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THE INMATE CODE AND SELF-ESTEEM

by

DEBBIE CARRIERE, B.A.

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

Master of Arts

Department of Psychology

Carleton University

Ottawa, Ontario

January 18, 1996

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The Inmate Code and Self-Esteem
Submitted by Debbie Carriere, B.A.
in partial fulfilment of the requirements for
the degree of Master of Arts

Thesis Supervisor

Chair, Department of Psychology

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Abstract

The current research had two main goals: To establish the psychometric properties of the Inmate Code scale (Baxter, 1993); and to examine empirically variables that have been suggested by past literature to have an association with the inmate code (including self-esteem, criminal sentiments, treatment ratings, and misconducts). The results show high internal consistency and test-retest reliability for the ICS scale. Self-esteem is negatively correlated to identification with the inmate code at all time periods, however, change in self-esteem is not related to identification with the inmate code. There is an association between identification with the inmate code and criminal sentiments. In addition, identification with the inmate code at intake was predictive of treatment outcome ratings for one group examined. There was also an association between identification with the inmate code and misconducts, especially for the opposition and total identification scales, and for misconducts and criminal sentiments.

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Chapter 1

Introduction

The use of incarceration is unlikely to decrease in the near future, therefore, it is essential that its effects are examined and understood. Although it has long been assumed that prison is highly destructive to the inmates, this assumption has just recently been challenged by empirical research (Bonta & Gendreau, 1990). Early studies of inmate adjustment to and the effects of incarceration examined the concept of prisonization which refers to the taking on of values and customs of the prison subculture (Clemmer, 1940). These studies suggested that if the effects of prisonization were reduced, the probability of resocialization would be improved (Thomas, 1973). As a result, many researchers and prison personnel believed that inmate associations should be discouraged to avoid the negative consequences that follow the onset of prisonization (Zingraff, 1975).

More recently, however, it has been suggested that even criminal peer association does not have to be

negative. There is the possibility that identification with other inmates may serve as a protective measure against the "degradations" of imprisonment: That is association with one's peers in the institution may function to restore a positive self- concept or to enhance self-esteem (Baxter, 1992) and may not be significantly related to increases in criminal sentiments. If this is the case, we may find that participation in the inmate normative system, or adherence to the inmate code, may be beneficial to the inmate and under some conditions, to rehabilitative goals. Despite a number of research articles on prison adjustment, broad gaps remain in our understanding of the inmate's adaption to confinement (Thomas, Hyman, & Winfree, 1983).

Several empirical studies which have reviewed the long-term effects of incarceration have challenged the assumption of an association between incarceration and personality deterioration (Wormith, 1984). For example, Wormith (1984) found that inmates who served

more time displayed less deviance in their MMPI profiles. In addition, previous research has shown that there is no evidence of deterioration in intellectual ability (Banister, Smith, Heskin, & Bolton, 1976; Bolton, Smith, Heskin, & Banister, 1976). In fact, verbal ability has been shown to increase with more opportunity for the development of verbal ability in prison (Bolton, et al., 1976). Bukstel and Kilmann (1980) also reviewed ninety studies which examined the psychological effects of imprisonment on behavior, personality, and attitudes. Despite several methodological problems in the literature it was concluded that consistent negative effects were not evident from imprisonment rather some inmates showed improvement, some showed deterioration, and others showed no appreciable changes.

Prisonization and the Inmate Code

In early studies, prisonization was conceptualized as assimilation into the inmate subculture which included the rejection of the administrative code (Thomas, 1973). Inmate identification resulted from a

rejection by society, and strong inmate relationships caused hostility toward staff and law-abiding citizens (Schwartz, 1973; Ramirez, 1990). Once the values of the prison community were internalized, the inmate could not be rehabilitated, and high levels of prisonization would lead to low success in the community upon release (Atchley & McCabe, 1968; Thomas & Foster, 1973; Wheeler, 1961). Baxter (1992) describes the three basic assumptions that were associated with adherence to the inmate code in previous literature: (1) identification of the inmate code leads to an internalization of a criminal self-concept (2) is associated with greater criminality and recidivism and (3) is incompatible to treatment or rehabilitation.

Source of Norms

There are two primary sources for the normative systems which are evident in correctional institutions: The first are the conduct norms delineated by the prison administration, while the second comes from the inmates themselves - the inmate code (Wellford, 1967). Wellford (1967) defined the inmate code as "a series of

conduct norms that define the proper behavior for inmates... prescribing behavior that is contrary to the behavior patterns expected by the administration" (p. 197). According to this definition the inmate norms and administrative norms conflict on several points including reporting of rule violations by other inmates ("ratting"), the value of treatment, the value of work, sex norms, and the value of group formation (Garofalo & Clark, 1965; Wellford, 1967). The hypothesis that there is conflict between staff and inmate ignores the fact that "the majority of staff and inmates would like a comfortable, easy, and predictable" way to spend their working hours and time in prison. For this to happen conflicts must be minimized (Grapendal, 1990).

More current views are that, although the inmate code and the administrative code may be opposite in many respects, most often the inmates are not under the effects of one or the other code exclusively, it is more likely that both codes have an effect on the behavior of all inmates (Wheeler, 1961). Furthermore, the inmate code was often seen as a threat to

institutional stability and security (Baxter, 1992). There is the possibility, however, that the inmate informal system may be useful in the rehabilitative goals of the prison by enhancing the inmate's psychological well-being and may not be related to increases in criminal sentiments. Although prisonization has been examined extensively, relatively little research has examined the effects of imprisonment without referring to staff opposition as the main component.

Theories of Prisonization

Two dominant theories have been hypothesized to account for prisonization: the deprivation model and the importation model. The deprivation model focuses on prison-specific variables, i.e., the pressures and deprivations of prison, the most important factors being depersonalization and the stigmatization of incarceration (e.g., Sykes, 1958; Thomas, 1973; Thomas & Foster, 1973; Thomas, Petersen, & Zingraff, 1978; Thomas & Zingraff, 1976; Zingraff, 1980). In contrast, the importation model focuses on preprison

socialization and extra-prison influences, including preprison involvement in criminal behavior, frequency of contact with significant others outside of the prison, and the quality of the inmates' perceptions of their postprison chances (e.g., Thomas, 1973; Thomas, 1975; Thomas, 1977; Thomas & Foster, 1973; Thomas, Petersen, & Zingraff, 1978; Thomas & Zingraff, 1976; Zingraff, 1980). Much of the prisonization literature has been a debate over the validity of these competing theories.

It has been demonstrated, however, that the various aspects of prisonization are probably better understood when the two models are considered together. In other words, prisonization is a function of both situational (institutional) factors and extra-prison factors. While institutional factors are important, the prison is not a closed system and prison adjustment is also influenced by factors such as the strength of outside contacts maintained while in prison or expectations about parole (e.g., Grapendal, 1990; Thomas, 1973; Thomas, 1977; Thomas, Petersen, &

Zingraff, 1978; Zingraff, 1980). In addition, inmates enter the prison with a fixed set of values, beliefs, and adaptation patterns that are applied to the new situation and which therefore affect the nature of their adjustment to the prison setting (Irwin & Cressey, 1962). Neither importation or deprivation model variables are capable of explaining inmate adaptations alone.

Factors related to prisonization

Research over the past three decades has identified several factors that appear to be related to the degree of prisonization. Prisonization is greater when there are more negative postrelease expectations (Thomas & Foster, 1971; Thomas, Pertersen, & Zingraff, 1978; Zingraff, 1975); when opposition to the prison organization is greater; when the offenders associate with criminals in the free society (Thomas and Foster, 1971); when feelings of powerlessness are present (Thomas, Peterson, and Zingraff, 1978); with longer periods of imprisonment (Clemmer, 1940); when the prison environment includes greater visible or

perceived control over the inmates (Goodstein, 1979; Street, 1965; Wellford, 1973; Wright, 1993); in custodial (vs. treatment) settings (Feld, 1981; Street, 1965; & Wellford, 1973); in maximum security institutions (Sieverdes & Bartollas, 1986); and is associated with increased disruptive behavior (Wright, 1993). On the other hand the degree of prisonization is reduced by a stable pattern of preprison employment; the relative absence of feelings of powerlessness; positive postprison expectations for the future (Thomas, 1973; 1977; Thomas, Peterson, & Zingraff, 1978; Wellford, 1967); the presence of positive extra-prison social relationships during incarceration (Clemmer, 1940; Thomas, 1973), and when there is greater life satisfaction in general (Thomas, Peterson, & Zingraff, 1978). Research has also revealed that the degree of prisonization is a continuum and that most inmates are not completely prisonized (Thomas, 1973). In addition, inmates who have not been previously incarcerated have shown weaker ties to the inmate subculture (Cohen & Taylor, 1981), and attachment to

inmate norms is greater for those who have more experience in the prison system (Garofalo & Clark, 1985). Research has also revealed that younger inmates are more likely to support the inmate code (Garofalo & Clark, 1985) and that inmates whose first conviction was at a younger age show a higher degree of prisonization (Thomas, 1973). The present research will examine the relationship of several of these variables to the current conceptualization of the inmate code adherence.

Researchers have examined various inmate social roles and their effects on prisonization (e.g., Sykes, 1958). Although the information provided by the study of social roles is interesting, it does not provide useful direct information on the prisonization process per se or on individual response to imprisonment. Further, many of the conclusions about specific social roles have come from simple observation or anecdotal evidence and little empirical research has been undertaken to confirm these observations or to determine whether the examination of such inmate social

roles enables a better understanding of the prison experience. Few validated measures have been established to examine social roles in prison. Poole, Regoli, and Thomas (1980) examined whether a questionnaire was able to reliably discriminate between different social roles and whether knowledge of group membership contributed to the prediction of other critical variables such as institutional misconducts. Their measure failed on both counts and the authors concluded that social role typing was not helpful in advancing knowledge about prisonization. Wellford (1973) similarly concluded that there was no significant relationship between social role and level of prisonization (other variables, however, were able to distinguish these roles, e.g., the type of offence first recorded). Kassebaum, Ward, and Wilner (1971) reported that it was almost impossible to classify inmates into role types even when inmates tried to classify themselves.

Garafalo and Clark (1985) report that the inmate normative system is functional even with relatively

short sentences and high rates of turnover (cf. Wellford, 1967). Other researchers, however, have found that shorter periods of incarceration result in less prisonization (Clemmer, 1940; Thomas, 1977; Troyer & Frease, 1975; Wheeler, 1961). Cohen and Taylor (1981) suggest that there is a greater need for close association or intimate relationships with other inmates for the long term offender to ensure psychological survival. This may not be as important for those who are serving shorter sentences (Cohen & Taylor, 1981).

Length of incarceration has been a predominant independent variable in prisonization research. The examination of time as an essential variable in prisonization began with Clemmer (Bukstel & Kilmann, 1980). Wheeler's (1961) results suggest that with increased length or phase of incarceration there is an increase in prisonization. That is, attitudes toward staff become more oppositional and there is increased solidarity with other inmates over time. This decreases with impending release. However, not all

research studies examining the inmate code have yielded the same results. Others have found that the relationship between length of time served and adoption of the inmate code was low and nonsignificant (e.g., Wellford, 1967).

Throughout the prisonization literature, there is evidence of conflicting results although researchers are measuring the same variables. There remain many unanswered questions about the inmate code. These problems may in part be attributed to a number of common methodological and conceptual errors in studies of prisonization. In particular, most of the instruments used to measure prisonization or related factors have not been examined for reliability and validity.

Some of these errors have arisen directly from a misunderstanding or oversimplification of the concept of prisonization. Prisonization has frequently been interpreted as unidimensional when in fact there is growing evidence that the phenomenon is multidimensional. In early studies, it was believed that

prisonization necessarily implied that there was a high degree of opposition to the administration. However, when opposition to staff was examined empirically, it was found that there was considerable agreement between staff and inmates on certain aspects of the administrative code, and that inmates were not influenced solely by either the inmate code or the administrative code (Ramirez, 1984). Fry (1976, cited in Baxter, 1992) suggests that inmates may not like staff or institutions but that this does not mean that they like each other either (i.e., that cohesiveness exists among the inmates). In addition, opposition to staff does not imply opposition to all staff.

As the first alternate measure of prisonization, researchers examined the degree to which the inmate endorsed various elements of the inmate code. The focus remained, however, on the view that the inmate code and the administrative code were in opposition and mutually exclusive (Ramirez, 1984) and was measured as the extent to which the inmate adopted "an oppositional and hostile normative system", despite a shift in the

measurement instrument (Thomas & Zingraff, 1976). In fact, there is no empirical evidence that opposition to staff and inmate solidarity are correlated rather than orthogonal. Neither does there exist in prison a tug between inmate influence versus staff influence; the us versus them attitude is very different from observable behavior in the prison (Ramirez, 1984).

As early as Garabedian (1993 cited in Bukstel and Kilmann, 1980) it was suggested that opposition to staff is not necessarily the same as identification with the inmate code. In addition, Schwartz (1973) provided evidence that staff and inmates were most often not in conflict. Results also showed that the quality of inmate-staff relations makes more of a difference in accounting for some behavior than inmate-inmate relationships. Therefore, inmate-staff relationships are very important in adjustment to prison. Schwartz (1973) suggests that this data questions the "solidarity/opposition model" which hypothesizes that hostile relations with staff are related to identification into inmate groups and the

adoption of undesirable attitude and values. In fact, it was found that positive staff relations suppressed the undesirable effects originating from social relationships with other inmates because the two are positively correlated (Schwartz, 1973). According to Schwartz (1973) inmate-staff conflict is necessary for negative peer influence and under positive inmate-staff relations the negative peer influences are counterbalanced. With good inmate-staff relations an inmate is able to benefit from the positive aspects of close inmate ties (emotional support, sense of belonging etc.) contributing to high self-esteem while avoiding negative aspects (antisocial and procriminal sentiments; Baxter, 1992). Feld (1981) suggests that inmates' views of staff parallel staff members' views of inmates. That is, where staff show negative opinions of inmates (i.e. describe them as unreliable, abnormal, etc) the inmates show corresponding views of staff (i.e. they view them as untrustworthy, unhelpful, etc.).

Ramirez (1984) suggests that the problem with most

measures of prisonization is that they reflect a misinterpretation of Clemmer's (1940) initial conceptualization of the phenomenon. Prisonization was described as "the taking on in a greater or lesser degree of the folkways, mores, customs, and general culture of the penitentiary" (Clemmer, 1940, p. 199): This general culture includes staff as well as inmate interactions (Clemmer, 1940) but have been omitted in subsequent research.

The current research proposal adopts the tenet that identification with or acceptance of the inmate code does not necessarily imply complete rejection of or opposition to the administrative code, nor does it imply a strengthening of criminal sentiments. Within a social identity framework (see below), identification with the inmate code allows participation in a social peer group which may help the individual to maintain or re-establish a positive self-image while incarcerated. In turn, enhanced self-esteem may in some cases facilitate greater success in rehabilitation. Thus, it is assumed that adherence to the inmate code may have

beneficial as well as or instead of detrimental effects.

Social Identity Theory and the Inmate Code

Social Identity Theory stipulates that an individual's social identity is comprised of those aspects of an individual's self-concept that are derived from group membership, "along with the emotional, evaluative, and psychological correlates of membership in that group" (Tajfel, 1978, p.63). Social Identity Theory is based on the premise that all individuals strive to achieve a positive and congruent image of themselves. Insofar as an individual defines him/herself in terms of a given social group, that individual will be motivated to evaluate the group positively (Turner, 1984).

At any given time, an individual may belong to several social groups and membership in these groups is an integral part of the self-image, either positive or negative (Tajfel, 1978). Group membership determines social relationships with others, the attitudes and values that are subscribed to, and the social norms and

roles that serve as a guide for behavior (Turner, 1984). Social identity involves perceiving the self in terms of social status within the various social groups to which an individual belongs. By associating with other inmates, the inmate attains status within an identifiable group and a positive self-concept, if through conforming to the norms and values of the group that behavior is supported, admired, and reinforced by peers (Baxter, 1992).

When inmates interact in all aspects of their existence, a social order inevitably arises. The prison environment is, in essence, a "society within a society" (Sykes, 1958). Interactions that occur between inmates but not under the guidance of authorities may provide an important source of the inmate's social identity, giving the inmate a sense of some control over his environment. Inmates evolve their own code that controls these informal interactions so that they are not revealed to authorities (Goffman, 1961). Cressey (1961) suggests that adherence to the inmate code provides a way to

escape the devastating psychological effects that are endured when a person internalizes social rejection into self rejection.

In effect, the inmate is able to find support from those who are in a similar situation by being accepted in a new social group (Cohen & Taylor, 1981). The inmate is able to see himself as equal to or better than his fellow inmates (this is not the case with the wider social comparison group, to which he feels inferior) and therefore self-esteem is enhanced or maintained within the prison social relationships (Power & Beveridge, 1990).

Wheeler (1961) suggests that if the development of the inmate subculture is a response to specific problems imposed by a unique situation then members of this group may be insulated from lasting socialization effects. Adherence to the inmate code is a situational state -- a response to being incarcerated -- whereas a criminal identity is a relatively enduring trait that is also operative in the community. As a part of the inmate social group, the code guides behavior while

incarcerated, while not necessarily increasing antisocial beliefs. Therefore, it is possible for an inmate to exhibit strong adherence to the inmate code without increasing endorsement of criminal sentiments. Adherence to the inmate code gives the individual a sense of who he is and where he stands in the new social group: Achieving a positive and distinct social identity is not synonymous with attaining a criminal identity.

From this perspective, membership in the inmate group and adherence to the inmate code allows the inmate to maintain a positive self identity. The negative implications of adherence to the inmate code may include opposition to prosocial attitudes and increased adherence to procriminal values and attitudes. Positive effects, however, may include peer support, improved self-esteem, a more positive self-concept, and a reduced sense of isolation and rejection (Baxter, 1992). Therefore, the goal of prison authorities should not be to eliminate the inmate code as a means of enhancing rehabilitation; rather, efforts

should be directed toward swaying the influence of the inmates in a more favorable direction. Baxter (1992) suggests several ways that the institution might influence inmate adjustment in the favored direction: promoting prosocial views and discouraging procriminal attitudes (which includes monitoring staff attitudes and modelling influences, and a redefinition of behavior such as legitimizing informing as a collective responsibility rather than as betrayal of peers); promoting a positive view of the inmate with the possibility to change; ensuring consistent punishment and rewards; and encouraging outside ties to the community. Therefore, rather than prohibiting inmate informal interactions, the institution should attempt to influence the nature of these interactions so that the results are more positive. If the inmate maintains high self-esteem and a positive self concept, he may be better able to cope with imprisonment which may lead to greater success in rehabilitation.

What is self esteem?

One of the major variables examined in relation to prisonization or the inmate code has been self-esteem. Self-esteem is a hypothetical construct that is quantified by measuring attitudes toward and evaluations of the self. It is a person's overall evaluation of worth, value, and importance. Due to the subjective nature of self-esteem, it has been measured almost exclusively by self-report. Self-esteem has also been conceptualized as the discrepancy between the view of the actual self and the ideal self (Robinson, Shaver, & Wrightsman, 1991). Despite the great amount of research that has examined self-esteem, a clear consensus as to the definition of self-esteem is still not available (Robson, 1988). However, the wealth of information on self-esteem has suggested that low self-esteem is associated with a large number of undesirable or maladaptive traits (e.g. Robson, 1988).

An individual's self-concept refers to the system of concepts that the individual utilizes in defining a mental image of the self (Turner, 1984). The self-

concept is a broader term than self-esteem (although many researchers have used the terms interchangeably). Self-concepts may or may not influence self-esteem. For example, a person may believe that he is a terrible singer: This is part of that individual's self-concept but may not bear any relation to his/her overall sense of self-worth. On the other hand, if one is depressed because of one's inability to sing, then that is a matter of self-esteem (Robinson et al., 1991).

Past Research on Self Esteem and the Inmate Code

Research on self-esteem has been plagued with many problems, most notably problems of measurement and definition. The widespread everyday use of the term self-esteem promotes the belief that all researchers are measuring the same thing. In fact, different researchers have used different conceptualizations and measures of this variable (Robson, 1988). There are currently a multitude of self-esteem instruments in use, which leads to difficulty in comparing results across studies because of variations in the quality of many of the measures (Bennett, 1974a; Robinson, Shaver,

& Wrightsman, 1991; Robson, 1988; Tittle, 1972).

Previous studies of the effects of incarceration on self-esteem have yielded mixed and contradictory results. Some have found increases in self-esteem over the course of incarceration (Bennett, 1974a; Gendreau, Gibson, Surridge, & Hug, 1973; Power & Beveridge, 1990). Others have reported decreases (Heskin, Bolton, Smith, & Banister, 1974; Hepburn & Stratton, 1977; Fitchler, Zimmerman, & Moore, 1973) or U-shaped functions (Tittle, 1972). In addition, examination of self-concept showed that there were no significant changes over the course of incarceration (Culbertson, 1975). A reasonable conclusion is that incarceration in itself has no consistent effects on self-esteem and that self-esteem is determined more by what happens to the individual in the course of incarceration. Bonta and Gendreau (1992) in their review of the literature support the finding that sentence served is an insufficient predictor of prisonization.

The inmate code and self-esteem have been measured a variety of ways in relation to length and phase of

incarceration. Culbertson (1975) administered the Tennessee Self-Concept scale to 236 boys in an institution for juvenile offenders. Although this is a measure of the self-concept, which may or may not reflect an individual's self-esteem, the results are discussed here due to their contribution to the question of the role of length of incarceration in prisonization. This cross-sectional study found little change in self-concept for the total sample over the length of incarceration. When the data for those who had not previously been incarcerated was considered alone, there was a decrease in self-concept. However, this decrease accounted for only 4% of the total variance. For those who had been incarcerated once before, self-concept was lower than for first-timers at the beginning of their sentences, but higher than first-timers near the end. In contrast, those incarcerated two or more times showed a U-shaped function for self-concept over time. While this study used a measure of self-concept which has been shown to be both valid and reliable, it failed to consider

variables other than the length of incarceration as possible determinants of self-concept.

Heskin, Bolton, Smith, and Banister (1974) examined the psychological correlates of long-term imprisonment. The goal of the study was to examine the relationship between lengthy periods of incarceration and attitude change in 175 long term offenders. They used a version of the Semantic Differential, which requires the subject to choose adjectives arranged on a bipolar scale which the person feels best describes him. The results showed a decrease in self-evaluation associated with the length of imprisonment. Given that the psychometric properties of the instrument have not been evaluated these findings must be interpreted cautiously.

Gendreau, Gibson, Surridge, and Hug (1973) assessed self-esteem changes related to six months imprisonment. Self-esteem was measured by the Coopersmith SEI, the adjective checklist, and several scales of the MMPI. Results revealed a significant increase in self-esteem and fewer reports of depressive

symptoms. The prisonization theory that inmates are stripped of their self-confidence was not supported by the results of this study.

Moreover, it has been suggested that the relative phase of incarceration (i.e., the beginning, middle, or end of the current sentence) may be a better predictor of adjustment than the absolute length of incarceration. Bennett (1974a) administered the Self-Attitude Inventory to incoming offenders to examine changes in self-esteem as a function of phase of incarceration, and also to examine the relationship between self-esteem and adjustment. The test was then re-administered every six months over a two year period. The pattern that emerged was a progressive increase in mean self-esteem score for the group across six month intervals, although the increase diminished somewhat between the middle and late phase. However, individual subjects showed varying patterns: Eleven of the subjects showed an inverted-U function, eight showed a U-shaped function, fourteen showed an increasing slope, and six showed evidence of a

decreasing slope, indicating that there was no consistent pattern across individuals. Again, the suggestion is that what happens to an individual during incarceration may be much more significant than incarceration per se.

Power and Beveridge (1990) also examined changes in self-esteem over phase of incarceration with a longitudinal design which assessed thirty-two young offenders immediately following incarceration, during the mid-point of their sentence, and at the end of their sentence (usually after three months). Several measures of self-esteem were employed: Bennett's (1971) Self-Attitude Inventory, the Positive and Negative Self-Esteem Scale (War & Jackson, 1983), and Coopersmith's (1967) Behaviour Rating Form. Self-esteem increased significantly across phases of incarceration for all measures of self-esteem except the Negative Self-Esteem Scale, where the increase was not significant. There was a significant decrease in distress, hopelessness, and the number of minor institutional infractions while the expressed trust in

other inmates increased. There was no attempt to examine if there was a relationship between self-esteem, adjustment, and hopelessness: Rather, the focus was solely on how these variables relate to the phase of incarceration.

Tittle (1972) also examined self-esteem changes in relation to phase of incarceration. This study was conducted in a federal hospital serving volunteer and incarcerated narcotic addicts. Interviews were conducted with a representative sample consisting of 47 female volunteers, 44 female prisoners, 68 male volunteers, and 116 male prisoners. Self-esteem was measured by presenting the adjectives from the Twenty Statement Test (Kuhn & McPartland, 1954) and asking respondents to pick the words they felt were most descriptive of themselves (Kuhn and McPartland did not present validity data for this test, other than to state that the test-retest reliability was .85 for an unspecified group and time). Tittle reported that incarceration had a negative impact on self-esteem overall, with the proportion of males and females

reporting low self-esteem was greatest for those in the middle phase of incarceration. Tittle concluded, therefore, that self-esteem was lowest when the person was furthest removed from society (Tittle, 1972).

Fitchler, Zimmerman, and Moore (1973) examined self-esteem in prison and non-prison groups to determine whether incarceration per se resulted in lower self-esteem. The four groups examined were 60 newly arrived inmates, 64 maximum security inmates, 49 psychology students, and 54 church members. The non-offender groups included both males and females while the offenders were all male. The instrument used to measure self-esteem was the Butler-Haigh Self-Referent Test (Rogers & Dymond, 1954). This instrument was administered twice, once as a measure of the actual self and later to measure the ideal self. Self-esteem scores were defined in terms of the discrepancy between the two measures: the greater the discrepancy, the lower the self-esteem. The results showed that the maximum security prison group had the lowest self-esteem as defined in this manner, and the church group

had the highest. The psychology students and the newly-arrived prisoners did not differ significantly, although the scores for both these groups were higher than those in the maximum security group. The authors concluded that the new incarcerates retained their self-esteem because they had not been part of the system for a sufficiently long period of time. In support of this conclusion, they found a positive correlation between amount of time spent in prison and the discrepancy between the actual-self and the ideal-self, i.e., the longer the time spent in prison, the lower the self-esteem, according to their definition. However, real-ideal discrepancy scores have been criticized as a measure of self-esteem because of a large amount of error which reduces their reliability and validity (Hoge & McCarthy, 1983). Jacques and Chason (1977) also found that institutionalized individuals (either psychiatric or in maximum security) had lower self-esteem than all other groups examined (these included college students, city residents, black

residents, and service oriented professionals) as measured by the Rosenberg SES.

The contradictory results of the various studies focusing on phase or length of incarceration suggests that these variables cannot provide a sufficient explanation for variations in self-esteem among incarcerated offenders. It is more likely that variations in self-esteem are determined by what happens to the individual during incarceration. Thus, it is necessary to consider other factors which affect inmates during incarceration, such as the degree and nature of an individual's association with other inmates.

Hepburn and Stratton (1977) explored the issue of self-esteem further with 329 inmates. They used a 4-item Guttman scale to measure inmate solidarity based on the respondent's willingness to trust, share with, or sacrifice fellow inmates. Self-esteem was measured by the Semantic Differential (which as noted above remains invalidated). None of the variables examined (degree of commitment to the inmate social system or

post-prison expectations) had any significant effect on self-esteem, with the exception of orientation to a criminal reference group, which was only important in the early and middle phases. Because of the lack of validation of the measures one must again be cautious in accepting these results. Nonetheless, this study is an important step forward in research on self-esteem in prison, if only because it points to the need to consider more than simply length or phase of incarceration.

Mackenzie, Goodstein, and Blouin (1987) examined the relationship between perceived control and various measures of prisoner adjustment, which included a measure of self esteem. Control in prison can be regained by the offender in many ways, for example, through planning for the future, in opposing prison regulations, or being able to make personal decisions. Self-esteem was measured by the Rosenberg Self-Esteem Scale. Prisonization was measured by Thomas and Foster's (1972) prisonization scale, a very brief scale reflecting general attitudes and opposition to staff

and institutional goals. The variables of isolation, anxiety, depression, negative self-esteem, fear of victimization, and psychosomatic health were combined into a composite stress/anxiety variable. Inmates with greater perceived and expected control were found to exhibit fewer symptoms of distress, to harbor fewer anti-institutional attitudes, and to incur fewer major and minor misconducts than inmates who scored low on level of perceived control. These results suggest that with greater perceived control, the inmate experiences less stress, which includes fewer feelings of low self-esteem, and less stress is related to fewer misconducts and fewer anti-institutional attitudes. The results seem to suggest that self-esteem, inmate informal interactions, and number of misconducts may be related but there has as yet been no direct empirical test of this conclusion.

As long as imprisonment is the accepted way to deal with offenders, we must do our best to ensure that prison objectives are attained, i.e., inmate reform or rehabilitation. "These goals are not achieved if

incarceration reinforces procriminal attitudes and aggressive behaviour, if it impedes the development of coping mechanisms, or if it exacerbates psychological dysfunction. The rational use of imprisonment requires that we understand how individuals in the system are affected by it" (Porporino & Zamble, 1984).

Two scales will be used to assess inmate adjustment to incarceration, the Inmate Code Scale (ICS) and the Criminal Sentiments Scale (CSS). The ICS (Baxter, 1993) is a measure of adherence to the inmate code: As we have argued, this is a situational or state variable. Identification with the inmate code is a function of the 'situation' of being incarcerated. As a state variable the emphasis becomes on arranging the situation to effect positive change (Bennett, 1974b).

Fortin and Baxter (1992; cited in Baxter 1992) have argued that the presence of a criminal identity and the absence of a positive distinct alternative social identity that is noncriminal are necessary conditions for persistent criminality. Therefore, if there is a pre-existing positive and distinct

noncriminal social identity then association with antisocial peers will not result in the formation of a criminal identity. Under these conditions the person does not emerge as a persistent criminal.

The CSS (Andrews & Wormith, 1984), on the other hand, measures general criminal values and attitudes: These are durable traits which are also present in the community. Thus, the CSS reflects relatively enduring values, attitudes, beliefs, or character traits. Imprisonment forces the association of criminal others and thus an exposure to antisocial attitudes and values is inevitable. In fact past research has suggested that imprisonment is a place to strengthen and increase values associated with criminal behaviour. However, if this is indeed the case, and this is the way to deal with offenders, then research should focus on how the negative effects of imprisonment can be minimized (Bonta, & Gendreau, 1992). In fact, Bonta and Gendreau (1992) suggest that treatment programs which focus on attitude change are desirable. There is increasing evidence that criminal attitudes are associated with

criminal behaviour, and that treatment programs which target criminogenic needs (that is, those variables which have shown an association to criminal behaviour) have shown a reduction of recidivism (Bonta & Gendreau, 1992). It is reasonable to suggest that incarceration may consolidate procriminal attitudes which began when the offender belonged to a procriminal group in society (Bonta & Gendreau, 1992).

Thomas and Foster (1972) suggest that there are two main reasons that it is important to examine the inmate code: for a better understanding of the dynamics of the inmate group, and to examine whether the inmate code does indeed have an effect on behaviour both within and outside the prison environment.

Previous research has found that the CSS is related to delinquency/criminality and recidivism (e.g., Andrews, Wormith, & Kiessling, 1985). In contrast, there is no real evidence that identification with or adherence to the inmate code has any bearing on recidivism or general criminal propensity. However, because the ICS measures a situational state we might

expect a relationship between the ICS and institutional misconducts.

If we believe that the CSS is measuring a trait and the ICS as measuring a state variable, the CSS should predict recidivism but not institutional behaviour, while the ICS should predict institutional behaviour but not recidivism. Preliminary research (Baxter, unpublished data, 1993) suggests that the CSS and ICS are significantly but not highly correlated (i.e., $r = .40$). It is clearly visible that some of the factors that make up the general criminal code (such as don't inform on others; don't be weak etc.) are very similar to those which make up the inmate code.

The present research is a longitudinal design with repeated measures of self-esteem, criminal sentiments, and identification with the inmate code. The major questions to be tested are:

- (1) Is there, in fact, an association between self-esteem and identification with the inmate code?
And does this relationship change with increased

exposure to other inmates. Our hypothesis is that with high identification with the inmate code there will be increases in self-esteem, at least for inmates who initially exhibit low self-esteem.

- (2) How is identification with the inmate code related to general criminal sentiments? It is expected that there will be a significant correlation between inmate code adherence and criminal sentiments. However, because the two concepts are not identical, the correlation is not expected to be high.
- (3) What is the relation between opposition to staff and identification with other inmates?
- (4) How are identification with other inmates, and opposition to staff related to general institutional adjustment? It is hypothesized that there will be a relationship between misconducts and identification with the inmate code.

In addition, staff ratings of identification with the inmate code are collected to offer concurrent validity for the ICS scale. Finally, a number of

variables, including age, number of previous incarcerations, offence type, and treatment group ratings, will also be examined because they are potential sources of influence on the variables in the study.

Chapter 2

Method

Subjects

A total of 137 participants were approached in the assessment unit of the Rideau Correctional and Treatment Centre (R.C.T.C.) for participation in the study. The R.C.T.C. is a medium security provincial facility located in Merrickville, Ontario. Of those inmates approached, 122 agreed to complete the first session (the data from one subject was omitted because directions were not followed and scores for the scales could not be generated), 93 were available for participation in the study four weeks later and 63 were available to complete all three trials.

In total, 24 participants declined participation in the study (fifteen at the first trial; three the second; and six the third). The other inmates who were unable to participate in all three sessions were either no longer in the institution (twenty participants were paroled, reclassified, discharged, or moved to a halfway house) or could not be located at the four or

eight week period after being called two consecutive weeks (twenty nine participants could not be located, this was most often because participants were working, visiting, in programs, in court, or with other prison personnel and could not be located or removed from the activity for the purpose of participation in the study).

The mean age of the participants was twenty-nine with a range from eighteen to sixty-four. The majority were white (88.8%; attributable to the regionality of the inmate population), and had attained a mean educational level of grade 10 (with a range from grade 3 to 3 years post-secondary education). The average length of sentence being served by the participants was one year (373 days; minimum 120 days and maximum 770 days).

Apparatus

Self-esteem was measured by the Rosenberg Self-Esteem Scale (1965) and the Coopersmith Self-Esteem Inventory (1967). The Rosenberg Scale (SES) consists of 10 items, each rated on a four-point scale ranging

from "completely agree" to "completely disagree", which results in a score ranging from 10-40 (some later researchers have used five or seven-point scales). Higher scores indicate higher self-esteem. Although the original sample was a group of high school students, the SES has now been validated on adult samples. Over the past 25 years, the SES has become a standard against which other self-esteem measures have been evaluated (Robinson, Shaver, & Wrightsman, 1991). The validity and reliability of this scale have been well established (see Appendix A). Rosenberg (1965) viewed self-esteem as a global concept, a total sense of self-worth and social competence.

The adult version of the Coopersmith Self-Esteem Inventory (SEI) consists of twenty five items. Participants indicate whether the statements are 'like me' or 'unlike me'. Higher scores indicate higher self-esteem. The validity and reliability of this scale have also been well-established (see Appendix B). A score of 75-100 is considered a high or adequate score (Beer & Beer, 1992). Coopersmith defined self-

esteem as an evaluation of the self, based on feelings of capability, significance, success, and worth (Coopersmith, 1967, p.4).

The MMPI-2 was also used to provide some additional measures related to self-esteem. The LSE scale is one of the new MMPI-2 "content" scales, devised as measure of low self-esteem, with high scores indicating low self-esteem. Low scores on the K-scale may also be associated with low self-esteem, at least in part: High scores on this measure reflect rigidity and an inability to see fault in oneself, while low scores may reflect an overly negative or critical view of the self. Other scales which may reflect self-esteem are: the Coping/Resources scale (Es); the Assertiveness scale (Do); and the Confidence scale (Mf).

Identification with the inmate code was assessed with the Inmate Code Scale (Baxter, 1993; Appendix C). The ICS consists of 36 statements to which the participant responds on a five-point scale ranging from "strongly disagree" to "strongly agree". Three factors

have been identified in the ICS: (1) Opposition to Staff or Authority, (2) Solidarity with Other Inmates, and (3) Trust and Need for Affiliation. In addition scores reflecting Total Identification with the Inmate Code (opposition plus solidarity) and Total Susceptibility to the Inmate Code (opposition, solidarity, and trust/affiliation) are generated. As a concurrent measure, subjective ratings of overall identification with the inmate code, opposition to staff, and solidarity with other inmates were obtained from volunteer correctional officers for a subset of the current subjects. Identification with the inmate code can be differentiated from adherence to the inmate code in that the former is a measure of attitude and values, whereas, the latter is a measure of behavior.

Criminal attitudes and values were assessed by the Criminal Sentiments Scale (CSS: Andrews & Wormith, 1984; appendix D). The subscales of this scale are: Law, Courts, and Police (LCP), Tolerance for Law Violations (TLV), and Identification with Criminal Others (ICO). Several additional variables were also

collected including the number of misconducts and final progress ratings in treatment groups, coded from the institutional files. Misconducts are defined as a breach of institutional rules of conduct in the institution. Other variables were extracted from the institutional database including number of previous incarcerations, age, sentence length, offence type, juvenile record, and type of previous criminal behaviour. Three scale were also extracted from the database: CPI So scale which provides a measure of social conformity indicating the extent to which social values are excepted and internalized (Megargee, 1972); Pd-So index which combines the MMPI Pd scale and the CPI So scale to provide an index of psychopathic or general criminal tendencies (Heilbrun, 1979); and the LSI-IV which indicates risk (Andrews and Bonta, 1994).

Procedure

The MMPI, the Criminal Sentiments Scale, and the Inmate Code Scale are administered to the inmate as part of the standard assessment battery by a psychometrist, on admission into the Assessment Unit.

This battery also includes the Socialization Scale (So) from the California Psychological Inventory, the Level of Supervision Inventory (LSI-VI), and the Pd-So index. A week following the completion of the standard battery, the participants were asked by the researcher in the present study to volunteer to complete a further series of questionnaires (SES, SEI) and a retest of the ICS which took about 15 to 20 minutes. The ICS was re-administered to establish the test-retest reliability of the scale (i.e., prior to the beginning of any treatment programs).

The SES, SEI, ICS and CSS were then be re-administered four weeks later when participants had been transferred to the treatment unit. Finally, these measures were re-administered four weeks later near the end of the inmates stay on the Treatment Unit (i.e., eight weeks after initial testing on the Assessment Unit; the average stay on the unit is 6-8 weeks). Therefore, the four measures (SES, SEI, ICS, and CSS) were administered three times over an eight week period. Supplementary data was then collected from

patient files and from the institutional database.
Means and standard deviations (or frequencies) for all variables are presented in Appendix E, as well as, the scoring keys for all scales.

Chapter 3

Results

Psychometric Properties of the Inmate Code Scale

The first goal of the study was to establish the psychometric properties of the Inmate Code Scale (ICS). The Cronbach alpha measure of internal consistency was obtained from a data set of 1048 adult male offenders (this data was collected by Baxter 1993-1995) and was high for all scales of the ICS: Opposition to Staff or Authority scale $\alpha=.87$; Solidarity with Other Inmates scale $\alpha=.77$; Trust/Distrust and Affiliation Need scale $\alpha=.72$; Total Identification score $\alpha=.88$; Total Susceptibility score $\alpha=.79$.

The ICS is a relatively new scale, and therefore, the next step of the analysis was to establish the test-retest reliability of the scale. The correlation of the ICS over a one-week time span for 118 participants was $r=.72$, $p<.001$, for the Opposition Scale; $r=.70$, $p<.001$, for the Solidarity Scale, and $r=.50$, $p=.001$, for the Trust/Affiliation scale. The correlation for Total Identification with the Inmate

Code was $r=.77$, $p<.001$, and for Total Susceptibility the value was $r=.72$, $p<.001$. In addition, inter-correlations for the subscales of the ICS are presented in Appendix F.

Comparisons were also made between scores on the ICS at intake and subjective staff ratings of inmates. If the scale measures what it is supposed to measure, observable behaviour should correspond to scores on the scale. That is, if an inmate exhibits behaviours associated with high identification with the inmate code then the scale score should also be high. The majority of the correlations, however, were nonsignificant, possibly due to methodological problems discussed below. The correlations for staff ratings of overall inmate code identification and all ICS scales were nonsignificant, as were the correlations for staff ratings of solidarity versus ICS scores. The staff ratings of opposition, however, were correlated significantly with ICS Opposition, Solidarity, and Total Identification scores but not with the Trust/Affiliation scale. The correlations based on 89

participants were $r=.27$, $p<.01$ for Opposition; $r=.28$, $p<.01$ for solidarity; $r=.30$, $p<.01$ for Total Identification; and $r=.28$, $p<.01$ for total susceptibility. It seems reasonable to conclude that oppositional behaviour is more visible to untrained staff raters and therefore it was easier for the raters to evaluate this factor than to evaluate the degree of solidarity among inmates per se.

Criminal Traits and Attitudes

In order to examine further evidence regarding the psychometric properties of the ICS, the scale was correlated with several measures of criminal traits or attitudes/values. One of the major questions addressed here was whether there was an association between inmate code adherence and general criminal sentiments. Researchers have often suggested that incarceration leads to increased criminal sentiments or values, though this hypothesis has not been tested adequately by empirical means.

A significant correlation between the two variables was expected. However, the magnitude of the

correlation was not expected to be high, since the ICS scale was hypothesized to be measuring a different although somewhat related variable. The data for this analysis is based on all participants in the study as well as those subjects who declined participation (this data is available because the ICS is part of the intake procedure at the institution).

As hypothesized there was a significant relationship between identification with the inmate code and various measures of criminal traits and attitudes.

Insert table 1 here

The Trust/Affiliation scale, showed mixed results with some correlations significant (CPI-So, CSS-LCP, CSS-TLV) while others were not (MMPI-Pd, CSS-ICO, Pd-So). As can be seen in the Table 1, most of the correlations were moderate with the exception of the CSS-LCP and the CSS-TLV scales which had relatively high correlations. The correlations were positive for

the MMPI Pd scale (which measures antisocial attitudes), the CSS-TLV, CSS-ICO, and Pd-So index, whereas the correlations with the CPI-So and CSS-LCP were negative. These relationships suggest that inmates with higher scores on the ICS also showed increased evidence of criminal traits and values. In itself, this is perhaps not surprising, since the inmate code and the more general code of criminal conduct within the community appear to reflect similar attitudes and behaviours. Of great interest, however, is whether these criminal traits and values increase for inmates who show high identification with the inmate code (see below).

It was also possible to correlate the scores on the CSS and the ICS at the three testing sessions. The same relationships were found as at intake, that is, all scales showed significant correlations with other measures at that time period except in the case of the Trust/Affiliation scale. These relationships were negative for the CSS-LCP scale and positive for the

CSS-ICO and CSS-TLV scores and the majority of the correlations ranged from moderate to high.

Insert table 2 here

Previous Criminal Behaviour

ICS scores were also compared with measures of previous criminal behaviour and incarceration. There were few significant correlations between measures of previous criminal behavior (previous convictions, previous incarcerations, longest previous sentence) and ICS scores at intake. One exception was the Trust/Affiliation scale which showed a significant correlation with total number of previous incarcerations.

Insert table 3 here

For the most part, the nonsignificant relationships between previous criminal behavior and scores on the ICS scale were also true at the three

later testing periods. There were two exceptions, however: the number of previous incarcerations versus the Opposition scale, $r=.21$, $p=.02$ and total incarceration versus the Trust/Affiliation scale, $r=-.23$, $p<.01$, at time 1.

The presence of a juvenile record was positively correlated with several ICS scales at intake, though not significantly in the case of ICS scores at the later test periods. Having a juvenile record was also correlated with intake scores on the CSS but again not to the CSS scores at time 2 or 3: For the Identification with Criminal Others scale the correlation was $r=.16$, $p<.10$ (approaches significance); for the Law Courts and Police scale it was $r=-.20$, $p<.05$; and for Tolerance for Law Violations, $r=.19$, $p<.05$) at intake.

In summary then, it appears that ICS scores were unrelated to previous criminal behaviour, with the exception of a history of juvenile arrests, which was related to both ICS and CSS scores at intake.

Type of Criminal Behaviour

The ICS was then compared with measures of type of criminal behaviour (total property offences, total assault offences, total drug/alcohol offences, and total number of convictions). No significant correlations were found between ICS scores and any of these measures of criminal behaviour.

Insert table 4 here

Institutional Adjustment

Examining the relationship between ICS scores at intake and three measure of institutional misconduct (misconducts at R.C.T.C., pre R.C.T.C., and total number) revealed no significant correlations at intake. At the later time periods there were some significant correlations for number of misconducts and ICS scores. This data is based on the 63 participants who completed all three trials of the study. The Opposition scale showed the most consistent correlations. The Opposition scale was significantly correlated with RTC

misconducts at time 2, $r=.27$, $p=.05$, and time 3, $r=.27$, $p=.05$. At both of these times the correlation between total number of misconducts and the Opposition scale approached significance: at time 2, $r=.23$, $p<.10$; at time 3 the value is, $r=.21$, $p<.10$. The relationship between the Total Identification score and R.C.T.C. misconducts approaches significance at both times as well: time 2, $r=.24$, $p<.10$; at time 3, $r=.23$, $p<.10$.

There were several significant correlations for the number of misconducts versus the CSS.

Insert table 5 here

At intake there were significant correlations for the ICO and TLV scale of the CSS with total and R.C.T.C. misconducts. At time two total number of misconducts and R.C.T.C. misconducts are positively correlated with the TLV scale. At time three there are significant correlations for the ICO and TLV with the total number of misconducts, as well as the R.C.T.C. misconducts.

Overall, these results indicate a relationship between both general criminal values or attitudes and number of institutional misconducts, and also between identification with the inmate code and number of misconducts, especially opposition. Inmates with pro-criminal attitudes and values were more likely to have misconducts while in prison, and similarly inmates identifying more strongly with the inmate code were likely to incur misconducts. However, using a stepwise discriminant analysis procedure for groups based on no misconducts versus one or more misconducts, and including all CSS and ICS scores as independent variables, the only significant predictor of misconducts at R.C.T.C. was the ICS Opposition score at time 1, and this accounted for only 9% of the variance. For total number of misconducts, none of the CSS or ICS scores significantly predicted group membership.

The large amount of data obtained at intake also allowed an examination of other variables suggested by previous literature to be related to number of misconducts. There was a significant correlation

between sentence length and the number of misconducts pre-R.C.T.C., $r=.19$, $p<.05$, as well as the total number of misconducts $r=.20$, $p<.05$. No significant correlations were obtained for misconducts while at R.C.T.C. Similar relationships were found for juvenile arrest, however, the correlations only approached significance. The correlation between juvenile arrest and misconducts pre-R.C.T.C., and the total number of misconducts both approached significance, $r=.15$, $p<.10$. There were no significant correlations between education or age and number of misconducts.

Treatment Ratings

The previous literature has frequently suggested that association with other inmates will lead to poorer treatment outcome. On the other hand, in the present study it was hypothesized that this may not necessarily be the case. Therefore the relationship between the ICS scales and final treatment progress were examined. Treatment staff made the ratings without prior knowledge of score on the ICS.

There were significant correlations between ICS intake scores and the ratings of the addictions/relapse program. However, these correlations were negative (except for the Trust/Affiliation scale where the correlations were nonsignificant). The correlations between ICS scores and treatment ratings for the anger management group, and for 'other' groups were also not significant (note that these groups have smaller numbers).

Insert table 6 here

These results suggest that inmates who score lowest on the ICS at intake may do better in the addictions and relapse treatment programs as measured by the final treatment rating.

However, it was also possible to examine the relationship between treatment ratings and later ICS scores especially those obtained at the four and eight week period, which were usually at a point where the inmate was in treatment or had just completed a

treatment program. However, only one ICS scale, the Solidarity scale at week 4, showed a significant correlation with group rating for the addictions and relapse program, $r = -.2540$, $p < .05$. The correlations for all other treatment ratings and ICS scales were not significant.

There were no significant correlations between treatment group ratings and several other variables examined including: number of misconducts, self-esteem scores on three measures, age, or LSI total scores. The only significant correlation between treatment group progress ratings and the CSS was for the LCP scale at intake and the addictions/relapse group.

Self-Esteem

One of the major questions to be addressed in this study was whether there was in fact an association between self-esteem and identification with the inmate code. The longitudinal repeated measures design allowed an examination of whether this relationship changed over the course of incarceration with high identification with the inmate code. It was

hypothesized that high identification with the inmate code would be associated with subsequent increases in self-esteem, at least for inmates who initially exhibited low self-esteem.

Previous research has shown mixed results concerning self-esteem due largely to problems in measurement and conceptualization of the term "self-esteem". The first step was therefore to establish the correlation between the various self-esteem measures to evaluate their concurrent validities. Indeed, the correlations were significant and relatively high for all of the present measures of self-esteem. For the Rosenberg SES, the following correlations were obtained: Coopersmith SEI: $r=.67$; MMPI Lse: $r=-.60$; MMPI Es: $r=.39$; MMPI Do: $r=.35$; and MMPI K: $r=.37$ all significant at $p<.05$. For the Coopersmith SEI, the following correlations were found: MMPI LSE: $r=-.79$; MMPI Es: $r=.60$; MMPI Do: $r=.54$; and MMPI K: $r=.55$ (all significant at the .05 level). For the MMPI Lse the following correlations were obtained: MMPI Es: $r=-.71$, MMPI Do: $r=-.61$, and MMPI K: $r=-.67$. For the MMPI ES

correlations were: MMPI Do: $r=.66$, and MMPI K: $r=.67$. Finally, the correlation for the MMPI Do and the MMPI K scale was $r=.57$. The highest correlations were for the Coopersmith SEI, the Rosenberg SES, and the MMPI LSE. This is reasonable given that these scales were designed as direct measures of self-esteem while the remaining MMPI scales appear to be related to self-esteem but were not designed originally to be direct measures of self-esteem.

Next, the relationship between the self-esteem measures and the ICS scales at intake were examined (the Rosenberg and Coopersmith were not administered until week one). The results show that the majority of the correlations were significant.

Insert table 7 here

The majority of the relationships were also negative, i.e., lower self-esteem was associated with higher ICS scores at intake. There were two exceptions, however: first, the Trust-Affiliation scale

shows positive relationships with self-esteem. The LSE also exhibited positive correlations, however, on this scale a high score indicates low self-esteem, therefore, we have further evidence an association between low self-esteem and inmate code adherence at entrance into the institution.

The relationship between identification with the inmate code and self-esteem was also examined at each of the 3 later testing sessions. The participants filled out two self-esteem questionnaires (the Rosenberg SES and the Coopersmith SEI) and the ICS after one week, four weeks, and eight weeks at RCTC.

At time one, both Coopersmith and Rosenberg self-esteem scores were negatively correlated with ICS scores except for Trust/Affiliation scores, where the correlation was not significant.

Insert table 8 here

At time two, after four weeks, similar results were obtained, except that the correlation for

solidarity was not significant.

Insert table 9 here

At time 3, after eight weeks, there were similar results for the Rosenberg SES. However, none of the correlations between the Coopersmith SEI and the ICS were significant.

Insert table 10 here

In summary, the Rosenberg SES was negatively correlated with ICS scores at all three time periods (with the exception of the Trust/Affiliation scale and the Solidarity scale at time 2). Similar findings were observed with the Coopersmith SEI scale at time one and four but not at week eight.

Overall, the results suggest that there is an inverse relationship between self-esteem and scores on the Inmate Code Scale: Inmates with higher self-esteem exhibit lower identification with the inmate code.

Similar results were found for the relationship between self-esteem and the CSS. At intake there are significant inverse correlations between self-esteem and all scales of the ICS, indicating that inmates with lower self-esteem tend to score higher on measures of criminal attitudes and values.

Insert Table 11 here

Similar relationships are found for time two between all scales of the CSS and the Coopersmith SEI both measured at that time period: for the ICO scale, $r = -.36$, $p < .001$; the LCP scale, $r = .23$, $p < .05$; and for the TLV scale, $r = -.28$, $p < .01$. The relationships at time three, however, are not significant ($r = -.22$, $p < .10$; $r = .11$; and $r = -.22$, $p < .10$, respectively).

For the Rosenberg SES, there are significant inverse relationships at both time two and time three, indicating that high criminal sentiments scores are related to low scores on self-esteem. At time two: for the relationship with the ICO scale, $r = -.39$, $p < .001$;

LCP, $r=.34$, $p<.001$; and TLV, $r=-.39$, $p<.001$. At time three the correlations are: ICO, $r=-.32$, $p<.05$; LCP, $r=.58$, $p<.001$; and TLV, $r=-.51$, $p<.001$.

Longitudinal Design

In addition to an examination of the correlations between adherence to the inmate code, criminal sentiments, and self-esteem at each time period, the longitudinal design also allowed the examination of covariance over time among these variables.

Two questions were addressed in this series of analyses: The first was the question of whether there were changes in self-esteem over the three time periods regardless of any changes in inmate code scores. More specifically, the question was do inmates who initially show high inmate code scores show subsequent increases in their self-esteem?. This was assessed in two ways: first, by correlating initial ICS scores with the measures of self-esteem taken at the three time periods, and by Chi-Square analysis to see if inmates who initially show high identification with the inmate code show an increase in self-esteem.

The second question involved whether low self-esteem groups show increased self-esteem with increased exposure to the inmate code? This analysis utilized a factorial ANOVA and multiple classification analysis to determine whether there was a difference in self-esteem for inmates who changed from low to high adherence, versus those who went from high to low adherence versus those who remained low or high.

The subjects were divided into high and low adherence groups based on the median for each scale of the inmate code at each time period.

Correlation between initial Identification with the Inmate Code scores and Self-esteem measures taken at the three time periods

For this analysis, the initial ICS scores were correlated with the measures of self-esteem at each of the three time periods.

Insert table 11 here

The Coopersmith Self-Esteem Inventory did not correlate significantly with any of the ICS scales for subjects who completed all three trials. However, as noted above, when all participants were included, there was a negative correlation between self-esteem and ICS scores at intake, as well as at the other three time periods. The effect sizes although significant were relatively small, and this may explain why there were no significant results for the smaller number of subjects. The Trust/Affiliation scale was not significantly correlated with any of the measures of self-esteem.

The Rosenberg Self-Esteem scale showed significant negative correlations with the ICS scores at time one and three, the correlations were not significant at time two.

A similar analysis was undertaken to examine the relationship between the initial scores for identification with the inmate code and score on the criminal sentiment scale at the three time periods.

Previous research has suggested that inmates who identify strongly with the inmate code tend to exhibit increased pro-criminal attitudes over the course of incarceration. High correlations were indeed found for initial intake scores on the CSS and intake ICS, but the magnitude of these correlations decreased over the three time periods. In fact the correlations at time 3 for the CSS-TLV and CSS-ICO were no longer significant.

Insert table 12 here

There were no significant correlations between the Trust/Affiliation scale and CSS scores.

Chi-Square Analysis of change in self-esteem in relation to initial scores on the ICS.

The major prediction was that high identification with the inmate code should be associated with increases in self-esteem, at least for those who initially exhibit evidence of low self-esteem. We are not examining changes in both identification with the inmate code and self-esteem (as in the analysis below)

but rather changes in self-esteem in relation to initial scores on the ICS.

The participants were divided into low and high scoring groups on the ICS for each scale based on the median for that scale. These groups were compared in relation to change in self-esteem for all time periods for both the Coopersmith SEI and Rosenberg SES. We predict that inmates who scored high on the ICS initially, will have the highest percentage of inmates who show increases in self-esteem, and that for inmates who initially scored low on the ICS the greatest percentage would either show no change or a decrease.

There was only one significant chi-square. This was for the Solidarity scale and the change in self-esteem as measured by the SES between time one and two, $\chi^2=6.52$, $p<.05$. In the low scoring group, 39.5% showed lower self-esteem, 34.2% showed no change, and 26.3% showed an increase. In comparison, of the inmates who had high identification with the inmate code, 38% showed decreased self-esteem, 14% no change, and 48% increases.

Chi-square analyses were also undertaken with change in CSS scales based on high and low initial scores for identification with the inmate code. There were three significant relationships, and surprisingly these were for the Trust/Affiliation scale. The majority of inmates who had low scores on the Trust/Affiliation scale did not show changes in their CSS TLV between time two and time three scores (69% vs 26% decrease, 13% increase). Similarly, the majority of high scoring inmates showed no change (52.9% vs 8.8% decreases, and 38.2% increases; $\chi^2=5.844$, $p<.05$). For the CSS TLV between time 1 and 3 the majority of low scoring inmates either showed decreases (40%) or no change in criminal sentiments (44% vs 16% who showed increases; $\chi^2=6.98$, $p<.05$). For high scoring inmates the majority showed no changes (57.1% vs 11.4% decreases, and 31.4% who showed increases). The final significant chi-square ($\chi^2=7.06$; $p<.05$) for the Trust/Affiliation scale was with the ICO between time 1 and time 3; the majority of low scoring inmates showed decreases (44%) or no change (40% vs. 16% who showed

increases). For high scoring inmates the majority showed no change (51.4% vs 14.3% showing decreases, and 34.3% increases).

Relationship between mean self-esteem change scores and mean changes in identification with the inmate code

To further examine the relationship between self-esteem and the inmate code, a factorial ANOVA was used to examine the relationship between change in ICS scores (median split) for each time period and changes in Coopersmith SEI and Rosenberg SES scores.

One of the main effects was statistically significant: main effect of Opposition at time 3 on Rosenberg SES change scores between time one and time 3, $F(3,54)=5.627$, $p<.05$ (mean change in self-esteem for low scoring inmates on Opposition at time 3 was -1.04 and for the high scoring inmates was $.31$). The interaction between Solidarity and change in Coopersmith Self-Esteem between time one and time two was significant; $F=4.462$, $p<.05$. All groups changed in the negative direction, however, the most significant changes were for the groups who changed

'identification' groups from time one to time two. That is inmates whose identification with the inmate code went from low to high showed a change of -14.40 (n=10); and inmates who went from high to low identification showed a change of -14.50 (n=8) for self-esteem as measured by the Coopersmith SEI. For inmates who remained low the change was -4.50 (n=16) and for those who remained high in identification with the inmate code there was a change of -3.67 (n=24).

Similar to the analysis done for self-esteem, the CSS and ICS were compared using a factorial ANOVA to see if changes in one scale relate to changes in the other. The subjects were divided into groups based on low versus high ICS subscales (median division).

Significant main effects were found for: the Solidarity scale at time 1 and CSS-ICO change scores between time 1 and 2, $F(3,82)=4.133$, $p<.05$ (inmates who scored low on the solidarity scale showed a change of -2.89; high scoring inmates showed a change of 1.33). Several main effects were found for changes in the CSS between time 1 and 3 and scales of the ICS: Opposition

scale at time 1 and change in the ICO, $F(3,56)=4.047$, $p<.05$ (change for low scoring inmates was -1.28, and for high was 1.58); and the TLV, $F(3,56)=5.695$, $p<.05$ (low -1.83; high 1.52); Opposition scale at time 3 and change in ICO, $F(3,56)=5.158$, $p<.05$ (low 2.30; high -1.52); and the TLV, $F(3,56)=7.394$, $p<.01$ (low 2.41; high -2.15); Trust/Affiliation time 1 and ICO, $F(3,56)=6.723$, $p<.05$ (low -3.26; high 2.74); and the TLV scale at the same time period, $F(3,56)=6.028$, $p<.05$ (low -3.68; high 2.46); the Total Susceptibility Score and ICO, $F(3,56)=4.329$, $p<.05$ (low -2.60; high 1.69); and the Total Identification scale at time 1; $F=4.340$, $p<.05$ (low -1.93; high 1.73); and at time 3; $F=5.071$, $p<.05$ (low 2.14; high -2.06).

For changes in the CSS between time 2 and 3, significant main effects were found for: Opposition at time 2 and LCP, $F(3,56)=6.542$, $p<.05$ (low -.75; high -3.10); and TLV, $F(3,56)=5.753$, $p<.05$ (low -1.89; high 3.29); Opposition at time 3 and LCP, $F(3,56)=9.980$, $p<..01$ (low -4.15; high -.16); Total Identification time 2 and LCP, $F(3,56)=6.071$, $p<.05$ (low -1.30; high -

2.69); and Total Identification time 3 and LCP,
 $F(3,56)=9.345$, $p=.01$ (low -3.79; high -.35).

There were two significant interactions in this grouping, for the ICO and Opposition changes between time 2 and time 3, $F(3,56)=6.250$, $p<.05$ (low-low -3.79; low-high 2.67; high-low 5.38; and high-high .65); and TLV and Solidarity for the same time period, $F(3,56)=9.647$, $p<.01$.

Other variables related to ICS Scores

The five ICS scores at intake were significantly correlated with several offender demographic variables. For the Total Identification Score the following correlations were significant: age, $r=-.18$, $p<.05$ (correlations with age and education partialled out revealed few significant changes for the relationship of the ICS and other variables), education, $r=-.22$, $p<.01$, time remaining to probable release date at admission, $r=-.23$, $p<.01$, length of sentence $r=-.19$, $p<.05$, and employment status at admission, $r=-.19$, $p<.05$. For the Total Susceptibility score, the following correlations were significant: time left in

sentence before probable release date, $r = -.19$, $p < .05$; and length of sentence, $r = -.18$, $p < .05$. Several other variables approached significance: age, $r = -.17$, $p = .10$; education, $r = -.15$, $p = .10$; and employment status at admission $r = -.15$, $p = .10$.

None of the demographic variables were significantly correlated with the Trust/Affiliation scale. The Opposition scale, however, was significantly correlated with: age, $r = -.17$, $p < .05$; education, $r = -.25$, $p < .01$; days to discharge probable date at admission, $r = -.24$, $p < .01$; and sentence length, $r = -.19$, $p < .05$. Similarly, the Solidarity scale was significantly correlated with: age, $r = -.16$, $p < .10$ (approached significance); days to probable release date, $r = -.18$, $p < .05$; sentence length, $r = -.16$, $p < .10$ (approached significance); and employment status at admit, $r = -.20$, $p < .05$.

Characteristics of the subjects declining participation in the study

It was possible to examine various characteristics of the subjects who declined to participate in the

study because of the data that had been collected at intake and was available on the institutional database. Four groups were compared on several variables using a one-way ANOVA and Scheffe Multiple Comparison Technique to test for significant differences among the groups. The four groups compared were those who declined (n=24), those who were no longer in the institution to complete the study (n=20), those who could not be located (n=29), and finally, those who completed all three trials (n=63). There were no significant differences among the four groups for age, education, number of misconducts (pre-RTC, RTC, and total), CSS or ICS scores at intake, juvenile arrest, longest previous sentence, or employment history (ever fired, never employed one year, or frequently unemployed).

Three of the LSI subscales showed significant differences among the groups: Discharged subjects had lower Companions scores than those completing all three trials, $F(3,132)=3.8497$, $p<.01$; discharged subjects also had lower Criminal History scores, $F(3,132)=6.20$, $p<.001$ and Total scores, $F(3,132)=4.0771$, $p<.01$ then

inmates who completed all three trials or who were not available. All other LSI scores did not indicate significant differences between the four groups. Since the LSI is an assessment of recidivism risk, it is reasonable that those who were released earlier than the others had lower LSI scores than those who were denied parole or those who remained in the institution. Most importantly, the group that declined participation in this study were not significantly different from the other groups in their LSI scores.

The majority of the MMPI scores also showed no significant differences among groups, including those related to self-esteem and self-efficacy (K, LSE, Es, Do, Mf). The two scales which showed significant differences were the Cynicism scale, $F(3,131)=3.5763$, $p<.05$ (there were no significant Scheffe's; an examination of the means reveals that those who were discharged and those who declined had the lowest means), and there was also a significant difference in means for those who were discharged and those who

completed all three study trials on the MAC scale (addictions risk scale), $F(3,131)=3.5910$, $p<.05$.

Finally, significant differences were found for sentence length, $F(3,132)=2.6488$, $p<.05$ (no Scheffe's were significant, however, the smallest sentence lengths were for the group who declined, and for those who were discharged, followed by the group who could not be located. The longest sentence length was for the group who completed all three trials), and previous convictions, $F(3,128)=3.8711$, $p<.01$. The group who were discharged had fewer previous convictions (4.9) than the group who declined (19.37). These differences are reasonable given that those who are discharged earlier likely had shorter sentences, and number of previous convictions likely affected the sentence that the offender received.

Chapter 4

Discussion

Psychometric Properties of the Inmate Code Scale

The first goal of the study was to establish the psychometric properties of the Inmate Code Scale. This is important for several reasons, particularly because of the methodological problems which have plagued the previous research in this area. The ICS scale conceptualizes the inmate code somewhat differently than previous research which has often operationalized adherence to the inmate code as opposition to staff alone. The Cronbach alphas for all scales of the ICS were high (all above .72) suggesting that the ICS has high internal consistency. The test-retest reliability over a one-week period was relatively high and significant for all scales of the ICS (with the exception of the trust/affiliation scale, all scales yielded correlation coefficients above $r=.70$).

The present attempt to provide concurrent validation of the ICS by correlating test scores

with subjective staff ratings of opposition, solidarity, and overall adherence to the inmate code (on a 5 point scale) was somewhat problematic. The rating of opposition by staff correlated significantly with all scales of the ICS except the Trust/Affiliation scale. However, staff ratings of solidarity and adherence to the inmate code were not correlated with any ICS scales. In speaking with staff and reviewing the ratings given by various staff members it appears that the methodology used to obtain these ratings was somewhat problematic. First, separate staff ratings for individual inmates over short time periods were very inconsistent indicating low inter-rater reliability. In addition, several staff members indicated confusion or ambiguity regarding the rating scales. Finally, several staff members questioned their ability to make such a judgement after the inmate had only been in the assessment unit for one-week. Therefore, the results must be interpreted cautiously. It seems reasonable to conclude that oppositional behavior by inmates may be more visible and pertinent

to the staff, making this behavior easier to evaluate over a short time period than inmate solidarity.

Criminal Traits and Attitudes

Although it was hypothesized that there would be a significant correlation between ICS scores and measures of general criminal attitudes, it was expected that the magnitude of the correlation coefficient would be only moderate. Since the elements that comprise the inmate code are similar in several respects to those which would make up the code for general criminal behaviour in our society, we would expect some relationship between the two variables. However, since the inmate code is in effect a situational variable not everyone who identifies with or endorses the inmate code is necessarily pro-criminal in terms of general attitudes, so this should limit the size of the correlation. Several scales were available to test these hypotheses: MMPI-Pd scale, CPI-So, all scales of the CSS, and the Pd-So index.

The majority of the correlations were indeed significant, the exception again being the

Trust/Affiliation scale, which was not significantly correlated with the MMPI-Pd scale, the CSS-ICO scale, and the Pd-So index. For the most part the significant correlations were only moderate, as expected. Some of the CSS scales, however, showed relatively high correlations with the ICS. Similar results were found for all time periods, indicating that the relationship between identification with the inmate code and general criminal sentiments is reliable and persistent: Those with higher ICS scores also had higher CSS scores. However, this finding does not directly address the question of whether increased exposure to the inmate code is related to any consistent changes in criminal traits and values (see below).

Previous Criminal Behavior

The relationships between the ICS scores and measures of previous criminal behaviour (previous convictions, previous incarcerations, longest previous sentence, and juvenile arrests) were also examined. However, previous incarcerations did not increase

adherence to the inmate code as had been suggested in previous research. As noted, however, previous research has generally conceptualized the inmate code solely in terms of opposition to staff. Nonetheless, even in the case of the Opposition scale there was not a significant correlation with measures of previous incarceration.

The one exception was the presence of a juvenile criminal record. This variable was significantly correlated with the Opposition scale, Total Identification score, and the Total Susceptibility score at intake. This indicates that inmates with juvenile arrests obtained higher scores on the inmate code scale, perhaps indicating a more habitual criminal behavior pattern. In support of this, a significant correlation was also found between juvenile arrests and CSS scores, although only in the case of intake scores.

Type of Criminal Behavior

An examination of the relationship between ICS scores and measures of criminal behaviour revealed no significant correlations. Included among these

variables were total number of property offences, total number of assaults, total number of alcohol/drug offences, and total number of convictions. The lack of any relationship between these variables and the ICS may indicate that all types of offenders, regardless of type or extent of criminal activity, may participate in or cooperate to some degree with the inmate code. Alternatively, it may also be taken as evidence that identification with the inmate code is not identical to criminal behavior per se.

In summary, ICS scores were significantly correlated with measures of criminal attitudes and values, but not with measures of previous or current criminal behavior.

Institutional Adjustment

As one of the major factors in the overall institutional climate, the inmate code would be expected to have an effect on institutional adjustment or conduct. In the present study significant correlations were found between misconducts and the opposition and total identification scale at time 2 and

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time 3. The relationship with the Opposition scale is not surprising, given that it indicates that those who are most oppositional toward staff and authority figures incur the greatest number of misconducts. This finding tends to confirm those of previous studies suggesting a relationship between the inmate code and misconducts. In past research, identification with the inmate code was most frequently defined as opposition to staff (e.g., Thomas, 1973; Wright, 1993) and in the present study there was indeed a relationship between number of misconducts and the Opposition scale in the later time periods. The CSS was also significantly correlated with misconducts, especially in the case of the Identification with Criminal Others scale.

The measurement of the number of misconducts, however, is difficult to assess. The recording of a breach of institutional rules is highly dependent on staff members. Some staff are more quick to issue a misconduct, while others will simply warn the inmate before official actions are taken. In addition, certain staff are more likely to elicit negative

behavior from certain inmates increasing the number of misconducts that they report. Reporting of misconducts, therefore, is highly variable, and may not accurately reflect institutional adjustment.

Several other variables have been previously hypothesized to be related to institutional misconducts. For example, Porporino and Zamble (1984) found fewer disciplinary infractions for those with more education and longer sentences, while inmates with juvenile criminal records had more disciplinary infractions. The present results suggest a fairly strong relationship between ICS scores and juvenile record, while the correlations between juvenile arrest record and total number of misconducts, or misconducts pre-R.C.T.C. approached statistical significance. Pre-R.C.T.C. misconducts and total number of misconduct were also correlated significantly with length of sentence, with inmates serving longer sentences having a greater number of misconducts. However, contrary to Porporino and Zamble, no significant relationship was found between educational level and misconducts.

Treatment Group Ratings

Previous research on prisonization has generally accepted the hypothesis that internalization of the values inherent in the inmate code were incompatible with or antagonistic to rehabilitation. The present study, therefore, examined whether there was any relationship between final progress ratings for treatment groups and identification with the inmate code. The ratings for three types of treatment groups were available: addictions/relapse, anger management, and "other" treatment groups. There were significant negative correlations between final treatment ratings for the addictions/relapse program and ICS scores, indicating that inmates with lower ICS scores at intake tended to do better in this group. However, there was no significant relationship between later measurements of the ICS and final treatment ratings, except in the case of the Solidarity scale at week 4.

Treatment group ratings were not related to the number of misconducts, age, self-esteem, or LSI-total scores. The CSS showed only one significant

relationship: between the LCP scale and the addictions/relapse group at time one.

This data suggests that those who score highest on the ICS at intake might have special or additional needs which should be targeted in order to increase participation and performance in groups (at least in the additions/relapse group). In addition, the results indicate that at later time periods inmate relationships are not detrimental to treatment and rehabilitation goals. In fact, it is entirely possible that identification with the inmate code may even be beneficial to rehabilitation if it serves to increase self-esteem.

Self-Esteem

Past research on self-esteem has yielded mixed and contradictory results. A review of the literature suggests that this is in part due to a reliance on length or phase of incarceration as a primary independent variable. On the other hand, it is suggested that what happens to an individual during incarceration is more important than length or phase of

incarceration per se. Past research has also suffered from numerous methodological inadequacies especially with the measures of self-esteem. In the present study correlations for the different self-esteem measures were high and significant contributing evidence to their psychometric validity. This was especially high for the scales which were specifically designed as a direct measure of self-esteem (while the other scales are related to self-esteem, they are not direct measures of this variable).

High negative correlations were found between ICS scores at intake and self-esteem, indicating that inmates with lower self-esteem had higher ICS scores and vice versa. This relationship held true at all time periods. This finding can be interpreted in several ways: it may be that those who have high self-esteem have less need for the sense of group membership that may accompany identification with the inmate code than those with low self-esteem. That is, high self-esteem inmates may not need to rely on group belongingness in order to cope with imprisonment.

Rather, it seems to be those with low self-esteem who seek out and identify more strongly with other inmates and follow the inmate code more strongly.

However, in the present study, self-esteem and identification with the inmate code did not in any systematic way covary over the three time periods so that changes in ICS scores or initial scores on the ICS did not necessarily correspond to changes in self-esteem. This may indicate that although inmates with low self-esteem are more likely to have high ICS scores, identification with the inmate code does not in itself necessarily lead to improvements in self-esteem. In other words, the motivation for strong identification with the inmate code seems to derive from problems with self-esteem, even though such identification with other inmates is not in fact a solution to problems with self-esteem. Similarly, there were few significant interactions for the change in CSS scores compared changes in ICS scores.

A variety of other variables were also examined for their relationship to identification with the

inmate code. There were no significant correlations for the Trust/Affiliation scale. However, there were several significant correlations for the other ICS scales. As suggested in previous research age was negatively correlated with ICS scores with younger inmates being more likely to have high scores on the ICS. This was also the case for inmates with less education (there was no correlation, however, between education and the Susceptibility scale).

There was also a significant negative correlation between three of the ICS scores and sentence length as well as days to probable release date at admission: Inmates with shorter sentences and less time remaining in their sentence showed higher ICS scores.

Implications for institutional practice and future research

As we have seen, identification with the inmate code may have both negative and positive effects on inmate adjustment. Strong identification with the inmate code is related to a greater number of institutional misconducts, but does not appear to be

related to treatment group ratings after intake. At intake, however, the present results suggests that the ICS may be useful in identifying a group with special treatment needs: that is, those who have high intake scores on the ICS tend to do more poorly in treatment, but if some effort is spent on encouraging their participation in groups they are able to respond to treatment interventions later on. In addition, the only significant predictor of misconducts was the opposition scale at time 1, which accounted for a small amount of the variance.

At this stage of the research our goal should be to integrate what we have found out about the inmate code with the treatment programs to make them more effective or to control for the effects that other inmates have on the progress of inmates in the institution (Baxter, 1992).

In essence, the results of the study suggest that inmates who show evidence of high identification with the inmate code also show the following: High criminal sentiments, more likely a juvenile record, more

misconducts, lower success in at least some treatment (based on initial ICS and the addictions/relapse group), lower self-esteem, are younger, less educated, have shorter sentences, and less time remaining in their sentence.

Summary

The present study was an attempt to clarify the process of identification with the inmate code and the major correlates and determinants of this process. The results show that:

(1) There is a significant relationship between general criminal attitudes and values and inmate code identification. This is not surprising given that there is some overlap between the elements of the inmate code and elements of the general code governing criminal conduct. There was also a significant correlation between identification with the inmate code and the presence of a juvenile criminal record, consistent with previous research. No significant relationship was found with other measures of previous criminal behavior.

(2) There is a significant negative correlation between self-esteem and identification with the inmate code.

This finding suggests that inmates with low self-esteem are more likely to exhibit strong identification with the inmate code on admission, though such identification does not necessarily lead to later improvements in self-esteem.

(3) Identification with the inmate code does not necessarily have negative implications for rehabilitation, as has been suggested by previous research. In fact in the present study there was no relationship between treatment group ratings and scores on the ICS except for intake ICS scores only for one of the groups examined.

(4) There is a significant relationship between identification with the inmate code and institutional misconducts. At later time periods this was especially true for the Opposition scale and Total Identification score. There was also a significant correlation between CSS scores (general criminal attitudes) and misconducts, but not between treatment ratings and

misconducts.

(5) There was a significant negative correlation between ICS scores at intake and age, education, sentence length, and days to probable release.

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APPENDIX A

Rosenberg (1965)	n=5024 high schoolers	Discriminant Validity	4% with highest self- esteem scores and 80% with lowest were highly depressed
		Convergent Validity	Negative correlation with depression $r=-$.30; and anxiety $r=-$.48
Hoge & McCarthy (1983)	n varies from 873-1038 high schoolers	Reliability (correlation of each score with itself 1 year later)	.57
		Cronbach alpha (internal consistency)	Year 1 = .74 Year 2 = .78
Silber & Tippett (cited in Robinson, 1970)	college students	Test-Retest reliability (2 weeks)	.85
Robinson (1970)	n=185 undergrad	Convergent Validity (with Beck Depression Inventory)	$r= -.24$, $p<.01$

Wilson & Lavelle (1990)	n=77 University students	Convergent Validity	Inter-correlations between loneliness, depression, low self-esteem, and anxiety ranged from .32 to .58 and were sign. $p's < .01$.
Shapurian, Hojat, & Nayerahmadi, (1987)	n=232 U.S. students and n=305 Iranian students	Item-Total Score Correlation	range .36 to .73 $p < .01$
		Alpha Reliabilities	.82 and .83
	n=29	Test-Retest Reliability (3 weeks)	.84
		Concurrent Validity	loneliness $r = -.43$
			depression $r = -.48$
		Factor Analysis	Unidimensional One factor accounted for 70% of the variance
Beck, Steer, Epstein, & Brown, (1990)	n=110 patients admitted to a cognitive therapy unit	Concurrent Validity	Correlation between low self-esteem and the Beck Depression Inventory = .51 ($p < .001$)

Westaway, & Wolmarans, (1992)	n=100 tuberculosis patients	Coefficient Alpha	.78
		Item-Total Correlation	r's range from .49 to .77
		Convergent Validity	r= -.54 with Beck Depression Inventory

Table 1: Reliability and Validity data for the Rosenberg
Self-Esteem Scale

APPENDIX B

Coopersmith (1967)*	n=30 fifth graders	Test-Retest Reliability	.88 (5 weeks)
	n=56 fifth graders	Test-Retest Reliability	.70 (3 years)
Ryden (1978)	n=32 adult women	Test-Retest Reliability	.78 (6 weeks) .80 (58 weeks)
	n=51 college students	Convergent and Discriminant Validity	r=.47 for social desirability scale
Hoge & McCarthy (1983)*	n varies from 873-1038 high schoolers	Reliability (correlation of each score with itself 1 year later)	.65
		Cronbach's Alpha (Internal Consistency)	Year 1 = .84 Year 2 = .86
Johnson, Redfield, Miller, Simpson (1983)*	105 male and female students	Convergent Validity: Piers-Harris Children's Self-Concept Scale	r=.63, p<.01
		Behavior Academic Self- Esteem Scale	r=.47, p<.01
		Discriminant Validity	r=.17, p<.05
		Internal Consistency (coefficient alpha)	.86

Beer & Beer (1992)	98 teachers	Discriminant Validity (Beck Depression Inventory)	$r = -.42, p < .01$
Ahmed, Vaillant, & Swindle (1985)	n=154 university students	Cronbach's alpha	.75
		Convergent Validity	$r = -.399$ with MMPI psychasthenia scale (guilt or anxiety); Pd not significant
Bagley (1989)	n=2715 (short form developed by authors)	Internal Reliability	Average alpha .92
	n=345	Test-Retest	.58 (14 months)
Demo (1985)	n=41 ninth graders	Concurrent validity	Correlation between Coopersmith and Rosenberg SES = .55

Table 2: Reliability and Validity data for the Coopersmith Self-Esteem Inventory

*child form

Appendix C

ICS Questionnaire

Name _____ **Date** _____

Please indicate whether you **agree** or **disagree** with some opinions listed on the following pages. Please enter **1, 2, 3, 4, or 5** next to each statement using this scale:

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

Give your own opinions about the statements: There are no right or wrong answers on this questionnaire.

Example:

_____ 1. Laws are made to be broken.

If you **strongly disagree** with this statement (you believe it to be completely wrong), you should enter "1". If you **strongly agree** with the statement, enter "5". If you tend to agree or disagree but don't feel quite so certain about your opinion, enter "2" for **disagree** or "4" for **agree**. If you are unable to make up your mind about the statement or if you have no opinion about the statement, enter "3".

Strongly
Disagree
1

Disagree
2

Uncertain
3

Agree
4

Strongly
Agree
5

- ___ 1. I would never rat on another inmate.
- ___ 2. If someone insulted me or a friend, I would have to take serious action against them.
- ___ 3. Sometimes I like to see how far I can push the staff.
- ___ 4. Other inmates here usually talk about you behind your back.
- ___ 5. I trust the staff here more than I trust other residents.
- ___ 6. Fighting is usually a pretty good way to get people off your back.
- ___ 7. I enjoy seeing other people get nervous or scared.
- ___ 8. Most staff here don't care if I live or die.
- ___ 9. It's easy to con the staff here.
- ___ 10. I would be willing to fake an injury or illness to get better treatment.
- ___ 11. The best way to get along here is to agree with everything staff says.
- ___ 12. You can always expect someone to rat on you here.
- ___ 13. The staff here give me a lot of static.
- ___ 14. I try to let staff think that I am going straight.
- ___ 15. Staff here will leave you alone if you don't mess up.
- ___ 16. Most inmates here have only one or two close friends.
- ___ 17. I would be willing to fake getting religion in order to get an early release or transfer.

- | Strongly
Disagree
1 | Disagree
2 | Uncertain
3 | Agree
4 | Strongly
Agree
5 |
|---------------------------|---------------|----------------|------------|------------------------|
|---------------------------|---------------|----------------|------------|------------------------|
- ___ 18. I find it easy to play one staff member off against another.
- ___ 19. Most staff think of me as a troublemaker.
- ___ 20. The worst kind of person to be is a rat.
- ___ 21. Most staff here like to act tough.
- ___ 22. Sometimes I like to see how far I can push other residents.
- ___ 23. I enjoy hassling staff just to see what they will do.
- ___ 24. If you reveal too much about yourself to a staff member, the information will probably be used against you.
- ___ 25. The best way to do time is to "grin and bear it" and not let staff know that anything is getting you down.
- ___ 26. In jail, I keep pretty much to myself.
- ___ 27. I don't think I have very much in common with other inmates here.
- ___ 28. There are very few inmates I really trust.
- ___ 29. The best people to talk to about personal problems are staff.
- ___ 30. When inmates stick together, it's a lot easier to do time.
- ___ 31. Staff get a lot of information about inmates from group therapy which is used against the inmate.
- ___ 32. Being with other inmates give me a sense of not being totally alone.

- | Strongly
Disagree
1 | Disagree
2 | Uncertain
3 | Agree
4 | Strongly
Agree
5 |
|---------------------------|---------------|----------------|------------|------------------------|
|---------------------------|---------------|----------------|------------|------------------------|
- _____ 33. Most inmates are not really loyal to each other when the chips are down.
- _____ 34. In jail, generally you're better off talking to other inmates about personal problems than talking to staff.
- _____ 35. The best way to do time is to mind your own business and have as little to do as possible with other inmates.
- _____ 36. These days, you don't really know who you can count on.
- _____ 37. I can't think of any situation where I would report another inmate to staff.
- _____ 38. I can't see myself ever having a friendly conversation with a staff member.
- _____ 39. There really isn't anyone in this institution that I'm close to.
- _____ 40. It's important to me to be liked and accepted by other inmates.

Appendix D

CSS Questionnaire

Name _____ **Date** _____

Please indicate whether you **agree** or **disagree** with some opinions listed on the following pages. Please enter **1, 2, 3, 4, or 5** next to each statement using this scale:

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

Give your own opinions about the statements: There are no right or wrong answers on this questionnaire.

Example:

_____ 1. Laws are made to be broken.

If you **strongly disagree** with this statement (you believe it to be completely wrong), you should enter "1". If you **strongly agree** with the statement, enter "5". If you tend to agree or disagree but don't feel quite so certain about your opinion, enter "2" for **disagree** or "4" for **agree**. If you are unable to make up your mind about the statement or if you have no opinion about the statement, enter "3".

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

- ___ 1. Laws are so often made for the benefit of small selfish groups that a person cannot respect the law.
- ___ 2. Nearly all laws deserve our respect.
- ___ 3. It is our duty to obey all laws.
- ___ 4. Laws are usually bad.
- ___ 5. The law is rotten to the core.
- ___ 6. Almost any jury can be fixed.
- ___ 7. You can't get justice in court.
- ___ 8. On the whole, lawyers are honest.
- ___ 9. Fake witnesses are often produced by the prosecution.
- ___ 10. On the whole, the police are honest.
- ___ 11. A cop is a friend to people in need.
- ___ 12. Life would be better with fewer police.
- ___ 13. The police should be paid more for their work.
- ___ 14. The police are just as crooked as the people they arrest.
- ___ 15. All laws should be strictly obeyed because they are laws.
- ___ 16. The law does not benefit the common person.
- ___ 17. The law as a whole is sound.
- ___ 18. In the long run, law and justice are the same.
- ___ 19. The law enslaves the majority of people for the benefit of a few.

Strongly Disagree 1	Disagree 2	Uncertain 3	Agree 4	Strongly Agree 5
---------------------------	---------------	----------------	------------	------------------------

- ___ 20. On the whole, judges are honest and kind-hearted.
- ___ 21. Court decisions are almost always just.
- ___ 22. Almost anything can be fixed in the courts if you have enough money.
- ___ 23. A judge is a good person.
- ___ 24. Our society would be better off if there were more police.
- ___ 25. Police rarely try to help people.
- ___ 26. Sometimes a person like myself has to break the law in order to get ahead.
- ___ 27. Most successful people used illegal means to become successful.
- ___ 28. People who have been in trouble with the law have the same sort of ideas about life that I have.
- ___ 29. People should always obey the law no matter how much it interferes with their personal ambition.
- ___ 30. I would rather associate with people who obey the law than with those who don't.
- ___ 31. It's alright for a person to break the law if he or she doesn't get caught.
- ___ 32. I'm more like the people who can make a living outside the law than I am like those who only break the law occasionally.
- ___ 33. Most people would commit crimes if they knew they wouldn't get caught.
- ___ 34. People who have been in trouble with the law are more like me than people who don't have trouble with the law.

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

- ___ 35. There never is a cause for breaking the law.
- ___ 36. I don't have much in common with people who never break the law.
- ___ 37. A hungry person has the right to steal.
- ___ 38. It's alright to evade the law if you don't actually break it.
- ___ 39. No one can violate the law and be my friend.
- ___ 40. A person should obey those laws which seem reasonable.
- ___ 41. A person is a fool to work for a living if he or she can get by some easier way, even if it means violating the law.

Appendix E

Variable	Mean	Standard Deviation	Number of Participants
Rosenberg SES Time 1	30.02	4.70	120
Rosenberg SES Time 1*	30.10	3.83	62
Rosenberg SES Time 2	30.36	4.26	90
Rosenberg SES Time 2*	30.10	4.03	61
Rosenberg SES time 3	30.33	3.49	60
Coopersmith SEI time 1	70.53	21.17	120
Coopersmith SEI time 1*	72.26	18.25	62
Coopersmith SEI time 2	73.22	17.77	92
Coopersmith SEI time 2*	74.71	15.24	62
Coopersmith SEI time 3	79.13	14.58	60
ICS-Opposition Intake	50.26	10.12	134
ICS-Opposition time 1	52.16	10.14	119
ICS-Opposition time 1*	51.77	10.11	61
ICS-Opposition time 2	51.37	10.46	91
ICS-Opposition time 2*	50.56	9.76	62

Variable	Mean	Standard Deviation	Number of Participants
ICS-Opposition time 3	52.71	11.68	63
ICS-Solidarity Intake	49.86	10.13	134
ICS-Solidarity time 1	50.55	9.22	119
ICS-Solidarity time 1*	51.31	8.82	61
ICS-Solidarity time 2	48.40	8.08	91
ICS-Solidarity time 2*	48.21	8.40	62
ICS-Solidarity time 3	49.75	8.97	63
ICS-Trust/ Affiliation Intake	52.28	10.40	134
ICS-Trust/ Affiliation time 1	52.87	10.80	119
ICS-Trust/ Affiliation time 1*	53.28	11.32	61
ICS-Trust/ Affiliation time 2	55.16	10.32	91
ICS-Trust/ Affiliation time 2*	54.84	10.88	62
ICS-Trust/ Affiliation time 3	56.49	10.51	63

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Variable	Mean	Standard Deviation	Number of Participants
ICS Total Identification Intake	49.48	10.51	134
ICS Total Identification time 1	51.29	10.06	119
ICS Total Identification time 1*	51.39	9.84	61
ICS Total Identification time 2	49.57	9.55	91
ICS Total Identification time 2*	48.90	9.47	62
ICS Total Identification time 3	51.11	11.08	63
ICS Total Susceptibility Intake	50.21	10.99	134
ICS Total Susceptibility time 1	52.63	11.46	119
ICS Total Susceptibility time 1*	52.93	11.18	61
ICS Total Susceptibility time 2	51.98	10.62	91
ICS Total Susceptibility time 2*	51.18	10.52	62
ICS Total Susceptibility time 3	54.00	12.34	63

Variable	Mean	Standard Deviation	Number of Participants
CSS-LCP Intake	52.06	10.10	135
CSS-LCP Intake*	52.33	8.96	63
CSS-LCP time 2	52.35	8.33	88
CSS-LCP time 2*	52.28	8.23	60
CSS-LCP time 3	54.29	9.10	62
CSS-TLV Intake	47.47	9.46	135
CSS-TLV Intake*	47.81	9.17	63
CSS-TLV time 2	49.10	9.93	88
CSS-TLV time 2*	49.22	10.10	60
CSS-TLV time 3	48.50	10.33	62
CSS-ICO Intake	49.84	9.36	135
CSS-ICO Intake*	49.94	9.12	63
CSS-ICO time 2	51.34	9.41	88
CSS-ICO time 2*	50.70	9.38	60
CSS-ICO time 3	50.50	9.18	62
Education	10.26	1.83	136
Age	29.49	8.47	136
LSI-Total Score	27.94	8.45	136
Pd-So	33.04	22.18	135
CPI-So	33.81	12.72	135
MMPI Do	38.97	8.64	136
MMPI Es	43.83	10.84	136

	Total misconducts	Misconducts pre-RCTC	RCTC misconducts
CSS ICO intake	.33**	.10	.30*
CSS LCP intake	-.02	.09	-.04
CSS TLV intake	.29**	.11	.25*
CSS ICO time 2	.10	-.06	.12
CSS LCP time 2	-.16	.11	-.19
CSS TLV time 2	.26*	-.02	.27*
CSS ICO time 3	.25*	.00	.26*
CSS LCP time 3	-.14	.18	-.19
CSS TLV time 3	.28*	-.14	.33**

Table 5: Correlation for misconducts and CSS subscales for the sixty three participants who completed all three trials.

Frequencies for Misconducts:

Misconducts R.C.T.C. -	<u>Number</u>	<u>Frequency</u>
	0	90
	1	27
	2	11
	3	4
	4	1
	7	1
	9	1
	Missing	1

	Total	136

Misconducts Pre-R.C.T.C. -	<u>Number</u>	<u>Frequency</u>
	0	113
	1	13
	2	5
	10	1
	Missing	4

	Total	136

Total Misconducts -	<u>Number</u>	<u>Frequency</u>
	0	79
	1	30
	2	15
	3	6
	4	2
	7	1
	9	1
	12	1
	Missing	1

	Total	136

Juvenile Arrest: No juvenile arrests n=52
 Juvenile arrests n=83
 Missing n=1

Treatment Outcome/Progress Rating Scale

	Addictions Relapse	Anger Management	Other Rating
-9 Incomplete/Withdrew	5	2	0
1 Unsatisfactory	9	1	1
2 Satisfactory/Fail/Completed	7	2	2
3 Average/Satisfactory to Good	21	2	5
4 Good	14	5	6
5 Good to Very Good	12	3	1
6 Very Good	10	7	4
7 Very Good to Excellent	7	5	0
8 Excellent/Outstanding	6	2	3
. Missing	45	107	114

Staff Questionnaire

Please indicate your opinion concerning the statements below.

- 1. To what extent do you think (inmate)
exhibits negative or oppositional attitudes to staff?**

Not at all	Somewhat	Moderately	Extremely
0	1	2	3

Don't Know _____

- 2. To what extent does he identify with other inmates?**

Not at all	Somewhat	Moderately	Extremely
0	1	2	3

Don't Know _____

- 3. In general, to what extent does he adhere to the inmate code?**

Not at all	Somewhat	Moderately	Extremely
0	1	2	3

Don't Know _____

YOUR ASSISTANCE IS GREATLY APPRECIATED
Please return to D.J. Baxter when completed

Scoring key for the Criminal Sentiments Scale

CSS: Name _____ Date _____

Law Courts Police

6 - 1. _____	21. _____
2. _____	6 - 22. _____
3. _____	23. _____
6 - 4. _____	24. _____
6 - 5. _____	6 - 25. _____
6 - 6. _____	Total = _____
6 - 7. _____	Tol. Law Violations
8. _____	26. _____
6 - 9. _____	27. _____
10. _____	6 - 29. _____
11. _____	31. _____
6 - 12. _____	33. _____
13. _____	6 - 35. _____
6 - 14. _____	37. _____
15. _____	38. _____
6 - 16. _____	40. _____
17. _____	41. _____
18. _____	Total = _____
6 - 19. _____	
20. _____	

Ident. Crim. Others

28. _____
6 - 30. _____
32. _____
34. _____
36. _____
6 - 39. _____
Total = _____

Inmate Code Scale (ICS)
(c) D.J. Baxter, 1993-1995
Instructions for Manual Scoring

Opposition to Staff or Authority

Items: 3 6 7 8 9 10 12 14 15 16 17 18
Reverse¹:

Items: 19 20 27 34
Reverse¹:

Solidarity with Other Inmates

Items: 1 2 5 17 21 25 26 28 30 33 36
Reverse¹: * *

Trust/Affiliation Need

Items: 4 11 13 22 23 24 29 31 32 35
Reverse¹: * * * * *

Total Identification Score

Items: 1 2 3 5 6 7 8 9 10 12 14 15
Reverse¹: *

Items: 16 17 18 19 20 21 25 26 27 28 30 33
Reverse¹: *

Items: 34 36
Reverse¹:

Total Susceptibility Score

Items: 1 2 3 4 5 6 7 8 9 10 11 12
Reverse¹: * *

Items: 13 14 15 16 17 18 19 20 21 22 23 24
Reverse¹: * * *

Items: 25 26 27 28 29 30 31 32 33 34 35 36
Reverse¹: * * *

¹ To reverse items, subtract from 6 (i.e., $X' = 6 - X$)

Appendix F

	Opp.	Sol.	Trust/Aff	Total Id.	Total Suc
Opp.	1.00	.65	-.21	.92	.79
Sol.	.65	1.00	-.02	.89	.85
Trust/Aff	-.21	-.02	1.00	-.13	.30
Total Id.	.92	.89	-.13	1.00	.90
Total Suc	.79	.85	.30	.90	1.00

	ICS-OPP	ICS-SOL	ICS-T/AFF	ICS TOTAL IDENT.	ICS TOTAL SUSC.
MMPI Pd (n=134)	.17*	.22*	.02	.21*	.21*
CPI So (n=133)	-.42***	-.41***	.22**	-.45***	-.34***
CSS LCP (n=134)	-.65***	-.58***	.35***	-.67***	-.49***
CSS TLV (n=134)	.69***	.63***	-.20*	.73***	.61***
CSS ICO (n=134)	.42***	.56***	-.16+	.53***	.44***
Pd-So (n=134)	.33***	.37***	-.12	.38***	.32***

+p<.10

*p<.05

**p<.01

***p<.001

Table 1: Correlations between the Inmate Code Scale and various measures of criminal traits and attitudes.

	CSS-ICO	CSS-LCP	CSS-TLV
ICS-OPP time 1	.49***	-.59***	.59***
ICS-OPP time 2	.62***	-.72***	.72***
ICS-OPP time 3	.45***	-.71***	.62***
ICS-SOL time 1	.44***	-.38***	.45***
ICS-SOL time 2	.38***	-.50***	.44***
ICS-SOL time 3	.24+	-.44***	.46***
ICS-T/AFF 1	.05	.14	.07
ICS-T/AFF 2	-.04	.14	-.14
ICS-T/AFF 3	.03	-.14	.12
ICS-TOTAL IDENT time 1	.53***	-.57***	.60***
ICS-TOTAL IDENT time 2	.59***	-.71***	.69***
ICS-TOTAL IDENT time 3	.43***	-.68***	.64***
ICS-TOTAL SUSCEP time 1	.49***	-.44***	.55***
ICS-TOTAL SUSCEP time 2	.55***	-.60***	.59***
ICS-TOTAL SUSCEP time 3	.37**	-.63***	.59***

Table 2: The correlation between the CSS and the ICS both measured at the same time period. Time one is for 119 participants, time 2 for 91, and time 3 is data for 63 participants.

	ICS-OPP	ICS-SOL	ICS-TRUST/AFF	ICS-TOTAL IDENT	ICS-TOTAL SUSC
Previous convict. (n=130)	.03	-.01	-.06	.01	-.02
Previous incarceration. (n=132)	.12	.12	-.17*	.13	.05
Longest prev.sent (n=134)	-.03	.01	-.01	-.04	-.07
Any juv. arrest (n=133)	.22*	.15+	-.06	.21*	.17*

Table 3: Correlations between previous criminal behavior and the scales of the ICS.

	ICS-OPP	ICS-SOL	ICS TRUST/AFF	ICS-TOTAL IDENT.	ICS-TOTAL SUSC.
Total property offences (n=129)	.01	-.04	.02	-.01	-.01
Total assault offences (n=132)	.08	.04	-.09	.07	.03
Total alcohol- drug offences (n=130)	.01	-.07	-.07	-.03	-.06
Total offences previous and current (n=129)	.02	-.05	-.06	-.01	-.03

Table 4: Correlations between types of criminal behavior and the ICS scales

	Total misconducts	Misconducts pre-RCTC	RCTC misconducts
CSS ICO intake	.33**	.10	.30*
CSS LCP intake	-.02	.09	-.04
CSS TLV intake	.29**	.11	.25*
CSS ICO time 2	.10	-.06	.12
CSS LCP time 2	-.16	.11	-.19
CSS TLV time 2	.26*	-.02	.27*
CSS ICO time 3	.25*	.00	.26*
CSS LCP time 3	-.14	.18	-.19
CSS TLV time 3	.28*	-.14	.33**

Table 5: Correlation for misconducts and CSS subscales for the sixty three participants who completed all three trials.

	Addiction/ Relapse (n=91)	Anger Management (n=29)	Other group progress rating (n=22)
ICS-Opposition	-.24*	-.13	.06
ICS-Solidarity	-.26*	-.07	.23
ICS-Trust/Aff.	.07	.21	-.21
ICS-Total Iden	-.27**	-.12	.15
ICS-Total Susc	-.23*	.01	.05
Misconducts R.C.T.C.	-.01	-.04	-.05
Misconducts pre-R.C.T.C.	.15	.05	-.34
Total Misconducts	.08	-.02	-.28
MMPI LSE	-.11	-.19	-.19
Rosenberg SES	-.05	.11	-.10
Coopersmith SEI	-.03	.35+	.10
Age	.17	-.18	.06
LSI Total	-.14	-.32+	.41+
CSS-ICO	-.07	-.30	.06
CSS-LCP	.20*	.22	.03
CSS-TLV	-.18+	-.19	.09

Table 6: Correlations between treatment group progress ratings and ICS, Misconducts, CSS, Age, Self-Esteem, and LSI.

	ICS-OPP	ICS-SOL	ICS TRUST/AFF	ICS TOTAL IDENT	ICS TOTAL SUSC
Rosenberg (n=119)	-.39***	-.32***	.10	-.39***	-.33***
Coopersm. (n=119)	-.22*	-.28**	.21*	-.27**	-.17+
MMPI K (n=134)	-.30***	-.29***	.28***	-.33***	-.19
MMPI LSE (n=133)	.22**	.23**	-.25***	.25**	-.05
MMPI Es (n=134)	-.22**	-.13	.33***	-.20*	-.05
MMPI Do (n=134)	-.28***	-.22*	.38***	-.27***	-.10
MMPI Mf (n=134)	-.02	-.08	-.27**	-.06	-.17*

Table 7: Correlations between self-esteem measures and ICS intake measures

	Rosenberg SES (n=118)	Coopersmith SEI (n=118)
Opposition	-.48***	-.31***
Solidarity	-.32***	-.21*
Trust/affiliation	.04	.16
Total identification	-.46***	-.31***
Total susceptibility	-.39***	-.21*

Table 8: Correlations between self-esteem and ICS measures at time one

	Rosenberg SES (n=90)	Coopersmith SEI (n=90)
Opposition	-.40***	-.29**
Solidarity	-.19	-.14
Trust/affiliation	.11	.03
Total identification	-.34***	-.26**
Total susceptibility	-.28**	-.24*

Table 9: Correlations between self-esteem measures and the ICS at time two

	Rosenberg SES (n=60)	Coopersmith SEI (n=60)
Opposition	-.53***	-.12
Solidarity	-.37**	-.06
Trust/affiliation	-.11	-.09
Total identification	-.53***	-.12
Total susceptibility	-.48***	-.05

Table 10: Correlations between self-esteem measures and the ICS at time three

	CSS-ICO	CSS-LCP	CSS-TLV
Coopersmith time 1 (n=120)	-.34***	.43***	-.32***
Rosenberg time 1 (n=120)	-.36***	.42***	-.40***
MMPI LSE (n=134)	.29***	-.34***	.28***

Table 11: Correlations between CSS and Self-Esteem at Intake

	ICS-opp	ICS-sol	ICS-t/aff	ICS-total ident.	ICS-total susc.
C-SEI time 1	$r=-.17$	$r=-.17$	$r=.17$	$r=-.20$	$r=-.10$
C-SEI time 2	$r=-.03$	$r=-.15$	$r=.08$	$r=-.09$	$r=-.06$
C-SEI time 3	$r=.03$	$r=-.10$	$r=.06$	$r=-.03$	$r=-.01$
R-SES time 1	$r=-.43^{***}$	$r=-.28^*$	$r=-.03$	$r=-.43^{***}$	$r=-.38^{**}$
R-SES time 2	$r=-.25^+$	$r=-.17$	$r=.00$	$r=-.23$	$r=-.22$
R-SES time 3	$r=-.31^*$	$r=-.25^*$	$r=-.14$	$r=-.32^*$	$r=-.33^{**}$

Table 12: Correlations for sixty three participant who completed all three trials depicting the relationship between the score on the ICS at week one and the three measures of self-esteem

	ICS-opp	ICS-sol	ICS-t/aff	ICS-total ident.	ICS-total susc.
CSS-ICO time 1	$r=.47^{***}$	$r=.56^{***}$	$r=-.03$	$r=.55^{***}$	$r=.50^{***}$
CSS-ICO time 2	$r=.36^{**}$	$r=.23^{+}$	$r=-.05$	$r=.32^{***}$	$r=.28^{*}$
CSS-ICO time 3	$r=.20$	$r=.06$	$r=-.04$	$r=.16$	$r=.14$
CSS-LCP time 1	$r=-.65^{***}$	$r=-.54^{***}$	$r=.19$	$r=-.65^{***}$	$r=-.51^{***}$
CSS-LCP time 2	$r=-.61^{***}$	$r=-.54^{***}$	$r=.09$	$r=-.63^{***}$	$r=-.54^{***}$
CSS-LCP time 3	$r=-.48^{***}$	$r=-.29^{*}$	$r=.07$	$r=-.42^{***}$	$r=-.36^{**}$
CSS-TLV time 1	$r=.63^{***}$	$r=.62^{***}$	$r=-.03$	$r=.68^{***}$	$r=.61^{***}$
CSS-TLV time 2	$r=.45^{***}$	$r=.35^{**}$	$r=-.06$	$r=.45^{***}$	$r=.39^{**}$
CSS-TLV time 3	$r=.16$	$r=.12$	$r=.02$	$r=.15$	$r=.15$

Table 13: Correlations between intake scores on the ICS and the three measures of criminal sentiments to indicate whether these correlations change over time for the 63 participants who completed all three trials.

END

1 0 | 0 6 | 9 | 6

FIN