge (1984) analyzed a third set of longitudinal data in order to evaluate and clarify the earlier findings of Kaplan and others. In the 1976-77 school year,
questionnaires were administered to 1,965 male and female students in the seventh, ninth, and eleventh grades of 13 Catholic and Public schools (T1). Subjects were followed up twice thereafter at one-year intervals (T2, T3), retaining 84.4% of the original sample. Again, this is a sample of adolescents who are attending school and are judged to be more or less delinquent by virtue of their response to a 31-item antisocial acts measure.

Results showed that there is little evidence for either component of the S/E Hypothesis. Low self-esteem at T1 does not appear to affect later delinquency (T2), nor does T2 delinquency enhance self-esteem (T3). In fact, the opposite was observed; the more delinquent behaviour that occurred, the lower the self-esteem. This holds true most strongly for those engaging in more serious delinquent acts and for those initially high in self-esteem. These results appear to be supportive of the labeling theory. However, further inspection reveals that the correlation was stronger when the measure of self-esteem was specific rather than more global.

The general measures of self-esteem were the Rosenberg Self-Esteem Scale used in the previous studies, and the shortened version of the Coopersmith Self-Esteem Scale. The authors acknowledged that some of the questions in the Coopersmith were content free and others specific to the contexts of school and peer relationships. However, it is unclear if the entire measure was used as a global measure, or just those questions specified
to be content free. The "specific" self-esteem measures were comprised of single self-evaluation items for eight specific areas of life. The more "specific" measures appear to be "self-concept" items rather than "self-esteem" items (i.e., they refer to functioning in specific areas of one's life). Therefore, the data appears to indicate that certain areas of self-concept are negatively influenced by delinquent behaviour more strongly than is self-esteem.

In addition, there were no differences observed among age groups. This undermines Wells and Rankin's (1983) attempt to reconcile their results with those of Kaplan by highlighting the age difference between their samples. Overall, McCarthy and Hoge's (1984) results do not support the theoretical importance of the impact self-esteem has on delinquency and visa-versa. "A major theoretical implication is that if researchers cannot uncover stronger relationships between self-esteem and delinquency than we have, they should look in other directions in order to understand both self-esteem and delinquency" (Hoge & McCarthy, 1984, p. 409). Throughout the research reviewed up to this point, it has become increasingly clear that self-concept plays an important role in understanding both the cause and affect of delinquency. Perhaps reviewing the research focusing on self-concept and delinquency will clarify what has been become an increasingly cloudy picture.
Self-Concept and Delinquency

Leung and Lau (1989) set out to evaluate Kaplan's theory using a "componential conceptualization of self-concept" (p. 347). Kaplan's theory posits that the conventional institutions of family and the school fail some children leading them to look elsewhere for validation. "Thus, it may be argued that poor academic self-concept and poor relationship with school and family should be related to a higher frequency of delinquent behaviour" (p. 348). Moreover, engaging in delinquent behaviour may "defend esteem" indirectly by positively influencing social self-concept, due to the acceptance of a delinquent peer culture; and physical self-concept, due to the often physical nature of many delinquent activities and the aggressiveness necessary for survival on the street.

Students in the seventh to ninth grades of three Hong Kong schools were selected to participate (N=1061 males/591 females). Again, subjects were determined to be more or less delinquent by virtue of their responses to a delinquent acts questionnaire. Results showed that all four of the above stated facets of self-concept were significantly correlated in the expected direction with scores on the delinquent acts index. Peer approval was also strongly positively correlated with delinquent behaviour, as expected. However, global self-esteem, measured with the Rosenberg Self-Esteem Scale (and inappropriately referred to as global self-concept), did not demonstrate a significant correlation with delinquency. This lends support to the notion
that it is self-concept rather than self-esteem that directly influences and/or is influenced by delinquency. The subsequent indirect affect on self-esteem does not necessarily follow.

Comparing the above study to others is potentially problematic as the effect of culture is as yet undetermined. Earlier in this review, some evidence was presented to suggest that SES and age may confound the self-esteem/delinquency relationship. Perhaps culture similarly confuses the connection. Another difficulty generalizing from the above study, as with many others, is that the subject population was composed of students. Even though they may engage in delinquent behaviours, this may be a very different population from sentenced delinquents. However, the following review of studies conducted with sentenced delinquents indicates that the above results may be representative of this population.

The findings of Leung and Lau (1989) are similar to the results of Lund and Salary (1980) and Jurich and Andrews (1984). They found that, although adjudicated juvenile offenders did not differ from nonoffenders in their overall level of positive self-concept, the obtained pattern of subscale scores differed considerably as measured by the Tennessee Self-Concept scale. Adjudicated delinquents demonstrated good self-concepts in the areas of: physical appearance, social adequacy, self-acceptance, and sense of personal adequacy. Low self-concept patterns were observed in the areas of: family self, moral-ethical self, appropriate behaviour patterns, and "basic personal identity".

This further indicates that it may be identity (self-concept) rather than self-acceptance (self-esteem) that needs to be addressed in order to clarify the factors leading to the emergence of delinquency and its ensuing psychological effect.

Two areas of self-concept that have received attention in the literature concerning delinquents are academic self and family self. In reference to academic self-concept, some researchers have addressed the correlation between academic underachievement due to learning disabilities and delinquent/criminal behaviour (e.g., Dalby, Schneider, & Florez, 1982). It appears that this is a relationship of great complexity as learning disability is not strongly associated with juvenile delinquency among nonadjudicated youths (Pickar & Tori, 1986); however, among sentenced delinquents cognitive abilities are often weaker and more suggestive of learning disabilities than among nondelinquents (Hains, 1984). One wonders if this is merely a relationship between increasing cognitive disability and the inability to evade detection, or if it is more complex. As one would expect, academic self-concept is just one piece of the puzzle; neither necessary nor sufficient.

The dangers of allowing personal bias to cloud one's interpretation of delinquency research were mentioned in the introduction. Hains (1984) may have fallen into this trap. His results indicated that although sentenced delinquents evidenced slightly lower cognitive abilities than nondelinquents, their self-evaluations as learners were indistinguishable. Hains
proceeded to suggest that "the inconsistency between their self-concept scores ["learner" self-concept] and their performance on moral reasoning and logical cognitive measures in comparison to nondelinquents could indicate an inaccurate awareness or evaluation of their own skills" (p. 73).

Such a conclusion is possible, but it assumes that one should consider oneself to be a poor learner if one does not perform well on moral reasoning and Piagetian tasks (used by Hains to determine cognitive ability). The ability to learn does not apply solely to academic tasks, or the internalization of societal morals. In the delinquent subculture, the ability to quickly learn how to circumvent new car alarms may be highly prized. Furthermore, readers do not know what standard each group judged themselves against. Perhaps each group has a different conception of a "good learner". Researchers must be careful that societal preconceptions do not distort their interpretations of their results.

Turning back to the research on self-concept and delinquency, little research has directly addressed the familial self-concept of delinquents. However, several studies have found consistent disfunctions among the families of delinquent youth. Himes-Chapman and Hansen (1983) found that delinquent youths on probation differed significantly from nondelinquent adolescent students in the areas of relationships, personal growth, and system maintenance; as measured by the Family Environment Scale. Delinquent youths reported their families to be more conflicted
and demanding, yet casual with little expressed warmth. The authors summed up the home environment of this sample of delinquents as being confusing, nonsupportive, and punitive.

Lewis, Pincus, Lovely, Spitzer, and Moy (1987) compared matched samples of incarcerated delinquents and nondelinquents on several psychiatric and neurological variables. The single most significant discriminator between groups was the presence of abuse/family violence (experienced and/or witnessed). This also discriminated between the most and least aggressive subjects.

Kolvin, Miller, Fleeting and Kolvin (1988) examined the longitudinal findings from the Newcastle Thousand Family Survey (1947-1980) and determined that children who grew up in "deprived" rather than "nondeprived" families were more at risk for offending in later childhood and beyond. "Deprivation" was assessed according to the following criteria: marital instability, parental illness, poor domestic and physical care of the children and homes, social dependency, overcrowding, and poor mothering ability (not specified). It seems plausible that conditions such as these may lead to the family environments specified by Himes-Chapman and Hansen (1983) and Lewis et al. (1987). Moreover, the family environment described by these researchers appears to be a prime environment for the development of a low self-concept in the area of the family, as was discovered by Leung and Lau (1989) in their sample of nonadjudicated delinquent youths. This demonstrates just one of the many possible connections between sociological and
psychological explanations of delinquency.

Thus, research with adjudicated delinquents supports the pattern of low self-concept scores demonstrated by Leung and Lau (1989) with nonadjudicated delinquents (i.e., academic and family self-concept). However, the aspects of self-concept that Leung and Lau (1989) found to be positive in their sample, social and physical self-concept, have received less attention in the literature. Nevertheless, evidence to indicate that the positive aspects hold true for "real" delinquents as well as "delinquent" high school students can be found.

With reference to social self, Bernstein (1981) found that incarcerated delinquents demonstrated no evidence of being developmentally delayed in self and peer cognition as he had hypothesized. This indicates that they have the cognitive ability to perform well socially. Eisikovits and Baizerman (1983) found that "survival in prison is 'fitting in' or 'falling into' the right 'place' .... 'Fitting in' on the broader structural level, means finding a reference group and becoming a member of an actual group" (p. 12, 13). Survival on "the outs" (outside of prison) also depends on peer acceptance as "the children's independence from home, school and any adult supervised environment has begun at an early age of 6, 7, or 8" (Foley, 1983, p. 15). This results in "a world built by children largely by themselves" (p. 15). Together with the findings of Bernstein (1981), this indicates that delinquents have both the ability and motive to function adequately socially.
The second aspect of self-concept that may be rated favorably by delinquents is physical self. This can be understood by glimpsing the world that these individuals must survive in. The following is an excerpt from Eisikovits and Baizerman's (1983) description of survival in an adolescent prison.

Second, 'settling down' means understanding that fear and violence are just a part of everyday life. When violence stops being seen as a special event, the youth become less responsive to threats of violence. Violence is a part of daily life and one does not fear it anymore. One comes to threaten and use violence just like everyone else. (p. 14)

Aggressiveness and violence are not only necessary for survival in the jails and prisons, but imperative in many of the environments delinquents grow up in:

On the slum streets physical and verbal aggression were described as forms of self-assertion that assure children of a place in social life. In the streets it is dangerous to be meek, to be easily pushed, or made fun of--dangerous and no fun. Each day children must assert themselves over and over again. All those interviewed gave many descriptions of the aggressive activity they encountered and acted out daily. It can be said from these descriptions that the street demands a high-friction adjustment in bearing, manner, tone of voice, behaviour, and children are taught to fight for self at the drop of a hat. (Foley, 1983, p. 11)

The competitiveness and danger of such environments almost necessitates the formation of gangs. Hochhaus and Sousa (1987) found that the three most prominent reasons for juveniles to join gangs were protection, excitement, and companionship.

"Companionship is a critical issue, members simply want more and closer friends" (p. 75). As well, a crucial part of becoming and staying a gang member is "doing these 'gang' things that earn you
The respect and recognition as a dependable gang member with "huervos" (balls)" (Vigil, 1988, p. 432).

This highlights the overlap in function between social and physical aspects of self-concept within the delinquent subculture. Both are necessary for survival in the environments these individuals frequent, both at "home" and in prison. They are irrevocably intertwined; one must be tough to gain the respect and acceptance of one's friends, and one needs the protection of friends because of the aggression and violence.

In sum, there is a great deal of evidence that the self-concept of delinquents differs from that of nondelinquents, even though the two groups are virtually indistinguishable on measures of self-esteem. This appears to hold true for both nonadjudicated and adjudicated delinquents. This is not to say that there is a direct causal relationship between aspects of self-concept and delinquency (or visa versa). For example, Himes-Chapman and Hansen (1983) found that the family environment of delinquents, although significantly different from nondelinquents, was similar to that of adolescents hospitalized for mental illness. Although the relationship is too complex to be linear, there does appear to be a consistent connection emerging in the research. Delinquents view the academic and familial aspects of their lives negatively, and the social and physical aspects positively.
The Delinquent Self-Concept

There is one aspect of self-concept that is frequently ignored, or judged prematurely, in the literature concerning delinquents - the delinquent aspect of the self-concept. Intuitively, the greater an individual's involvement in the delinquent subculture, the greater role delinquency will play in that individual's identity. Group process theory states that "once a person joins a group, he identifies with the norms and standards of the group and makes the group his ego ideal" (Vigil, 1988, p. 433). Thus, the identity of an individual heavily involved in a delinquent group may be strongly supported by the "delinquent" role, as it is experienced and understood by the person. As with other aspects of self-concept, the impact on the self-esteem varies according to the individual. I will refer to this as the Delinquent Identity Theory.

Jensen (1972) conducted a study with the students of eleven junior and senior high schools in the California area, for the purposes of investigating the self-esteem of white and black delinquents. These subjects were rated more or less delinquent using a variety of official records and self-reports; and self-esteem was determined by the degree of agreement to two questions from the Rosenberg Self-Esteem Scale (a less than reliable method). In general, self-reported and self-rated delinquency were not significantly related to self-esteem. However, the author indicated that there was a "persistent trend" toward a negative relationship between delinquency and self-esteem.
There was also a trend for the relationship to be stronger among those of higher SES. Furthermore, a greater difference was observed between the high and low SES blacks, relative to the high and low SES whites. In other words, delinquency was more consistently negatively related to self-esteem among white subjects, regardless of their class standing. However, among low SES blacks the relationship was reversed, demonstrating a trend for the self-esteem enhancement properties of self-esteem. This is supportive of Rosenberg and Rosenberg's (1978) finding that delinquency defends self-esteem more for those of lower SES.

Although the above results are limited in their generalizability due to the unrepresentativeness of the sample and the unreliability of the self-esteem measure, they do support the findings of Emms, Povey, and Clift (1986). Emms et al. compared white and black incarcerated delinquents in order to investigate the relationship between cultural background and self-esteem. (Note that these authors referred to their measure as one of self-concept. However, as it was measuring a general acceptance of self, it falls under the canopy of the construct referred to in this paper as self-esteem.)

Emms et al.'s results indicated that the mean self-esteem score for black delinquents was slightly higher although it did not differ significantly from that of white delinquents. What is most interesting is that the mean self-esteem score for black delinquents did not differ appreciably from that of black nondelinquents. Conversely, the mean score for white delinquents
was "considerably lower" than that of white nondelinquents. These results together with those of Jensen (1972) seem to be suggesting that delinquency defends against a derogated self-image for black delinquents while contributing to a derogated self-image for white delinquents. As Gold and Mann (1972) found, delinquency is more available as a social or psychological option for some adolescents than for others to serve the purpose of esteem-enhancement.

That delinquency appears to coincide with high self-esteem in black delinquents may be indicating that delinquency is a more solid part of the black delinquent identity than of the white delinquent identity. It is possible that this is due to the greater prevalence of delinquency and crime in many black communities, which are often lower SES communities in comparison to the majority of white communities. It may be easier to fully integrate an aspect of identity that is modeled frequently in an environment of restricted options. Once delinquency becomes an important part of the self-concept it may increase self-esteem indirectly to feel that one has done well in that role (S/E Hypothesis).

The same mechanism may have been operating to produce the results obtained by Haddock and Sporakowski (1983). Juveniles adjudicated for status offenses evidenced lower self-concept scores than did those adjudicated for criminal offenses. Moreover, criminal offenders and nonoffenders had similar self-concept scores as measured by the Piers-Harris Children's Self-
Concept Scale. Again, one theoretical explanation for these results is that criminal offenders have internalized the identity of "delinquent" to a greater degree than status offenders. Status offenses are age-related by definition, as after a certain age one cannot be charged with such an offense. Therefore, individuals charged with these offenses may not consider themselves to be as "criminal" as those charged with criminal offenses. For these individuals the label of delinquency may work to lower self-concept in a way that does not occur if delinquency is an integrated aspect of the identity. In the former case, delinquency may be quite "ego-alien" or discrepant from the reference group norm, thereby negatively effecting self-esteem. In the latter case this may not be true, and delinquency may have the potential to indirectly defend self-esteem.

The delinquent aspect of the self-concept appears to play an important, although varying, role in a delinquent's overall self-image and self-esteem. One begins to wonder about the nature of this influential aspect of self-concept. Studies investigating this question have often approached it from a labelling theory perspective. Labelling theory predicts a self-fulfilling prophecy whereby a delinquent internalizes a negative societal stereotype only to further propagate deviant behaviour. This theory also predicts that the discrepancy between how society prefers one should be (ought self) and how one really is (actual self), will result in lowered self-esteem (e.g., Higgins, 1987).

Hughes and Dodder (1980) examined the effects of own and
perceived other conceptions of delinquency on the self-acceptance of "delinquents" (nonadjudicated school youths who engage in delinquent behaviour). The results showed that subjects' perceptions of "mainstream" views (general concept of delinquency in mainstream society) had the greatest negative impact on self-acceptance. This indicates that some "societal" representations had been internalized. It is not surprising that this had a negative impact on self-acceptance, as the sample employed by Hughes and Dodder was upper-middle class. The research reviewed in this section indicates that delinquency has a greater negative effect on self-esteem for those of higher SES.

However, subjects' "own" views of delinquency did not correlate with low self-acceptance. Perhaps if one rates oneself as delinquent it represents a greater internalization of delinquency as an important aspect of the self-concept. Although this may occur less frequently and with greater difficulty among those of higher SES, once delinquency becomes an important part of the self-concept it may have the same esteem-enhancement properties that it does with those of lower SES.

Chassin, Presson, Young, and Light (1981) investigated the effects of "labelling" upon incarcerated delinquents and adolescent psychiatric patients. Self-ratings were obtained from both experimental groups as well as from a control group of high school students, and were then compared. Individual delinquent's self-ratings were subsequently compared to the control group's average ratings of delinquents, and the average self-ratings of
all delinquents. The results showed that approximately one-half of the delinquent group identified themselves as popular teenagers rather than as delinquents, as did the majority of the high school subjects. Those who did identify themselves as delinquent did not adopt the societal stereotype of delinquents as defined by the control group.

This finding indicates that for those delinquents who have internalized "delinquency" as a part of their identity, this aspect of self-concept may deviate widely from the societal stereotype. The theorist cannot make the mistake of assuming that his/her own idea of delinquency matches that aspect of a delinquent's self-concept, nor that the individual has even internalized this as part of his/her self-concept, nor that it will be in any way negative if it is a part of the identity. For example, Burr (1987) found that the roles of "staghead" (heroin addict), "junkie" and "villain" were prized rather than stigmatized within the delinquent street subculture he interviewed.

The failure to adopt societal stereotypes is supportive of earlier findings by Jensen (1972). His results showed that the more personal the evaluation of delinquency (i.e., own opinion as opposed to official documentation), the stronger the positive relation to self-esteem; although in general delinquency/self-esteem correlations were extremely low and slightly negative. If we assume that one's own opinion reflects one's identity more than an official record, then this supports Hall's (1966)
assertion that the greater one's involvement in the delinquent sub-culture (and thus a greater part of the identity), the more it will "defend" self-esteem.

The following study will be presented to demonstrate that the interpretation of results can change when the delinquent identity is considered. Oyserman and Markus (1990) have conducted innovative research in the area of "possible selves". Possible selves are "those elements of the self-concept that represent what individuals could become, would like to become, or are afraid of becoming" (p. 112). The "Balance Hypothesis" states that the most delinquent youths will have the least balance (i.e., best match) between their expected and feared selves. This means that what one fears becoming and what one expects to become are very similar. This offsets the motivational influence of a feared self because the youth does not have an outline for what s/he may do (delineated in the expected self) to avoid the feared self.

Youths were drawn from the following groups representing degree of official delinquency in ascending order: high school adolescents, community placed delinquents, group home delinquents, and training school delinquents. Results showed that a decreasing discrepancy between the feared self and the expected self was correlated with an increase in the degree of official delinquency. Conversely, global self-esteem (as measured by the Rosenberg Self-Esteem Scale) was not correlated with delinquency. These authors conclude that using only a
measure of global self-esteem will mask the content of self-concept. Although this may be true, a closer look at the self-esteem results indicates that there is more information there than the authors discuss.

The relationship between delinquency and self-esteem was actually "U-shaped", not "uncorrelated". Those with high self-esteem ratings were those with either low or high delinquency ratings; mid-level delinquents evidenced mid-level self-esteem. This is consistent with findings reported above indicating that a strong delinquent identity may defend self-esteem. In fact, the lack of balance between the expected and feared selves may itself indicate a greater internalization of the delinquent identity. If one expects to behave a certain way in the future, does that not indicate that it may be a part of one's identity rather than a transitory behaviour pattern?

In sum, it appears that individuals charged with delinquent acts may internalize "delinquency" as an aspect of their self-concepts to varying degrees. There is some indication that a delinquent aspect of the self-concept, particularly one that is positive, may be internalized more easily for some individuals than for others. As a result, delinquency is more available as an esteem-enhancement option for some individuals than for others. Although the factors that influence this are far from clear, lower SES groups appear to benefit from the esteem-enhancement properties of delinquency more than others.

As well, delinquency may mean very different things to the
different individuals who have internalized it as a part of the self-concept. One may have a delinquent self-concept that s/he feels quite good about, hence having a positive effect on self-esteem; or a delinquent self-concept that one feels quite bad about, hence negatively effecting self-esteem; or the delinquent aspect may be either unimportant or nonexistent, both having no effect on the self-esteem. Whatever the role of the delinquent identity may be, it is a crucial element that cannot be overlooked if one is attempting to grasp the nature of self-concept within a delinquent population.

The Self-Esteem/Self-Concept Connection

At this point both the self-esteem/delinquency literature and the self-concept/delinquency literature have been reviewed. It has become increasingly clear that both self-esteem and self-concept affect, and are effected by, delinquency in a manner that suggests an interaction. Changes in the self-concept appear to comprise the mediating bridge between delinquency and self-esteem (e.g., Kaplan, 1980; Wells & Rankin, 1983). Furthermore, it appears that the two dimensions of self-concept that are important in this mediation are positivity/negativity and importance/unimportance. Moreover, the importance of an aspect of self-concept may be influenced by the degree to which it has been internalized as an aspect of the identity. However, the relationship is still very clouded as research has often focused on one construct or the other. The research to be addressed in
the next section has directly investigated this crucial self-esteem/self-concept link.

Hoge and McCarthy (1984) investigated whether a content free measure of self-esteem taps the same dimension as does a combined summated score of self-evaluations on "specific self-esteem" scales. The specific self-esteem measures were one-item scales that reflect what I have been referring to in this paper as aspects of self-concept. In order to get a combined summated score of these scales, each scale was weighted: (1) according to how important the individual indicated that aspect was to him/her; and (2) according to the group average of importance for that scale.

A nonweighted summation of the specific scales demonstrated a moderate correlation (.4) with the global measure of self-esteem. On this basis, the authors concluded that two different constructs were being measured, referred to in this review as self-concept and self-esteem. The results indicated that weighting the specific scales most effectively predicted global self-esteem when group norms were used, and when extreme weights were applied. Individual measures of importance did not improve the predictive ability of the summation score over the nonweighted version. The authors therefore concluded that "group identity salience is more important than individual identity salience in understanding how specific self-evaluations influence global self-esteem" (p. 413). However, there are two methodological weaknesses of this study that make this conclusion
premature. First, only single-item measures were used for each specific scale. Single-item measures have much weaker psychometric properties than do multi-item measures (e.g., Marsh, Barnes, & Hocevar, 1985). Second, averages of the self-concept/importance cross products were used to indicate whether the importance of a facet of self-concept influenced its relationship to global self-esteem. This may not be an adequate statistic, as cross-products are insensitive to the relative contribution of each variable (Marsh, 1986).

In sum, the Hoge and McCarthy data have demonstrated that: (1) self-esteem and delinquency have little reciprocal influence (McCarthy & Hoge, 1984); (2) self-esteem is a different construct from measures that tap specific aspects of self (self-concept); and (3) the different aspects of self only influence self-esteem inasmuch as they are perceived as important to others. However, important methodological flaws leave in question whether or not group importance supersedes individual importance.

Marsh (1986) found Hoge and McCarthy's (1984) findings to be "theoretically and logically implausible" (p. 1225). Therefore, he set out to further test the following hypothesis: the effect a specific facet of self-concept has on esteem will vary with the importance each individual accords that facet. Marsh not only eliminated the methodological flaws of Hoge and McCarthy (stated above), but expanded the theoretical scope to test both the interactive and discrepancy models.

Hoge and McCarthy focused on the interactive model of the
self-concept/self-esteem connection. This model states that having a positive self-concept in a particular area will contribute positively to esteem, as will a negative self-concept contribute negatively to esteem. However, the size of either contribution depends directly on how important each area or facet of self-concept is to the person. Alternatively, the discrepancy model (Marsh's term) states that ultimately, all of the aspects of self-concept receiving a low rating would be unimportant, and all of those receiving a high rating would be important, as this would maximize self-esteem. The degree to which there is discrepancy from a desired state is what is correlated with, and partially determines, global self-esteem.

The data were gathered from five groups that were expected to vary with respect to the perceived importance of some specific aspect of self-concept (e.g., group five consisted of female athletes). The results showed that ratings of "spiritual values" in the group of females from a Catholic school, and to a lesser extent, ratings of "physical ability" in the group of athletic subjects, were strongly correlated with ratings of importance. For all groups, correlations between importance ratings and self-concept measures were moderately positive, and stronger for those subjects demonstrating higher self-esteem.

The results also showed that various means of weighting self-concept ratings before aggregation did not improve prediction of global self-esteem over the unweighted sum. However, the unweighted sum predicted self-esteem significantly
better than demonstrated by Hoge and McCarthy (1984).

Statistically significant, although modest, support was demonstrated for both the interactive and discrepancy models. Thus, these results suggest that although there is a relationship between self-concept and self-esteem, indications of the importance of the different aspects of self-concept fail to aid in the clarification of this relationship.

A variety of theoretical hypotheses, as well as common sense, posit that the effect of a specific facet of self-concept on self-esteem will depend on the facet's importance. William James (1890/1963) first proposed the hypothesis 100 years ago; it has been restated frequently; it seems intuitively plausible; and it appears to be easy to test. Nevertheless, rigorous tests of the hypothesis—indeed, even clearly articulated accounts of how it should be tested are surprisingly rare. Hoge and McCarthy, in one of the most recent attempts, found little or no support for the hypothesis, but an examination of their study suggested methodological problems. The present investigation verified that methodological problems did exist and devised solutions to the problems, but it still found little support for the hypothesis. However, the theoretical notion has too much intuitive appeal to be completely rejected, and so further examination of the issues is needed. (Marsh, 1986, p. 1233)

As Marsh states above, the notion that one can clarify the contribution each aspect of self-concept makes to self-esteem by factoring in the perceived importance of each is intuitively appealing. The question is, why has it not been born out by the data? A possible explanation may be that these individuals lack the cognitive flexibility and sophistication to form a complex cognitive representation of the self. "Greater complexity of self-representation entails organizing the self-knowledge in terms of a greater number of aspects that are relatively
Linville (1985) found that with male undergraduates, those with low self-complexity evidenced greater variability in affect over a two week period, and were less affected by either failure or success experiences. Those with high self-complexity appeared to be better equipped to deal effectively with negative and stressful events. However, even within this sample of undergraduates there was a consistent proportion that evidenced little cognitive complexity. Are we not expecting too much for a group of delinquents to be able to perform what undergraduates have difficulty with?

According to Piaget, the flexibility and abstractness required to develop a complex self-representation are reasoning processes characteristic of the formal operations level of cognitive ability (Piaget, 1966). Research conducted on this cognitive stage has demonstrated that it is not universally attained by all adults. Neimark (1974) cites evidence indicating that factors such as a low intelligence quotient, poor language attainment, and impulsivity are related to the lack of formal operations development. These are characteristics that have been documented in populations of delinquents. Therefore, it would appear that delinquents have a lower-than-average probability of developing the skills necessary to develop a complex representation of self-concept.

The research reviewed thus far culminates in indicating that self-esteem, self-concept, and delinquency are related to each
other in the following way. Conventional institutions of socialization, such as the family and the schools, fail to provide the adolescent with a sense of mastery in these roles (genetic factors may aid in this failure). This results in the adolescent having negative aspects of self-concept in these areas and possibly a lowered self-esteem. These act in concert (possibly by creating self-discomfort) to propel the adolescent toward another means of attaining a sense of self-worth. Delinquency is one avenue that the adolescent may choose. Through various means of reinforcement (e.g., mastery, peer approval and support), delinquency improves some aspects of the self-concept. The adolescent may even create a new aspect of self-concept that reflects the delinquent self. If these positive aspects of the self-concept are both strong and important to the individual, they may act to improve the individual's overall self-esteem.

Although this theory appears plausible based on general research in the field, it has not received strong support from studies that investigated the self-esteem/self-concept relationship directly. The project to be proposed at the end of this paper will make use of the methodological improvements drafted by Marsh (1986) and will extend his work to further test the self-esteem/self-concept relationship.
Conclusion

In conclusion, it appears that although there is a strong theoretical and intuitive basis for expecting self-esteem to have a close relationship with delinquency, the data do not support the existence of such a relationship. There is greater evidence for a relationship between self-concept and delinquency, and a vague indication that self-concept may possibly mediate between self-esteem and delinquency. Other factors that appear to influence the relationship are SES, and possibly age. There are aspects of self-concept that show some evidence of being consistently positive or negative within a population of delinquents: family and academic selves are often negative; social and physical selves are often positive.

As well, the degree to which each individual has integrated delinquency as a part of the identity has been emphasized in importance when examining the self-concept of a delinquent. Although it is intuitively reasonable to hypothesize that the importance an individual places on each aspect of self-concept will determine its impact on the self-esteem, it has not been supported by the research conducted thus far. However, the research currently conducted on this hypothesis has not included the impact of the delinquent self.

As a final consideration, the studies that have been reviewed in this paper used various groups of adolescents that were all referred to as delinquent. Most often "delinquents" referred to high school students who admitted to committing
"delinquent" acts. This group of adolescents may not be representative of delinquents who are not in school. Furthermore, the "delinquent" acts high school students admitted to were often noncriminal acts. This calls into question the validity of generalizing these results to a legally recognized delinquent population.

Generalization may be even less valid with the studies that investigated the nature of self-concept. As Oyserman and Markus (1989) discovered, there are differences in one's representation of self depending on which group of "delinquents" you belong to. One is left to wonder what other differences may be observed between various groups of delinquents. Is there a valid basis for comparison and generalization from one group to another? Or are we committing the basic fallacy of considering delinquency a homogeneous entity?

Only one study (from a total of two) has used a sample of legally recognized delinquents in order to investigate the role of importance in the self-esteem/self-concept relationship. The following research will be conducted with legally recognized delinquents (i.e., convicted young offenders serving a court imposed sentence at a correctional facility), in an effort to clarify previous findings. As the current sample is incarcerated, findings will be discussed in terms of enhancing the rehabilitative aspect of "jail".
THE STATEMENT OF HYPOTHESES

Several connecting bits of information have been reviewed in this paper that concern the self-esteem and self-concept of various groups of delinquents. After considering this information carefully, I have formulated four hypotheses to be tested:

HYPOTHESIS #1. There will be a pattern of self-concept scores that are consistent with the Societal Failure Theory and which reflect the results of Leung and Lau (1989). Delinquents will score high on social and physical aspects of self-concept, and low on family and academic aspects of self-concept.

HYPOTHESIS #2(A). In a manner commensurate with the Societal Failure Hypothesis, only certain aspects of self-concept will correlate with self-esteem. Therefore, the unweighted summary measure of self-concept scores will demonstrate a slight to moderate relationship with the general self-esteem measure.

HYPOTHESIS #2(B). Consistent with the interactive hypothesis, weighting aspects of self-concept according to their importance (for each individual), will increase the strength of the relationship between aspects of self-concept and the general self-esteem measure.

HYPOTHESIS #3. The positive or negative valence of self-descriptions will be strongly related to self-esteem.
HYPOTHESIS #4. Preliminary analyses of an exploratory measure of delinquent self, referred to as the "Street-Self Questionnaire", will evaluate whether this measure has the necessary properties to be considered a separate self-concept scale. If so, this measure is expected to correlate with other aspects of self-concept in a manner commensurate with the Societal Failure Hypothesis (see Hypothesis #1), but not with the measure of self-esteem.
METHOD

Subjects

Data was collected from two groups of male subjects aged 13 to 20 years (M = 16.64). All subjects were convicted young offenders serving a court imposed sentence at a correctional facility.

The first group consisted of 111 male subjects, who completed a large test battery as part of another study examining the psychological profile of young offenders. Subjects in this group were selected from the following correctional facilities: Willingdon Youth Detention Centre (WYDC) (N = 42; mean age = 16.77); Victoria Youth Detention Centre (VYDC) (N = 16; mean age = 17.13); and Holly Open Custody Centre (HOCC) (N = 53; mean age = 16.27).

Combining the first two groups (WYDC and VYDC) results in a total of 58 closed-custody subjects; the third group (HOCC) consisting of 53 open-custody subjects. Closed-custody refers to maximum security incarceration; open-custody refers to medium security. Open-custody facilities typically allow more privileges and freedom (e.g., grounds privileges, community passes, etc.) than do closed-custody facilities.

The second group of subjects (mean age = 16.86) completed only the questionnaires from the battery that referred to self-esteem and self-concept (i.e., Rosenberg Self-Esteem Scale, Offer Self-Image Questionnaire, Personal Importance Measure, and the "Street Self" Questionnaire). These subjects were not tested by
the researcher, but by a staff member at the Prince George Youth Detention Centre (a closed and open-custody facility). Data were collected for a total of 26 male subjects (15 open-custody; 11 closed-custody).

Environmental Settings

A. Willingdon Youth Detention Centre (WYDC)

This is a high security correctional institution for young offenders aged 12 to 18 years. WYDC has an average resident population of 80 adolescents, 10% to 15% of whom are female. Sentenced residents comprise only 35% of the total population; the remaining 65% are individuals on remand. Sentenced residents are individuals serving a court imposed sentence; remanded individuals are those awaiting their court hearing.

The institution consists of a single-story building, including a gymnasium and swimming pool, and two additional mobile units. Windows are barred and security is emphasized. There are 12 units within the institution, representing differing levels of structure. A less structured unit dictates greater personal responsibility of the residents. When residents are first admitted to the institution, they are often placed in a large secure unit. Based on behaviour displayed in this unit, residents are moved to units of higher or lower structure. Nondisruptive behaviour earns each resident points on a "level" system. Once a resident reaches a certain "level", he has earned the opportunity to be moved to a unit of lesser structure.
However, high resident counts often thwart this incentive program.

Residents under the age of 16 years are required to attend school within the institution. Those over the age of 16 years have the option to attend. Recreational activities usually occur on a daily basis; although all of these are limited to the indoor facilities. Some crafts and quasi-therapeutic programs are available, such as "Art Therapy", but they have a limited number of spaces available to residents. Many residents, who do not avail themselves of these opportunities, spend a great deal of time in their units watching T.V..

Residents are woken up at 7:00 am to begin the daily routine. Breakfast is served at 8:00 am, followed by the commencement of programs at 8:30 am. Lunch is provided from 12:00 to 1:00 pm. Residents are confined to their cells from 2:30 to 3:30 pm during the staff shift change. Between the shift change and dinner at 5:00 pm, there are few programs offered. This is also true of the period between dinner and bed-time (6:00 to 9:00 pm). Residents do not always get outside every day. There is only one courtyard (paved), and residents are brought out one unit at a time to decrease the chances of an infraction.

The institution employs approximately 65 permanent staff members, and 30 full-time auxiliary employees. In addition, there are several contract employees who provide services such as: medical services, psychological services, pastoral counselling, alcohol and drug counselling, arts and crafts
programs, native awareness, etc.. Staff members are 50% male and 50% female. However, of those who work in the units to maintain order, the majority are male. The main goal of the staff that have direct contact with the residents is the maintenance of security.

B. Victoria Youth Detention Centre (VYDC)

This is also a high security correctional institution for both remanded and sentenced young offenders. VYDC was designed to hold 27 residents; less than one half of the WYDC capacity. The VYDC resident population varies from 21 to 41 adolescents, 10% to 20% of whom are female. VYDC has a level system similar to WYDC, and provides similar services. There are 40 permanent full-time staff members and 8 auxiliary staff members that are utilized "as needed". Sixty percent of staff members are male.

C. Holly Open-Custody Centre (HOCC)

HOCC is a medium security correctional facility designed to hold 23 sentenced young offenders. The daily count ranges from 16 to 35 individuals, approximately 20% of whom are female. HOCC receives all of the young offenders from the lower mainland who are sentenced to open-custody. Individuals are subsequently classified and often sent on to other open-custody facilities. As a result, 75% of the individuals who are sent to HOCC spend two weeks or less at the facility.

There are only two units at HOCC, which are undifferentiated
in terms of structure. Obtaining progressively higher "levels" at HOCC is rewarded with increased access to community outings, rather than movement to units that are less structured. (Although school is not mandatory for individuals who are past the age of 15, attendance is required to reach the levels that allow community outings.) Individuals from both units are mixed for most activities, including outdoor team sports. (HOCC has a large secure grassy field that is often utilized.)

The institution employs 23 full-time staff and 16 auxiliary employees that are utilized "as needed". Sixty percent of the employees are male. The services and programs that are offered at HOCC are very similar to those offered at WYDC. In fact, there is a great deal of communication between the two facilities as they are physically located "next door" to one-another.

D. Prince George Youth Detention Centre (PGYDC)

PGYDC is both a closed-custody (high security) and open-custody (medium security) correctional facility. It was designed to hold a total of 48 individuals: 24 with closed-custody sentences, and 24 with open-custody sentences. The PGYDC resident population varies from 46 to 51 individuals, 8% of whom are female. The closed-custody population has a level system similar to HOCC that represents access to progressively more privileges and earnings. However, the open-custody population does not have a level system, individuals are given privileges, and must serve a three-day "no-status" upon the misuse of these
privileges. (A "no status" resident cannot participate in programs or collect earnings.)

The programs and services offered at PGYDC are similar to those described for WYDC. However, PGYDC open-custody residents have the opportunity to participate in the maintenance of a trap-line. This is a program unique to the PGYDC facility. There is a total of 52 full-time employees and 13 auxiliary employees employed at PGYDC. Again, approximately 60% of those employees are male.

**Instruments**

The following instruments were administered as part of a larger test battery. Instruments that were administered for purposes not directly relevant to the current study will not be discussed.

**A. Published Instruments**

All of the instruments to be reviewed in this section have met acceptable standards for psychometric properties, unless otherwise stated.

**Offer Self-Image Questionnaire (OSIQ)**

Offer, Ostrov & Howard (1982)

The OSIQ is a 124-question self-report measure designed to assess the self-image (self-concept) of adolescents between the ages of 13 and 19. The development of this instrument was based on the theory that self-image is multifaceted; "since the
teenager can master one aspect of his world while failing to adjust in another" (Offer & Ostrov, 1981, p. 31). The test measures adjustment in 11 areas in order to reflect how each individual feels about him/her self in that area. Thus, this instrument reflects what has been referred to in this paper as aspects of self-concept.

The 11 areas of self-concept are organized into five categories: (1) **Psychological Self** - comprised of the following three scales: Impulse Control, Emotional Tone, and Body and Self-Image (scales 1, 2, and 3); (2) **Social Self** - comprised of the following three scales: Social Relationships, Morals, and Vocational and Educational Goals (scales 4, 5, and 9); (3) **Sexual Self** - comprised of scale 6, Sexual Attitudes; (4) **Familial Self** - comprised of scale 7, Family Relationships; and (5) **Coping Self** - comprised of the following three scales: Mastery of the External World, Psychopathology, and Superior Adjustment (scales 8, 10, and 11).

Items were chosen for these 11 areas on the basis of "theoretical propositions, clinical experience, and a review of empirical findings" (Offer & Ostrov, 1981). Approximately one half of the items are worded negatively, and intermixed with those worded positively. Each item must be responded to with a number from one to six (1 = "describes me very well"; 6 = "does not describe me at all"). Negatively worded items are reversed for scoring purposes, as higher standard scores represent a more positive self-image. The manual provides male and female norms
for younger (13 to 15) and older (16 to 18) "normal" adolescents. A score of 50 (standard deviation = 15) signifies a score equal to the appropriate normal reference group mean. A score lower than the mean signifies adjustment that is below that of the "normal" reference group. Similarly, a score higher than the mean indicates adjustment that is better than that of "normals".

This questionnaire was first developed in 1967. Since that time, data has been collected from over 10,000 adolescents. Data includes large samples of high school ("normal") adolescents, adolescents from other cultures, and "deviant" adolescents. This last group includes those who were delinquent, psychiatrically disturbed, or physically ill at the time of testing. The latest revision of the manual was completed recently in 1992. It incorporates data from studies conducted over the last three decades using this instrument. Several studies demonstrating strong validity data are cited in the manual. For example Offer, Ostov, and Howard (1977) demonstrated that the OSIQ reliably differentiates among "normal", delinquent, and emotionally disturbed adolescents. As well, individuals who are classified in one of these three categories are reliably reclassified in the same category over an eight year period.

There are only two factors that present cause for concern. The first presents itself in the recent data concerning scale 6: Sexual Attitudes (Offer, Ostrov, & Howard, 1992). Findings suggest that this scale has a curvilinear relationship with adjustment rather than a linear relationship. This has an impact
on the interpretation of scale scores. Both low and high scores in Sexual Attitudes can indicate poor adjustment.

Reports of the internal consistency of the scales also warrants some attention (ranging from .48 to .84). Martin (1988) in a review of the OSIQ concluded that the scales are not made up of homogeneous sets of items. However, this does not negate the usefulness of the OSIQ, merely indicating caution in the interpretation of scale scores. Hogan (1988) summed up his review of the OSIQ by stating "As a quick measure of personality to be used with normal teenaged populations, it is among the very best measures available" (p. 1080).

Rosenberg Self-Esteem Questionnaire (RSEQ)
Rosenberg (1979)

As the preceding literature review clearly demonstrates, the RSEQ has been used extensively to explore the nature of self-esteem in young offenders. It is a ten-item Guttman scale designed to assess "general favorable or unfavorable global self-attitude" (Rosenberg, 1979, p. 292), in both adolescents and adults. Factor analysis supports the existence of a single dimension, referred to by Carmines and Zellers (1974) as positive self-esteem/negative self-esteem.

One half of the questions are worded negatively and intermixed with those worded positively. Subjects respond to each question by choosing one of four responses (strongly agree, agree, disagree, strongly disagree). Scores on this scale range
up to a high of 7 points, with higher scores denoting lower self-esteem. Reliability and validity data demonstrate this measurement to be psychometrically sound. For example, two-week test-retest reliability averages at $r = .87$ (Rosenberg, 1979).

**B. Unpublished Instruments**

The three instruments to be presented in this section were constructed by the author and two other individuals knowledgeable with this research.

**Demographic Sheet**

A Demographic Sheet was devised to elicit information pertinent to both the current study, and the larger project of which the current study is a part. The information that is used in the current study includes: age, ethnicity, education, crimes committed, sentence, time-served, number of family visits, and number of incident reports (see Appendix A).

**Personal Importance Measure (PIM)**

The purpose of the PIM is to provide a measure of the importance of each area of self-concept (as measured by the OSIQ) for each individual (see Appendix B). The development of this scale was modeled after the work of Susan Harter (1988) who included a similar scale in her measure of adolescent self-perception.

Ten individuals were asked to do a content analysis on each
of the 11 OSIQ scales, and to indicate a question(s) reflecting each content area. These questions were pooled, resulting in two questions/content areas for each scale with the exception of scales 5, 8, and 10. Scales 5 and 8 reduced to one question each, and the content analyses of scale 10 resulted in three questions. There was a consensus that scales 9 and 10 were the most difficult to summarize; these two scales resulted in the most disagreement among those conducting the content analyses. Final items were revised twice following the results of two pilot studies. A portion of the final items were worded negatively and then randomly arranged with the remainder of the items.

For each of these summary items, individuals were asked to indicate: (a) how important the item was to the individual, and (b) how well the item described the individual. Subjects responded by checking off one of four responses provided for (a) (very important, important, not very important, not important at all); and one of six responses provided for (b) (see response format for the OSIQ). It was hypothesized that providing written responses rather than Likert scales would improve the accuracy of responding; as this is a population shown to respond well to concrete structure.

The psychometric properties of this summary measure are discussed in the Results section of this paper (in the manner of Marsh, 1986; and Marsh et al. 1985). The findings indicate that, although not a mirror-image of the multi-item scales it is meant to reflect, the PIM meets acceptable standards of reliability and
validity.

Street Self Questionnaire (SSQ)

This is an exploratory measure designed to investigate the role delinquency plays in the self-concept of those tested (see Appendix C). Questions were constructed for the purpose of assessing the extent to which delinquency is an important part of an individual's life. Based on the theoretical arguments presented in the preceding literature review, SSQ scores are hypothesized to reflect the extent to which delinquency has been internalized as an aspect of the identity.

The questions were modified according to feedback received during the two pilot tests. A portion of the final 25 questions were negatively worded and arranged randomly with the remainder of the SSQ questions. All questions are scored so that higher scores on the SSQ represent greater delinquent identity. Subjects respond to all questions by circling one of five responses. Five response sets were used: 1 = excellent, 5 = poor (used for 7 questions); 1 = all, 5 = none (used for 5 questions); 1 = all of the time, 5 = none of the time (used for 4 questions); 1 = totally, 5 = not at all (used for 7 questions); and 1 = a lot more, 5 = a lot less (used for 2 questions).

Although there are obvious difficulties with using more than one response set within the same questionnaire, it has the advantage of providing the most appropriate answer format for the question. This was hypothesized to be useful for eliciting
accurate responses from a population known to respond well to concrete structure. Similar reasoning resulted in providing written response sets rather than Likert scales (as with the Personal Importance Measure).

The psychometric qualities of the SSQ are discussed in the Results section of this paper. Four scales from two questionnaires (given to the current sample for purposes beyond the current study) were used to establish the construct validity of the SSQ. Therefore, although these two questionnaires are not directly relevant to hypotheses of the current study, they will be briefly mentioned in the next section.

C. Auxiliary Instruments

Jesness Inventory (JI)

Jesness (1983)

The JI was originally designed for the purpose of classifying and treating disturbed or delinquent adolescents. It consists of a total of 155 true-false items chosen for their ability to: (a) distinguish disturbed or delinquent adolescents from others; and (b) cover a variety of attitudes toward self and others for the purpose of providing the basis of a personality typology.

Standardized scores can be derived for 10 personality characteristics. All ten of these scales have been found to have acceptable reliability and validity (c.f., Jesness, 1983). Three of these scales were selected for the purposes of determining the
construct validity of the SSQ. First, Social Maladjustment (SM) measures the degree to which "the individual shares attitudes expressed by persons who do not meet, in socially approved ways, the demands of living" (Jesness, 1983, p. 7). In other words, SM reflects attitudes shared by those with inadequate or disturbed socialization.

Second, Value Orientation (VO) refers to a tendency to share attitudes and opinions that are characteristic of persons in the lower socioeconomic class culture (e.g., "toughness" ethic). Finally, Alienation (Al) refers to the presence of distrust and estrangement in relationship with others, particularly authority figures. On face validity, it was felt that these three scales represent attitudes that would be representative of individuals with an internalized delinquent identity (see preceding literature review). Therefore, the SSQ should correlate highly with these three scales.

**Carlson Psychological Survey** (CPS)

Carlson (1982)

The CPS was developed for use with "individuals accused or convicted of crimes, or otherwise referred for socially deviant behaviour" (Carlson, 1982, p. 1). It consists of 50 items that compose four scales. Of these four scales, Antisocial Tendencies (AT) was chosen for the purposes of establishing the construct validity of the SSQ. This scale measures the degree to which an individual has a hostile and socially defiant attitude.
Individuals who score highly on this scale are often cynical and prefer the values and customs of those who commit criminal offenses. It is hypothesized that those who prefer criminal values would have a "delinquent identity". Therefore, the SSQ should correlate highly with this scale.

Measures that were part of the complete test battery but are not discussed here include: Beck Depression Inventory, Corrections Institution Environment Scale, Family Environment Scale, Sequential I-Level Classification, and subtests from the WAIS-R and WISC-R.

Procedure

A. Pilot Tests

Two pilot tests were conducted prior to data collection. The first pilot test was conducted with five male junior high school students. This pilot test was conducted for the following purposes: to determine the time required to complete the tests; to determine the best arrangement of tests to minimize subject fatigue; and to receive feedback concerning the clarity of the two measures developed by the researcher and colleagues.

The second pilot test was conducted with 18 male adolescents remanded to the Willingdon Youth Detention Centre (WYDC). Remanded youth are those held in custody awaiting their court date. Sentenced subjects, the target group of this study, were not used for the pilot test because there are a limited number
available. Remand subjects were deemed to be the best alternative. The verbal feedback received from both pilot tests and the statistical feedback provided by the second, were used to guide the revisions of the new measures (PIM and SSQ).

B. Testing Procedure at WYDC, VYDC, and HOCC

The researcher followed a similar testing procedure in each of the three institutions where subjects were tested. Residents were briefly told the purpose of the research and what would be expected from them as subjects. Volunteers were taken to a semi-quiet private room in groups of three1. Upon arrival consent forms were read, signed, and questions concerning the research were answered (see Appendix D).

Testing then proceeded in three separate sections, each lasting approximately one hour. Groups of three subjects completed the following tests: Rosenberg Self-Esteem Scale; Offer Self-Image Scale; Personal Importance Measure; and the Street Self Questionnaire. The second session was conducted individually with each subject. During this session each subject completed the following tests: Beck Depression Inventory, subscales of the WISC-R or WAIS-R, Demographic Sheet, and the Family Environment Scale. Both the WICS-R/WAIS-R subscales and the Demographic Sheet require subject-researcher interaction. As

1. Subjects were tested in groups of three for the following reasons. First, it was thought that this was a number that was both manageable and yet would decrease the degree of socially appropriate responding sometimes present with individual testing. Second, this number was commensurate with both physical restrictions and security concerns.
well, the FES was sometimes read aloud to subjects who demonstrated extreme difficulty with reading ability.

The third and final session rejoined each set of three subjects for the completion of the remaining tests: Corrections Institution Environment Scale, Carlson Psychological Survey, and the Jesness Inventory. Subjects were told previous to testing that some questions may sound strange, and to feel free to ask what something means. Therefore, questions were asked and answered throughout the three testing sessions. All three sessions were usually completed on the same day. However, circumstances beyond the researcher's control resulted in the testing of some subjects over two days.

There is one important difference between the procedure employed at WYDC and Holly, and the procedure followed at VYDC. At both WYDC and Holly each subject received a cheeseburger, fries, and a soft drink for his participation. This was given to the subjects when they arrived in their groups of three for the final testing session. This constituted a more relaxed time in which the researcher chatted with the subjects about the institution, staff, etc. However, at VYDC the provision of tangible incentives is against their policy. Therefore, a relaxing "reward" period was not possible with this group of subjects.

C. Testing Procedure at PGYDC

The PGYDC data was not collected by the researcher
personally. Questionnaires were mailed there and subsequently distributed by a staff member. The purpose of the project and the requirements of subjects were explained to the residents. Subjects then volunteered to participate in a one hour (approximately) testing session. Previous to testing, consent forms were distributed, read, signed, and questions concerning the project were answered. During the session they completed the following questionnaires: Demographic Sheet, Rosenberg Self-Esteem Inventory, Offer Self-Image Questionnaire, Personal Importance Measure, and the Street Self Questionnaire.

As the questionnaires were collected by a staff person, the following steps were taken to ensure that these subjects would experience anonymity in a manner similar to those tested by the researcher. First, staff assured the subjects that their responses would not be viewed by any of the staff and that it would in no way affect their standing or treatment at PGYDC. Second, subjects signed consent forms guaranteeing confidentiality, collected before the questionnaires were distributed. Third, subjects did not put their names on any of the questionnaires. Each subject put all of his completed questionnaires in a sealed envelope prior to collection. All completed questionnaires were returned by mail.

D. Follow-up Procedures

Follow-up data was obtained from 20 of the subjects tested at WYDC, one month after the initial testing procedure. This
follow-up data was obtained only for the Personal Importance Measure and the Street Self Questionnaire; tests created by the researcher and colleagues. This data will be used to gain some insight into the test-retest reliability of these new instruments.

**Statistical Analyses**

Demographic variables were examined for differences between the four correctional settings, as well as for differences between open versus closed-custody subjects, using ANOVA and t-test procedures. The same procedures were employed to determine if there were any group differences concerning the variables involved in the hypotheses. There were no differences between groups concerning self-esteem, aspects of self-concept, or ratings of personal importance. Therefore, subsequent analyses of the hypotheses were conducted collapsing across groups.

Correlational procedures were employed to verify the psychometric properties of the PIM(b). Similarly, correlational procedures were used to analyze Hypotheses 1, 2(A), 3, and part of 4. The interactive hypothesis (H2(B)) can be conceptualized as containing two independent variables (measures of self-concept and personal importance), and one dependent variable (self-esteem). Therefore, multiple regression analyses were used to investigate the capacity of self-concept and personal importance to predict self-esteem. Multiple regression analyses were also used to investigate the selectivity hypothesis. This hypothesis
is not involved in any of the formal hypotheses, but it is often described as competing with the interactive hypothesis (H2(B)).

The use of multiple regression is in agreement with Marsh (1986). He stated that multiple regression allows a more sophisticated test of the interactive hypothesis than does simply averaging the self-concept/importance cross-products (the method employed by Hoge and McCarthy (1984)). Average cross-products do not allow one to discern the relative contribution of each independent variable. However, once a significant interaction has been uncovered by the multiple regression analyses, two multiple regression equations can be developed to clarify the nature of this interaction. These equations investigate the ability of self-concept to predict self-esteem when importance is high versus low. (c.f. Marsh, 1986). The interactive hypothesis not only predicts a significant interaction between self-concept and importance, but predicts the nature of that interaction as well.

H5 was investigated using reliability analyses, factor analyses, and correlational procedures. Reliability analyses were used to determine the internal consistency (alpha) of the SSQ as well as the relationship of each item to the scale. Factor analyses were used to determine the number and nature of the factors underlying the SSQ. Correlational procedures were first used to determine the test-retest reliability of the SSQ and the construct validity of the SSQ. At this point analyses of the SSQ had demonstrated acceptable psychometric qualities.
Therefore, correlational procedures were further used to determine the relationship between the SSQ and measures of self-esteem and self-concept. Where pertinent, statistical procedures are described in more detail within the Results section.
RESULTS

Psychometric Properties of the Personal Importance Measure (PIM)

As results gained from the PIM will be utilized in the analyses of the Hypotheses, the validation of this measurement must first be addressed. The PIM is a "short form" of the OSIQ developed to assess the personal importance of each OSIQ domain. It is only appropriate to use the importance ratings if the questions on the PIM do in fact reflect the OSIQ scales. Therefore, for each statement on the PIM, individuals were asked to indicate both the importance and the accuracy of the statement for them personally. Specifically, individuals were asked to rate each statement in terms of: (a) how important it is to you, and (b) how well it describes you. If responses to part (b) of the PIM significantly correlate with the OSIQ scale scores, then it is reasonable to construe the PIM as parallel to the OSIQ, and to further conclude that the importance ratings (part a) do refer to the domains assessed by the OSIQ (see Table 1).

Insert Table 1 about here

It was found that answers to part (b) of the PIM did significantly correlate with the corresponding OSIQ scale scores ($r(136) = .72$ to $r(136) = .27$, $p < .001$). However, PIM(b) scores also significantly correlate with other OSIQ scale scores. This is due to the interrelatedness of the eleven aspects of self-concept (see Appendix E). However, for nine of the eleven self-
concept areas, the PIM(b) scores correlate highest with the corresponding OSIQ scale scores. These findings provide quite good evidence for the construct validity of the PIM.

The test-retest reliability of the PIM(a) was the next psychometric property to be examined. With the exception of two areas, Vocational & Educational Goals and Sexual Attitudes, PIM(a) scores are reliable across a one-month time period (see Table 2). Not only are the test-retest correlations significant, but they are high as well; six of the nine correlations exceed $r(20) = .7)$. This result indicates that the importance individuals attach to nine of the eleven aspects of self-concept is reliable across short periods of time; thus, implying short-term stability of these nine aspects of self-concept. (Note that the test-retest reliability of the PIM(b) is similarly robust [see Appendix F].)

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Insert Table 2 about here

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**Demographic Information**

**A. Characteristics Common to all Settings**

The following characteristics were found to be common among subjects chosen from different correctional institutions. With regard to race, 62% of the sample is Caucasian, 25% is Aboriginal, and 11% are of an ethnicity other than Caucasian or Aboriginal (e.g., Oriental). Only one individual indicted that
he was a High School graduate at the time of testing; a further 24.1% of subjects had achieved a High School educational level (Grades 10 or 11); the majority of subjects (67%) had achieved a Junior High educational level (Grades 7 to 9 inclusive); 9% of subjects had an educational level of Grade 6; and, fortunately, only one individual had an educational level below Grade 6.

Groups drawn from different institutions did not differ in the nature of the offenses individuals were convicted for, nor with regard to whether or not someone had been physically harmed as a result of that crime. This suggests that the basic nature of the current offense does not influence institutional placement. Almost one half (48.5%) of all subjects indicated that they had physically injured someone as a result of their crimes. Of the most severe crimes listed by each individual, 54.2% are property crimes, 41.1% are violent crimes, 3.2% are misdemeanors, and only 1.6% refer to the trafficking of drugs. Of the property crimes, 50% are thefts over or under $1000 (21.4% of which are auto thefts), and 45.76% are break-and-enter crimes. Of the violent crimes, 50.85% are assault offenses, and 32.12% are robberies. For those individuals stating multiple crimes, the second most serious charge was most frequently escape from custody (22.6%). The remainder of the second most serious charges are varied and infrequent (see Table 3).

Insert Table 3 about here
B. Open versus Closed-Custody Settings

When institutions were separated into open and closed custody groups for analyses, two group differences were revealed. Open custody residents were serving significantly shorter sentences ($t(130) = 6.1, p < .001$), and had served shorter periods of those sentences at the time of testing ($t(130) = 4.27, p < .001$). (See Table 4 for a breakdown by institution.) Interestingly, there was also a significant difference within the closed custody sample. Individuals incarcerated at WYDC had significantly longer sentences than residents of VYDC ($t(128) = 2.29, p < .05$). This may suggest a difference in sentencing or classification practices in various jurisdictions.

Insert Table 4 about here

C. Comparison Among Institutional Settings

Subjects from different institutions differed on the number of family visits ($F(3, 126) = 4.71, p < .01$), and incident reports received ($F(3, 130) = 2.9, p < .05$). (Incident reports are filed to document residents' infractions of the institutional rules.) Closer inspection revealed that subjects incarcerated at PGYDC received significantly fewer family visits ($t(126) = -2.82, p < .01$), and significantly more incident reports ($t(130) = 2.93, p < .01$) than did subjects incarcerated at any of the other three institutions. It may be that individuals incarcerated at PGYDC have fewer family visits because they are physically further away
from family than are individuals incarcerated at WYDC, VYDC, or Holly. It is also possible that the relative infrequency of family visits at PGYDC contributes to an increased rate of incident reports.

No differences were found between open and closed custody, nor among institutional settings with regard to self-concept or self-esteem scores. This homogeneity supports the utility of collapsing across groups in order to analyze the hypotheses.

Pattern of Self-concept Scores for Young Offenders

HYPOTHESIS #1. There will be a pattern of self-concept scores that is consistent with the Societal Failure Hypothesis and which reflects the results of Leung and Lau (1989). Young offenders will score high on social and physical aspects of self-concept, and low on family and academic aspects of self-concept.

This group of incarcerated young offenders shows a pattern of self-concept scores similar to that of hospitalized young offenders, and opposite to that of "gifted" children (Offer, Ostrov, & Howard, 1982). As predicted, Social Relationships and Body & Self-Image were rated significantly higher than were Family Relationships and Vocational & Educational Goals ($F(136) =$
4.97, \( p < .001 \)). However, these were not the most extreme aspects of self-concept (see Figure 1).

Sexual Attitudes and Superior Adjustment were two areas of self-concept that received significantly higher mean ratings than did social and physical aspects (\( t(136) = 9.66, p < .001 \)). Sexual Attitudes and Superior Adjustment were the only two areas in which subjects demonstrated adjustment above the normative mean (\( m = 50 \)). Subjects were almost one full standard deviation below the mean for adjustment in Family Relationships. As well, Emotional Tone and Morals received low mean ratings similar to that of Vocational & Educational self-concept. The Social Self scores (scales 4, 9, and 6) were the most consistent across scales.

**The Relationships Among Self-concept, Personal Importance, and Self-esteem**

**HYPOTHESIS #2(A).** In a manner commensurate with the Societal Failure Hypothesis, only certain aspects of self-concept will correlate with self-esteem. Therefore, the unweighted summary measure of self-concept scores will demonstrate a slight to moderate relationship with the general self-esteem measure.
HYPOTHESIS #2(B). Consistent with the interactive hypothesis, weighting aspects of self-concept according to their importance (for each individual), will increase the strength of the relationship between aspects of self-concept and the general self-esteem measure.

A. Main Multiple Regression Results: The Predictive Capacity of Self-Concept for Self-Esteem

According to the interactive hypothesis, having a positive self-concept in a particular facet will contribute positively to self-esteem, but the size of this positive contribution will depend on the individual importance of that facet of self-concept. Similarly, a negative self-concept will negatively impact self-esteem to the degree that it is considered important to the person. This model predicts that the aspect of self-concept and the corresponding self-concept/importance cross product will contribute significantly and positively to the prediction of self-esteem.

Multiple regression analyses were conducted in order to clarify the predictive relationship between aspects of self-concept and their relative importance, and self-esteem. Self-concept scale scores and importance ratings were entered in the first step of the regression equation for the purpose of investigating the independent effect of each construct on self-esteem. The self-concept/importance cross products were then
entered in the second step of the regression equation to test for the existence of an interaction between the two constructs in the prediction of self-esteem.

Consistent with earlier findings, the main effect of self-concept on self-esteem is substantial, positive, and statistically significant for the majority of the facets (8/11 aspects of self-concept): Emotional Tone ($t(134) = 6.98, p < .001$), Body & Self-Image ($t(134) = 6.23, p < .001$), Psychopathology ($t(134) = 5.85, p < .001$), Mastery of the External World ($t(134) = 4.83, p < .001$), Family Relationships ($t(134) = 4.71, p < .001$), Social Relationships ($t(134) = 4.65, p < .001$), Impulse Control ($t(134) = 3.68, p < .001$), and Sexual Attitudes ($t(134) = 2.82, p < .01$). These areas of self-concept have a decided effect on self-esteem independent of their importance. Morals, Vocational & Educational Goals, and Superior Adjustment are the only aspects of self-concept found not to significantly predict self-esteem (see Table 5).

These findings are replicated in the simple correlations between self-concept and self-esteem (see Table 6). These results support Hypothesis #2(A), suggesting that for this subject population, only certain aspects of self-concept are significantly related to self-esteem. Moreover, the relationship

2. Note that for all of the analyses the importance ratings and self-esteem scores were recoded so that higher scores denote a person who is 'higher' on that construct.
between aspects of self-concept and self-esteem is not only significant, but of moderate magnitude for the majority of the self-concept facets. This outcome supports the underlying premise of the interactive hypothesis; many areas of self-concept do significantly predict self-esteem. This relationship is further clarified by the finding that the unweighted summary measure of self-concept scores correlates at a significant, though moderate, level with self-esteem ($r(136) = .47$, $p < .001$).

Furthermore, an exploratory analysis was conducted to determine which of these self-concept aspects have the greatest impact on self-esteem independent of the others. This analysis involved entering all of the self-concept aspects into the regression equation. The results indicated that the two areas of self-concept having the greatest impact on self-esteem are Emotional Tone ($t(124) = 4.7$, $p < .001$), and Body & Self-Image ($t(124) = 3.42$, $p < .001$). These are both areas of the Psychological Self. Therefore, it appears that aspects of the Psychological Self influence self-esteem independent of other aspects of self-concept.
B. Main Multiple Regression Results: The Predictive Capacity of Importance for Self-Esteem

Psychopathology is the one aspect of importance found to significantly predict self-esteem independent of self-concept ($t(134) = 2.92, p < .01$). This finding signifies that individuals who place greater importance on the area of Psychopathology have higher self-esteem, regardless of whether or not they score highly on this area of self-concept. The following aspects of self-concept approach significance: Family Relationships ($t(134) = -1.93, p = .06$), Impulse Control ($t(134) = 1.9, p = .06$), Superior Adjustment ($t(134) = 1.9, p = .06$), Social Relationships ($t(134) = 1.84, p = .07$), and Mastery of the External World ($t(134) = 1.82, p = .07$) (see Table 5).

With the exception of Family Relationships, all of these trends are positive, indicating that as with Psychopathology, individuals who place greater importance on these aspects of self-concept tend to have higher self-esteem scores, independent of their OSIQ scores on those aspects. Family Relationships is the only area of self-concept in which importance demonstrates a negative effect on self-esteem. This outcome suggests a nonsignificant trend for young offenders who highly value Family Relationships to suffer from lowered self-esteem, independent of their score on this area of self-concept.

With the exception of Family Relationships, the areas of importance described above as approaching significance all achieved significance when self-concept was omitted from the
regression equation. These findings replicate the results of the simple correlations between importance and self-esteem. These correlations suggest that the personal importance assigned each aspect of self-concept is not uniformly relevant to the understanding of self-esteem. However, although importance does demonstrate a relationship with self-esteem, with the exception of Psychopathology, it does not add to the predictive capacity of self-concept. This conclusion is further substantiated by the failure of any of the interaction terms between importance and self-concept to approach significance.

Insert Table 7 about here

In further investigations, PIM ratings were recoded to represent the following dichotomy: high importance versus low importance\(^3\). When the recoded PIM ratings were considered in the regression equation with self-esteem, an additional significant main effect was uncovered for the importance rating of Impulse Control (beta = .18; \(t(134) = 2.27, p <.05\)). As well, the interaction term for Emotional Tone gained significance (beta = -.43; \(t(134) = -3.17, p <.01\)). This result indicates that importance ratings interact with Emotional Tone in the prediction of self-esteem. Therefore, Emotional Tone is the only aspect of self-concept to demonstrate support for Hypothesis #2(B) and for

\(^3\) For the purposes of this study, all dichotomous variables were created by means of a Tertile split. This procedure eliminates the middle values of a variable in order to create a dichotomy of extremes. Although this procedure results in the loss of subjects (and therefore precious degrees of freedom), it clarifies the clinically interpretive value of the results.
Two multiple regression analyses were conducted in order to clarify the interaction between self-concept and importance for the area of Emotional Tone. The two equations examined the predictive capacity of Emotional Tone on self-esteem: first, when the importance rating for Emotional Tone is high, and second, when the importance rating for Emotional Tone is low. The results indicate that Emotional Tone predicts self-esteem better for individuals who do not place much importance on Emotional Tone (high importance: beta = .44, t(32) = 2.76, p < .01; low importance: beta = .76, t(41) = 7.58, p < .001). This result is contrary to the interactive hypothesis which stipulates that an aspect of self-concept should only impact self-esteem inasmuch as the aspect is considered important.

In accordance with the selectivity hypothesis one would expect individuals to rate Emotional Tone as unimportant in an effort to preserve self-esteem because they do not consider themselves to perform well in this aspect of self-concept. Therefore, if there is a strong positive relationship between Emotional Tone and self-esteem, this relationship should take the form of low Emotional Tone scores predicting low self-esteem scores for individuals who place little importance on Emotional Tone. This hypothesis was investigated by examining the mean self-esteem scores for individuals in four groups (importance [low, high] X Emotional Tone [low, high]). The outcome of this analysis supports the selectivity hypothesis; the majority of
individuals who place little importance on Emotional Tone have both low Emotional Tone scores and low self-esteem scores (23/32 individuals).

C. Multiple Regression Results for the Self-Concept Domains

The eleven aspects of self-concept and importance were grouped into the five domain areas specified by the OSIQ: Psychological Self, Social Self, Sexual Self, Familial Self, and Coping Self. Multiple Regression analyses were then conducted for the purpose of investigating the predictive capacity of each domain area for self-esteem. Analyses progressed as in the first multiple regression: importance ratings and OSIQ scores for each self-concept domain were entered in the first step of the regression equation, followed by the importance/self-concept interaction terms in the second step of the regression equation.

With the exception of Social Self (which approached significance [r(134) = 1.92, p = .06]), significant positive main effects were obtained for each self-concept domain: Psychological Self (r(134) = 7.37, p < .001), Coping Self (r(134) = 5.06, p < .001), Familial Self (r(134) = 4.71, p < .001), and Sexual Self (r(134) = 2.82, p < .01). These findings indicate that these four domains of self-concept significantly predict self-esteem independent of importance (see Table 8).

Insert Table 8 about here
Ratings of importance achieved a significant positive main effect for the Coping Self ($t(134) = 2.79, p < .01$). Therefore, only within the Coping Self do importance ratings significantly predict self-esteem independent of self-concept. Only one interaction term achieved significance: Psychological Self ($t(134) = 2.56, p < .01$). This result indicates that within the Psychological Self, self-concept and importance ratings must be jointly considered as predictors of self-esteem.

These results essentially replicate the findings concerning each aspect of self-concept that were presented in the previous two sections. It appears that grouping aspects of self-concept by domain detracts from, rather than adds to, our understanding of the nature and influence of self-concept. When a few aspects of self-concept are grouped together under one domain, it seems that the significant aspect(s) of self-concept merely lend significance to the entire domain. Thus, interpretation based on analyses of the self-concept domains may be misleading.

D. The Impact of Self-Esteem and Self-Concept on Importance Ratings: Investigating the Selectivity Hypothesis

Rosenberg's (1982) selectivity hypothesis posits that individuals will attempt to protect their self-esteem by placing greater importance on aspects of self-concept in which they rate themselves high. In an effort to test the applicability of this hypothesis for this subject population, multiple regression analyses were conducted to investigate the capacity of self-
concept scale scores and self-esteem levels to predict importance ratings. Self-concept scale scores and self-esteem scores were entered in the first step of the regression equation, followed by the self-concept/self-esteem interaction terms in the second step.

As expected, the majority of the self-concept scales (7 of 11) were significant positive predictors of importance (see Table 9): Family Relationships ($t(134) = 6.76$. $p < .001$), Morals ($t(134) = 5.53$. $p < .001$), Sexual Attitudes ($t(134) = 2.71$. $p < .01$), Superior Adjustment ($t(134) = 2.68$. $p < .01$), Vocational & Educational Goals ($t(134) = 2.67$. $p < .01$), Emotional Tone ($t(134) = 2.13$. $p < .05$), and Impulse Control ($t(134) = 2.04$. $p < .05$). These results are replicated in the correlational analyses (see Table 10). Individuals allocate importance to these seven areas of self-concept in a manner that reflects their OSIQ scores for each aspect.

Theoretically, these results are consistent with the selectivity hypothesis; individuals place greater importance on those aspects of self-concept in which they consider themselves
to be doing well. Conversely, less importance is attached to those areas in which they do not consider themselves to be doing well. However, not all aspects of self-concept were consistent with this hypothesis. Ratings of importance occurred independent of self-concept scores in the areas of: Body & Self-Image, Social Relationships, Mastery of the External World, and Psychopathology.

Self-esteem was a significant predictor of importance in only one area, Psychopathology ($t(134) = 2.92, p < .01$). However, five other areas approached significance: Family Relationships ($t(134) = -1.93, p = .06$); Impulse Control ($t(134) = 1.90, p = .06$); Superior Adjustment ($t(134) = 1.90, p = .06$); Social Relationships ($t(134) = 1.85, p = .07$); and Mastery of the External World ($t(134) = 1.82, p = .07$). (See Table 6 for the simple correlations between self-esteem and importance.) These findings suggest that self-esteem is an important factor, independent of self-concept, in the prediction of importance ratings for the area of Psychopathology, and possibly other areas. Individuals who have higher self-esteem tend to rate Psychopathology, and to a lesser degree other areas, as more important than do individuals who have lower self-esteem.

Interestingly, Family Relationships is the only area of importance approaching significance that demonstrated a negative relationship with self-esteem. This indicates a nonsignificant trend for those who have high self-esteem to place less importance on this area than do those who have low self-esteem.
These results together offer some support both for and against the selectivity hypothesis. According to the selectivity hypothesis, individuals with high self-esteem highly value those aspects of self-concept in which they feel they do well, while virtually ignoring those aspects in which they feel they perform poorly. Therefore, one would expect those with high self-esteem to demonstrate both high positive correlations with importance in areas of self-concept they are doing well in, and high negative correlations with importance in aspects of self-concept they feel they perform poorly in. Only six of the eleven areas demonstrated such a trend, all were positive, and only one of those was significant.

The interaction variables were significant for importance in four areas: Mastery of the External World ($t(134) = -3.79, p < .001$); Body & Self-Image ($t(134) = -2.67, p < .01$); Psychopathology ($t(134) = -2.59, p < .01$); and Sexual Attitudes ($t(134) = -1.99, p < .05$). This indicates that both self-concept and self-esteem must be taken into account when interpreting importance ratings in these areas. In order to clarify the nature of the four significant self-concept/self-esteem interaction terms, two sets of regression analyses were conducted. These analyses investigated the predictive capacity of self-concept on importance ratings: first, for individuals with high self-esteem, and second, for those with low self-esteem.

The results indicate that the interpretation is ambiguous
for self-concept/self-esteem interactions in the areas of Body & Self-Image, Mastery of the External World, and Psychopathology (see Table 11). It appears that there is a marginally greater pull in one direction than the other, but it cannot be considered noteworthy because the magnitude of the beta weights is small and the t-scores are all nonsignificant. However, the interaction term for the area of Sexual Attitudes can be interpreted. It appears that Sexual Attitudes is a stronger predictor of importance for individuals with low self-esteem.

The selectivity hypothesis predicts that individuals with low self-esteem "inappropriately" assign importance to aspects of self-concept they do not perform well in. The interactive hypothesis also states that aspects of self-concept only influence self-esteem to the degree they are considered important. Therefore, both hypotheses predict that individuals with low self-esteem should demonstrate a negative correlation between self-concept and importance. The results reported above indicate a positive relationship between Sexual Attitudes and importance for individuals with low self-esteem; thus, failing to support either hypothesis.

4. As demonstrated in the previous section, analyzing the data by domain simply reflects the results obtained for each aspect of self-concept. When aspects of self-concept that have statistically significant effects are combined with aspects that demonstrate little influence, it appears that the significant aspects "lend" significance to the entire domain.
Do Self-descriptions Reflect Self-Esteem?

**HYPOTHESIS #3.** The positive or negative valence of self-descriptions will be strongly related to self-esteem.

As hypothesized, the valence of self-descriptions was positively related to self-esteem ($r(120) = .48, p < .001$). Individuals with higher self-esteem described themselves more positively. The valence of self-descriptions was also negatively related to depression as measured by the Beck Depression Inventory ($r(103) = - .35, p < .001$). Young offenders who are less depressed describe themselves more positively.

The Potential Utility of the Street Self Questionnaire

**HYPOTHESIS #4.** Preliminary analyses of an exploratory measure of delinquent self, referred to as the "Street-Self Questionnaire", will evaluate whether this measure has the necessary properties to be considered a separate self-concept scale. If so, this measure is expected to correlate with other aspects of self-concept in a manner commensurate with the Societal Failure Hypothesis (see Hypothesis #1), but not with the measure of self-esteem.

5. In depth discussion of the results gained from the Beck Depression Inventory are beyond the scope of this thesis and are discussed elsewhere.
A. Reliability of the SSQ

Preliminary analyses of the exploratory "Street-Self Questionnaire" (SSQ) revealed promising results (see Appendix G). The scale demonstrates high internal consistency (alpha = .83, N = 115), and high test-retest reliability (r(17) = .98, p < .001).

B. Factor Analysis of the SSQ

A factor analysis of the SSQ revealed eight factors that collectively account for 66.3% of the variance. With the exception of question 2 which did not demonstrate a high loading on any factors, questions were only considered that had factor loadings greater than or equal to 0.5 (see Table 12). Factor 1 comprises nine of the twenty-five SSQ questions and accounts for the largest proportion of the variance (23.1%). This factor can be designated as "criminal identity". Questions included in this factor assess the extent to which crime is a salient part of the individual's life, including: amount of time spent in the delinquent subculture; ability and reasons for committing criminal acts; and the degree to which crime is a positive experience.

Insert Table 12 about here

Factor 2 (4 of 25 questions; 8.5% variance represented) can be designated as "peer acceptance". This factor represents the peer acceptance one receives for delinquent behaviour. Within
this factor, questions 2 and 23 appear quite similar in content, although question 2 does not load as highly as question 23. This discrepancy may be due to a subtle difference between the questions. Question 23 represents crime as one of the ways in which one can gain respect, whereas question 2 isolates crime as the only reason one is respected. It seems intuitively plausible that individuals would be less willing to agree to the latter.

Factor 3 (3 of 25 questions; 8% variance represented) can be designated as "future criminality". The significance of this factor is clarified by the Delinquent Identity Theory. It predicts that the greater role delinquency plays in one's identity, the less likely it is that one will change. This relationship may account for the inclusion of question 12 under Factor 3. Crime may be a necessary part of survival "on the street". Therefore, the more time spent on the street, the greater the chances that crime will be probable or even necessary, and the greater the chances that criminality is a part of the identity. Factor 3 may be related to Factor 5 (2 of 25 questions; 5.8% variance represented), which encompasses a lack of personal responsibility and implies an external locus of control.

Factor 4 (2 of 25 questions; 7.3% variance represented) can be designated "street survival". Although these individuals may feel that they have little control over events in their lives (Factor 5), they believe that they can survive. The last three factors will be mentioned only briefly, as they account for
little of the variance (13.7% collectively). Factor 6 (2 of 25 questions) represents status and validation of the delinquent identity. Factor 7 (2 of 25 questions) indicates an inability to function adequately in the incarcerated social situation. Finally, Factor 8 (1 of 25 questions) refers to the sense of a strong physical self.

C. Construct Validity of the SSQ

On the basis of the theory underlying the SSQ, four measures given to subjects as part of a larger study were chosen for the purpose of demonstrating construct validity. The SSQ raw scores demonstrate significant correlations with the Antisocial Tendencies scale of Carlson Psychological Survey ($r(90) = .63, p < .001$), and with the three scales chosen from the Jesness Inventory (JI): Value Orientation ($r(90) = .47, p < .001$), Alienation ($r(90) = .41, p < .001$), and Social Maladjustment ($r(90) = .27, p < .01$). These four scales have been established as valid measures of constructs also assessed by the SSQ (see Method section). These results provide strong evidence for the construct validity of the SSQ.

D. The Relationship Between the SSQ and Self-Esteem/Self-Concept

The SSQ was found to be relatively unrelated to self-esteem ($r(115) = .12$). Thus, the delinquent identity is not consistently related to feeling either positively or negatively about oneself. However, scores on the SSQ demonstrate
significant correlations with the following OSIQ scales: Morals ($r(115) = -.50, p < .001$); Impulse Control ($r(115) = -.47, p < .001$); Vocational & Educational Goals ($r(115) = -.39, p < .001$); Family Relationships ($r(115) = -.34, p < .001$); Superior Adjustment ($r(90) = -.27, p < .01$), and Psychopathology ($r(115) = -.24, p < .01$). This indicates that individuals who receive high SSQ ratings tend to receive low scores on those aspects of self-concept.
DISCUSSION

Pattern of Self-Concept Scores: Support for the Societal Failure Theory of Delinquency

The young offenders in this study have demonstrated a pattern of self-concept scores that supports existing research and theory concerning the self-concept of delinquents. Positive self-concepts are indicated primarily in the areas of Sexual Attitudes and Superior Adjustment, and secondly in the areas of Body & Self-Image and Social Relationships. Low or "poor" self-concept was indicated in all other areas, but it was most pronounced in the area of Family Relationships. Moreover, Superior Adjustment and all of the aspects of self-concept receiving low mean ratings (with the exception of Emotional Tone) were demonstrated to be significantly negatively related to a measure of "delinquent identity" (the SSQ).

These results can be seen as support for the Societal Failure Theory of delinquency. It posits that conventional institutions of socialization such as the family and schools fail to provide some adolescents with a sense of mastery in these roles. The results of the current study support the contention that young offenders do not feel positively about these roles. This group of delinquent adolescents clearly demonstrated low self-concept in Family Relationships. The positive or negative valence of academic self-concept is more difficult to discern because it is included within Vocational & Educational Goals. However, as Vocational & Educational Goals achieved only a modest
mean rating, it is probable that academic self would not be positive relative to the other self-concept areas.

By virtue of being young offenders, it is not surprising that the subjects in this study rate themselves lower in the areas of Morals and Impulse Control. Low scores in the area of Psychopathology are more easily understood by reviewing the questions that compose the scale. Psychopathology includes a diverse set of dimensions, including the extent to which one is reality-based, non-depressed, and self-confident\(^5\). The results of the OSIQ indicate that this group of subjects has areas of self-concept about which they feel insecure. As well, being in jail may undermine one's confidence and cause depression and/or detachment from reality. In fact, 57.3% of young offenders in this sample were found to be at least mildly depressed by the Beck Depression Inventory (mild = 22.2%; mild-moderate = 11.1%; moderate-severe = 13.9%; and severe = 11.1%).

High self-concept scores in the areas of Body & Self-Image and Social Relationships are commensurate with theories explaining why adolescents turn to delinquency. It has been hypothesized that adolescents turn to delinquency, in part, to acquire the peer acceptance of the subculture both for personal validation and to enhance survival. Therefore, Social Relationships may be rated positively due to the necessity for acceptance. The physical nature of the environments that young offenders both come from and find themselves in, could lead to

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5. The OSIQ scale 'Psychopathology' is not a measure of psychopathology as understood in clinical or psychiatric usage.
the development of a positive self-concept in that area. A
strong physical self (or at least, a personal belief in it) may
be necessary for survival (c.f., Eisikovits & Baizerman, 1983).

High scores in the area of Sexual Attitudes\(^6\) may be
partially explained by the positive correlation between this area
and physical self-concept (Body & Self-Image; \(r(136) = .64\)).
Other possible reasons for positive Sexual Attitude ratings
include the possibility that young male offenders have more
opportunity to engage in sexual behaviour in their subculture, or
that their subculture requires a great deal of bravado in this
area of their lives (i.e., "machismo"). Indeed, arguably,
Western culture generally inculcates such an attitude,
particularly for adolescents.

The positive mean rating for Superior Adjustment is a
pleasant surprise for this group of young offenders. This scale
includes many questions that assess one's ability to plan for the
future and to meet challenges. This group of young offenders
collectively consider themselves to perform well in this area,
perhaps because they have survived a difficult life. This is the
only scale with a high mean rating to demonstrate a negative
relationship to the measure of delinquent identity (SSQ). Factor
analysis of the SSQ demonstrated that a high SSQ total score may
represent, in part, the degree to which an individual lacks
personal responsibility and does not hold much hope for changing
future behaviours (Factors 3 and 5). These factors appear to

\(^6\) Interpretation of the Sexual Attitudes subtest will be tentatively provided, pending receipt
of further information concerning the linearity of this scale.
represent values that are in opposition to those assessed by the Superior Adjustment scale, lending credence to the negative relationship between the two measurements. However, even those who score highly on the SSQ receive a relatively high scale score for Superior Adjustment \( (m = 52) \); thus, the mean rating for the entire sample is high.

Although the finding that the self-concept profile for this group of young offenders parallels existing theory concerning the self-concept of delinquent adolescents is gratifying, one must still exercise caution in the interpretation of the sample profile. The standard deviations of each scale are quite large \( (M = 17.84; \text{ranging from } 16.23 \text{ for Superior Adjustment to } 20.25 \text{ for Emotional Tone}) \), indicating that within the sample there is a great deal of variability. Indeed, it would even be possible for a subset of individuals to differ significantly from the mean (e.g., high SSQ scorers).

**Self-Concept and its Relationship to Self-Esteem**

The results from the multiple regression analyses indicate that the Psychological Self, Sexual Self, Family Self, scale 4 of the Social Self, and scales 8 and 10 of the Coping Self are all areas of self-concept that demonstrate a significant positive relationship to self-esteem. These results simply indicate the existence of relationships and do not provide further information which might clarify their nature. However, following from the above discussion, one would expect these relationships to most
frequently take the form of high scores in the areas of Body & Self-Image (scale 3 of the Psychological Self), Social Attitudes (scale 4 of the Social Self), and the Sexual Self going with high self-esteem, and low scores in the other areas going with low self-esteem.

It is not surprising that the areas of Morals and Vocational & Educational Goals do not contribute to self-esteem, as these two areas of self-concept may be less developed or less salient to members of a delinquent subculture. However, it is interesting that the area of Superior Adjustment fails to significantly predict self-esteem. Since this aspect of self-concept received a high mean rating, the selectivity hypothesis predicts that it has the potential to provide an esteem-protecting function. However, it appears that it fails to do so because both individuals with high and low self-esteem rate themselves relatively high on this aspect of self-concept.

The results of the current study are supportive of those reported by Leung and Lau (1989), and may reflect the Esteem-Enhancement Theory of delinquency. It states that lowered self-esteem increases the probability of delinquent behaviour, and in turn delinquency provides the individual with some opportunity to enhance his/her esteem. The results discussed above provide evidence that, for this group of subjects, some aspects of self-concept have the potential to significantly contribute to lowered self-esteem (e.g., Family Relationships, Emotional Tone, Impulse Control, and Psychopathology), and other aspects have the
potential to significantly contribute to improving self-esteem (e.g., Sexual Attitudes, Body & Self-Image, and Social Relationships).

The Role of "Importance" in the Prediction of Self-Esteem

Within this study, individuals who consider the areas of the Psychological Self, Coping Self, and scale 4 of the Social Self to be important usually have higher self-esteem. Therefore, ratings of personal importance are related to self-esteem for some areas of self-concept. However, importance is only significantly predictive of self-esteem independent of self-concept in the areas of Psychopathology and Impulse Control. (Although the magnitude of these effects is small.) Moreover, both the self-concept score and the rating of importance must be considered in order to understand the impact of Emotional Tone on self-esteem.

It is interesting that importance had a significant effect on self-esteem (independent or not) for Psychopathology, Impulse Control, and Emotional Tone. These are all aspects that are closely monitored within a correctional setting. Corrections workers do not want individuals to act out (Impulse Control), act "crazy" (Psychopathology), or become depressed such that they represent a suicidal risk (Emotional Tone). Moreover, high ratings for importance in these three areas may also be influenced by the subjects viewing the researcher as a "shrink". This suggests that one should pay heed to the specifics of the
testing situation, the environment, and/or the life situation of the individuals being tested in order to glean some understanding of what may be most salient to the subjects at the time of testing.

The question still remains, why would more salient aspects of the environment demonstrate a relationship between importance and self-esteem? One purely speculative reason may be that individuals with high self-esteem are more socially aware, and therefore place importance on aspects of self-concept that are environmentally salient, regardless of how well they feel they perform in that area. These may be individuals who can "read" any situation so as to best survive.

**Interactive Hypothesis**

The finding that self-concept significantly predicts self-esteem for the majority of the facets (8 of 11) is consistent with both the interactive and selectivity hypotheses. In addition, the interactive hypothesis predicts that these aspects of self-concept will interact with ratings of importance to significantly predict self-esteem. Emotional Tone is the only area of self-concept to demonstrate a significant and moderately strong interaction with importance in the prediction of self-esteem. With reference to Hypothesis #2(B), Emotional Tone is the only area of self-concept that had a stronger impact on self-esteem when weighted by individual ratings of importance.

The moderately strong relationship between self-concept and
self-esteem may be one of the factors contributing to the failure of the self-concept/importance interaction terms to reach significance in the prediction of self-esteem. Although importance is related to self-esteem, it does not have the capacity to improve an existing moderately strong relationship between self-concept and self-esteem. The unweighted average of the self-concept scores correlated at .47 with self-esteem. This is somewhat lower than the correlation of .7 observed by Marsh (1986), but it is virtually identical to the correlation of .45 demonstrated by Hoge and McCarthy (1984).

However, Hoge and McCarthy focused on the "empty half of the glass" by interpreting this result as indicating that the weighted summations measure a construct different from esteem. Although this appears to be true, it is not to say that if one had the weighted summation of all possible self-concepts that it would not correlate highly with self-esteem. A further interpretation may be that, although aspects of self-concept are separate constructs from the general measure of self-esteem, the former contributes to the latter such that both must be considered.

Although the above discussion provides an argument for discarding the interactive hypothesis, there is a methodological factor that may have resulted in the general failure of the self-concept to significantly interact with importance in the prediction of self-esteem. With the exception of Emotional Tone, each area of self-concept was rated as important substantially
more often than it was rated as not important, resulting in a lack of variability among the importance ratings (see Appendix H). Variability of the independent measures is necessary for the interaction terms to reach significance in the multiple regression analyses. The only interaction term to reach significance concerned Emotional Tone, the area for which importance was the most varied. Therefore, it is possible that the lack of variability within the importance measure contributed to the failure of ten of the eleven interaction terms between self-concept and importance to reach significance (in the prediction of self-esteem).

The lack of variability among ratings of importance could be due to several factors. First, it may represent a positive response bias amongst subjects. However, this seems unlikely as the importance ratings (part(a) of the PIM) are substantially less varied than the simultaneous ratings given for part(b) of the PIM (which is the applicability of the statement to self). A second possibility is that measures of personal importance are confounded with indications of societal importance. This may result in responses indicating what "ought" to be relevant rather than what is personally relevant (c.f., Higgins, 1987). A third possibility is that all of these aspects of self-concept are important to most of the subjects. This would not be surprising considering that the scales of the OSIQ are designed to measure aspects of self-concept that are central to most individuals' lives. It may be that the interactive hypothesis only has
viability for more idiosyncratic aspects of self-concept.

In the current study Emotional Tone is the only aspect of self-concept to demonstrate results supporting the interactive hypothesis. Marsh (1986) found significant interactions for seven of his twenty-four analyses. However, as none of these part-correlations exceeded .18, nor were they larger than the magnitude of the self-concept main effects, Marsh concluded "no support for the usefulness of importance ratings by individual subjects in the weighting of specific components of self-concept to predict self-esteem" (p. 1232). This conclusion would include "emotional stability" self-concept, which at face value appears to be similar to Emotional Tone.

Although acknowledging the seeming nominal importance of one significant interaction weighed against ten nonsignificant results, I am hesitant to dismiss it entirely as Marsh (1986) has done. In comparison to Marsh, in the present study, the interaction between Emotional Tone and importance was at least moderate in magnitude (beta = -.43), and approached the magnitude of the self-concept main effect (beta = .52). As well, Emotional Tone was the only area of self-concept to demonstrate significant variability among ratings of importance. Therefore, I am inclined to entertain the possibility that the significant interaction between Emotional Tone and ratings of importance in the prediction of self-esteem provides tentative support for the interactive hypothesis in at least one area of self-concept, and possibly any other area in which there is variability in the
importance it has for the target population.

**Selectivity Hypothesis**

On the basis of the current findings, it appears that there is more support for the selectivity hypothesis than for the interactive hypothesis. As already mentioned, evidence consistent with both the interactive and selectivity hypotheses is indicated by eight of the eleven self-concept aspects significantly predicting self-esteem. Evidence for the selectivity hypothesis alone can be adduced via the following results. For seven of the eleven aspects of self-concept, individuals placed significantly more importance on highly rated areas of self-concept, and significantly less importance on lower rated aspects of self-concept. Moreover, six of the eleven aspects demonstrated a relationship between self-esteem and importance, all of which were positive, and only one of which was significant. This pattern of results indicates moderate support for the selectivity hypothesis; substantially more support than was found for the interactive hypothesis.

The selectivity hypothesis may not have been fully supported for reasons similar to those discussed in the previous section. First, individuals such as those in the current study may not be capable of discounting some aspects of self-concept in which they rate themselves "poorly"; particularly if the importance of these aspects is strongly recognized by society. Second, the selectivity hypothesis may be more applicable for those aspects
of self-concept that are either not as salient within our society, or that are not as central to an individual's experience of the world.

Perhaps even more interesting is the fact that clusters of low self-esteem, low self-concept scores, and low importance ratings show a small but nonetheless significant tendency to group together. (This is true both for Emotional Tone in the prediction of self-esteem, and for Sexual Attitudes in the prediction of importance.) Although the function of the selectivity hypothesis is purportedly to protect self-esteem, it appears that it may function more consistently in the opposite direction! That is, individuals assign low importance to some areas of self-concept they perform poorly in, but this is not associated with enhanced esteem, instead it is associated with lower self-esteem. Moreover, there were no instances in which high self-concept ratings, high importance ratings, and high self-esteem clustered together.

**The Role of the Delinquent Self-Concept**

The reliability and validity results for the SSQ indicate that there is some initial promise for the SSQ as a measure of "delinquent identity". Consistent with theory about the delinquent self, SSQ scores were unrelated to the measure of self-esteem, yet significantly related to six of the eleven OSIQ scales. Because the SSQ is still in the infancy stages of development, one cannot make any "hard and fast" claims for it.
However, if the SSQ does indicate the degree to which criminality has become a part of an individual's identity (suggested by the results of the factor analysis), then the current results suggest that increasing identification with criminality will be correlated with self-concept in a predictable and stable fashion; however, self-esteem will not be altered in a consistently positive or negative manner in relation to the "delinquent identity". In other words, a more consolidated delinquent identity may be associated with a specific pattern of self-concept scores, yet one cannot predict whether an individual with such an identity will feel positively or negatively about himself. It may be that research has been unable to establish a consistent relationship between self-esteem and delinquency because one does not exist.

When compared to the current sample of young offenders as a whole, those who score highly on the SSQ rate themselves more "poorly" in the areas of Morals, Impulse Control, Vocational & Educational Goals, Family Relationships, and Superior Adjustment. It appears that those who score highly on the SSQ may represent a special subgroup of the current sample of young offenders (at least in terms of the nature of their self-concept). This group appears to be like the general sample, only "more so". That is, although the entire sample rated themselves quite low on these aspects of self-concept, individuals who receive high SSQ scores rate themselves significantly lower than the rest of the subjects.
Once the SSQ has been more firmly established as a psychometrically sound measurement, it may have very useful implications as an identification tool. For example, it may be that individuals with a greater delinquent identity have a lower probability of changing their criminal behaviours because crime is an important aspect of their life. Therefore, one potential use of the SSQ is as an indicator of recidivism risk.

**Treatment Implications**

The results of the current study have important treatment/programming implications. This sample of young offenders indicated high self-concept scores in the areas of Sexual Attitudes, Superior Adjustment, and to some extent Body & Self-Image, and Social Relationships. Low self-concept scores were demonstrated in the areas of Family Relationships, Emotional Tone, Psychopathology, Impulse Control, Morals, and Vocational & Educational Goals. The most obvious implication for intervention would be to reinforce those areas that receive high self-concept ratings while improving upon those that receive low ratings.

All treatment interventions could reinforce the area of self measured by Superior Adjustment by appealing to the individual's ability to "meet challenges" and "take charge". At the same time, this area would undergo some degree of restructuring due to the nature of the areas presented as challenges for the individual to take charge of. Impulse Control and Vocational & Educational Goals are two areas that can be directly approached
through skills training. Social skills training could also be involved as a component related to success in these two areas. Such a treatment approach would serve the dual functions of reinforcing a slightly "stronger" aspect of self-concept, while connecting success in the areas of Impulse Control and Vocational & Educational Goals to the more favorable area of Social Relationships. These are three areas that have received some program emphasis within correctional facilities, but education is the area that receives the most consistent attention.

Connected to social skills, yet requiring separate focus, is the area of Family Relationships. This area had the lowest mean rating of all the self-concept areas. As well, this is the only area of self-concept in which ratings of importance demonstrated a nonsignificant trend to negatively predict self-esteem. This means that independent of scores in that area of self-concept, the more importance placed on Family Relationships, the lower one's self-esteem. This finding suggests a strong need for treatment to include family members and to focus on family communication and dynamics. However, such a treatment orientation is a costly and time-consuming enterprise for which most correctional facilities are unlikely to be funded. This is surprising considering the strong relationship between family factors and delinquency (e.g., Campanella, 1990), and recidivism (e.g., Hollander & Turner, 1985).

Although Sexual Attitudes received a very high mean rating within the current sample of young offenders, I believe this is
one "strong" area where restructuring is necessary. Because many young offenders do not attend school with any regularity, they miss a great deal of information concerning human sexuality, contraceptive methods, sexually transmitted diseases, and related concerns. Combined with the fact that it is possible that members of a delinquent subculture experience greater pressure to be sexual and/or may have greater opportunity to engage in sexual activities, high self-concept scores in this area could very well indicate a significant health risk. "Family Planning" courses are often available and sometimes mandatory in adolescent corrections facilities. Although I applaud this inclusion in the correctional program, they are often one-time lectures that do little to address the centrality of sexuality in the overall self-concept of young offenders.

Correctional programs always include some type of physical activity as part of the daily (or close to daily) routine. The results of this study suggest that this practice has advantages that go beyond the obvious health benefits. Body & Self-Image is an area of self that received moderately high ratings from the young offenders sampled in this study. Therefore, the opportunity to engage in physical activity may be important as reinforcement for a "competent" area of self-concept.

Ideally, all of the treatment/program components that have been discussed would indirectly affect the self-concept areas of Morals, Emotional Tone, and Psychopathology. The last two would also be addressed more directly by individual or group therapy.
However, treatment resources are often limited, therefore restricting the number of individuals who can benefit from this intervention.

Self-esteem would probably also be indirectly affected via direct changes to various areas of self-concept (e.g., Kappes & Thompson, 1985; Wasmund & Brannon, 1987). In the past, some residential treatment programs for young offenders focused specifically on esteem-enhancement through the use of "Positive Peer Culture". Although there is some empirical support for this program (e.g., Sherer, 1985; Davis, Hoffman, & Quigley, 1988), the results of the present study suggest that directly approaching self-esteem in the absence of addressing aspects of the self-concept may not be maximally effective. In the current sample of young offenders, only 14.6% received a self-esteem rating on the lower end of the continuum (5, 6, or 7, out of 7), compared to 66.4% receiving a rating on the upper end of the continuum (0, 1, or 2, out of 7). First, this pattern suggests that low self-esteem is not pervasive amongst this sample; and second, post-treatment increases in self-esteem may not be that meaningful if the majority of individuals are already rating themselves at the upper end of the scale.

Conversely, post-treatment/program increases in targeted areas of self-concept may give a better indication of success in reducing the possibility of recidivism (e.g., Vogel & Brown, 1982). This outcome would be particularly beneficial if taken in conjunction with the results from the SSQ. These findings
suggest that low scores on some areas of self-concept are significantly related to the "delinquent identity". Therefore, perhaps post-treatment/program increases in some aspects of self-concept indicate an increased chance that delinquency will not retain its central status to the self.

Such predictions are most feasible if all treatment has a built-in focus on generalizability beyond the treatment environment (i.e., when the adolescent is released from jail). Wolf, Braukman, and Ramp (1987) suggested that the "cure" for delinquent behaviour is not to be found in the existing short-term residential programs, but in "extended supportive and socializing treatment" (p. 347). Perhaps current residential programs can be enhanced to provide treatment that extends beyond the walls of the institution. For example, if programs involved family members, as was discussed above, the intervention would extend beyond the institution and may enhance the possibility of "real world" change.

Some correctional facilities, such as those involved in the current study, include resident involvement with "one-on-one" workers. This is an individual who spends some time with a resident, hopefully develops some rapport, and possibly follows him up upon release. If these one-on-one workers were also involved in some of the treatment processes described above, this would be ideal for maximizing maintenance of treatment gains. Such aspects of correctional programs are central to success in the rehabilitative goal of incarceration.
Do Self-Descriptions Reflect Self-Esteem?

One of the positive findings of this research is that the valence of self-descriptions was significantly correlated with objective indicators of self-esteem and depression. This outcome suggests that to some extent we can take adolescents' self-descriptions at face value. This is a crucial consideration in a correctional setting. Typically correctional facilities are understaffed in terms of psychological service providers. This means that service provision is often limited to crisis intervention, while denying other adolescents who could benefit from psychological services. The findings of this study provide some assurance that adolescents' own self-descriptions can be used as gross indicators of who is in need of services. However, although the above correlation is significant, the magnitude of the relationship is moderate (.48 and -.35 respectively). This pattern suggests that caution must be exercised; self-descriptions obviously do not "tell all".

Suggestions for Further Research

Importance ratings were found to be most influential when they were represented as a dichotomy of extremes: very important versus not important. Individuals appeared to be reluctant to rate any aspects of self-concept as unimportant, therefore, ratings of "very important" had to be compared with the combination of "not important" and "not important at all". Marsh (1986) found the same results using a nine point scale, as
opposed to the four point scale used in the current research. This suggests that there is more involved than the mere restriction of scale points in the current study.

Future endeavors should include aspects of self-concept that are less central to everyone's existence and not as commonly viewed to be important (e.g., possibly the delinquent self). As mentioned earlier, the interactive and/or selectivity hypotheses may operate more strongly for more idiosyncratic aspects of self-concept. Of course, there is the danger that one could assess infinite aspects of self-concept. However, this may be circumvented by maintaining a strong individual focus, rather than attempting to discover the formula that fits everyone.

Another limitation of this study is the ambiguity involved in the interpretation of results pertaining to the selectivity hypothesis. One interpretation is that individuals are placing more importance on those areas of self-concept that they rate themselves highly on (consistent with the selectivity hypothesis). Another possible interpretation is that individuals place importance on, and endeavor to improve upon, self-perception in areas that others feel are important. Neither this study nor any other has focused on the effect of these perceptions of "societal importance" and/or "significant other importance" at the same time as testing the interactive and selectivity hypotheses. Future research should investigate the interaction of these factors. For example, a future study could include both measures of personal importance and estimations of
societal importance (c.f., Higgins, 1987).

The preliminary findings of this study suggest that in order to fully appreciate the self-concept of delinquent youths, future research must take into account the degree to which delinquency has become a part of their identity. Furthermore, the "delinquent identity" is a broad aspect of self-concept in and of itself. Further investigations should include a measure of the personal importance of the delinquent self. As well, as research on this area continues it may become apparent that an instrument such as the SSQ combines too many aspects of the delinquent self, all of which are not necessarily equally relevant to the individual.

The results of this study demonstrate that using broad domains of self-concept in statistical analyses can obscure the factor that is truly creating the effect. Therefore, subsequent research may yield more meaningful interpretations by focusing on specific aspects of self-concept. Previous research often reflects the assumption that general self-concept is more important than specific facets (e.g., Hoge & McCarthy, 1984). Specific aspects of self-concept were only considered important insofar as they collectively provide an estimation of general self-concept. This is a weakness that Marsh (1986) addressed, concluding that

"... self-concept can never be understood if it's multidimensionality is ignored. If the role of self-concept research is to better understand the complexity of the self, to predict diverse behaviours, and to relate self-concept to other constructs, then measures of multiple facets are more useful than a general facet. " (p. 1235)
Finally, consider the comparison of the current research to the existing literature. First, there were few studies to compare the current study to. Marsh (1986) was the prototype upon which the current study was built. Therefore, the current results obtained from male delinquents were compared to results obtained by Marsh (1986) from a sample of "normal" young females. Future research should endeavor to investigate groups of legally recognized young offenders to confirm and expand on the current results. Moreover, the use of "real" delinquent samples (as opposed to high-school students who commit more or less delinquent crimes) allows research to guide suggestions for combating this societal problem. Furthermore, subsequent studies should investigate the nature of the self-esteem and self-concept of female delinquents. This group is an understudied section of the delinquent population. The current literature provides very little insight into the nature of delinquency in females; hence, only part of the problem has been addressed. A great deal of further research is necessary before clarity is gained in this area.

**Conclusion**

In sum, this research demonstrates a consistent pattern of self-concept scores for the sampled group of incarcerated young offenders. Although many aspects of self-concept are rated quite low, the self-esteem scores for the majority of the individuals is quite high, suggesting that intervention may have more effect
if specific aspects of self-concept are targeted. Effecting change in a variety of self-concept areas could indirectly effect self-esteem as a secondary result. The results of the current research indicate that this could occur in the manner posited by the selectivity hypothesis. In contrast, little evidence was found to support the interactive hypothesis.

Although Marsh (1986) addressed both the interactive and selectivity models, he did not consider a combination of the two. Such a strategy is one of the possible answers to the conflicting results that have been evident in the research to date. Perhaps some aspects of self-concept influence self-esteem through the mode proposed by the interactive model, and others combine in the manner stipulated by the selectivity model. Furthermore, the aspects of self-concept that each of the models would comprise may largely depend upon the reference group with which one is identified. A tentative combination of the two hypotheses would appear to be the more conservative and appropriate approach, given that little attention has been focused on the role of separate aspects of self-concept. Merely rejecting the interactive hypothesis on the basis of the limited research available may be premature.
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Self-concept


Psychology, 38, 299-337.


*Piaget, J. (1966).* The structural integration of formal thought.


Figure Caption

Figure 1. Self-concept profile for incarcerated young offenders.
Self-Concept Profile for Incarcerated Young Offenders

OSIQ Scale

T Score

OSIQ Scale

Young Offenders

"Gifted" Adolescents

Hospitalized Y.O.
Table 1

Correlations Between OSIQ Scale Scores and Part(b) of the PIM

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<th>Scale</th>
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<th>PIM2b</th>
<th>PIM3b</th>
<th>PIM4b</th>
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<th>PIM6b</th>
<th>PIM7b</th>
<th>PIM8b</th>
<th>PIM9b</th>
<th>PIM10b</th>
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<td>.30**</td>
<td>.23*</td>
<td>.27**</td>
</tr>
<tr>
<td>OSIQ9</td>
<td>.20</td>
<td>.28**</td>
<td>.44**</td>
<td>.36**</td>
<td>.06</td>
<td>.40**</td>
<td>.25*</td>
<td>.34**</td>
<td>.27**</td>
<td>.22*</td>
<td>.28**</td>
</tr>
<tr>
<td>OSIQ10</td>
<td>.26*</td>
<td>.36**</td>
<td>.39**</td>
<td>.28**</td>
<td>.02</td>
<td>.35**</td>
<td>.27**</td>
<td>.34**</td>
<td>.18</td>
<td>.40**</td>
<td>.31**</td>
</tr>
<tr>
<td>OSIQ11</td>
<td>.07</td>
<td>.11</td>
<td>.18</td>
<td>.19</td>
<td>.19</td>
<td>.41**</td>
<td>.14</td>
<td>.18</td>
<td>.20*</td>
<td>.10</td>
<td>.42**</td>
</tr>
</tbody>
</table>

N = 137

1-tailed significance: * .01 ** .001
Table 2

Test-Retest Reliability of the PIM

<table>
<thead>
<tr>
<th>Original</th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIM1</td>
<td>FPIM1</td>
</tr>
<tr>
<td></td>
<td>.82**</td>
</tr>
<tr>
<td>PIM2</td>
<td>.52*</td>
</tr>
<tr>
<td>PIM3</td>
<td>.65**</td>
</tr>
<tr>
<td>PIM4</td>
<td>.43</td>
</tr>
<tr>
<td>PIM5</td>
<td>.62*</td>
</tr>
<tr>
<td>PIM9</td>
<td>.05</td>
</tr>
<tr>
<td>PIM6</td>
<td>.48</td>
</tr>
<tr>
<td>PIM7</td>
<td>.45</td>
</tr>
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<td>PIM8</td>
<td>.33</td>
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<tr>
<td>PIM10</td>
<td>.58*</td>
</tr>
<tr>
<td>PIM11</td>
<td>.60*</td>
</tr>
</tbody>
</table>

N = 22
1-tailed significance: * .01 ** .001
### Table 3

**Percentage of Crimes Committed**

<table>
<thead>
<tr>
<th>Crime</th>
<th>First Crime</th>
<th>Second Crime</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequ. / Percent</td>
<td>Frequ. / Percent</td>
</tr>
<tr>
<td>Violent Crimes:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Murder</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Attempted Murder</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Sexual Assault</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Assault</td>
<td>27</td>
<td>0</td>
</tr>
<tr>
<td>Robbery</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>Weapons</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Kidnapping</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Property Crimes:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Break &amp; Enter</td>
<td>32</td>
<td>6</td>
</tr>
<tr>
<td>Arson</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Auto Theft</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>Theft over/under</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>Fraud</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Possession</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Mischief</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Misdemeanors:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impaired</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Escape</td>
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<td>14</td>
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<tr>
<td>Attempt</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Disorderly</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Drug Charges:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trafficking</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Possession</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>62</td>
</tr>
</tbody>
</table>

100%

### Table 4

**Average Sentence and Time Served by Institution**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>WYDC</td>
<td>18.69</td>
<td>14.84</td>
<td>7.23</td>
<td>8.95</td>
</tr>
<tr>
<td>Holly</td>
<td>5.51</td>
<td>4.32</td>
<td>2.15</td>
<td>2.46</td>
</tr>
<tr>
<td>VYDC</td>
<td>11.13</td>
<td>8.83</td>
<td>5.28</td>
<td>5.63</td>
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<tr>
<td>PGYDC</td>
<td>14.33</td>
<td>13.69</td>
<td>6.22</td>
<td>7.04</td>
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</tbody>
</table>
Table 5

**Multiple Regression Results for the Prediction of Self-Esteem**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Self-concept beta</th>
<th>Self-concept t-score</th>
<th>Importance beta</th>
<th>Importance t-score</th>
<th>Interaction beta</th>
<th>Interaction t-score</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSIQ1</td>
<td>.30</td>
<td>3.68**</td>
<td>.16</td>
<td>1.90</td>
<td>.02</td>
<td>.19</td>
</tr>
<tr>
<td>OSIQ2</td>
<td>.52</td>
<td>6.98**</td>
<td>.11</td>
<td>1.50</td>
<td>.10</td>
<td>1.34</td>
</tr>
<tr>
<td>OSIQ3</td>
<td>.48</td>
<td>6.23**</td>
<td>.07</td>
<td>.91</td>
<td>.11</td>
<td>1.34</td>
</tr>
<tr>
<td>OSIQ4</td>
<td>.37</td>
<td>4.65**</td>
<td>.15</td>
<td>1.84</td>
<td>.10</td>
<td>1.18</td>
</tr>
<tr>
<td>OSIQ5</td>
<td>.00</td>
<td>.05</td>
<td>.08</td>
<td>.83</td>
<td>.02</td>
<td>.27</td>
</tr>
<tr>
<td>OSIQ9</td>
<td>.05</td>
<td>.58</td>
<td>.12</td>
<td>1.35</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>OSIQ6</td>
<td>.24</td>
<td>2.82*</td>
<td>-.06</td>
<td>-.75</td>
<td>.08</td>
<td>.93</td>
</tr>
<tr>
<td>OSIQ7</td>
<td>.43</td>
<td>4.71**</td>
<td>-.18</td>
<td>-1.93</td>
<td>.03</td>
<td>.39</td>
</tr>
<tr>
<td>OSIQ8</td>
<td>.38</td>
<td>4.83**</td>
<td>.15</td>
<td>1.82</td>
<td>.09</td>
<td>1.09</td>
</tr>
<tr>
<td>OSIQ10</td>
<td>.44</td>
<td>5.85**</td>
<td>.22</td>
<td>2.92*</td>
<td>.06</td>
<td>.72</td>
</tr>
<tr>
<td>OSIQ11</td>
<td>.15</td>
<td>1.75</td>
<td>.16</td>
<td>1.90</td>
<td>-.33</td>
<td>-1.22</td>
</tr>
</tbody>
</table>

N = 136

1-tailed significance:  * .01  ** .001
Table 6

Aspects of Self-Concept, and their Perceived Importance, Correlated with Self-Esteem

<table>
<thead>
<tr>
<th>Self-Concept Area</th>
<th>Scale/Aspect</th>
<th>Self-Esteem (Aspect)</th>
<th>Self-Esteem (Importance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Self</td>
<td>1/Impulse Control</td>
<td>.34**</td>
<td>.23*</td>
</tr>
<tr>
<td></td>
<td>2/Emotional Tone</td>
<td>.55**</td>
<td>.26**</td>
</tr>
<tr>
<td></td>
<td>3/Body &amp; Self-Image</td>
<td>.49**</td>
<td>.17</td>
</tr>
<tr>
<td>Social Self</td>
<td>4/Social Relationships</td>
<td>.39**</td>
<td>.19</td>
</tr>
<tr>
<td></td>
<td>5/Morals</td>
<td>.04</td>
<td>.08</td>
</tr>
<tr>
<td></td>
<td>9/Voc. &amp; Ed. Goals</td>
<td>.08</td>
<td>.13</td>
</tr>
<tr>
<td>Sexual Self</td>
<td>6/Sexual Attitudes</td>
<td>.23*</td>
<td>-.01</td>
</tr>
<tr>
<td>Family Self</td>
<td>7/Family Relationships</td>
<td>.35**</td>
<td>.03</td>
</tr>
<tr>
<td>Coping Self</td>
<td>8/Mastery of Ex. World</td>
<td>.42**</td>
<td>.23*</td>
</tr>
<tr>
<td></td>
<td>10/Psychopathology</td>
<td>.46**</td>
<td>.25*</td>
</tr>
<tr>
<td></td>
<td>11/Superior Adjustment</td>
<td>.19</td>
<td>.20*</td>
</tr>
</tbody>
</table>

N = 137

1-tailed significance: * .01  ** .001
Table 7

Multiple Regression Results for the Prediction of Self-Esteem
(Including only Self-Concept or Importance in the Regression Equation)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Multiple Regression Results</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>self-concept</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>beta</td>
<td>t-score</td>
<td></td>
</tr>
<tr>
<td>PIM1</td>
<td>.34</td>
<td>4.21***</td>
<td>.23</td>
</tr>
<tr>
<td>PIM2</td>
<td>.55</td>
<td>7.72***</td>
<td>.26</td>
</tr>
<tr>
<td>PIM3</td>
<td>.49</td>
<td>6.58***</td>
<td>.17</td>
</tr>
<tr>
<td>PIM4</td>
<td>.39</td>
<td>4.67***</td>
<td>.19</td>
</tr>
<tr>
<td>PIM5</td>
<td>.04</td>
<td>.46</td>
<td>.08</td>
</tr>
<tr>
<td>PIM9</td>
<td>.08</td>
<td>.92</td>
<td>.13</td>
</tr>
<tr>
<td>PIM6</td>
<td>.23</td>
<td>2.72**</td>
<td>-01</td>
</tr>
<tr>
<td>PIM7</td>
<td>.35</td>
<td>4.27***</td>
<td>.03</td>
</tr>
<tr>
<td>PIM8</td>
<td>.42</td>
<td>5.36***</td>
<td>.23</td>
</tr>
<tr>
<td>PIM10</td>
<td>.46</td>
<td>5.95***</td>
<td>.25</td>
</tr>
<tr>
<td>PIM11</td>
<td>.19</td>
<td>2.30*</td>
<td>.20</td>
</tr>
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</table>

N = 136  1-tailed significance:  * .05  ** .01  *** .001
TABLE 8

Multiple Regression Results for the Prediction of Self-Esteem by Domain

<table>
<thead>
<tr>
<th>Area</th>
<th>Multiple Regression Results</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>self-concept</td>
<td>importance</td>
<td>interaction</td>
</tr>
<tr>
<td></td>
<td>beta t-score</td>
<td>beta t-score</td>
<td>beta t-score</td>
<td>beta t-score</td>
</tr>
<tr>
<td>Psychological Self</td>
<td>.54 7.37**</td>
<td>.13 1.71</td>
<td>-.57 -2.56*</td>
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</tr>
<tr>
<td>(scales 1, 2 &amp; 3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Self</td>
<td>.17 1.92</td>
<td>.13 1.48</td>
<td>-.37 -1.59</td>
<td></td>
</tr>
<tr>
<td>(scales 4, 5 &amp; 9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Self</td>
<td>.24 2.82*</td>
<td>-.06 -.75</td>
<td>-.27 -.89</td>
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</tr>
<tr>
<td>(scale 6)</td>
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<td></td>
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<tr>
<td>Familial Self</td>
<td>.43 4.71**</td>
<td>-.18 -1.93</td>
<td>-.15 -.89</td>
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<tr>
<td>(scale 7)</td>
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<td></td>
</tr>
<tr>
<td>Coping Self</td>
<td>.39 5.06**</td>
<td>.22 2.79*</td>
<td>-.30 -1.73</td>
<td></td>
</tr>
<tr>
<td>(scales 8, 10, &amp; 11)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 136  1-tailed significance:  * .01  ** .001
Table 9

Multiple Regression Results for the Prediction of Importance

<table>
<thead>
<tr>
<th>Scale</th>
<th>Multiple Regression Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>self-concept beta</td>
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<tr>
<td>PIM1</td>
<td>.18</td>
</tr>
<tr>
<td>PIM2</td>
<td>.21</td>
</tr>
<tr>
<td>PIM3</td>
<td>.17</td>
</tr>
<tr>
<td>PIM4</td>
<td>.06</td>
</tr>
<tr>
<td>PIM5</td>
<td>.43</td>
</tr>
<tr>
<td>PIM9</td>
<td>.22</td>
</tr>
<tr>
<td>PIM6</td>
<td>.23</td>
</tr>
<tr>
<td>PIM7</td>
<td>.54</td>
</tr>
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<td>PIM8</td>
<td>.16</td>
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<tr>
<td>PIM10</td>
<td>-.04</td>
</tr>
<tr>
<td>PIM11</td>
<td>.22</td>
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</tbody>
</table>

N = 136  1-tailed significance:  *.05  **.01  ***.001
Table 10

Correlations Between Self-Concept Scale Scores and Personal Importance Ratings

<table>
<thead>
<tr>
<th>Importance</th>
<th>OSIQ1</th>
<th>OSIQ2</th>
<th>OSIQ3</th>
<th>OSIQ4</th>
<th>OSIQ5</th>
<th>OSIQ6</th>
<th>OSIQ7</th>
<th>OSIQ8</th>
<th>OSIQ9</th>
<th>OSIQ10</th>
<th>OSIQ11</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIM1</td>
<td>.24*</td>
<td>.13</td>
<td>.01</td>
<td>.06</td>
<td>.36**</td>
<td>.25*</td>
<td>.03</td>
<td>.23*</td>
<td>.06</td>
<td>.09</td>
<td>.17</td>
</tr>
<tr>
<td>PIM2</td>
<td>.36**</td>
<td>.29**</td>
<td>.11</td>
<td>.16</td>
<td>.36**</td>
<td>.27**</td>
<td>-.06</td>
<td>.33**</td>
<td>.17</td>
<td>.21*</td>
<td>.21*</td>
</tr>
<tr>
<td>PIM3</td>
<td>.22*</td>
<td>.12</td>
<td>.21*</td>
<td>.17</td>
<td>.22*</td>
<td>.23*</td>
<td>.23*</td>
<td>.10</td>
<td>.16</td>
<td>.04</td>
<td>.21*</td>
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<td>PIM4</td>
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<td>.11</td>
<td>.21*</td>
<td>.12</td>
<td>.11</td>
<td>.13</td>
<td>.17</td>
<td>.10</td>
<td>.15</td>
<td>.02</td>
<td>.12</td>
</tr>
<tr>
<td>PIM5</td>
<td>.25*</td>
<td>.06</td>
<td>.01</td>
<td>.03</td>
<td>.43**</td>
<td>.21*</td>
<td>-.12</td>
<td>.32**</td>
<td>.06</td>
<td>.06</td>
<td>.12</td>
</tr>
<tr>
<td>PIM9</td>
<td>.04</td>
<td>-.00</td>
<td>.17</td>
<td>.07</td>
<td>.23*</td>
<td>.23*</td>
<td>-.03</td>
<td>.24*</td>
<td>.03</td>
<td>.04</td>
<td>.19</td>
</tr>
<tr>
<td>PIM6</td>
<td>-.04</td>
<td>-.05</td>
<td>.06</td>
<td>.14</td>
<td>.05</td>
<td>.06</td>
<td>.22*</td>
<td>.03</td>
<td>.04</td>
<td>-.04</td>
<td>.17</td>
</tr>
<tr>
<td>PIM7</td>
<td>.16</td>
<td>.11</td>
<td>.13</td>
<td>.04</td>
<td>.23*</td>
<td>.25*</td>
<td>-.05</td>
<td>.48**</td>
<td>.17</td>
<td>.11</td>
<td>.10</td>
</tr>
<tr>
<td>PIM8</td>
<td>.16</td>
<td>.15</td>
<td>.15</td>
<td>.10</td>
<td>.24*</td>
<td>.28**</td>
<td>.09</td>
<td>.34**</td>
<td>.23*</td>
<td>.17</td>
<td>.31**</td>
</tr>
<tr>
<td>PIM10</td>
<td>.18</td>
<td>.13</td>
<td>.06</td>
<td>.08</td>
<td>.23*</td>
<td>.19</td>
<td>-.04</td>
<td>.18</td>
<td>.08</td>
<td>.08</td>
<td>.15</td>
</tr>
<tr>
<td>PIM11</td>
<td>.23*</td>
<td>.12</td>
<td>.10</td>
<td>.11</td>
<td>.25*</td>
<td>.40**</td>
<td>.00</td>
<td>.33**</td>
<td>.15</td>
<td>.11</td>
<td>.26*</td>
</tr>
</tbody>
</table>

N = 135
1-tailed significance: *.01 **.001
### Table 11

**Multiple Regression Results for the Prediction of Importance when Self-Esteem is High versus Low**

<table>
<thead>
<tr>
<th>Self-Concept Scale/Aspect</th>
<th>Importance</th>
<th>High Self-Esteem</th>
<th>Low Self-Esteem</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>beta</td>
<td>t-score</td>
</tr>
<tr>
<td>3/Body &amp; Self-Image</td>
<td></td>
<td>.19</td>
<td>1.81</td>
</tr>
<tr>
<td>6/Sexual Attitudes</td>
<td></td>
<td>.21</td>
<td>2.02*</td>
</tr>
<tr>
<td>8/Mastery of Ex. World</td>
<td></td>
<td>.17</td>
<td>1.66</td>
</tr>
<tr>
<td>10/Psychopathology</td>
<td></td>
<td>-.05</td>
<td>-.46</td>
</tr>
</tbody>
</table>

\[ N(\text{high self-estimate}) = 89 \quad N(\text{low self-estimate}) = 28 \]

1-tailed significance: \(* .05 \quad *.01 \quad ***.001\)
Table 12

Factor Analyses of the Street Self Questionnaire

<table>
<thead>
<tr>
<th>SSQ Question</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FACTOR 1  CRIMINAL IDENTITY</strong></td>
<td></td>
</tr>
<tr>
<td><em>(r)</em> 1. Compared to your other friends, how good are you at doing crime?</td>
<td>.72</td>
</tr>
<tr>
<td><em>(r)</em> 6. How many of your friends (outside of YDC) would be considered (by police) to be delinquents or criminals?</td>
<td>.72</td>
</tr>
<tr>
<td><em>(r)</em> 7. In your opinion, how many of your friends (outside of YDC) are delinquents or criminals?</td>
<td>.69</td>
</tr>
<tr>
<td>*(r)*14. How much crime have you done compared to the other residents at the Youth Detention Center?</td>
<td>.65</td>
</tr>
<tr>
<td>*(r)*22. When you do crime, is it because you want</td>
<td></td>
</tr>
<tr>
<td>a) To get 'things'/cash?</td>
<td>.59</td>
</tr>
<tr>
<td><em>(r)</em> 4. When you are doing crime how much of the time do you feel excited?</td>
<td>.54</td>
</tr>
<tr>
<td><em>(r)</em> 5. When you are with your friends, how much of your time is spent thinking about, talking about or doing crime?</td>
<td>.54</td>
</tr>
<tr>
<td>*(r)*25. When you do crime, is it because you want</td>
<td></td>
</tr>
<tr>
<td>d) To feel the excitement?</td>
<td>.51</td>
</tr>
<tr>
<td>3. When you are doing crime, how much of the time do you feel nervous?</td>
<td>(.48)</td>
</tr>
</tbody>
</table>

| **FACTOR 2  PEER ACCEPTANCE**                                              |                |
| *(r)*23. When you do crime, is it because you want                          |                |
| b) To gain respect?                                                       | .88            |
| *(r)*24. When you do crime, is it because you want                          |                |
| c) To fit in with others?                                                  | .84            |
| 8. How many of your friends would still hang out with you if you stopped doing crime? | .60            |
| *(r)* 2. How many of your friends respect you because you do crime?         | (.40)          |
Table 15 continued

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<td><strong>FACTOR 3  FUTURE CRIMINALITY</strong></td>
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<td>(r) 17. What are the chances that you will do crime in the future?</td>
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<td>(r) 18. What are the chances that you will do time as an adult?</td>
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<tr>
<td>(r) 12. How much time do you usually spend hanging out <em>on the street</em>?</td>
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<td><strong>FACTOR 4  STREET SURVIVAL</strong></td>
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<td>(r) 13. How would you rate your ability to live on the street?</td>
<td>.81</td>
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<tr>
<td>(r) 21. How would you rate your <em>street smarts</em>?</td>
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<tr>
<td><strong>FACTOR 5  LACK OF PERSONAL RESPONSIBILITY</strong></td>
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<tr>
<td>10. Do you think you deserve to be here for what you've done?</td>
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</tr>
<tr>
<td>20. How much do you think you are responsible for where you are today?</td>
<td>.79</td>
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<tr>
<td><strong>FACTOR 6</strong></td>
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<td>(r) 9. After doing time in jail, will your friends like you:</td>
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<tr>
<td>a lot more                     more                        the same            less        a lot less</td>
<td>.73</td>
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<tr>
<td>(r) 11. Do you consider yourself to be a delinquent?</td>
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<td><strong>FACTOR 7</strong></td>
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<td>(r) 16. How would you rate your ability to do O.K. at YDC</td>
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<tr>
<td>b) With the other residents?</td>
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<td>15. How would you rate your ability to do O.K. at YDC</td>
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<td>a) With the staff?</td>
<td>.63</td>
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<td>(r) 2. How many of your friends respect you because you do crime?</td>
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Table 15 continued

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<tr>
<td>(r)19. How many people think you are strong and tough?</td>
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Note: (r) indicates reverse scoring
Appendix A

DEMOGRAPHIC SHEET

Date of Birth:_________________________ Age:____

Ethnic origin: white__ black__ native__ other__

List three words or phrases that describe who you are (what you are like):

______________________________________________________________________________________

______________________________________________________________________________________

What area did you grow up in?___________________________________________________________

Area living when arrested?______________________________________________________________

How long had you been living there?____________________________________________________

How many different communities do you remember living in?____

What were you arrested for?____________________________________________________________

Was anyone injured as a result of this crime? Y N

Have you been arrested before? Y N For a similar crime? Y N

How long is your sentence?____________________________________________________________

How much time have you served already?___________________________________________________

Are you sentenced to: ___OPEN or ___CLOSED custody?

How old were you the first time you got in trouble with the police___________________________

Do you (or will you) have any visitors at YDC? Y N

Who? (no names) _____________________________ How often?_______________________________

What was the last grade you officially completed on the outside?_____________________________

Have there been any incident reports filed on you? Y N

How many? few some many

Who did you live with when you were growing up? (List the people who lived in the house. For example: mom, 2 sisters, and a friend.)___________________________

If you lived with different people when you were growing up, is there one place that you would consider to be home? (Ex. a place you lived at for a longer period of time) Y N If yes, list the people who lived there.

When did you last live at "home"?________________________________________________________

How long did you live there?____________________________________________________________

Where will you be going when you leave here?_____________________________________________

Are you, or have you ever been, a ward of the court? Y N

When, and for how long?________________________________________________________________

How many placements have you had?______________________________________________________
Appendix B

PERSONAL IMPORTANCE MEASURE

NAME:__________________________  AGE:________

For each of the following statements indicate:

a) how important it is to you  
b) how well it describes you

1. To be happy most of the time.
   a) very important___ important___  
      not very important___ not important at all___
      I am happy most of the time.
   b) describes me very well___ describes me well___ describes me  
      fairly well___ does not quite describe me___ does not really  
      describe me___ does not describe me at all___

2. To be sexually attractive to girls.
   a) very important___ important___  
      not very important___ not important at all___
      I am sexually attractive to girls.
   b) describes me very well___ describes me well___ describes me  
      fairly well___ does not quite describe me___ does not really  
      describe me___ does not describe me at all___

3. To be capable of doing what I set my mind to.
   a) very important___ important___  
      not very important___ not important at all___
      I am capable of doing what I set my mind to.
   b) describes me very well___ describes me well___ describes me  
      fairly well___ does not quite describe me___ does not really  
      describe me___ does not describe me at all___

4. To have friends that like me.
   a) very important___ important___  
      not very important___ not important at all___
      I have friends that like me.
   b) describes me very well___ describes me well___ describes me  
      fairly well___ does not quite describe me___ does not really  
      describe me___ does not describe me at all___

5. To be relaxed most of the time.
   a) very important___ important___  
      not very important___ not important at all___
      I am relaxed most of the time.
   b) describes me very well___ describes me well___ describes me  
      fairly well___ does not quite describe me___ does not really  
      describe me___ does not describe me at all___

6. To have parents I can trust and count on, now and in the  
   future.
   a) very important___ important___  
      not very important___ not important at all___
I have parents I can trust and count on, now and in the future.

b) describes me very well____ describes me well____ describes me fairly well____ does not quite describe me____ does not really describe me____ does not describe me at all____

7. Not to feel depressed and hopeless about my situation.

a) very important____ important____
not very important____ not important at all____

(r) Sometimes I feel depressed and hopeless about my situation.

b) describes me very well____ describes me well____ describes me fairly well____ does not quite describe me____ does not really describe me____ does not describe me at all____

8. To be capable of facing challenges successfully.

a) very important____ important____
not very important____ not important at all____

I am capable of facing challenges successfully.

b) describes me very well____ describes me well____ describes me fairly well____ does not quite describe me____ does not really describe me____ does not describe me at all____

9. To be comfortable with sexual matters.

a) very important____ important____
not very important____ not important at all____

(r) I feel unsure of myself in sexual matters.

b) describes me very well____ describes me well____ describes me fairly well____ does not quite describe me____ does not really describe me____ does not describe me at all____

10. To meet new people.

a) very important____ important____
not very important____ not important at all____

I enjoy meeting new people.

b) describes me very well____ describes me well____ describes me fairly well____ does not quite describe me____ does not really describe me____ does not describe me at all____

11. To be satisfied with myself.

a) very important____ important____
not very important____ not important at all____

I am satisfied with myself.

b) describes me very well____ describes me well____ describes me fairly well____ does not quite describe me____ does not really describe me____ does not describe me at all____

12. Not to think crazy thoughts.

a) very important____ important____
not very important____ not important at all____

(r) Sometimes I think crazy thoughts.

b) describes me very well____ describes me well____ describes me fairly well____ does not quite describe me____ does not really describe me____ does not describe me at all____
13. To be realistic about what is happening to me.
   a) very important important
      not very important not important at all
   I am realistic about what is happening to me.
   b) describes me very well describes me well describes me
      fairly well does not quite describe me does not really
      describe me does not describe me at all

14. To be in control of my behaviour when I lose my temper.
   a) very important important
      not very important not important at all
   Sometimes when I lose my temper I cannot control my
   behaviour.
   b) describes me very well describes me well describes me
      fairly well does not quite describe me does not really
      describe me does not describe me at all

15. To plan for the future.
   a) very important important
      not very important not important at all
   I plan for the future.
   b) describes me very well describes me well describes me
      fairly well does not quite describe me does not really
      describe me does not describe me at all

16. To work and pay my own way.
   a) very important important
      not very important not important at all
   I would rather not work and support myself.
   b) describes me very well describes me well describes me
      fairly well does not quite describe me does not really
      describe me does not describe me at all

17. To keep all of my emotions under control.
   a) very important important
      not very important not important at all
   Sometimes I find it difficult to control my emotions.
   b) describes me very well describes me well describes me
      fairly well does not quite describe me does not really
      describe me does not describe me at all

18. To be considerate and fair to others.
   a) very important important
      not very important not important at all
   I am considerate and fair to others.
   b) describes me very well describes me well describes me
      fairly well does not quite describe me does not really
      describe me does not describe me at all

19. To take pride in doing something well.
   a) very important important
      not very important not important at all
I take pride in doing something well.
b) describes me very well____ describes me well____ describes me fairly well____ does not quite describe me____ does not really describe me____ does not describe me at all____

20. To like and respect my parents and have them feel the same way about me.
   a) very important____ important____
      not very important____ not important at all____
   I like and respect my parents and they feel the same way about me.
   b) describes me very well____ describes me well____ describes me fairly well____ does not quite describe me____ does not really describe me____ does not describe me at all____

21. To be proud of my body.
   a) very important____ important____
      not very important____ not important at all____
   I am proud of my body.
   b) describes me very well____ describes me well____ describes me fairly well____ does not quite describe me____ does not really describe me____ does not describe me at all____

22. To have the respect of others.
   a) very important____ important____
      not very important____ not important at all____
   I have the respect of others.
   b) describes me very well____ describes me well____ describes me fairly well____ does not quite describe me____ does not really describe me____ does not describe me at all____

Note: (r) indicates reverse scoring
Appendix C

THE "STREET SELF" QUESTIONNAIRE

NAME: ______________________________ AGE: ______

For each of the following questions, please circle the one answer that best describes you.

1. Compared to your other friends, how good are you at doing crime?
   (r) excellent     good     average     not very good     poor

2. How many of your friends respect you because you do crime?
   (r) all        most       some        hardly any       none

3. When you are doing crime, how much of the time do you feel nervous?
   all of the time     most of the time     some of the time
   hardly any of the time     none of the time

4. When you are doing crime, how much of the time do you feel excited?
   all of the time     most of the time     some of the time
   hardly any of the time     none of the time

5. When you are with your friends, how much of your time is spent thinking about, talking about or doing crime?
   all of the time     most of the time     some of the time
   hardly any of the time     none of the time

6.a) How many of your friends (outside of YDC) would be considered (by police) to be delinquents or criminals?
   all        most       some        hardly any       none

6.b) In your opinion, how many of your friends (outside of YDC) are delinquents or criminals?
   all        most       some        hardly any       none

7. How many of your friends would still hang out with you if you stopped doing crime?
   all        most       some        hardly any       none

8. After doing time in jail, will your friends like you a lot more     more     the same     less     a lot less

9. Do you think you deserve to be here for what you've done?
   totally     mostly     some     hardly at all     not at all

10. Do you consider yourself to be a delinquent?
    (r) totally     mostly     some     hardly at all     not at all
11. How much time do you usually spend hanging out "on the street"?
   (r) all of the time   most of the time   some of the time
   hardly any of the time   none of the time

12. How would you rate your ability to live on the street?
   (r) excellent   good   average   not very good   poor

13. How much crime have you done compared to the other residents at the Youth Detention Center?
   (r) a lot more   more   the same   less   a lot less

14. How would you rate your ability to do O.K. at YDC
   a) With the staff?
      (r) excellent   good   average   not very good   poor
   b) With the other residents?
      (r) excellent   good   average   not very good   poor

15. What are the chances that you will do crime in the future?
   (r) excellent   good   average   not very good   poor

16. What are the chances that you will do time as an adult?
   (r) excellent   good   average   not very good   poor

17. How many people think you are strong and tough?
   (r) all   most   some   hardly any   none

18. How much do you think you are responsible for where you are today?
   totally   mostly   some   hardly at all   not at all

19. How would you rate your "street smarts"?
   (r) excellent   good   average   not very good   poor

20. When you do crime, is it because you want
   a) To get "things"/cash?
      (r) totally   mostly   some   hardly at all   not at all
   b) To gain respect?
      (r) totally   mostly   some   hardly at all   not at all
   c) To fit in with others?
      (r) totally   mostly   some   hardly at all   not at all
   d) To feel the excitement?
      (r) totally   mostly   some   hardly at all   not at all

Note: (r) indicates reverse scoring
Appendix D

CONSENT FORM

It has been explained to me that this is a research study on the personalities and behaviours of residents at the Willingdon Youth Detention Centre (WYDC). I understand that my participation in this research is voluntary and that I am free to withdraw my participation in this research at any time. I also understand that my answers on these questionnaires are confidential and will not be seen by the security or clinical staff at WYDC, or by any other persons not directly involved in this research. In addition, I have been assured that my responses to the questionnaires will in no way influence my status, classification, or release from WYDC.

Name ________________________________

Date ________________________________

Researcher ____________________________
### Appendix E

**Correlations Among OSIO Scales**

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<th>OSIQ3</th>
<th>OSIQ4</th>
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N = 137

1-tailed significance: *.01 **.001
Appendix F

Test-retest Reliability of PIM(b)

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<td>-0.14</td>
<td>-0.19</td>
<td>0.07</td>
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<td>-0.52*</td>
<td>-0.14</td>
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<td>PIMb7</td>
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<td>0.54*</td>
<td>0.33</td>
<td>0.49</td>
<td>0.25</td>
<td>0.52*</td>
<td>0.29</td>
<td>0.84**</td>
<td>0.44</td>
<td>0.38</td>
<td>0.68**</td>
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<td>PIMb8</td>
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<td>0.53*</td>
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<td>0.40</td>
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N = 22

1-tailed significance: *p < 0.01 **p < 0.001
# Appendix G

## Reliability Analysis of the Street Self Questionnaire

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<th>Scale Item</th>
<th>Scale Mean</th>
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<th>Corrected Item/Total Correlation</th>
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<td>Scale Variance</td>
<td>Alpha</td>
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N = 116  
Total Alpha = .83
Appendix H

Frequency Count of Personal Importance Ratings

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<th>Area</th>
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<th>High</th>
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