

MMPI PERSONALITY TYPE AND THE EFFECT OF  
IMPRISONMENT UPON SELF CONCEPT

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## CHAPTER I

### INTRODUCTION

Combs and Snygg (1959) suggested that all human behavior stems from man's need to maintain and enhance the perceived self. The manner in which each man perceives his self is highly individualistic such that no two men can ever perceive their selves in exactly the same way. No man's self concept can be reproduced, copied, or completely shared by another human being, but some basic commonalities do exist among people. Although the banker, lawyer, housewife, rapist, and armed robber may appear to be very different, similarities could exist among their self concepts. All share the need to maintain and enhance their perceived self; however, the behavioral manifestation of this need probably would vary. Self concept is not considered to be a simply defined entity, but a complex of many factors consisting of the physical, social, intellectual, psychological, family, and biological selves all of which make up any individual's self concept.

When considered as a group, research has demonstrated that the self concept profiles of public offenders are amazingly consistent. Such variables as age, ethnic origin, sex, intelligence, education, geographic area, nature of crime and others do not account for the consistency found in self concept among offender populations (Fitts and Hamner, 1969). However, it is the implicit assumption of this investigation that different personality types do differ in self concept. Research has

demonstrated that subgroupings within an offender population can be identified on the basis of their MMPI profile peak scores. Individuals with various MMPI profiles tend to differ in their patterns of behaving in the world and also in the way they perceive themselves. Since differences have been demonstrated to exist in the way offenders with different MMPI profiles behave and think of themselves and others, differences may also exist in their self concept. If self concept differences do exist among personality types, it then becomes important to consider what rehabilitative approaches would best serve the needs of different subgroupings within an offender population. Correctional institutions usually separate offenders according to age, sex, nature of crime, and number of crimes committed. However, within a given correctional institution, the rehabilitation programs are generally the same for the majority of the residents. Rehabilitation is a complex process involving many factors which may aid the offender in making a successful adjustment to life and society. If the public offender perceives his self to be different from the rest of society, then rehabilitation should be directed toward the resolution of this discrepancy. The offender who re-enters society with the same distorted perception of himself and others that he had upon entry to the institution is more likely to experience difficulty re-integrating into society. If different personality types within an institution differ in self concept, then different rehabilitative approaches may be necessary for each subgroup within the institution.



## CHAPTER II

### REVIEW OF THE LITERATURE

#### The Impact of Imprisonment

Imprisonment has been described as a debasing experience which could result in the destruction of the public offender's sense of worth (Sykes, 1958; Creesy, 1961). Goffman (1961) suggested that the mere process of entering a prison is demoralizing. The removal of personal possessions, lack of privacy, finger printing, and regimented living tend to have a dehumanizing effect.

Clemmer (1959) suggested that most inmates gradually take on aspects of the prison culture. This process of assimilation was called prisonization which referred to "... the taking on in greater or lesser degree of the folkways, mores, customs, and general culture of the penitentiary" (p. 229). Prisonization facilitates the adoption of an inmate code requiring loyalty to other inmates and opposition to the prison staff. Clemmer viewed prisonization as a specific example of the frequently observed process of assimilation occurring whenever persons are injected into an unfamiliar culture. The net result being an internalization of the value system to which one is currently exposed. He hypothesized that no inmate could remain totally unaffected by prisonization and that there is a direct correlation between prisonization and the length of time served. However, he also stated that the

degree of prisonization varies in accordance with the degree of involvement in the informal life of the prison community.

In an effort to determine if differences in patterns of socialization took place during incarceration, Wheeler (1961) categorized inmates according to phases of their institutional career such that inmates were identified as being in the early, middle, or late phases of their period of confinement. The phases were broken down as follows: (1) the early phase consisted of those inmates who had served less than six months in prison; (2) the middle phase inmates had served more than six months but had more than six months remaining; and (3) the late phase inmates had less than six months remaining before release. Through the use of this classification system, he was able to identify two prominent trends of socialization. The first was a progressive opposition to staff norms with each phase. This finding adds empirical verification to Clemmer's (1958) theory of prisonization. Second, he found an adaptive U-shaped pattern of response indicating varying degrees of conformity to staff expectations. Those in the middle phase deviated most from the expectations of the staff, whereas, those in the early and late phases conformed most to staff expectations. When viewed from another perspective, the results suggested that those inmates who have just been removed from the "outside" environment and those soon to return to society were more likely to be oriented to conventional values. In contrast, those inmates who were in the middle phase of their prison career, conformed least to conventional standards. Therefore, inmates seemed to shed their prison culture in an attempt to prepare themselves for the outside environment, such that there were as many conforming inmates in the late phase as in the early phase.

This adaptive U-shaped pattern of response to institutionalization was also observed to hold true for recidivists (Wheeler, 1961). Upon each successive re-entry into the prison, the recidivists appeared to go through a process of re-prisonization. However, the speed and degree of prisonization were dependent upon the extent of the involvement in the prison subculture. The more involved the inmate was in the values and norms of the prison community, the greater the speed and degree of prisonization. This conclusion held for first time offenders as well as recidivists.

While Wheeler (1961) recognized the influence of prisonization upon the attitudes and behavior of the offender, he also stressed that another dimension of the impact of imprisonment was its influence upon the inmate's self concept.

The offender learns to reject society and in doing so comes to accept a conception of himself as a criminal, with an elaborate set of supporting justifications. But much of the impact of imprisonment appears to lie along another dimension of self image--the tendency for the offender to internalize the social rejection implicit in his status and suffer the pains of a lowered self esteem and self rejection (p. 710).

Therefore, the inmate attempts to restore his diminished self-esteem by participating in a subculture that is experiencing similar feelings of rejection and isolation. Prisonization enables the inmate to reject those who have rejected him rather than reject himself.

In a follow up to Wheeler's (1961) study, Garabedian (1963) found that adult male felons who had served less than six months were proportionately twice as likely to conform to staff norms as those inmates who had served more than six months but had less than six months left to serve. As the offender approached the end of his prison sentence, the per cent conforming to staff norms was identical to the per cent

conforming at the early phase. His results were suggestive of the U-shaped distribution reported by Wheeler (1961). Garabedian hypothesized that this recovery may be due to feelings of anticipation and/or anxiety surrounding the inmate's re-entry into the outside world. The impact of the prison culture was greatest at the point when the inmate was most removed from the rest of society. He concluded that inmates were socialized into the prison culture in varying degrees and rates depending upon the particular social role the inmate adopts.

Himelson (1962) also investigated some of Wheeler's (1961) findings by measuring inmate self esteem just before and after release from prison and found that significant changes in self esteem had occurred. He hypothesized that offenders use each other as a basis of comparison during their period of incarceration, resulting in moderate to high self regard. However, upon release from the institution, they find themselves in competition with the free society resulting in lower self esteem.

In summary, inmates seem to incorporate the value system of the prison community which influences the extent of conformity or rejection of staff expectations. There seems to be an identifiable pattern which the inmate progresses through during the period of incarceration. During the first few months and also the last several months, the inmate was most likely to conform to staff expectations. However, during the middle phase, inmates tended to deviate most from the values and norms of the staff. The same process occurs among recidivists upon each successive re-entry into prison. Some interpret this process as an attempt by the inmate to boost his diminished self esteem by participating in a prison subculture which opposes the values of the staff who represent

the norms of the society that has rejected and isolated them for "objectionable" behavior.

### Self Theory and Self Concept

Before reviewing the research which has specifically investigated the self concept of the public offender, various self theories will be presented. A vast amount of research and theorizing has been devoted to self concept over the past several decades. Gordon and Gergen (1968) report that over 2000 publications in the fields of psychology and sociology have pertained to the self. As a result of this extensive research, a bewildering array of definitions, terms, hypotheses, theories, research designs, and measuring instruments have emerged in the literature. The present review will focus on those theorists and investigators who have been most prominent in the field of self theory and self concept.

Rogers (1951), Combs and Snygg (1959), and Wylie (1961) have been most influential in developing self theory which views man from a phenomenological perspective. Wylie (1961) applied the term "phenomenal" to all aspects of that continuum of clarity in the conscious field. Self theorists stress that man's behavior is the result of his highly individualistic perception of his phenomenal field. Combs and Snygg (1959) suggested that the phenomenal field was composed of the totality of experience and feelings of which the individual was consciously aware. Although there are varying degrees of awareness, no experience ever becomes completely unconscious. The most prominent feature of each person's phenomenal field is his phenomenal self which "... includes all those parts of the phenomenal field which the individual

experiences as part or characteristic of himself" (Snygg and Combs, 1949, p. 58).

Self theorists stress that each person's behavior is always meaningful when understood from his unique frame of reference. Therefore, each person's behavior can be understood only if one can perceive another's phenomenal world as he does. Each person's environment is subject to a multitude of influencing factors which are in a continual state of flux. However, these self theorists suggest that the self concept is relatively unchanging and provides a stable frame of reference through which the individual interacts, perceives, and evaluates the world. Rogers (1951) suggested that self concept serves to regulate behavior and to account for the uniformity and consistency in personality. It is impossible to completely understand an individual's self concept and his phenomenological world, but knowledge of another's self concept does facilitate both understanding and prediction of human behavior.

An individual's self concept involves the complex interaction of social, psychological, and environmental factors. The following statements reflect the interrelatedness of these factors. Wylie (1961) viewed self concept simply as "... the individual who is known to himself" (p. 1). Fitts (1971) stated: "The self concept, or self image, is learned by each individual through his lifetime of experience with himself, with other people, and with the realities of the external world" (p. 3). A third definition came from Rogers (1951):

The self concept or self structure may be thought of as an organized configuration of perceptions of the self which are admissible to awareness. It is composed of such elements as the perception of one's characteristics and abilities; the percepts and concepts of the self in relation to others and to the environment; the value qualities which are perceived as associated with experiences and objects; and goals and

ideals which are perceived as having positive or negative valence (p. 136).

Therefore, an individual's self concept has a direct and active influence upon his behavior, values, attitudes, and interests. An individual's self concept is based upon his perception of how others view him. Others' perception of him is determined, in part, by their own personal self concepts. Also, his perception of how others see him may or may not reflect the actual responses of others toward him.

#### Tennessee Self Concept Scale and the Public Offender

Fitts has done extensive research with the Tennessee Self Concept Scale (TSCS) on the self concept of public offenders. Fitts along with other investigators have found that there was a characteristic profile for the public offender. In the following sections, the general characteristics of the public offender as indicated by the TSCS will be discussed. Also, specific investigators which have utilized the TSCS with public offenders will be presented.

#### The Typical Public Offender's Profile

Fitts and Hamner (1969) reported that the typical public offender has a characteristic profile which differentiates him from normals and other diagnostic classifications (see Appendix A for further explanation of the TSCS). The mean Total P Score is likely to be between 300 and 315 which is one-and-a-half standard deviations below the norm for the standardization group which consisted of 626 subjects broadly sampled with respect to age, race, and sex, in addition to social, economic,

intellectual, and educational levels. Delinquent groups yield a smaller standard deviation than other subgroups, implying that they are a relatively homogeneous group. The data imply that the public offender doubts his own self worth, and tends to see himself as undesirable. He lacks self confidence which may be reflected in feelings of unhappiness and dissatisfaction with himself. The Raw P scores are significantly below the mean of the standardization group and usually form an inverted "V" shape such that Identity (Row 1) and Behavior (Row 3) are more deviant than Self Satisfaction (Row 2). The public offender seems to be saying that he just is not a very good person and that he frequently demonstrates this by his behavior; however, he is really not particularly dissatisfied with himself. He seems to have accepted a negative view of himself without accompanying feelings of guilt or anxiety. The Column P Scores form a "W" profile which is deviant in the negative direction. Physical Self (Column A), Personal Self (Column C), and Social Self (Column E) are the peaks of the "W" profile with Moral-Ethical Self (Column B) and Family Self (Column D) being the low points. Each of the Column P scores are below the mean of the normative group implying that there is no area of self perception in which the public offender sees himself positively. The public offender dislikes his body, his general state of health, and overall physical appearance. He not only feels inadequate when he stops to take a careful look inside himself but also when he compares himself to others. From a moral-ethical frame of reference, he tends to feel as though he is a "bad" person. As a result of his feeling that he has disappointed his family and closest friends, he feels unworthy as a family member. The Variability Scores are higher than for the general population and typically form a "V" profile with



Total Variability and Row Total Variability being higher than Column Total Variability. In general, public offenders experience a greater amount of inconsistency from one area of self perception to another than the normative group. An overall lack of integration exists in the public offender's self concept in addition to a tendency to compartmentalize certain areas of self and to view these areas quite apart from the rest of the self. The Distribution Scores for the average delinquent are all within one-half standard deviation below the mean and form a lopsided "W" profile for the five response scores. Profiles typically show a disproportionately high number of "3" responses (Partly True-Partly False). The number of "5" responses (Completely True) is higher than the number of "1" responses (Completely False). The low points on the profile are "2" responses (Mostly False) and "4" responses (Mostly True). This implies that public offenders are generally uncertain as to who and what they are. Also, they seem to find it difficult to reject statements which do not apply to them. The Self Criticism Score is at the mean, implying a healthy, normal openness. The high True/False Ratio indicates a tendency to "act out" feelings and to be impulsive.

Both the Net Conflict and Total Conflict Scores are above the mean and reflect confusion in the public offender's perception of himself. Public offenders also exhibit a characteristic profile on the empirical scales. The two highest peaks are on the General Maladjustment and Personality Disorder Scales followed by the Neurotic and Psychotic Scales. These scales indicate a general overall level of maladjustment in addition to a tendency to respond in a fashion similar to those individuals with basic personality defects and weaknesses in contrast to neurotic or psychotic states. The public offender's Personality

Integration Scale score is below the mean indicating a less than adequate level of adjustment.

A below average score on the Defensive Positive Scale implies that the public offender is deficient in the usual defenses for maintaining minimal self esteem. The Defensive Positive Scale is a much more subtle measure of defensiveness than the Self Criticism Score which implies a healthy openness. On a scale which attempts to measure overt defensiveness, the public offender appears to be open and non-defensive. However, on more subtle measures of defensiveness, the public offender lacks the necessary defenses needed to maintain a healthy self esteem. Very few offenders have normal scores on the Number of Deviant Signs Scale with the majority falling significantly above the mean which is in the direction of maladjustment. Public offenders' scores deviate from the mean more on this scale than any of the other twenty-eight scales. Fitts and Hamner (1969) report that this scale is the best single index of maladjustment.

The typical public offender had a profile with the aforementioned general characteristics. In the following sections, research which has investigated various subcategorizations of the public offender population will be examined.

#### Differences Between Delinquents and

#### Non-Delinquents

In a study by Atchison (1958), the TSGS was administered to two groups of ninth grade boys who had been divided into a behavior problem or a non-behavior problem group on the basis of three teacher's ratings on the Haggerty-Olson-Wickman Teacher Rating Schedule, Form A. He

found significant differences between the two groups at the .01 level of confidence in Total Positive Scores and all Row and Column P Scores. The only departure from the typical "W" profile on the Column P Scores was that the Family Self was higher than the Social Self. Atchison hypothesized that this deviation from the typical offender's profile was due to the fact that the behavior problem group had not been labeled as delinquents, therefore, they had not yet experienced as much dissonance in their role as a family member as the labeled delinquent.

In another attempt to determine the differences between delinquent's and non-delinquent's self concept, Deitche (1959) compared 15 and 16 year old, white delinquent and non-delinquent males who were matched on age, Stanford-Binet I.Q., ethnic origin, and home stability. On every scale, the non-delinquent group had a more positive self concept than the delinquent group on the TSCS. The two groups had statistically significant differences at the .01 level on Total Positive Scores, Self Satisfaction, Behavior, Moral-Ethical Self and Family Self. There was a significant difference at the .05 level on the Social Self. On the basis of these and other investigations, Fitts and Hamner (1969) conclude that the TSCS does differentiate delinquents from non-delinquents.

#### Self Concept of Adult Offenders

Although Fitts and Hamner (1969) demonstrated that self concept profiles of public offenders on the TSCS have shown amazingly consistent patterns across many variables, the majority of the research has been with delinquent populations rather than adult offenders. Angelino (unpublished data cited in Fitts and Hamner, 1969) administered the TSCS to fifty male Federal Reformatory inmates and found no significant

differences between the adult male felons he studied and the typical delinquent profile reported by Fitts and Hamner (1969). Another study which involved thirty-four adult female inmates at the Tennessee Woman's Prison, Fitts and Hamner (1969) found no significant deviation from the delinquent profile. On the basis of these findings, Fitts and Hamner (1969) concluded that age and sex did not significantly influence the TSCS scores.

#### Differences Between First Offenders and Recidivists

The TSCS was utilized by Lefeber (1965) to investigate the self concept of non-delinquents, institutionalized delinquent first time offenders, and institutionalized delinquent recidivists. Each group of fifty-eight subjects was matched according to age, sex, ethnicity, mental maturity, and socioeconomic status. Significant mean differences were discovered among the three groups with the non-delinquents obtaining the highest mean score, followed by the first time offenders, and then by the recidivists when classified by: overall self concept; basic identity; self-satisfaction with basic identity; concept of own behavior; physical, moral, and ethical selves; and sense of worth as a person, family member, and in their social interactions. These results imply that the non-delinquents had the healthiest self concept overall followed by the first time offenders then the recidivists who had the poorest self concept. In no case did the self concept scores vary significantly as a function of age, ethnicity, mental maturity, or socioeconomic status. In another study involving institutionalized male juvenile offenders, recidivists again showed more negative self concepts

than first offenders (Curry, Manning, and Monroe, 1971). However, they found no significant difference in self concept attributable to urban vs. rural residence, birth order, type of crime, and presence or absence of a broken home.

Other studies which also demonstrated that the recidivist has a poorer self concept than the first offender were cited by Fitts and Hamner (1969). The data which were collected at a correctional institution for boys at Pikeville, Tennessee and the Tennessee State Prison for Women indicated that recidivists consistently had a more negative self concept than first offenders on almost every dimension of the TSCS with the greatest differences occurring on the P Scores.

#### Sociopathic Personality Disturbance and Self Concept

In an attempt to specifically identify differences in self concept among various diagnostic entities, Fitts (1972a) presented TSCS data for many of the diagnostic categories cited in the 1952 edition of the Diagnostic and Statistical Manual of Mental Disorders. He included data on those individuals diagnosed as having an antisocial reaction and a dyssocial reaction. The forty-nine subjects in the antisocial reaction group exhibited a profile very similar to that of the typical public offender. The Column Scores formed a distinctive "W" shape which differentiated this profile from that of any other diagnostic group. This "W" pattern was the exact opposite of the "M" shaped pattern which Fitts found to be characteristic of some of the psychotic and neurotic group profiles. He concluded that sociopaths view themselves as morally bad and as "black sheep" of their families. Their physical, personal, and

social selves were the areas of highest self esteem for the sociopath.

The profile for the dyssocial reaction group was relatively normal with all means within one-half standard deviation from the TSCS norms in all areas except Moral-Ethical Self, Personality Disorder, Personality Integration, and Number of Deviant Signs. These results imply that the dyssocial group was more likely to view themselves as "bad," to indicate a greater lack of personality integration and to demonstrate a significantly greater degree of maladjustment than the TSCS normative group. Also, they were unlikely to respond in a fashion similar to those individuals with basic personality defects and weaknesses. Most important, this group had a more positive self concept, better defenses, and less evidence of pathology than the antisocial group. Although members of this diagnostic category were deviant when compared to societal norms, they were quite normal within the value system of their subculture.

#### Institutional Behavior and Self Concept

In a study conducted in a woman's prison, Fitts and Hamner (1969) demonstrated that a significant relationship exists between inmate self concept and institutional behavior. Three prison staff members rated each of the forty-five inmates with respect to interpersonal difficulties with other inmates, dividing them into two groups. The "least problem" group had much healthier and less deviant profiles than the "most problem" group. The "most problem" group's scores were indicative of a significantly poorer self concept on the following scales: Total Positive Score, Basic Identity, Behavior, Personal Worth, Family Self and on all the Empirical Scales except for the Psychotic and Personality Integration Scales. This implied that the "most problem" group was more

likely not only to doubt their own self worth, to feel inadequate and to view themselves as "bad" but also to act in such a way as to confirm their negative self perceptions. A more negative score on the Family Self Scale reflected their uncertainty and possibly their feelings of failure in their role as a member of their "institutional family." They were also likely to have less adequate defenses and to score more negatively on most indices of maladjustment.

In a study involving 188 male juvenile offenders, Watson (1972) found that the TSCS was not significantly correlated with pre-institutional behavior or type of offense; however, significant correlations did exist with institutional behavior. The Total P Score, which implies a relatively positive self concept, was negatively correlated with total disciplinary slips received, number of fighting offenses, minor rule breaking, number of corporal punishments, commitments to cells and institutional probations.

#### Changes in Self Concept and Institutionalization

A review of the literature on self concept change during institutionalization as measured by the TSCS yielded many conflicting results. Some studies (Meese, 1961; Hamner, 1969; Lee, 1970; Pikeville Training School study cited by Fitts and Hamner, 1969, p. 25) reported no significant changes in self concept as a result of institutionalization. However, other investigations (Gattshall, 1969; Hamner, 1968, 1969; Joplin, 1967, and Woman's Prison study cited by Fitts and Hamner, 1969, p. 25) did report significant changes in self concept. These studies and possible explanations for these discrepant results will be explored

in the following paragraphs.

Meese (1961) failed to find any significant change in self concept scores in two groups of institutionalized delinquents over a six month interval; however, the data indicated a non-significant change in the positive direction in Total Positive Scores. Upon comparison of the pre- and post-test measures administered to a control group and a group involved in a special treatment program, Hamner (1969) found slightly positive, though non-significant, changes in both groups. He concluded that institutionalization had no harmful effects, at least for this sample. Lee (1970) administered the TSCS to one group of delinquent girls upon entry into a correctional institution and to another group just prior to their release. These groups which were matched for age, race, education, type of delinquency, and total time served in correctional institutions had no significant differences on any of the self concept scores. Following investigation of 96 males at the State Vocational Training School at Pikeville, Tennessee, Fitts and Hamner (1969) concluded that the length of time since commitment was not a significant factor influencing self concept. In summary, these aforementioned studies were unable to detect any significant changes in self concept as a result of institutionalization.

Upon investigation of the effects of four-and-one-half months of incarceration upon 176 inmates of a state reformatory, Gattshall (1969) found that the following scales on the TSCS showed a significant increase: Net Conflict, Self-Satisfaction, Moral-Ethical Self, Personality Disorder and Personality Integration whereas Total Variability decreased. His results imply that the inmates felt more self acceptance and better adjusted coupled with a decreased likelihood of seeing themselves as



"bad" people after the first several months in prison. They were less likely to score in a fashion similar to individuals with Basic Personality defects. Curiously enough, the results indicated that even though inmates felt more confusion and contradiction in their self-perceptions, there was less variability from one area of self to another.

Joplin (1969) also analyzed pre- and post-test data for 28 delinquent subjects who had participated in an eight month specialized treatment program for delinquents and found remarkable improvement on the majority of the 29 scales. No specific information on the program was available except that the major emphasis was upon personal adjustment rather than academic and vocational remediation. Those subjects who were experiencing the most emotional distress and had the most negative self concepts on the TSCS revealed the greatest change in self concept. Also, those subjects showing the greatest positive change in self concept had the best behavioral records (e.g., lower recidivism rates) following release from the institution.

In another study by Fitts and Hamner (1969), thirty-four residents of a women's prison were administered the TSCS twice over a four month period. The subjects participated in a milieu treatment program which placed primary emphasis upon vocational training and weekly group sessions. Although they found no significant differences in means or standard deviations, change in a positive direction did occur for 25 out of the 29 scales.

Hamner (1968, 1969) studied an intensive treatment program which consisted of eight three-and-a-half hour sessions spanning a two week period. The treatment program consisted of the use of group techniques, operant conditioning, peers as reinforcers, video-tape recordings for

immediate feedback and study of group functioning in addition to the administration of d-amphetamine in a dosage of 20 mg. per day. There were no significant changes on the TSCS scores following the two week treatment program.

On the basis of these investigations, Fitts and Hamner (1969) concluded that the self concept as measured by the TSCS was relatively stable and was not very sensitive to temporary, superficial changes in the individual. These results suggested that significant self concept changes did occur following intensive rehabilitation programs which encompassed a period of six months to a year. There also seemed to be a significant relationship between positive self concept change during institutionalization and a decreased likelihood of recidivism.

#### Cross Cultural Influences on Self Concept

A comparison of profiles involving delinquents from different countries and ethnic groups yielded results similar in form as well as level to that of the typical public offender (Lamarche, 1968; Kim, 1967; de Alvarez, 1969). Lamarche (1968) administered a French translation of the TSCS to French Canadian delinquents, Kim (1967) tested Korean delinquents, and de Alvarez (1969) studied delinquent Mexican girls. The profile for the public offender seemed to be consistent across different nationalities and cultures.

#### Summary

In comparing his research with that of other investigators (Atchison, 1958; de Alvarez, 1969; Deitche, 1959; Kim, 1969; Lefeber, 1965; and some unpublished research as cited by Fitts and Hamner, 1969, p. 6), Fitts:

(1969) demonstrated that the delinquents' profile on the TSCS was remarkably similar across studies in level and form. The typical public offender dislikes himself and has a relatively negative self concept particularly in terms of his basic identity, his own behavior, his moral-ethical character and his role as a poor family member. His locus of control is outside himself and he is easily influenced by his environment and by external suggestion. He is not likely to defensively distort his self concept and makes little effort to portray himself favorably. He experiences considerable confusion, conflict, uncertainty, and inconsistency in his perceptions on himself. It is easier for him to point out negative aspects of his self concept than to reject what he is not. He tends to lack the degree of internal strength necessary to function under stress, frustration, and pressure. He is likely to show many deviant features indicating a degree of maladjustment similar to that of people with neuroses and psychoses. However, the nature of his pathology most closely resembles a character disorder.

Fitts reported a characteristic profile for the public offender which does not vary significantly with age, sex, intelligence, educational level, race, geographical area, nationality and nature of crime. Self concept appears to be on a continuum with first time offenders having a more deviant self concept than normals and recidivists having a more deviant self concept than both of them. Measured self concept is remarkably consistent and change takes place very slowly. Incarceration alone does not produce any significant change in self concept and short term rehabilitative treatment programs produce little change. Long term, intensive treatment programs may produce positive changes in self concept.

## Self Esteem and the Public Offender

Some theorists and researchers have chosen to focus their attention upon self esteem rather than looking at the total self concept. Self esteem is generally defined as an individual's perception of his worth. Brissett (1972) suggested that self esteem encompasses two distinct social psychological processes: (1) the process of self evaluation, and (2) the process of defining one's self worth. Self evaluation refers to a conscious process of passing judgment on one's social importance and significance. Self worth refers to the feeling of self as being important and effective in one's dealings with one's environment. Geland (1962) defined self esteem as:

A person's characteristic evaluation of himself and what he thinks of himself as an individual; low self-esteem is characterized by a sense of personal inadequacy and an inability to achieve need satisfaction in the past; high self-esteem is defined by a sense of personal adequacy and a sense of having achieved need satisfaction in the past (p. 260).

Therefore, an individual's self esteem is dependent upon his perception and evaluation of his worth based upon past experiences and future aspirations. Self esteem is both a component and a determiner of self concept. In the following paragraphs, research investigations of the self esteem of the public offender will be examined.

In an attempt to study the new inmate's self esteem and the background factors which might influence self esteem at the time of incarceration, Johnson (1968) administered the Rosenberg Self Esteem Scale to adult male offenders convicted for their first felony and to civilian controls. The distribution of the self esteem scores did not differ significantly for inmates and controls, nor was there any significant difference between white and black inmate self esteem scores.

Inmate background factors were only slightly correlated with self esteem measures. Therefore, Johnson concluded that factors such as age, marital status of inmate's parents, and the age (of inmates whose homes were broken) when their homes were broken could possibly exert a minimal influence on self-esteem.

Bennett, Sorensen, and Forshay (1971) administered the Self-Esteem Inventory to newly admitted adult male offenders. They concluded that attitudes toward one's self vary considerably among newly admitted inmates as demonstrated by the fairly normal distribution of scores. The impact of institutionalization varied among inmates and/or inmates differed in self-esteem at the time of entry into the prison. Follow-up data has shown that self esteem scores were also widely distributed among inmates upon departure from the institution. However, the analyses of the test material administered to inmates leaving the institution is still in the preliminary stages. No specific pre- and post-test measures have yet been published.

Fichtler, Zimmermann, and Moore (1973) compared the self esteem of prison and non-prison groups. The two prison groups were composed of newly admitted adult felons and maximum security prisoners who had spent a year or more in the same prison. Students enrolled in an introductory psychology course and rural church members made up the other two groups. Self esteem was defined in terms of the discrepancy score between the actual-self and the ideal-self measures on a modified version of the Butler-Haigh self-referent items. A rank ordering of the groups from high to low self esteem was: rural church members, psychology students, newly admitted prisoners, and maximum security prisoners. Also, self esteem was negatively correlated with time in prison indicating that the

greater the time in prison, the lower the self-esteem scores. Fitchler et al. hypothesized that the sheltered, conservative environment of the rural church group was conducive to the maintenance of high self esteem. Since the distribution of scores were similar for both the psychology students and newly admitted prisoners, they suggested that the self esteem of incoming prisoners was relatively healthy. They also hypothesized that the low self esteem found among the maximum security prisoners was the result of the tightly controlled, dehumanizing environment of the prison.

In each of the three investigations reported, each concluded that the distribution of self esteem scores among newly admitted inmates was fairly normal (Johnson, 1968; Bennett et al., 1971; and Fitchler et al., 1973). Bennett et al. reported that a preliminary analyses of data collected from inmates leaving the institution suggested that inmate self esteem scores were distributed in much the same manner and at the same level as those just entering the institution. Fitchler et al. found that lower self esteem develops in prison as demonstrated by the positive correlation between time in prison and lowered self esteem. Since each study utilized different self esteem measures with different populations, it is impossible to conclusively resolve the discrepancy. However, Fitchler's data offered an empirical verification of the theoretical formulations of Clemmer (1959), Cressy (1961), Goffman (1961), Sykes (1958), and Wheeler (1961); all of whom theorized that incarceration leads to low self esteem.

## CHAPTER III

### STATEMENT OF THE PROBLEM

Extensive research on the self concept of public offenders has been conducted by Fitts with the Tennessee Self Concept Scale (TSCS). Upon comparing his research with that of other investigators, he demonstrated that the public offenders' profile on the TSCS was remarkably similar in level and form and does not vary significantly with age, sex, intelligence, educational level, race, geographical area, nationality, and nature of crime. However, the type of treatment program, institutional behavior, and diagnosis did influence the TSCS profile (Fitts and Hamner, 1969).

Fitts and Hamner (1969) concluded that the self concept of public offenders was relatively stable and incarceration alone does not produce any significant change in self concept. However, self concept changes did occur following intensive rehabilitation programs which encompassed a period of six months to a year. Following an eight month specialized treatment program, Joplin (1967) found significant changes in the direction of a more healthy self concept on the majority of the 29 scales. The subjects who were initially experiencing the most emotional distress and had the most negative self concepts on the TSCS revealed the greatest change in self concept. Also, those subjects showing the greatest positive change in self concept had the best behavioral records (c.g., lower recidivism rates) following release from the institution.

Fitts and Hamner (1969) also reported that a significant relationship existed between inmate self concept and institutional behavior. On the basis of staff ratings of inmates' interpersonal difficulties, the "least problem" group had much healthier and less deviant profiles than the "most problem" group (Fitts and Hamner, 1969). Watson (1972) found that the TSCS was not significantly correlated with pre-institutional behavior or type of offense, however, significant correlations did exist with institutional behavior.

Although the public offender group has generally been considered to be a very homogeneous one, there appears to be personality differences among prisoners as indicated by the fact that different Minnesota Multiphasic Personality Inventory (MMPI) profile scores are found (Pierce, 1972). It would seem that individuals with different MMPI profiles would differ in their ability to adjust to the demands and expectations of the prison and would respond differently to the institution's treatment program. An intensive rehabilitation program may facilitate extensive changes in one personality "type" within the prison and only superficial, short-term changes in another personality type. It would also be expected that differences in patterns of response to imprisonment would have differential effects on self concept as measured by the TSCS.

The present study was an attempt to determine if different personality types at different phases of their period of incarceration differ on the TSCS. The MMPI was used to differentiate two frequently observed personality types among the inmate population, the 4-9 profile (psychopathic deviant and hypomania) and the 4-8 profile (psychopathic deviant and schizophrenia). The inmate with peaks at scales 4 and 9 can be



described as overactive, talkative, provocative, resentful, and irritable. He is likely to show low frustration tolerance, impulsivity, poor moral standards in addition to irresponsible, untrustworthy behavior. In interpersonal relationships, he may create a favorable impression because of his lively, extroverted, and uninhibited appearance (Dahlstrom, Welsh, and Dahlstrom, 1972). These people also tend to have poor work and marital adjustment, a high frequency of unhappy marriages, extramarital relations, and sexual difficulties (Good and Brantner, 1974). The inmate with peaks on scales 4 and 8 is likely to be unpredictable, excitable, impulsive, and nonconforming. Others may consider him to be odd, peculiar, and distant in interpersonal relationships (Dahlstrom et al., 1972). His occupational and educational history may be marked by underachievement, uneven performance, and marginal adjustment. Family problems, sexual confusion and poor interpersonal relationships are fairly common (Good and Brantner, 1974).

Inmates who had these two profiles were also differentiated according to length of time of imprisonment. The first group had served less than six months on their present sentence, and the second group was composed of inmates who had been in the institution longer than six months. Biographical and demographic information was also analyzed because of the possibility of a relationship with self concept scores when personality factors are taken into consideration.

Inmates with peaks on scales 4 and 9 would be more likely to receive a diagnosis of "antisocial reaction" than those with peaks on 4 and 8 (Gilberstadt and Duker, 1965). Since individuals diagnosed as "antisocial reaction" have TSCS profiles similar to that of the "typical public offender" (Fitts, 1972a) and inmate self concept is consistent

over time (Fitts and Hamner, 1969), it was hypothesized that self concept of inmates with peaks on 4 and 9 would remain relatively unchanged throughout their period of confinement. Also, the 4-8 group was hypothesized to have a poorer self concept than the 4-9 group during the first six months of their institutionalization. Inmates with peak scores on scales 4 and 8 are likely to experience more feelings of alienation and confusion upon entry into the institution than the 4-9 group as would be expected from the findings of Dahlstrom et al. (1972). Therefore, incarceration is more likely to challenge their established ways of perceiving and evaluating their self resulting in a poorer self concept than the 4-9 group during the first few months of incarceration. However, significant positive self concept changes are predicted to occur among the 4-8 group who had been in prison longer than six months. As they became more accustomed to prison life, they will have had time to establish relationships and support systems which do not view them as peculiar or odd which would tend to boost their self concept. Therefore, TSCS profiles would not be expected to differ significantly for the 4-8 and 4-9 groups who had been incarcerated longer than six months.

## CHAPTER IV

### METHOD

#### Subjects

Subjects were 80 residents of the Iowa State Reformatory in Anamosa, Iowa, one of two correctional institutions for adult male felons in the state. Each of the 600 inmates had been routinely administered the MMPI upon admission as part of a standard test battery. The admission MMPI was used to select subjects for this experiment. The guidelines for the 4-9 group were as follows: scales Pd and Ma were the two highest scales with both being greater than a T-score of 70; Ma was 10 or more T-scores greater than Sc; L was less than a T-score of 60 and K was less than a T-score of 70. The guidelines for the 4-8 group were: scales Pd and Sc were the two peak scales with both being greater than a T-score of 70; Sc was 10 or more T-scores greater than Ma; L was less than a T-score of 60 and K was less than a T-score of 70. Those inmates who did not have at least a sixth grade reading level, as measured by the California Achievement Test, were eliminated from the sample. Subjects were divided into four groups of twenty each on the basis of their MMPI peak scales and the length of time in prison: 4-9's who had served less than six months (4-9 Less); 4-9's who had served more than six months (4-9 More); 4-8's who had served less than six months (4-8 Less) and 4-8's who had served more than six months (4-8 More).

### Tennessee Self Concept Scale

The TSCS is composed of 100 self descriptive statements to which the subject must respond on a five-point scale ranging from completely true to completely false. The TSCS yields 29 scales, each of which are reported in terms of standard scores with a mean of 50 and a standard deviation of 10. (Refer to Appendix A for a listing and explanation of the scales.) Subjects must be over twelve years of age and have at least a sixth grade reading level in order to take the test (Fitts, 1965).

The standardization group was composed of 626 individuals of varying age, sex, race, socioeconomic class, and educational level. The test-retest reliability with 60 college students over a two-week period ranged from .60 to .92 for all 29 scales. The content validity was determined by a group of psychologists who had to reach an unanimous agreement that each item was correctly classified (Fitts, 1965).

### Procedure

Subjects were told that their participation was completely voluntary and that their scores were confidential. Subjects were administered the Clinical Research form of the TSCS by the author until there were 20 correctly completed profiles for each of the four groups. Groups of between five and fifteen subjects were selected for testing primarily on the basis of their availability at certain times during the day. The testing was completed within five consecutive days. Biographical and demographic information was obtained from the files of each subject (refer to Appendix B for a complete listing).

## Design

Stepwise linear discriminant function analyses and t-tests were computed to examine the differences between inmates with different MMPI profiles at different phases of their institutionalization. The four criterion groups were as follows: 4-9's who had served less than six months (4-9 Less); 4-9's who had served more than six months (4-9 More); 4-8's who had served less than six months (4-8 Less); and 4-8's who had served more than six months (4-8 More). The 4-9 Less versus 4-9 More and 4-8 Less versus 4-8 More comparisons were analyzed by performing t-tests on each of the 29 TSCS scales and on the 20 demographic/biographical items. The two discriminant function analyses involved the following comparisons: 4-9 Less versus 4-8 Less and 4-9 More versus 4-8 More. The predictor variables in the discriminant function analyses included the 29 scales of the TSCS (Fitts, 1965) and 20 variables dealing with demographic and biographical information from their files (see Appendix B). In each analysis, a discriminant function was completed for each group in that analysis based on a weighting system which maximizes the variance between groups while minimizing the variance within groups (Cooley and Lohnes, 1962). This statistical analysis assumes that the misclassification costs are equal and that the prior probabilities of each population are equal.

The stepwise discriminant function analysis also demonstrated the order in which the variables were selected in discriminating between the groups. For example, the variable that contributed the most to the prediction system already containing the best single predictor was chosen as the second predictor. An F test with  $g - 1$  and  $n - g - p$  degrees of freedom was employed at each stage to determine whether the predictor

contributed to accounting for the remaining variance in the system.

The second phase of the study consisted of delineating those variables that meet certain specifications. Specifically, the criteria by which the best final predictors were chosen were as follows:

1. Since shrinkage occurs in this type of analysis, the number of final predictors were limited to the first five variables selected. This ceiling limit provided a subject to predictor ratio of 8:1.
2. Final predictor variables were selected so that the number of misclassifications was at a minimum.
3. Every variable in the final prediction system must be significant at the .25 level.

## CHAPTER V

### RESULTS

#### Introduction

Three approaches will be utilized in reporting and examining the results of this study. First, a general description of each of the four groups will be presented. Second, the variables that significantly differentiate the groups will be examined. Finally, the best predictor variables from the two discriminant function analyses will be reported.

#### General Characteristics of the Four Groups

A brief description of each of the four groups participating in this study is presented below. Central tendency statistics were used in computing the biographical and demographic information obtained from each inmate's files. Refer to Table I and Appendix C for specific means and standard deviations.

In this study, the inmate with MMPI peak scores on subscales 4 and 9 who has served less than six months (4-9 Less) was a 23 year old, white, single male who was living in a city with a population of 112,000 when last arrested. He has completed the 11th grade and has an average intelligence score on the Revised Beta Examination. The typical inmate in this group was 19 at the time of his first recorded arrest and has been arrested 3 times since then, not including the arrest for the

TABLE I  
 MEANS FOR VARIABLES FOUND SIGNIFICANT IN  
 AT LEAST ONE ANALYSIS

Variable	4-9 Less	4-9 More
<u>TSCS</u>		
Total P (Overall Self Concept)	336.50	345.80
Row 1 (Identity)	120.45	123.95
Row 2 (Self Satisfaction)	107.85	112.05
Row 3 (Behavior)	108.20	109.80
Column A (Physical Self)	73.90	76.15
Column C (Personal Self)	67.70	69.40
Column D (Family Self)	63.60	68.65
Column E (Social Self)	69.45	67.20
Total Variability	42.95	47.05
Column Total Variability	23.50	26.00
Row Total Variability	19.45	23.60
Distribution Score	108.65	119.00
#4 Responses (Mostly True)	25.55	23.00
#1 Responses (Mostly False)	15.90	21.65
Defensive Positive	60.30	61.05
General Maladjustment	92.45	95.80
Psychosis Scale	50.85	46.25
Neurosis Scale	84.35	87.40
Personality Integration	10.05	9.70
Number of Deviant Signs	20.65	18.95
<u>DEMOGRAPHIC DATA</u>		
Race (0= white, 1=nonwhite)	0.15	0.25
Years of School	10.95	10.50
Adult Incarcerations	0.25	0.35
Prior Arrests	3.10	3.75
Months Incarcerated*	4.00	14.20
Disciplinary Committee	0.50	0.75
Single**	0.55	0.60
Married**	0.30	0.30
Separated**	0.05	0.00
Crime Against Persons**	0.20	0.30
Length of Sentence (yrs.)	7.75	8.60
Population of city of residence	112,030	151,997



TABLE I (Continued)

Variable	4-8 Less	4-8 More
<u>TSCS</u>		
Total P (overall Self Concept)	301.60	321.45
Row 1 (Identity)	107.95	116.70
Row 2 (Self Satisfaction)	96.05	100.05
Row 3 (Behavior)	95.70	104.55
Column A (Physical Self)	65.35	69.55
Column C (Personal Self)	60.25	64.90
Column D (Family Self)	55.85	59.75
Column E (Social Self)	61.40	63.50
Total Variability	55.00	49.20
Column Total Variability	31.65	29.65
Row Total Variability	23.35	19.55
Distribution Score	115.35	101.15
#4 Responses (Mostly True)	21.70	24.65
#1 Responses (Mostly False)	20.25	18.40
Defensive Positive	51.70	54.55
General Maladjustment	82.00	87.30
Psychosis Scale	49.05	52.35
Neurosis Scale	71.15	77.60
Personality Integration	6.55	7.75
Number of Deviant Signs	34.65	25.45
<u>DEMOGRAPHIC DATA</u>		
Race (0=white, 1=nonwhite)	0.00	0.25
Years of School	10.40	9.95
Adult Incarcerations	0.20	0.05
Prior Arrests	2.95	2.15
Months Incarcerated*	3.45	25.05
Disciplinary Committee	0.25	1.95
Single**	0.80	0.45
Married**	0.05	0.30
Separated**	0.10	0.20
Crime Against Persons**	0.05	0.30
Length of Sentence (yrs.)	8.00	11.65
Population of city of residence	45,837	75,460

\*No analysis was performed on Less-More comparisons since it would be meaningless.

\*\*These variables were scored 0 for a "No" response and 1 for a "Yes" response for each S.

present conviction. He was probably convicted for a crime against property or persons and is serving an eight year sentence. Data compiled from the Bureau of Criminal Investigation Report, which was in each inmate's file, indicated that 30% of the 4-9 Less group were incarcerated while juveniles and 15% had a record of a prior adult incarceration. Thirty percent of this group have been before the Disciplinary Committee at least once during the first four months of their institutionalization.

The inmate from the 4-9 More group was most likely to be a 24 year old, white, single male who has completed the 11th grade and has an average intelligence test score. He was living in a town of 150,000 when arrested for his most recent offense. His first recorded arrest was at the age of 17 and he has been arrested 4 times prior to his present conviction for a crime against property or persons which carries a nine year sentence. Forty percent of this group were first institutionalized while still juveniles and 35% had a prior adult incarceration. Thirty-five percent of this group have been before the Disciplinary Committee at least once during their 14 month stay at the reformatory.

A description of a typical inmate from the 4-8 Less group would depict him as a 22 year old, white male who has never been married. He has completed the 10th grade and has an average intelligence test score. He was living in a town of 50,000 when last arrested. He was 18 at the time of his first recorded arrest and has been arrested on three subsequent occasions before being convicted for a crime against property carrying an eight year sentence. Forty percent of this group were incarcerated while juveniles and 15% have at least one prior adult incarceration. Fifteen percent have been before the Disciplinary

Committee at least once during their first 3 months in the reformatory.

A description of an average inmate from the 4-8 More group would depict him as a 23 year old, white, single male who has finished the 10th grade and has an average intelligence test score. He was 18 at the time of his first recorded arrest and has a record of two other arrests before being convicted for a crime against property carrying a twelve year sentence. He was residing in a town with a population of 75,000 when arrested for the present offense. Twenty-five percent of this group were institutionalized while juveniles and 5% have at least one prior adult incarceration. Sixty-five per cent of the 4-8 More group were seen at least twice by the Disciplinary Committee during their 25 month period of institutionalization.

#### Variable Significantly Differentiating the Groups

Two out of 48 variables significantly differentiated the 4-9 Less and the 4-9 More groups. The 4-9 group was more likely to use number one (Completely False) responses on the TSCS ( $\underline{t} = 2.13$ ,  $\underline{df} = 38$ ,  $\underline{p} < .05$ ) and had less deviant scores on the Psychoses Scale ( $\underline{t} = 2.15$ ,  $\underline{df} = 38$ ,  $\underline{p} < .05$ ) than the 4-9 Less group.

The 4-8 Less and 4-8 More groups were significantly different on 7 out of 48 variables. The variables and  $\underline{t}$  values are located in Table II. The only significant variable from the TSCS was Row Total Variability indicating that the 4-8 Less group had more variability or inconsistency in self perception across rows than did the 4-8 More group. The 4-8 More group had been before the Disciplinary Committee more frequently than the 4-8 Less group. The 4-8 More group had more non-white members, was less

TABLE II  
RESULTS OF COMPARISONS BETWEEN MEANS FOR 4-8 MORE AND  
4-8 LESS FOR SIGNIFICANT VARIABLES

Variable	t <sup>a</sup>	p
Row Total Variability	2.18	.05
Race	2.52	.05
Disciplinary Committee	3.60	.01
Single	2.39	.05
Married	2.15	.05
Crime Against Persons	2.15	.05
Length of Sentence	2.34	.05

<sup>a</sup>df = 38 for all t-tests.

TABLE III  
VARIABLES SIGNIFICANTLY DIFFERENTIATING THE 4-9 MORE AND  
4-8 MORE GROUPS AT STEP 0

Variable	F <sup>a</sup>	p
Total P (Overall Self Concept)	5.25	.05
Row 2 (Self Satisfaction)	6.32	.05
Column A (Physical Self)	6.04	.05
Column D (Family Self)	10.57	.01
Distribution	4.27	.05
General Maladjustment	8.53	.01
Psychosis Scale	12.21	.01
Neurosis Scale	6.31	.05
Adult Incarcerations	6.22	.05
Months Incarcerated	6.17	.05
Disciplinary Committee	4.19	.05
Separated	4.75	.05

<sup>a</sup>df = 1,38 for all F tests.

likely to be single and more likely to be married than the 4-8 Less group. Furthermore, the 4-8 More group had committed more crimes against persons and had longer prison sentences than the 4-8 Less group.

Twelve out of 49 variables significantly differentiated the 4-9 More and the 4-8 More groups at Step 0 of the discriminant function analysis. Refer to Table III for a listing of the variables and  $F$  values. Table IV contains a correlation matrix for these 12 variables. The 4-8 More group had an overall lower level of self esteem (Total P Score), felt less self satisfaction (Row 2), had a less positive view of their body and state of health (Column A), felt less adequate when evaluating their personal worth (Column B) and tended to be less definite when describing themselves (Distribution) than the 4-9 More group. They were more likely to score in a deviant direction on the following scales: General Maladjustment, Psychosis and Neurosis than the 4-9 More group. Respectively, these three scales differentiated psychiatric patients from non-patients, psychotic patients from other groups and neurotic patients from normals. The 4-8 More group had significantly fewer prior adult incarcerations, had spent more time in prison on their current sentence, had been before the Disciplinary Committee more often and were more likely to be separated from their wives than the 4-9 More group.

The 4-9 Less and the 4-8 Less groups were significantly different on 18 out of 49 variables at Step 0 of the discriminant function analysis (see Table V). Table VI presents a correlation matrix for these 18 variables. The 4-8 Less group doubted their own worth more, saw themselves as less desirable and had less self confidence in themselves (Total P Score) than the 4-9 Less group. Subjects in the 4-8 Less group

TABLE IV  
CORRELATION MATRIX FOR THE TWELVE VARIABLES DISTINGUISHING THE 4-9 MORE AND 4-8 MORE GROUPS  
AT STEP 0

	TP	R2	CA	CD	D	GM	P	N	AI	MI	DC	S
TP	1.00											
R2	0.85 <sup>c</sup>	1.00										
CA	0.84 <sup>c</sup>	0.66 <sup>c</sup>	1.00									
CD	0.79 <sup>c</sup>	0.69 <sup>c</sup>	0.57 <sup>c</sup>	1.00								
D	0.60 <sup>c</sup>	0.34 <sup>a</sup>	0.63 <sup>c</sup>	0.41 <sup>b</sup>	1.00							
GM	0.92 <sup>c</sup>	0.79 <sup>c</sup>	0.76 <sup>c</sup>	0.79 <sup>c</sup>	0.56 <sup>c</sup>	1.00						
P	-0.42 <sup>b</sup>	-0.43 <sup>b</sup>	-0.27	-0.45 <sup>b</sup>	-0.05	-0.47 <sup>b</sup>	1.00					
N	0.87 <sup>c</sup>	0.69 <sup>c</sup>	0.82 <sup>c</sup>	0.74 <sup>c</sup>	0.54	0.79 <sup>c</sup>	-0.29	1.00				
AI	-0.08	-0.10	-0.15	-0.23	-0.13	-0.14	-0.09	-0.10	1.00			
MI	-0.17	-0.14	-0.01	-0.08	-0.23	-0.09	-0.17	-0.15	-0.04	1.00		
DC	-0.11	-0.07	-0.00	-0.20	-0.38 <sup>a</sup>	-0.12	0.08	-0.08	-0.16	0.27	1.00	
S	0.17	0.12	0.09	0.13	-0.02	0.08	-0.22	0.17	0.19	0.12	0.06	1.00

df = 38

a = p < .05

b = p < .01

c = p < .001

TP = Total P (Overall Self Concept)

P = Psychosis Scale

R2 = Row 2 (Self Satisfaction)

N = Neurosis Scale

CA = Column A (Physical Self)

AI = Adult Incarcerations

CD = Column D (Family Self)

MI = Months Incarcerated

D = Distribution

DC = Disciplinary Committee

GM = General Maladjustment

S = Single

TABLE V  
 VARIABLES SIGNIFICANTLY DIFFERENTIATING THE 4-9 LESS  
 AND 4-8 LESS GROUPS AT STEP 0

Variable	<u>F</u> <sup>a</sup>	<u>p</u>
Total P (Overall Self Concept)	8.87	.01
Row 1 (Identity)	9.32	.01
Row 2 (Self Satisfaction)	4.75	.05
Row 3 (Behavior)	7.93	.01
Column A (Physical Self)	6.91	.05
Column C (Personal Self)	7.18	.05
Column D (Family Self)	5.84	.05
Column E (Social Self)	11.69	.01
Total Variability	12.90	.01
Column Total Variability	13.26	.001
Row Total Variability	4.43	.05
Defensive Positive	5.16	.05
General Maladjustment	9.00	.01
Neurosis Scale	11.45	.01
Personality Integration	6.69	.05
Number of Deviant Signs	5.49	.05
Married	4.61	.05
Population	5.43	.05

<sup>a</sup>df = 1,38 for all F tests.

TABLE VI

CORRELATION MATRIX FOR THE EIGHTEEN VARIABLES DISTINGUISHING THE 4-9 LESS AND 4-8 LESS GROUPS  
AT STEP 0

	TP	R1	R2	R3	CA	CC	CD	CE	TV	CTV
TF	1.00									
R1	0.81 <sup>c</sup>	1.00								
R2	0.88 <sup>c</sup>	0.50 <sup>b</sup>	1.00							
R3	0.91 <sup>c</sup>	0.69 <sup>c</sup>	0.72 <sup>c</sup>	1.00						
CA	0.81 <sup>c</sup>	0.67 <sup>c</sup>	0.68 <sup>c</sup>	0.76 <sup>c</sup>	1.00					
CC	0.86 <sup>c</sup>	0.62 <sup>c</sup>	0.87 <sup>c</sup>	0.76 <sup>c</sup>	0.71 <sup>c</sup>	1.00				
CD	0.81 <sup>c</sup>	0.72 <sup>c</sup>	0.66 <sup>c</sup>	0.79 <sup>c</sup>	0.55 <sup>c</sup>	0.68 <sup>c</sup>	1.00			
CE	0.84 <sup>c</sup>	0.70 <sup>c</sup>	0.73 <sup>c</sup>	0.72 <sup>c</sup>	0.64 <sup>c</sup>	0.74 <sup>c</sup>	0.58 <sup>c</sup>	1.00		
TV	-0.42 <sup>b</sup>	-0.27	-0.45 <sup>b</sup>	-0.38 <sup>a</sup>	-0.26	-0.37 <sup>a</sup>	-0.55 <sup>c</sup>	-0.30	1.00	
CTV	-0.51 <sup>c</sup>	-0.19	-0.64 <sup>c</sup>	-0.44 <sup>b</sup>	-0.45 <sup>b</sup>	-0.56 <sup>c</sup>	-0.43 <sup>b</sup>	-0.41 <sup>b</sup>	0.85 <sup>c</sup>	1.00
RTV	-0.15	-0.26	-0.04	-0.15	0.07	0.00	-0.48 <sup>b</sup>	-0.05	0.78 <sup>c</sup>	0.34
DP	0.78 <sup>c</sup>	0.57 <sup>c</sup>	0.73 <sup>c</sup>	0.72 <sup>c</sup>	0.67 <sup>c</sup>	0.67 <sup>c</sup>	0.59 <sup>c</sup>	0.68 <sup>c</sup>	-0.40 <sup>b</sup>	-0.50 <sup>b</sup>
GM	0.88 <sup>c</sup>	0.84 <sup>c</sup>	0.72 <sup>c</sup>	0.77 <sup>c</sup>	0.78 <sup>c</sup>	0.81 <sup>c</sup>	0.74 <sup>c</sup>	0.79 <sup>c</sup>	-0.34 <sup>a</sup>	-0.41 <sup>b</sup>
N	0.87 <sup>c</sup>	0.79 <sup>c</sup>	0.72 <sup>c</sup>	0.80 <sup>c</sup>	0.79 <sup>c</sup>	0.84 <sup>c</sup>	0.78 <sup>c</sup>	0.71 <sup>c</sup>	-0.44 <sup>b</sup>	-0.50 <sup>c</sup>
PI	0.36 <sup>a</sup>	0.26	0.39 <sup>a</sup>	0.30	0.26	0.43 <sup>b</sup>	0.20	0.37 <sup>a</sup>	-0.26	-0.38 <sup>a</sup>
NDS	-0.50 <sup>b</sup>	-0.52 <sup>c</sup>	-0.40 <sup>b</sup>	-0.43 <sup>b</sup>	-0.42 <sup>b</sup>	-0.51 <sup>c</sup>	-0.44 <sup>b</sup>	-0.48 <sup>b</sup>	0.33	0.39 <sup>a</sup>
M	0.11	0.13	0.06	0.11	0.10	0.01	0.12	0.08	-0.09	-0.03
P	-0.07	0.09	-0.14	-0.07	0.12	-0.08	-0.04	0.02	0.14	0.17



TABLE VI (Continued)

	RTV	CP	GM	N	PI	NDS	M	P
RTV	1.00							
DP	-0.13	1.00						
GM	-0.13	0.61 <sup>c</sup>	1.00					
N	-0.19	0.66 <sup>c</sup>	0.86 <sup>c</sup>	1.00				
PI	-0.01	0.25	0.34 <sup>a</sup>	0.38 <sup>a</sup>	1.00			
NDS	0.14	-0.24	-0.58 <sup>c</sup>	-0.59 <sup>c</sup>	-0.71 <sup>c</sup>	1.00		
M	-0.13	0.12	0.08	0.15	0.15	-0.23	1.00	
P	0.04	-0.10	-0.06	-0.14	-0.02	-0.07	0.19	1.00

df = 38

a =  $p < .05$

b =  $p < .01$

c =  $p < .001$

TP = Total P (Overall Self Concept)

R1 = Row 1 (Identity)

R2 = Row 2 (Self Satisfaction)

R3 = Row 3 (Behavior)

CA = Column A (Physical Self)

CC = Column C (Personal Self)

CD = Column D (Family Self)

CE = Column E (Social Self)

TV = Total Variability

CTV = Column Total Variability  
(Variation within Columns)

RTV = Row Total Variability  
(Variation across Rows)

DP = Defensive Positive

GM = General Maladjustment

N = Neurosis Scale

PI = Personality Integration

NDS = Number of Deviant Signs

M = Married

P = Population

were more likely to view their basic identity in a less positive fashion (Row 1), to feel less self acceptance (Row 2) and to negatively evaluate their own behavior (Row 3). They also felt less acceptance of their physical self (Column A), their self in relation to significant others (Column D) and their social self (Column E) in addition to a greater likelihood of feeling more inadequate as a person (Column C) than did the 4-9 Less group. The 4-8 Less group felt more inconsistency from one area of self perception to another (Total Variability, Column Total V and Row Total V) than did the 4-9 Less group. The 4-8 Less group was less likely to defensively distort their profile by positive self description (Defensive Positive). The 4-8 Less group was more likely to score in a deviant direction on the following scales: General Maladjustment, Neurosis, Personality Integration and Number of Deviant Signs. Respectively, these scales differentiate psychiatric patients from non-patients, neurotic patients from normals, the personality integration group from other groups and individuals with psychological disturbances from normals. Furthermore, the 4-8 Less group was less likely to be married and more likely to be residing in a smaller town at the time of arrest for the present conviction than the 4-9 Less group.

#### Final Predictors of the Discriminant

##### Function Analyses

An overall  $F$  test ( $F = 8.92$ ,  $df = 5$ ,  $34$ ,  $p < .001$ ) indicates that the discriminant function with five predictor variables significantly differentiates the 4-9 More and 4-8 More groups (see Table VII). Table VIII presents a correlation matrix of these five predictor variables. As can be seen, none of the correlations are significantly different

TABLE VII

FINAL PREDICTORS OF THE DISCRIMINANT FUNCTION OF  
THE 4-9 MORE VERSUS 4-8 MORE GROUPS

Variable	F-value Step 0 (df = 1,38)	F-value Entered (1,35)	F-value Step 5 (df = 1,34)
# of 4 Responses	0.23 <sup>a</sup>	5.95* (1,35)	5.93*
Psychosis Scale	12.21**	12.21** (1,38)	20.80***
Months Incarcerated	6.17*	7.17* (1,37)	4.24*
Separated	4.75*	4.62* (1,36)	8.99**
Population	3.95 <sup>a</sup>	3.75 <sup>a</sup> (1,34)	3.75 <sup>a</sup>

a =  $p < .10$

\*\* =  $p < .01$

\* =  $p < .05$

\*\*\* =  $p < .001$

TABLE VIII

CORRELATION MATRIX OF THE FIVE PREDICTOR VARIABLES

	# of 4	PS	MI	Sep	Pop
# of 4 Responses	1.00				
Psychosis Scale	0.02	1.00			
Months Incarcerated	-0.29	-0.17	1.00		
Separated	-0.17	-0.22	0.12	1.00	
Population	-0.16	0.14	0.20	-0.01	1.00

\* =  $p < .05$

from zero. Specifically, the best five variables distinguishing the two groups are the frequency of number four (Mostly True) responses and the Psychosis Scale from the TSCS, the number of months incarcerated, whether or not they are separated from their wives, and the population of the town they were residing in at the time of arrest. The 4-8 More group gave more number four (Mostly True) responses and responded more deviantly on the Psychosis Scale than the 4-9 More group. Also, the 4-8 More group had been incarcerated for a longer period of time, had a greater likelihood of being separated and were living in a smaller town when arrested.

Table IX is a frequency distribution of the accuracy of predicting the membership of each inmate utilizing a discriminant function with these five predictor variables. After Step 5, the proportion of 4-9 More subjects correctly classified into the 4-9 More group was 0.95. Likewise, the proportion of 4-8 More subjects correctly classified was 0.89.

An overall  $F$  test ( $F = 10.79$ ,  $df = 2, 37$ ,  $p < .001$ ) indicates that the discriminant function with two predictor variables significantly differentiates the 4-9 Less and the 4-8 Less groups (refer to Table X). The two best variables distinguishing the two groups are Column Total Variability and Population. The 4-8 Less group was more inconsistent from one area of self perception to another within the five column scores (Physical Self, Moral-Ethical Self, Personal Self, Family Self, and Social Self) and they were living in a smaller town when arrested for their current offense. The correlation between these two variables is 0.17.

Table XI is a frequency distribution of the accuracy of predicting

TABLE IX  
 FREQUENCY DISTRIBUTION OF THE PROBABILITY OF CLASSIFICATION  
 OF 4-9 MORE AND 4-8 MORE GROUPS

Probability	4-9M/4-9M	4-9M/4-8M	4-8M/4-8M	4-8M/4-9M
1.00	0	0	0	0
.95 - .99	10	0	7	0
.90 - .94	2	1	2	0
.85 - .89	2	0	1	0
.80 - .84	0	0	2	0
.75 - .79	1	0	2	0
.70 - .74	0	0	1	1
.65 - .69	1	0	0	0
.60 - .64	1	0	1	1
.55 - .59	1	0	2	0
.50 - .54	1	0	0	0
Total	19	1	18	2

4-9M/4-9M = 4-9 More Ss correctly classified.

4-9M/4-8M = 4-9 More Ss incorrectly classified.

4-8M/4-8M = 4-8 More Ss correctly classified.

4-8M/4-9M = 4-8 More Ss incorrectly classified.

TABLE X  
 FINAL PREDICTORS OF THE DISCRIMINANT FUNCTION OF  
 THE 4-9 LESS VERSUS 4-8 LESS GROUPS

Variable	F-value Step 0	F-value Step 2
Column Total Variability	13.26***	14.26***
Population	5.44*	6.44*

\* =  $p < .05$

\*\* =  $p < .01$

\*\*\* =  $p < .001$

TABLE XI

FREQUENCY DISTRIBUTION OF THE PROBABILITY OF CLASSIFICATION  
OF 4-9 LESS AND 4-8 LESS GROUPS

Probability	4-9L/4-9L	4-9L/4-8L	4-8L/4-8L	4-8L/4-9L
1.00	0	0	0	0
.95 - .99	3	0	2	0
.90 - .94	1	0	5	0
.85 - .89	2	0	1	0
.80 - .84	1	0	0	1
.75 - .79	1	2	0	0
.70 - .74	2	0	1	1
.65 - .69	4	0	2	0
.60 - .64	0	1	0	0
.55 - .59	0	0	5	0
.50 - .54	2	1	0	2
Total	16	4	16	4

4-9L/4-9L = 4-9 Less Ss correctly classified.

4-9L/4-8L = 4-9 Less Ss incorrectly classified.

4-8L/4-8L = 4-8 Less Ss correctly classified.

4-8L/4-9L = 4-8 Less Ss incorrectly classified.

the membership of each inmate utilizing a discriminant function with these two predictor variables. After Step 2, the proportion of 4-9 Less subjects correctly classified into the 4-9 Less group was 0.75.

Similarly, the proportion of 4-8 Less subjects correctly classified was 0.75.

## CHAPTER VI

### DISCUSSION.

Research conducted by Fitts and other investigators has demonstrated that the public offender's TSCS profile was remarkably similar in level and form and does not vary significantly with age, sex, intelligence, educational level, race, geographical area, nationality, or nature of crime. When viewed as a homogeneous group, the self concept of public offenders was relatively stable and incarceration alone did not produce significant changes in self concept (Fitts and Hamner, 1969). The results of the present study support Fitts and Hamner's (1969) findings that the self concept of public offenders is relatively stable. Since only two out of forty-eight variables (or 4% of the variables) significantly differentiated the 4-9 Less from the 4-9 More groups, these differences are most likely attributable to chance alone. Therefore, inmates with MMPI peak scores on scales 4 and 9 who have been in prison less than six months apparently do not significantly differ from those who have been in prison longer than six months.

Seven out of forty-eight (or 15% of the variables) significantly differentiated the 4-8 Less from the 4-8 More group. Since only one of the TSCS variables was significant, it is unlikely that any real differences in self concept exist between these two groups. The remaining six significant differentiators came from the Biographical and Demographic Information. The interrelationships between these variables



demand careful examination before definite conclusions can be drawn. The fact that the number of times before the Disciplinary Committee emerged as significant is not surprising since length of time in prison was a variable in determining group membership. The number of months incarcerated was significantly correlated with Crimes against Persons ( $r = 0.38$ ,  $df = 38$ ,  $p < .05$ ). Crimes against Persons typically carry longer prison sentences, therefore requiring more time in prison before being eligible for parole considerations. In light of the correlation, it appears that the significance of Crimes against Persons is due to factors inherent in the design of the study and to the nature of the prison system.

Two overlapping factors dealt with marital status. The results indicated that the 4-8 More group was more likely to be married and less likely to be single. Another variable which differentiated the two groups was race. The 4-8 More group had more non-white members in the sample than did the 4-8 Less group. Since most of the obtained differences between these groups appear to be related to factors inherent in the design of the study, the significance of the results is questionable.

When length of time in prison was held constant across groups with different MMPI profile peaks, significant differences in self concept did emerge. Twelve of the forty-nine variables (or 24% of the variables) significantly differentiated the 4-9 More and 4-8 More groups. On each of the eight significant variables from the TSCS, the 4-8 More group scores consistently reflect a poorer self concept. The 4-8 More group had also spent a significantly longer period of time in prison for their most recent conviction in addition to having been called before the

Disciplinary Committee more frequently than the 4-9 More group. These groups did not differ with respect to the type of crime committed or the length of their sentence which might have accounted for a longer period of incarceration. One might argue that because the 4-8 More group had significantly fewer prior adult incarcerations, they were less experienced in "playing the game" needed to get paroled. However, it would be short-sighted to attribute these differences only to lack of experience in the prison system without first considering the meaning of their MMPI profile peaks. Inmates with peak scores on scales 4 and 8 are likely to have an occupational and educational background marked by underachievement, irregular performance, and marginal adjustment (Good and Brantner, 1974). Although the MMPI would also predict poor work adjustment for inmates with peak scores on 4 and 9 (Good and Brantner, 1974), the results suggest that the 4-8 More group had a poorer institutional adjustment which was demonstrated by their being incarcerated for a significantly longer period of time and being seen more frequently by the Disciplinary Committee than the 4-9 More group.

The MMPI would also predict marital discord and sexual difficulties for both groups (Good and Brantner, 1974). However, the inmate with peak scores on 4 and 8 would be likely to experience more difficulty with interpersonal relationships than the inmate with peaks on 4 and 9. Acquaintances frequently describe the 4-8 individual's relationships with others as being unusual, peculiar, and distant. The term schizoid is often applied to them (Dahlstrom et al., 1972). The 4-8 More group was more likely to be separated from their wives than the 4-9 More group demonstrating a poorer marital adjustment for the 4-8 More group as would be expected from the MMPI. In summary, the 4-8 More group not

only had a less healthy self concept than the 4-9 More group but also had a poorer institutional and marital adjustment.

Of the eighteen variables (or 37% of the variables) significantly differentiating the 4-9 Less and 4-8 Less groups, sixteen were from the TSCS. The means for the 4-8 Less group were consistently in the direction of poorer self concept and indicative of more significant pathology. The results of the analysis of the Biographical and Demographic variables revealed interesting differences between the two groups which are consistent with the descriptive "picture" of each profile type from the MMPI. The 4-9 Less group was more likely to be living in a larger city than the 4-8 Less group when last arrested. The MMPI suggests that individuals with 4-9 profiles are likely to have shallow interpersonal relationships and may tend to enjoy a fast-moving, socially exciting environment where they could enter wholeheartedly into outings and parties (Dahlstrom et al., 1972). In a big city, there may be a greater likelihood of anonymity, less stable social structures and looser family ties. The behaviors which 4-9 profile types are likely to prefer would be more acceptable in a larger city. Another possibility is that the 4-9's life style is shaped by the environment of a big city. The 4-8 Less group was also less likely to be married than the 4-9 Less group. This combined with the aforementioned results which indicated that the 4-8 More group was more likely to be separated than the 4-9 More group adds additional support to the conclusion that inmates with peak scores on scales 4 and 8 of the MMPI have more difficulty establishing binding heterosexual relationships.

To summarize, there were no significant changes in self concept on

the TSCS for either the 4-8 or 4-9 group over time in prison. The present study supports the findings by Fitts and Hamner (1969) that the offender's self concept was relatively stable and incarceration alone does not produce significant changes in self concept. However, differences in self concept do exist when subgroups of the offender population are identified on the basis of their MMPI profile peak scores. The 4-8 group had a more negative self concept than the 4-9 group throughout their period of incarceration. This demonstrates the importance of treatment programs designed to meet the particular needs of subgroups within the general offender population. The MMPI could be used to identify offenders who are more likely to have a poor self concept throughout their period of incarceration so that they could be channeled into specific programs designed to deal directly with the particular needs of these offenders. Previous research has shown that offenders who initially had the most negative self concept demonstrated the greatest overall change in self concept in addition to having better behavior records after release following an eight month intensive treatment program (Joplin, 1967). One could hypothesize that the 4-8 group which had a more negative self concept than the 4-9 group throughout imprisonment might have demonstrated positive self concept changes following involvement in a specialized treatment program. This points to a critical need for additional research which investigates the impact of specialized treatment programs upon the self concept and behavior of subgroups within the offender population.

Past research has shown that a significant relationship exists between inmate self concept and institutional behavior. Inmates having the fewest interpersonal difficulties with other inmates had healthier

and less deviant TSCS profiles (Fitts and Hamner, 1969). Also, Watson (1972) found that Total P Score was negatively correlated with institutional disciplinary problems. In the present study, the 4-8 More group not only had a poorer institutional adjustment but also had a more negative self concept than the 4-9 More group. Although this experiment was not specifically designed to investigate the relationship between self concept and institutional behavior, the results support the findings of Fitts and Hamner (1969) and Watson (1972).

Although speculative at this point, the first six months are likely to be an adjustment period during which time networks of interpersonal relationships are being developed. As the inmate becomes more enculturated and established in his institutional environment, differences in behavior patterns and styles of interrelating should become more apparent. Since length of institutionalization and number of times before the Disciplinary Committee are rough indices of overall institutional adjustment, subtle differences between inmates who had been in prison less than six months might not have been detected. Additional research involving more sophisticated measures of institutional adjustment are needed to determine the extent of the relationship which exists between self concept and behavior among different personality types during their period of incarceration.

The five variables selected as the best predictors classified 95 per cent of the 4-9 More subjects correctly and 89 per cent of the 4-8 More subjects correctly. In comparison to the 4-9 More group, the 4-8 More inmates tend to score in a more abnormal direction on the Psychosis Scale, have been incarcerated longer, are more likely to be separated from their wives, tend to choose number four (Mostly True) responses

more frequently and are likely to come from smaller towns. An inmate's score on the Psychosis Scale had the strongest predictive ability. The Psychosis Scale is based on 23 items which best differentiated psychotic patients from other groups (Fitts and Hamner, 1969). Scale 8 of the MMPI is similar to the Psychosis Scale in that it also measures the similarity of a subject's responses to those of patients characterized by their bizarre and unusual thoughts or behaviors. Scale 8 items not only reflect disordered thought processes and social alienation but also deal with poor family relationships, concern with sexual matters, difficulties in impulse control and debilitating fears and worries (Dahlstrom et al., 1972). The reliability of Scales 4 and 8 of the MMPI in identifying those inmates likely to experience more difficulty in interpersonal and occupational adjustment than the 4-9 group is demonstrated by the Psychosis Scale emerging as the strongest predictor in differentiating these two groups.

The subjects in the 4-8 More group were also incarcerated for a longer period of time and were more likely to be separated from their wives. These two variables not only significantly differentiated the 4-8 More from the 4-9 More group but also emerged as final predictors. This adds more support to the conclusion that the 4-8 More group has a poorer marital and institutional adjustment than the 4-9 More group.

A variable which emerged as a final predictor which was not significant at Step 0 was the number four (Mostly True) response. Fitts and Hamner (1969) cite research indicating that four and two (Mostly False) responses reflects the use of finer distinctions and qualifications which they conclude is related to good personal adjustment. Although the difference is not significant, the 4-8 More group demonstrate a

tendency to choose four responses more frequently than the 4-9 More group. It is unlikely that the increased use of four responses reflects better adjustment since the other TSCS variables which were significant all indicated that the 4-8 More group had a poorer self concept than the 4-9 More group. Additional research is needed to clarify the meaning of four (Mostly True) responses in an offender population.

Population emerged as non-significant final predictor although it was significant at Step 0. This means that even though population was a weak (non-significant) final predictor, including it with the other four predictors increased the probability of correctly predicting group membership. The 4-8 More group was residing in a town almost exactly one-half the size of the typical town which the 4-9 More group was living in at the time of their arrest for the present conviction.

Column Total Variability (CTV) and population were the two variables which emerged as the best predictors correctly classifying 75 percent of the 4-9 Less group and 75 percent of the 4-8 Less group. In comparison with 4-9 Less subjects, the 4-8 Less group tend to experience a greater amount of inconsistency from one area of self perception to another and are more likely to have resided in a smaller town when last arrested. CTV emerged as the best predictor for use in differentiating the two groups. Fitts (1969) hypothesized that the variability scales reflect the degree of integration of a person's self concept, therefore, serving as an additional indicator of personality adjustment or maladjustment. Offenders typically report more variability in self concept than non-offenders, indicating a tendency among offenders to compartmentalize certain aspects of self and to view these aspects as being apart from the rest of the self (Fitts, 1969). At Step 0, the 4-8 Less

group scored significantly higher on all three variability scales indicating more overall inconsistency in self perception than the 4-9 Less group. However, the variability scales were not significant differentiators for the groups who had been in prison longer than six months indicating that inmate self perception becomes less variable as the inmate settles into his period of incarceration. The confusion or inconsistency in self perception experienced by the inmate with peak scores on scales 4 and 8 of the MMPI is most acute during the first few months in prison; however, this disruption of self perception lessens as the inmate becomes more familiar with his prison environment. Even though self concept becomes less variable for the 4-8 group over time in prison, their self concept scores continue to be less healthy and to reflect more indicators of maladjustment than the 4-9 group.

Population also emerged as a factor having strong predictive power in determining membership in either the 4-9 Less or 4-8 Less group. One can speculate that the inmate with a 4-9 profile might prefer a larger community where shallow interpersonal relationships and an active social life could more easily be maintained.

Another possibility would be that the 4-9's life style has been shaped by the environment of a big city. However, further investigation is necessary before definite conclusions can be made concerning size of the community inmates were residing in when arrested and its relation to self concept.



## CHAPTER VII

### SUMMARY

The present investigation was an attempt to determine if different personality types at different phases of their period of incarceration differ on the Tennessee Self Concept Scale. Previous research by Fitts and other investigators has demonstrated that the public offender's TSCS profile was remarkably similar in level and form and does not vary significantly with age, sex, intelligence, educational level, race, geographical area, nationality, and nature of crime. However, the type of treatment program, institutional behavior, and diagnosis has been shown to influence the TSCS profile (Fitts and Hamner, 1969). Although public offenders appear to be a relatively homogeneous group on the basis of their TSCS profiles, this has not been the case with some other measures. Research with the Minnesota Multiphasic Personality Inventory (MMPI) has demonstrated that different personality types do exist within an inmate population (Pierce, 1972).

The MMPI was used to differentiate two frequently observed personality types among an inmate population, the 4-9 profile (Psychopathic Deviate and Hypomania) and the 4-8 profile (Psychopathic Deviate and Schizophrenia). The inmate with peaks at scales 4 and 9 can be described as overactive, irritable, talkative, and hostile. He is likely to show low frustration tolerance, impulsivity, poor moral standards in addition to irresponsible, untrustworthy behavior. In

interpersonal relationships, he may create a favorable impression because of his lively, extroverted, and uninhibited appearance (Dahlstrom et al., 1972). These people also tend to have poor work and marital adjustment, a high frequency of unhappy marriages, extramarital relations, and sexual difficulties (Good and Brantner, 1974). The inmate with peaks on scales 4 and 8 is likely to be unpredictable, excitable, impulsive, and nonconforming. Others may consider him to be odd, peculiar, and distant in interpersonal relationships (Dahlstrom et al., 1972). His occupational and educational history may be marked by underachievement, uneven performance, and marginal adjustment. Family problems, sexual confusion, and poor interpersonal relationships are fairly common (Good and Brantner, 1974). Inmates who had these two profile types were also differentiated according to length of time of imprisonment. The first group had served less than six months on their present sentence, and the second group was composed of inmates who had been in the institution longer than six months.

Since individuals diagnosed as "antisocial reaction" have TSCS profiles similar to that of the "typical public offender" (Fitts, 1972) and inmate self concept is consistent over time (Fitts and Hamner, 1969), it was hypothesized that self concept of inmates with peaks on 4 and 9 would remain relatively unchanged throughout their period of confinement. The 4-8 group was hypothesized to have a poorer self concept than the 4-9 group during the first six months of their institutionalization. Inmates with peak scores on scales 4 and 8 are likely to experience more feelings of alienation and confusion upon entry into the institution than the 4-9 group as would be expected from the findings of Dahlstrom et al. (1972). Therefore, incarceration would be more likely to

challenge their established ways of perceiving and evaluating their self resulting in a poorer self concept than the 4-9 group during the first few months of incarceration. However, significant positive self concept changes were predicted to occur among the 4-8 group who had been in prison longer than six months. As they became more accustomed to prison life, they were expected to have had time to establish relationships and support systems who would not view them as peculiar or odd which would tend to boost self concept. Therefore, TSCS profiles would not be expected to differ significantly for the 4-8 and 4-9 groups who had been incarcerated longer than six months.

Eighty subjects from a state men's reformatory participated in the study. Each of the 600 inmates of the reformatory had been routinely administered the MMPI upon admission as part of a standard test battery which was used to select subjects for this experiment. Subjects who had been selected on the basis of their MMPI profiles and length of time in prison were administered the Clinical and Research form of the TSCS until there were twenty correctly completed profiles for each of the four groups.

The comparisons investigating the effect of time in prison on the two different MMPI profile types were analyzed by performing t-tests. Two discriminant function analyses were performed on the 4-8 versus 4-9 Less and 4-8 versus 4-9 More groups to identify these variables which differentiated the groups and which best predicted group membership. Biographical and demographic information was also analyzed because of the possibility of a relationship with self concept scores when personality factors were taken into consideration.

The results indicated that changes in self concept on the TSCS

for either the 4-8 or 4-9 groups over time in prison would be expected purely on the basis of chance. The present study supported the findings of Fitts and Hammer (1969) that the offender's self concept was relatively stable and incarceration alone does not produce significant changes in self concept. However, differences in self concept do exist when subgroups of the offender population are identified on the basis of their MMPI profile peak scores.

On each of the eight significant variables from the TSCS, the 4-8 More group scores consistently reflect a poorer self concept than the 4-9 More group. The 4-8 More group had also spent a significantly longer period of time in prison for their most recent conviction in addition to having been called before the Disciplinary Committee more frequently than the 4-9 More group. Also, the 4-8 More group was more likely to be separated from their wives than the 4-9 More group which suggests poorer marital adjustment. The 4-8 More group not only had a less healthy self concept but also had a poorer institutional and marital adjustment than the 4-9 More group.

Of the eighteen variables significantly differentiating the 4-9 Less and 4-8 Less groups, sixteen were from the TSCS. The means for the 4-8 Less group were consistently in the direction of poorer self concept and indicative of more significant pathology. In addition, the 4-8 Less group was more likely to be living in a smaller town when last arrested and were less likely to be married than the 4-9 Less group. This combined with the aforementioned results which indicated that the 4-8 More group was more likely to be separated than the 4-9 More group suggests that those inmates with peak scores on scales 4 and 8 on the MMPI have more difficulty establishing and maintaining binding

heterosexual relationships. Overall, the 4-8 group had a more negative self concept than the 4-9 group throughout their period of incarceration.

The five variables selected as the best predictors classified 95 per cent of the 4-9 More subjects correctly and 89 per cent of the 4-8 More subjects correctly. In comparison to the 4-9 More group, the 4-8 More inmates tend to score in a more abnormal direction on the Psychosis Scale, have been incarcerated longer, are more likely to be separated from their wives, tend to choose number four (Mostly True) responses more frequently and are likely to come from smaller towns. Column Total Variability and population were the two variables which emerged as the best predictors correctly classifying 75 per cent of the 4-9 Less group and 75 per cent of the 4-8 Less group. The 4-8 Less group tended to experience a greater amount of inconsistency from one area of self perception to another and were more likely to have resided in a smaller town when last arrested than the 4-9 Less subjects.

## BIBLIOGRAPHY

- Atchison, C. O. "A Comparison Study of the Self Concept of Behavior Problem High School Boys." (Unpublished Doctoral Dissertation, Indiana University, 1958.)
- Bennett, L. A., D. E. Sorensen, and H. Forshay. "The Application of Self-Esteem Measures in a Correctional Setting: 1. Reliability of the Scale and Relationship to Other Measures." Journal of Research in Crime and Delinquency, 8 (1971), 1-9.
- Brissett, D. "Toward a Clarification of Self-Esteem." Psychiatry, 35 (1972), 255-263.
- Clemmer, D. The Prison Community. New York: Holt, Rinehart, and Winston, 1959.
- Combs, A., and D. Snygg. Individual Behavior: A Perceptual Approach. New York: Harpers, 1959.
- Cooley, W. W., and P. P. Lohnes. Multivariate Procedures for the Behavioral Sciences. New York: Wiley, 1962.
- Cressy, D. R. The Prison. New York: Holt, Rinehart, and Winston, 1961.
- Curry, M. W., R. J. Manning, and D. R. Monroe. "A Study of Self Concept of Juvenile Delinquents in Specific Institutions in the State of Tennessee." (Unpublished Master's Thesis, University of Tennessee School of Social Work, 1971.)
- Dahlstrom, W. G, G. S. Welsh, and L. E. Dahlstrom. An MMPI Handbook Volumn 1: Clinical Interpretation. Minneapolis: University of Minnesota Press, 1972.
- de Alvarez, B. M. Interamerican Institute for Psychological and Sociological Studies, Chihauhau, Chihauhau, Mexico. Unpublished Data, 1969.
- Deitche, J. H. "The Performance of Delinquent and Non-delinquent Boys on the Tennessee Department of Mental Health Self Concept Scale." (Unpublished Doctoral Dissertation, Indiana University, 1959.)
- Downie, N. M., and R. W. Heath. Basic Statistical Methods. New York: Harper and Row, 1970.

- Fichtler, H., R. R. Zimmerman, and R. T. Moore. "Comparison of Self-Esteem of Prison and Non-Prison Groups." Perceptual and Motor Skills, 36 (1973), 39-44.
- Fitts, W. H. Tennessee Self Concept Scale. Nashville: Counselor Recordings and Tests, 1965.
- Fitts, W. H. The Self Concept and Psychopathology. Monograph No. 4. Nashville, Tennessee: Dede Wallace Center Monograph, 1972.
- Fitts, W. H. The Self Concept and Performance. Monograph No. 5. Nashville, Tennessee: Dede Wallace Center Monograph, 1972.
- Fitts, W. H. The Self Concept and Behavior: Overview and Supplement. Monograph No. 7. Nashville, Tennessee: Dede Wallace Center Monograph, 1972.
- Fitts, W. H., and W. T. Hamner. The Self Concept and Delinquency. Monograph No. 1. Nashville, Tennessee: Nashville Mental Health Center, 1969.
- Garabedian, P. C. "Social Roles and Processes of Socialization in the Prison Community." Social Problems, 11 (1963), 139-152.
- Gattshall, G. W. "Imprisonments' Affects Upon the Self Concept and the Actualizing Process." (Unpublished Doctoral Dissertation, Ball State University, 1969.)
- Geland, D. M. "The Influence of Self-Esteem on the Rate of Verbal Conditioning and Social Matching Behavior." Journal of Abnormal and Social Psychology, 65 (1962), 259-265.
- Gilberstadt, H., and J. Duker. A Handbook for Clinical and Actuarial MMPI Interpretation. Philadelphia: W. B. Saunders, 1965.
- Goffman, E. Asylums. Garden City, New York: Anchor Books, 1961.
- Good, P., and J. P. Brantner. A Practical Guide to the MMPI. Minneapolis: University of Minnesota Press, 1974.
- Gordon, C., and K. J. Gerger (eds.). The Self and Social Interaction. New York: Wiley, 1968.
- Hamner, W. T. The Self Concept of Delinquents. Research Bulletin No. 3. Nashville, Tennessee: Nashville Mental Health Center, 1968.
- Hamner, W. T. "The Learning of Social Controls in Juvenile Antisocial Personalities." (Unpublished Doctoral Dissertation, Vanderbilt University, 1969.)
- Johnson, R. E. "A Study of the Self-Esteem and Related Background Factors of New Reformatory Inmates." (Unpublished Doctoral Dissertation, Michigan State University, 1968.)

- Joplin, G. H. Highfields Residential Group Center, New Jersey.  
Unpublished Data shared with W. H. Fitts, 1967.
- Kim, Y. K. "A Comparison of Self Concept of Delinquent and Non-Delinquent Boys." (Unpublished Master's Thesis, Seoule National University, Seoule, Korea, 1967.)
- Lamarche, L. "Validation de la Traduction du Tennessee Self Concept Scale." (Unpublished Master's Thesis, University of Montreal, 1968.)
- Lee, M. J. "Self Concept and Juvenile Delinquent Girls." (Unpublished Master's Thesis, Florida State University, 1970.)
- Lefebver, J. A. "The Delinquent's Self Concept." (Unpublished Doctoral Dissertation, University of Southern California, 1965.)
- Meese, B. G. "An Experimental Program for Juvenile Delinquent Boys." (Unpublished Doctoral Dissertation, University of Maryland, 1961.)
- Pierce, D. M. "MMPI Coorelates of Adaptation to Prison." Correctional Psychologist, 5 (1972), 43-47.
- Rogers, C. R. Client-Centered Therapy. Boston: Houghton-Mifflin, 1951.
- Snygg, D., and A. Combs. Individual Behavior: A New Frame of Reference for Psychology. New York: Harper, 1949.
- Sykes, G. M. The Society of Captives. Princeton: Princeton University Press, 1958.
- Watson, R. G. "A Study of Personality Integration in Institutionalized Delinquents." (Unpublished Doctoral Dissertation, George Peabody College, 1972.)
- Wheeler, S. "Socialization in Correctional Communities." American Sociological Review, 26 (1961), 697-712.
- Wylie, R. C. The Self Concept. Lincoln: University of Nebraska Press, 1961.



APPENDIX A

NATURE AND MEANING OF TENNESSEE SELF

CONCEPT SCORES

## NATURE AND MEANING OF TENNESSEE SELF

## CONCEPT SCORES\*

- A. The Self Criticism Score (SC). This scale is composed of 10 items. These are all mildly derogatory statements that most people admit as being true for them. Individuals who deny most of these statements most often are being defensive and making a deliberate effort to present a favorable picture of themselves. High scorers generally indicate a normal, healthy openness and capacity for self-criticism. Extremely high scorers (above the 99th percentile) indicate that the individual may be lacking in defenses and may in fact be pathologically undefended. Low scorers indicate defensiveness, and suggest that the Positive Scores are probably artificially elevated by this defensiveness.
- B. The Positive Scores (P). In the original analysis of the item pool the statements seemed to be conveying three primary messages: (1) This is what I am, (2) This is how I feel about myself, and (3) This is what I do. On the basis of these three types of statements the three horizontal categories were formed. They appear on the Score Sheet as Row 1, Row 2 and Row 3 and are hereafter referred to by those labels. The Row Scores thus comprise three sub-scores which, when added, constitute the Total Positive or Total P Score. These scores represent an internal frame of reference within which the individual is describing himself.

Further study of the original items indicated that they also varied considerably in terms of a more external frame of reference. Even within the same row category the statements might vary widely in content. For example, with Row 1 (the What I am category) the statements refer to what I am physically, morally, socially, etc. Therefore, the pool of items was sorted again according to these new vertical categories, which are the five Column Scores of the Score Sheet. Thus the whole set of items is divided two ways, vertically into columns (external frame of reference) and horizontally into rows (internal frame of reference) with each item and each cell contributing to two different scores.

1. Total P Score. It reflects the overall level of self esteem. Persons with high scores tend to like themselves, feel that they are persons of value and worth, have confidence in themselves, and act accordingly. People with low scores are doubtful about their own worth; see themselves as undesirable; often feel anxious, depressed, and unhappy; and have little faith or confidence in themselves.

If the Self Criticism (SC) Score is low, high P Scores become suspect and are probably the result of defensive distortion. Extremely high scores (generally above the 99th percentile) are deviant and are usually found only in such disturbed people as paranoid schizophrenics who as a group show many extreme scores, both high and low.

2. Row 1 P Score - Identity. These are the "what I am" items. Here the individual is describing his basic identity -- what he is as he sees himself.
3. Row 2 P Score - Self Satisfaction. This score comes from those items where the individual describes how he feels about the self he perceives. In general this score reflects the level of self satisfaction or self acceptance. An individual may have very high scores on Row 1 and Row 3 yet still score low on Row 2 because of very high standards and expectations for himself. Or vice versa, he may have a low opinion of himself as indicated by the Row 1 and Row 3 Scores yet still have a high Self Satisfaction Score on Row 2. The sub-scores are therefore best interpreted in comparison with each other and with the Total P Score.
4. Row 3 P Score - Behavior. This score comes from those items that say "this is what I do, or this is the way I act." Thus this score measures the individual's perception of his own behavior or the way he functions.
5. Column A - Physical Self. Here the individual is presenting his view of his body, his state of health, his physical appearance, skills and sexuality.
6. Column B - More-Ethical Self. This score describes the self from a moral-ethical frame or reference--moral worth, relationship to God, feelings of being a "good" or "bad" person, and satisfaction with one's religion or lack of it.
7. Column C - Personal Self. This score reflects the individual's sense of personal worth, his feeling of adequacy as a person and his evaluation of his personality apart from his body or his relationships to others.
8. Column D - Family Self. This score reflects one's feelings of adequacy, worth, and value as a family member. It refers to the individual's perception of self in reference to his closest and most immediate circle of associates.
9. Column E - Social Self. This is another "self as perceived in relation to others" category but pertains to "others" in a more general way. It reflects the person's sense of adequacy and worth in his social interaction with other people in general.

- C. The Variability Scores (V). The V scores provide a simple measure of the amount of variability, or inconsistency, from one area of self perception to another. High scores mean that the subject is quite variable in this respect while low scores indicate low variability which may even approach rigidity if extremely low (below the first percentile).
1. Total V. This represents the total amount of variability for the entire record. High scores mean that the person's self concept is so variable from one area to another as to reflect little unity or integration. High scoring persons tend to compartmentalize certain areas of self and view these areas quite apart from the remainder of self. Well integrated people generally score below the mean on these scores but above the first percentile.
  2. Column Total V. This score measures and summarizes the variations within the columns.
  3. Row Total V. This score is the sum of the variations across the rows.
- D. The Distribution Score (D). This score is a summary score of the way one distributes his answers across the five available choices in responding to the items of the Scale. It is also interpreted as a measure of still another aspect of self perception: certainly about the way one sees himself. High scores indicate that the subject is very definite and certain in what he says about himself while low scores mean just the opposite. Low scores are found also at times with people who are being defensive and guarded. They hedge and avoid really committing themselves by employing "3" responses on the Answer Sheet.

Extreme scores on this variable are undesirable in either direction and are most often obtained from disturbed people. For example, schizophrenics often use "5" and "1" answers almost exclusively, thus creating very high D Scores. Other disturbed patients are extremely uncertain and noncommittal in their self descriptions with a preponderance of "2", "3" and "4" responses and very low D Scores.

- E. The True-False Ratio (T/F). This is a measure of response set or response bias, an indication of whether the subject's approach to the task involves any strong tendency to agree or disagree regardless of item content (Fitts, 1961).

The actual meaning of T/F can be approached in three ways. (1) It can be considered solely as a measure of response set and interpreted in terms of the findings about the meaning of deviant response sets. (2) It can be treated purely as a task approach or behavioral measure which has meaning only in terms of empirical validity. In this sense the T/F Ratio differentiates patients from non-patients and correlates significantly with other tests. (3) It can also be considered from the framework of self theory. From this

approach, high T/F Scores indicate the individual is achieving self definition or self description by focusing on what he is and is relatively unable to accomplish the same thing by eliminating or rejecting what he is not. Low T/F Scores would mean the exact opposite, and scores in the middle ranges would indicate that the subject achieves self definition by a more balanced employment of both tendencies -- affirming what is self and eliminating what is not self.

- F. Net Conflict Scores. These scores are highly correlated with the T/F Score. More directly, however, they measure the extent to which an individual's responses to positive items differ from, or conflict with, his responses to negative items in the same area of self perception. Thus this is a limited and purely operational definition and application of the term "conflict."

There are two different kinds of conflict, as follows:

1. Acquiescence Conflict. This phenomenon occurs when the P Scores are greater than the N Scores (P - N yields a positive score or number). This means that the subject is overaffirming his positive attributes.
  2. Denial Conflict. This is the opposite of acquiescence conflict. Here the N Scores for the cells are higher than the P Scores (P - N yields minus scores). This means that the subject is over-denying his negative attributes in relation to the way he affirms his positive characteristics. He concentrates on "eliminating the negative".
- G. Total Conflict Scores. The foregoing Net Conflict Scores were concerned with directional trends in our P - N measure of conflict. However, some individuals have high P - N differences which cancel each other out because they are so variable in direction. It is of equal interest to determine the total amount of P - N conflict in a subject's self concept as well as the net or directional amount of conflict. The Total Conflict score does this by summing P - N discrepancies regardless of sign. High scores indicate confusion, contradiction, and general conflict in self perception. Low scores have the opposite interpretation, but extremely low scores (below the red line on the Profile Sheet) have a different meaning. The person with such low scores is presenting such an extremely tight and rigid self description that it becomes suspect as an artificial defensive stereotype rather than his true self concept. Disturbed people generally score high on this variable, but some also have deviantly low scores depending on the nature and degree of their disorder.

The conflict scores are reflections of conflicting responses to positive and negative items within the same area of self perception. These scores are not to be confused with the variability scores, which reflect fluctuations from one area of self perception to another.

- H. The Empirical Scales. These six scales were all derived by item analysis, with a resulting selection of those items which differentiated one group of subjects from all other groups. The scores on these scales are purely empirical, and cut across the basic classification scheme of the Scale.

These scales were derived from an analysis of item responses with the following groups:

<u>Group</u>	<u>Size of Group</u>
Norm Group	626
Psychotic Group (Psy)	100
Neurotic Group (N)	100
Personality Disorder Group (PD)	100
Defensive Positive Group (DP)	100
Personality Integration Group (PI)	75

The comparative item responses for these groups were studied and analyzed by Chi Square tests. Those items which differentiated one group from all other groups were then used to compose a specific scale for that group. There is some overlapping of items, since a number of items are used on more than one scale.

The six empirical scales derived by this method, in order of their appearance on the Profile Sheet, are as follows:

1. The Defensive Positive Scale (DP). This is a more subtle measure of defensiveness than the SC score. One might think of SC as an obvious defensiveness and DP as a subtle defensiveness score. The DP Score stems from a basic hypothesis of self theory: that individuals with established psychiatric difficulties do have negative self concepts at some level of awareness, regardless of how positively they describe themselves on an instrument of this type.

The DP Score has significance at both extremes. A high DP Score indicates a positive self description stemming from defensive distortion. A significantly low DP Score means that the person is lacking in the usual defenses for maintaining even minimal self esteem.

2. The General Maladjustment Scale (GM). This scale is composed of 24 items which differentiate psychiatric patients from non-patients but do not differentiate one patient group from another. Thus it serves as a general index of adjustment-maladjustment but provides no clues as to the nature of the pathology. Note that this is an inverse Scale on the Profile Sheet. Low raw scores result in high T-Scores, and vice versa.
3. The Psychosis Scale (Psy). The Psy Scale is based on 23 items which best differentiate psychotic patients from other groups.

4. The Personality Disorder Scale (PD). The 27 items of this scale are those that differentiate this broad diagnostic category from the other groups. This category pertains to people with basic personality defects and weaknesses in contrast to psychotic states or the various neurotic reactions. The PD Scale is again an inverse one.
  5. The Neurosis Scale (N). This is an inverse scale composed of 27 items. As with the other inverse scales, high T-Scores on the Profile Sheet still mean high similarity to the group from which the scale was derived -- in this case neurotic patients.
  6. The Personality Integration Scale (PI). The scale consists of 25 items that differentiate the PI Group from other groups. The scoring is slightly different for this scale and is explained on the special template for scoring this scale. This group was composed of 75 people who, by a variety of criteria, were judged as average or better in terms of level of adjustment or degree of personality integration.
- E. The Number of Deviant Signs Score (NDS). The NDS Score is a purely empirical measure, and is simply a count of the number of deviant features on all other scores. This score is based upon the theoretical position of Berg (1957) as states in his "deviation hypothesis". This hypothesis states that individuals who deviate sharply from the norm in minor behaviors are likely to be deviant in more major aspects of behavior. The findings with the NDS Score substantiate this hypothesis. Disturbed persons often obtain extreme scores on either end of the continuum. Consequently, a system which sets appropriate cut-off points for each score on the Scale will identify disturbed persons with considerable accuracy.

The NDS Score is the Scale's best index of psychological disturbance. This score alone identifies individuals with about 80% accuracy.

APPENDIX B

BIOGRAPHICAL AND DEMOGRAPHIC VARIABLES



## BIOGRAPHICAL AND DEMOGRAPHIC VARIABLES

1. Present age.
2. Race: white (0), non-white (1).
3. Intellectual functioning as measured by the Revised Beta.
4. Last year of school completed prior to incarceration for the present offense.
5. Number of juvenile incarcerations.
6. Number of prior adult incarcerations.
7. Age at time of first recorded arrest.
8. Number of prior recorded arrests.
9. Number of months incarcerated to date for present offense.
10. Number of times before the Disciplinary Committee.
11. Resident has never been married (0,1)\*.
12. Resident is currently married (0,1)\*
13. Resident is currently divorced (0,1)\*.
14. Resident is currently separated (0,1)\*.
15. Present conviction is for a crime against persons (0,1)\*  
(robbery, assault with intent to rob, robbery with aggravation, burglary with aggravation, carrying a concealed weapon, going armed with intent; assault with intent to do great bodily injury, going armed with intent to do great bodily injury, assault with intent to commit a felony, and assault with intent to commit murder).
16. Present conviction is for a crime against property (0,1)\*  
(forgery, uttering a forged instrument, false checks, conspiracy shoplifting, larceny, larceny in the nighttime, larceny of a motor vehicle, breaking and entering, attempted breaking and entering, receiving stolen property, receiving a stolen vehicle, concealing stolen property, receiving and concealing stolen property, operating a motor vehicle without the owner's consent, burglary without aggravation, jailbreak, and escape and malicious injury to a building).

17. Present conviction is for a crime against nature (0,1)\*  
(rape, assault with intent to rape, and lascivious acts with a child).
18. Present conviction is for a drug related offense (0,1)\*  
(Possession of a controlled substance, delivery of a controlled substance, possession with intent to deliver a controlled substance and selling prescribed drugs).
19. Length of present sentence.
20. Population of the town resident was living in at the time of arrest for the present conviction.

\*These variables were scores 0 for a "No" responses and 1 for a "Yes" responses for each Ss.

APPENDIX C

MEANS AND STANDARD DEVIATIONS FOR ALL  
FOUR GROUPS

## MEANS AND STANDARD DEVIATIONS FOR ALL

## FOUR GROUPS

Variable	4-9 Less		4-9 More	
	Mean	Standard Deviation	Mean	Standard Deviation
<u>TSCS</u>				
SC	35.30	5.04	35.50	4.61
T/F	1.24	0.61	1.13	0.39
Net C	3.45	18.44	-3.45	19.94
Total C	29.65	12.90	33.60	10.11
Total P	226.50	32.40	345.80	27.62
Row 1	120.45	10.82	123.95	9.35
Row 2	107.85	14.53	112.05	14.95
Row 3	108.20	11.66	109.80	10.73
Column A	73.90	6.39	76.15	7.31
Column B	63.10	9.68	64.85	8.05
Column C	67.70	6.77	69.40	6.60
Column D	63.60	9.39	68.65	7.71
Column E	69.45	7.44	67.20	9.02
Total V	42.95	10.27	47.05	12.35
Column Total V	23.50	5.51	26.00	8.47
Row Total V	19.45	6.68	23.60	6.66
Distribution	108.65	26.75	119.00	24.70
# 5 Responses	16.50	10.97	18.45	13.03
# 4 Responses	25.55	5.62	23.00	9.42
# 3 Responses	23.90	11.99	23.10	10.63
# 2 Responses	18.15	9.32	14.30	7.84
# 1 Responses	15.90	7.30	21.65	9.64
DP	60.30	11.62	61.05	9.65
GM	92.45	8.94	95.80	8.22
Psy	50.85	8.15	46.25	5.04
PD	67.45	17.21	66.80	12.26
N	84.35	8.35	87.40	9.69
PI	10.05	4.59	9.70	4.17
NDS	20.65	16.21	18.95	18.94
<u>DEMOGRAPHIC DATA</u>				
Age	22.40	4.75	23.50	3.07
Race (0 = white, 1 = nonwhite)	0.15	0.37	0.25	0.44
IQ	102.40	9.19	102.60	8.09
Years of School	10.95	1.76	10.50	1.64
Juvenile Incarcerations	0.35	0.59	0.45	0.60
Adult Incarcerations	0.25	0.72	0.35	0.49
Age of 1st Arrest	18.65	3.57	17.20	2.12
Prior Arrests	3.10	3.48	3.75	3.81
Months Incarcerated	4.00	1.45	14.20	8.64
Disciplinary Committee	0.50	1.00	0.75	1.68

Variable	4-9 Less		4-9 More	
	Mean	Standard Deviation	Mean	Standard Deviation
Single*	0.55	0.51	0.60	0.50
Married*	0.30	0.47	0.30	0.47
Divorced*	0.10	0.31	0.10	0.31
Separated*	0.05	0.22	0.00	0.00
Crime Against Persons*	0.20	0.41	0.30	0.47
Crime Against Property*	0.65	0.48	0.50	0.51
Crime Against Nature*	0.00	0.00	0.05	0.22
Drug Related Offense*	0.15	0.37	0.15	0.37
Length of Sentece (yrs.)	7.75	2.71	8.60	3.73
Population of city of residence	112030	117062	151997	163045

\*These variables were scored 0 for a "No" response and 1 for a "Yes" response for each Ss.

Variable	4-8 Less		4-8 More	
	Mean	Standard Deviation	Mean	Standard Deviation
<u>TSCS</u>				
SC	35.75	4.95	33.80	4.26
T/F	1.20	0.44	1.10	0.34
Net C	2.75	13.43	-4.30	15.25
Total C	35.85	10.46	32.70	9.52
Total P	301.60	41.17	321.45	38.66
Row 1	107.95	14.77	116.70	14.15
Row 2	96.05	19.36	100.05	15.25
Row 3	96.70	14.05	104.55	13.94
Column A	65.35	13.07	69.55	9.53
Column B	58.80	9.70	62.55	7.13
Column C	60.25	10.43	64.90	7.65
Column D	55.85	10.92	59.75	9.51
Column E	61.40	7.45	63.50	8.22
Total V	55.00	10.94	49.20	13.30
Column Total V	31.65	8.36	29.65	8.39
Row Total V	23.35	4.90	19.55	6.07
Distribution	115.35	38.03	101.15	29.67
# 5 Responses	19.80	12.62	13.05	9.47
# 4 Responses	21.70	10.07	24.65	12.04
# 3 Responses	24.65	13.62	30.35	13.42
# 2 Responses	14.25	8.44	14.55	8.17
# 1 Responses	20.25	14.25	18.40	11.37
DP	51.70	12.32	54.55	12.77
GM	82.00	12.76	87.30	10.09
Psy	49.05	5.93	52.35	5.97
PD	60.50	13.50	62.85	9.08
N	71.15	15.32	77.60	14.51
PI	6.55	3.94	7.75	3.48
NDS	34.65	21.24	25.45	17.90
<u>DEMOGRAPHIC DATA</u>				
Age	21.80	2.80	22.70	2.30
Race (0 = white, 1 = nonwhite)	0.00	0.00	0.25	0.44
IQ	100.15	10.06	99.10	14.35
Years of School	10.40	1.57	9.95	1.43
Juvenile Incarcerations	0.50	0.69	0.30	0.57
Adult Incarcerations	0.20	0.52	0.05	0.22
Age of 1st Arrest	17.95	2.89	18.15	1.93
Prior Arrests	2.95	3.83	2.15	2.25
Months Incarcerated	3.45	1.90	25.05	17.52
Disciplinary Committee	0.25	0.64	1.95	2.01
Single*	0.80	0.41	0.45	0.51
Married*	0.05	0.22	0.30	0.47
Divorced*	0.05	0.22	0.05	0.22
Separated*	0.10	0.31	0.20	0.41
Crime Against Persons*	0.05	0.22	0.30	0.47
Crime Against Property*	0.85	0.37	0.70	0.47

Variable	4-8 Less		4-8 More	
	Mean	Standard Deviation	Mean	Standard Deviation
Crime Against Nature	0.10	0.31	0.00	0.00
Drug Related Offense*	0.00	0.00	0.00	0.00
Length of Sentence (yrs.)	8.00	3.20	11.65	6.20
Population of City of Residence	45837	49179	75460	55469

\*These variables were scored 0 for a "No" response and 1 for a "Yes" response for each Ss.

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Candidate for the Degree of

Doctor of Philosophy

Thesis: MMPI PERSONALITY TYPE AND THE EFFECT OF IMPRISONMENT UPON  
SELF CONCEPT

Major Field: Psychology

Biographical:

Personal Data: Born in Dayton, Ohio, June 16, 1949, the son of  
John and Helen Nieberding.

Education: Graduated from Carroll High School, Dayton, Ohio, in  
May, 1967; received the Bachelor of Science degree in  
Psychology from Ohio State University, Columbus, Ohio, in  
1971; enrolled in Master's program at Oklahoma State Univer-  
sity, 1971-1973; completed requirements for the Master of  
Science degree in May, 1974; enrolled in Doctoral program  
at Oklahoma State University, 1973-1975; completed require-  
ments for the Doctor of Philosophy degree in July, 1975.

Professional Experience: Activities Therapist, summer of 1971, at  
Columbus State Institute, Columbus, Ohio; graduate teaching  
assistant, Department of Psychology, Oklahoma State University,  
1971-1973; Psychologist I, summer of 1973, at Iowa State Men's  
Reformatory, Anamosa, Iowa; National Institute of Mental  
Health Trainee, Oklahoma State University, 1973-1974; Intern-  
ship in Clinical Psychology at the University of Minnesota  
Hospitals, Minneapolis, Minnesota, 1974-1975.