

This is to certify that the

dissertation entitled

AN ANALYSIS OF THE RELATIONSHIP OF  
MMPI AND DEMOGRAPHIC FACTORS  
FOR ESCAPEES IN A MINIMUM SECURITY ENVIRONMENT

presented by

GEORGE PRESTON WILSON

has been accepted towards fulfillment  
of the requirements for

Ph.D. degree in Criminal Justice

*David B. Kahovich*  
Major professor

Date 8/15/83

**PLACE IN RETURN BOX**  
 to remove this checkout from your record.  
**TO AVOID FINES** return on or before date due.

DATE DUE MAGIC 2	DATE DUE	DATE DUE
<del>MAY 25 1999</del> 300		

THE UNIVERSITY OF CHICAGO  
LIBRARY

GEORGE BREITMAN



P.O. 140-440X

**AN ANALYSIS OF THE RELATIONSHIP OF  
MMPI AND DEMOGRAPHIC FACTORS  
FOR ESCAPEES IN A MINIMUM SECURITY ENVIRONMENT**

**BY**

**GEORGE PRESTON WILSON**

**A DISSERTATION**

**Submitted to  
Michigan State University  
In partial fulfillment of the requirements  
for the degree of**

**DOCTOR OF PHILOSOPHY**

**School of Criminal Justice**

**1983**

## **ABSTRACT**

# **AN ANALYSIS OF THE RELATIONSHIP OF MMPI AND DEMOGRAPHIC FACTORS FOR ESCAPEES IN A MINIMUM SECURITY ENVIRONMENT**

by

**George Preston Wilson**

The problem of escape is not new to the field of corrections. In fact it is inherent in the operation of correctional institutions, particularly those with minimum security environments. On the other hand, correctional institutions could not operate effectively without the many functions regularly carried out by inmates. Thus the task of classifying and selecting individuals to perform necessary activities which provide a great opportunity for escape has become a major concern for correctional administrators. Limiting the potential for escape will continue to be a dilemma for administrators due to their dual responsibilities of protecting the community while maintaining order within the institution. The question then becomes under conditions of greatest opportunity to escape

which factors provide the best indicators of potential escape behavior? The primary objective of this study was to investigate the factors which are useful as predictors of escape behavior. It had two related objectives:

- 1) to create a psychological and demographic profile of escape offenders at the State Prison of Southern Michigan
- 2) to determine whether Minnesota Multiphasic Personality Inventory factors are more reliable predictors than demographic factors in predicting escape

In order to implement the objectives, three hundred inmates were selected from minimum security environments at SPSM; the files of two hundred escapees were matched with one hundred non-escapees. The data collected on all subjected included ten MMPI scales and twenty-six demographic variables that previous studies indicated had some relationship to escape behavior. This data was analyzed via regression analysis to develop a model that would best predict escape.

The results produced three models of significant variables related to escape behavior. The demographic model contained six variables: security level, number of prison terms, regular family contact, juvenile commitments, custodial record, and adult probation. The second model included three MMPI variables: the psychasthenia scale 7, depression scale 2, and psychopathic deviate scale 4. The

third model was a combination of demographic and MMPI variables which included security level, psychasthenia scale 7, number of prison terms, regular family contact, juvenile commitments, supression scale 2 and adult probation.

The three hundred inmates in the study were randomly divided into two representative groups with each of the three models used to determine their ability to differentiate between escapees and non-escapees. The conclusion demonstrated that demographic variables are better predictors of escape behavior than MMPI variables, however a combination of the two is better than either independently.

## ACKNOWLEDGEMENT

The author wishes to thank the Michigan Department of Corrections and the State Prison of Southern Michigan, without whose help and consideration this dissertation could not have been completed. A special thanks to Mr. Michael Martemucci and his staff at the State Prison of Southern Michigan for their invaluable assistance in the data collection. Dr. John Prelesnick, Director of the Reception and guidance Center at the State Prison of Southern Michigan, demonstrated his understanding of the issues involved in correctional research by granting access to Minnesota Multiphasic Personality Inventory files, thus making this dissertation possible.

The author owes a tremendous debt of gratitude to David Kalinich, Ph.D., Chair of the Dissertation Committee, for his empathy and support during the completion of this dissertation. Dr. Kalinich's persistent efforts with a sometimes difficult student, taught that student a valuable and important lesson about research and himself. He will always be a valued friend and associate.

The author also would like to thank the members of the Dissertation Committee: Drs. Peter Manning, Neal Schmitt and Professor Louis Radalet. Their responsiveness regarding scheduling, reading of the draft and resulting comments significantly improved the final dissertation.

To my Mother, and all those who prayed that I would finally complete this project, thanks for your love and prayers. And finally, to my wife, Zenobia, and daughter, Kaia, whose love, understanding and devotion through the difficult times sustained and supported me, a very special thanks and all my love.

**- TABLE OF CONTENTS -**

<b>Abstract.....</b>	<b>i</b>
<b>Acknowledgement.....</b>	<b>iv</b>
<b>List of Tables.....</b>	<b>vi</b>
<b><u>Chapter</u></b>	
<b>I. INTRODUCTION AND STATEMENT OF THE PROBLEM</b>	<b>. 1</b>
Historical Perspective of the Penal System.....	2
Open Institutions.....	8
Purpose of the Study.....	10
Limitations and Scope of the Study.....	11
Definition of Terms.....	12
Organization of the Study.....	14
Summary.....	14
 <b>II. REVIEW OF THE LITERATURE</b>	 <b>19</b>
Impact of Incarceration.....	19
The Evolution of the Prison	
Classification System.....	24
Sociological Escape Studies.....	27
Early Escape Studies.....	28
Contemporary Studies and Prediction of Escape	
Behavior.....	36
The Use of Psychometric Instruments and	
Criminal Behavior.....	43
MMPI Research and Criminal Behavior:	
A Selected Review.....	45
MMPI Research Regarding Sex and Race.....	50
MMPI Studies and Escape Behavior.....	51
Summary.....	54
 <b>III. RESEARCH METHODOLOGY</b>	 <b>62</b>
Research Questions.....	63
Organizational Setting.....	64
Site Selection.....	67
Sampling.....	70
Escape Group.....	71
Non-Escape Group.....	71
Data Collections.....	72
Demographic Variables.....	72
MMPI Variables.....	73
Analysis of the Data.....	78
Summary.....	80

<b>IV.</b>	<b>ANALYSIS OF DATA</b>	<b>82</b>
	Demographic Characteristics.....	83
	Criminal Justice History.....	87
	Institutional Information.....	90
	Special Problems.....	93
	Psychological Factors.....	95
	Regression Analysis.....	98
	Selecting the Best Model.....	105
<b>V</b>	<b>SUMMARY AND CONCLUSIONS</b>	<b>115</b>
	Demographic Factors.....	116
	MMPI Factors.....	120
	Discussion of the Model.....	121
	<b>BIBLIOGRAPHY</b>	<b>124</b>
	<b>APPENDICIES</b>	
	Appendix A.....	131
	Research Findings of Demographic Characterizations and Escape Behavior	
	Appendix B.....	132
	Data Coding Form	
	Appendix C.....	138
	Profile and Case Summary of Escape and Non-escape Groups for the MMPI	
	Appendix D.....	139
	Mean and Standard Deviation Scores for Demographic and MMPI Variables	
	Appendix E.....	141
	Correlation Matrixes for Demographic and MMPI Variables	



- LIST OF TABLES -

<u>Table</u>	<u>Page</u>
1. Michigan Department of Corrections Escapes 1973-1976.....	68
2. SPSM Escapes 1973-1976.....	69
3. Demographic Characteristics of the Escape and Non-escape Sample.....	84
4. Prior Criminal Justice History of Escape and Non-escape Sample.....	88
5. Current Institutional Information of Escape and Non-escape Sample.....	91
6. Special Problems of Escape and Non-Escape Sample.....	94
7. t-test of Escape and Non-escape Sample by MMPI Scales.....	96
8. Regression Analysis Between Independent Demographic Variables with Escapees.....	99
9. Regression Analysis Between Independent MMPI Variables with Escapees.....	101
10. Regression Analysis Between Independent Demographic and MMPI Variables with Escapees.....	102
11. Stepwise Regression Analysis Between Independent Demographic Variables and Escape Behavior.....	106
12. Stepwise Regression Analysis Between Independent MMPI Variables and Escape Behavior.....	108
13. Stepwise Regression Analysis Between Independent Demographic and MMPI Variables with Escape Behavior.....	109
14. Comparison of Multiple R and R <sup>2</sup> Results.....	110
15. Cross-Validation.....	112

## CHAPTER I

### INTRODUCTION AND STATEMENT OF THE PROBLEM

The modern correctional administration and staff are charged with many responsibilities concerning inmates legally committed to their control. Probably the most important of these responsibilities is maintaining physical custody. If the correctional system cannot prevent an inmate from escaping physical custody, it cannot reform, rehabilitate or punish the inmate. Originally it was believed that the answer to the escape problem was high walls and well-armed security officers; "however, these are sometimes not enough and despite such precautionary measures a prisoner will of his own volition, manage to leave the custody of the keeper without authorization." (1) It has become increasingly apparent that simply locking up the inmates is not an efficient solution to the escape problem.

The problem of escape is not new to the field of corrections and part of the problem is inherent in the operation of these institutions. It would be almost impossible for a modern correctional system to function efficiently without the thousands of jobs which must be performed by inmates. Many of these jobs require inmates to

be in minimum security or positions of trust outside the security of the prison walls. Inmates that reach honor or trusty status no longer are required to wear standard prison uniforms, have great amounts of freedom outside the walls, and work in positions of responsibility that provide many opportunities for escape. Because these situations exist, the questions of preventing escapes can no longer be resolved with walls, fences and security officers. The question now becomes can a particular inmate, under conditions of trust and responsibility, be expected to remain in custody or will he attempt an escape?

The decision-making process to place an individual inmate in minimum security or trust positions is a major concern of correctional administrators. In large correctional institutions like the State Prison of Southern Michigan (SPSM), the administrator is responsible for the smooth operation of the facility and the custody of its inmates. This is becoming more difficult with the increase in prisoner rights, educational and vocational programs and community involvement with the prison. However, this trend has not always existed as a brief history of the penal system will indicate.

### Historical Perspective of the Penal System

The historical development of American prisons may be traced to the development of European countries. In

Anglo-Saxon England, for example, the practice of imposing a term of imprisonment for a specified period of time was unknown; guilty felons were either killed, mutilated, or sold into slavery.<sup>(2)</sup> Early English law also relied extensively on physical punishment instead of a fine or imprisonment, and when imposed, it was severe. Death was imposed by hanging, beheading, burying, drowning, and stoning, as well as castration, flogging, and body mutilation.<sup>(3)</sup> Although mutilation ultimately disappeared from English law, the brutality of Anglo-Saxon criminal punishment continued unabated until the seventeenth century.

The transition from corporal punishment to imprisonment, as a source of punishment, took place in the eighteenth century and subsequently this period has been viewed as the Age of Enlightenment. It was characterized by humanitarianism which was responsible for both the elimination of galley slaves and the improvement of the wretched conditions in hulks and goals; during the same time opportunities were decreasing for transporting criminals to other countries. These factors were instrumental in fostering the shift from corporal and capital punishment to imprisonment. The development of the social and political philosophies of prisons was greatly influenced by the contributions of classical criminologists and philosophers such as Beccaria, Voltaire, Rousseau and their rationalistic followers.<sup>(4)</sup> John Howard, a contemporary of the Age of

Enlightenment, proposed ideas for prison reform that still have impact in modern times by anticipating the penitentiary system. His life and fortune were dedicated to the cause of humanity, particularly to those incarcerated in the jails, workhouses and prison hulks of Europe. He brought the attention of the world to the sordid conditions existing there and made recommendations for changes and/or improvements. His recommendations epitomized the philosophy underlying the systems that were later developed in England and subsequently America. (5)

During 1775 through 1777, Howard undertook a continental tour and focused his attention on prison developments that would provide a pattern for penal programs in England and America. He was significantly impressed by the House of Corrections established by Pope Clements XI at Rome in 1704, but he was even more influenced in several respects by the "Maison de Force" under construction at Ghent in 1775. The Hospice of St. Michael in Rome was designed to care for two types of juvenile delinquents, incorrigible boys submitted to its supervision for discipline, and youthful offenders committed by the court for a stint of hard labor and penance. The wing erected for youthful offenders had small rooms or cells for the separate confinement of each boy, though most were permitted out for work in silence during the day. The reconstructed House of Corrections at Ghent likewise provided small, separate

cells, arranged in pentagon cluster, around a control center. It was a new architectural model which could be adopted for the imprisonment of adults. (6)

Howard described each of the wretched jails he visited in England with meticulous detail and compared them with the foreign models he had toured. In doing so, he provided such a sharp contrast in conditions that Parliament was challenged to take action. With his classical publication, State of Prisons, such able men as Popham, Blackstone, Bentham and Romilly rallied to Howard's support. (7) Together they mounted a campaign for the reform of the criminal law and for a decision to replace the transportation system, which the revolt of the American colonies was just then interrupting, with national penitentiaries.

After the American Revolution, according to David Rothman in his classic book, The Discovery of the Asylum, considerable endorsement was given to the position that the roots of crime and poverty are in the social structure, the faulty organization of the community.

This belief led to the establishment of social action to solve social problems and became the prevalent major view advocated in America following the revolution. In the case of criminals and delinquents, it was thought the institutionalization would serve the dual purpose of rehabilitating the inmates as well as setting an example for others; it

would serve to reinforce individual and general deterrence.  
(8)

In 1787, in Pennsylvania, Benjamin Rush, Benjamin Franklin and others met to discuss punishment and prison reform. Rush proposed a new system for the treatment of criminals which included classification, individualized treatment, and prison labor to make them self-supporting. In 1790 a law was passed that established the principle of solitary confinement and hard labor. The Walnut Street Jail, described by Barnes and Teeters, as "the first real penitentiary in America," was remodeled to implement this new philosophy. Individual cells would be provided for serious felons, and other prisoners would be separated according to sex and whether they had been sentenced or were only being detained awaiting trial. This was the development of the American Penal System.

The prisoners at the Walnut Street Jail worked an eight-to-ten hour day and also received religious instruction. They worked in their cells and were paid for the work. Guards were not permitted to use weapons, and corporal punishment was forbidden. (9) By 1800, problems with the system were obvious. Despite the thick walls and high security, escapes did occur. Overcrowded facilities could not produce enough work for the increasing number of prisoners. Vice flourished prisoners revolted, and the prison began operating at a loss. The Walnut Street Jail

ultimately failed because of politics, finances, lack of personnel and overcrowding. But not before it gained recognition throughout the world as the first model prison system.

The response to the failure of the Walnut Street Jail was the development of two district types of prison systems; the Pennsylvania system (10) based on solitary confinement, and the Auburn system, based on the silent system. (11) By the 1830's these two American penitentiary systems were famous around the world.

While these developments were in process, determined philanthropists in New York City, Philadelphia and Boston planned houses of correction for misdemeanor offenders. The continuing reform efforts of these men finally led to the acceptance of the Auburn system as the model for American penitentiaries. Their efforts also established the National Prison Association, known today as the American Correctional Association. The first meeting of the organization was held on October 12, 1870, in Cincinnati. What emerged from this meeting was the Elmira Reformatory, established in 1876. This institution was based on the philosophy of reformation which included, indeterminate sentences, cultivation of inmate's self-respect, classification of prisoners, opportunity for parole, and an emphasis on rehabilitation through education and trade training. (12) These changes in



philosophy laid the groundwork for the establishment of more open correctional institutions.

### Open Institutions

The idea of open institutions also began in Europe. The penal farm, originating about 150 years ago, was used in Belgium; Switzerland and Holland as the solution to vagrancy. (13) Later, several penal farms started in the United States. The first was Cooley Farm near Cleveland, Ohio. (14) The ideas found in the honor camps of today can be traced to the penal farms. Little change has occurred in the basic principles. Modern honor farms are used for the more trustworthy prisoners. Those selected from the larger population are sent to camps outside the walls and often some distance from the central institutions.

According to penal scholars, open institutional settings bring self-respect, develops responsibility, and better prepares prisoners for release from custody. The development of this system has proven to be a valuable contribution to correctional treatment. Several advantages of that development were almost predictable. First, overcrowding can be alleviated by allowing prison authorities to screen out the better risk inmates and those more amenable to rehabilitation. Second, the cost of building and operating large institutions can be saved. Third, more opportunities could be provided for self-

improvement through educational, vocational and individualized treatment programs. Finally, illness and boredom is reduced by allowing the prisoners to work at public service jobs (state parks, forestry, roads) that otherwise remain undone or at the cost to the taxpayer. It is therefore obvious that open correctional facilities such as camps, farms or similar institutions can serve a useful purpose in preparing inmates for re-entry in society.

In spite of obvious advantages, prison authorities still experience considerable risks with open systems. They cannot predict whether a prisoner, once outside the walls, will live up to their expectations. Prison officials have isolated certain factors that are related to the success or failure of a trustee -- but there are no guarantees of success. These factors (interviews, psychological and academic tests, observations and practical experience) are useful in making decisions on outside placements, yet use of these procedures do not automatically end escapes. Many are employed merely with the hope of reducing the percentage of escapes.

It is paramount that the selection of prisoners for outside placement be based on solid decision. The selection should focus on prisoners who are low risk for escape and who would benefit most from this type of treatment. Prisoner selection from outside placement is the key in making the system work. It insures public safety and stems the tide

for fear created by the increasing number of escapes from minimum or open security facilities.

#### PURPOSE OF THE STUDY

The main purpose of this study is to investigate the relationship between demographic correlates and personality correlates, as measured by the Minnesota Multiphasic Personality Inventory (MMPI), as predictors of prison escape.

This study has two related objectives;

- 1) to create a psychological and demographic profile of the escape offender in SPSM.
- 2) to determine whether MMPI factors are more stable escape predictors than demographic factors.

The criminal justice system continues to seek out the behavioral science for assistance in how to explain criminal behavior. The two schools of thought explaining or predicting escape behavior center around gathering important descriptive and demographic data on individual case study and psychological data. According to Megargee, in any attempt to predict a given behavior, it is necessary for some sign, agent or event to be highly correlated with that

behavior. Yet the correlation alone is insufficient; the sign, agent or event must also discriminate between behaviors. (15) Those who believe that external and demographic factors discriminate behavior more accurately are from the first school of thought, and those who believe internal and psychological factors more accurately discriminate behavior are the latter.

### LIMITATIONS AND SCOPE OF THE STUDY

The use of statistical prediction has several major limitations, the major one being the unit of analysis. In order to reduce the error rate for statistical tests, a group of cases rather than an individual case must be the unit of study. Consequently, it is concerned with the way in which a given factor operates in the majority of cases, disregarding individual variations.

Another limitation of this study, one that appears to be common in criminal justice research, is the condition of the person's records used to obtain data. These records were completed by various sources and individuals with varying degrees of proficiency. Records were not always accurate, verified or completed.

Finally the study is limited to one group of escapees from a general population of the State Prison of Southern Michigan. Therefore, the findings of this study must be

used cautiously when applied to escapees from prison populations in general.

Overall, the quality of this research must be viewed in terms of these limitations. An awareness of these constraints coupled with a thorough research design can help minimize these obstacles.

## DEFINITION OF TERMS

In every major field of study there are some terms that require defining. The field of corrections is no exception. The purpose here is to define terms used in connection with this study.

Escapee - An inmate who has officially been reported to have escaped or attempted to escape, and an official escape report filed in his institutions folder. Inmates who have attempted escape but have not official escape report filed were excluded.

Non-Escapee - An inmate who has not had an official escape report filed against him at the time of the sample selection.

First Prison Offender - An inmate who is experiencing his first period of incarceration within a prison.

Maximum Custody - Generally a walled institution with the inmates occupying cells at all times. Armed guards are posted on the walls.

Medium Custody - Generally an institution with no walls but perhaps a fence. Inmates are confined in cells at night and are under constant supervision on work assignment during the day.

Minimum Custody - Generally an open institution, like a camp, with no fences, walls, or armed guards. Little direct supervision is maintained on work assignments.

Parole - The serving of a sentence in the outside community, usually after a portion of the sentence has been served in prison.

Probation - A court action whereby an offender is placed under supervision in the community without ever entering a prison. The offender need not enter prison as long as he observes the conditions laid down by the court. Probation is frequently used for first offenders and juveniles.

Maximum Term - The maximum number of years a prisoner must be confined before he can be considered for release on parole. All prison inmates except those sentenced for life are assigned a minimum term. In Michigan, judges have some leeway in determining minimum terms.

Trustee - A prisoner who is permitted to serve his prison sentence in a setting relatively free of armed guards or prison walls.

## ORGANIZATION OF THE STUDY

The second chapter will examine some of the issues surrounding the hardships and effects of prison life, and will review the pertinent research conducted on escape. In the third chapter the research methods include the organizational setting, sample selected for this study, a description of the psychological test and the statistical methods employed for analysis will be discussed. The results of the study, as arrived at through various statistical analyses, are presented in Chapter IV. Discussion of these findings, comparison of present findings with other pertinent research in the field, critique of the study, and implications for further research are presented in Chapter V.

### Summary

The American Correctional System has played a major role in the development and reforms of the prison systems throughout the world. From its earliest inception, it has moved toward building a basic philosophy of penology that reflects the democratic principles and view of our society. In doing so, the system has undergone several reform movements; from a philosophy of corporal and capital punishment to imprisonment and custody, to open institutions

and treatment.

The shift from a philosophy of custody to treatment has led to the establishment of rehabilitation programs in almost every correctional institutions throughout the country. The purpose of these programs is to reform and rehabilitate inmates. The belief is that these programs will enable the inmate to live a crime free life upon release. Recent attempts to rehabilitate prisoners and the increased use of the alternative programs has resulted in more open types of institutions than those of early America. The rapid expansion of these programs was in part forced on the correctional system by overcrowding and Supreme Court decisions to ensure prisoner rights. Many correctional authorities believe that the programs have greater rehabilitative potential when compared to the traditional walled institution. However, the programs often require minimum security areas and provide greater opportunity for inmates to escape.

The establishment of alternative programs in correctional institutions have increased the administrative and staff concern for security and the potential for inmate escape. There is a growing awareness of the psychological, sociological and physical stress of imprisonment. This awareness has led to a movement to guarantee prisoner's rights and to increase the programs and services offered in institutions. In spite of this trend, the primary



responsibility of correctional authorities remains maintaining custody and protecting society. The dilemma faced by prison administrators is maintaining alternative programs and more open institutions, while screening inmates that are potentially high escape risks.

In order to aid prison authorities in this dilemma, a good deal of research has been conducted, with the purpose of screening inmates and identifying relevant factors related to escape. The next task is to examine research on prison escape.

## Chapter I

### Footnotes

1. W.S. Loving, F.F. Stockwell and D.A. Dobbins, "Factors Associated with Escape Behavior of Prison Inmates," Federal Probation XXIII, September, 1959, p.49.
2. Leonard Orland, Prisons: House of Darkness, The Free Press, New York, 1975, p.13.
3. Ibid, p.14
4. Blake McKelvey, American Prisons: A History of Good Intentions, Patterson Smith Publishers, Montclair, New Jersey, 1977, p.5.
5. Harry Barnes and Negley K. Teeters, New Horizons in Criminology, Prentice-Hall, 1943, p. 480.
6. Ibid, p.482
7. Some of the reasons for the rapid acceptance of Howard's work was the spirit of the time and new philosophies of crime sparked by the "age of enlightenment" and the works of Baccaria and others. For an excellent discussion of these developments see: Harry F. Barnes, The Story of Punishment, Blake McKelvey, American Prisons. Patterson Smith, 1972 and 1977.
8. David J. Rothman, The Discovery of Asylum: Social Order and Disorder in the New Republic, Little Brown and Company, Boston, 1971, p.XIX.
9. Op cit, p.490
10. The influence of the Pennsylvania system on American penology passed through two main stages. The first was marked by the wide use of the system of administration established in the Walnut Street Jail in 1790, and the second was characterized by solitary confinement, single cells and hard work as put into operation in the Eastern Penitentiary in 1829. For more detailed discussion of the system seen Harvey Elmer Barnes, The Evolution of Penology in Pennsylvania, Patterson Smith 1968.
11. The Auburn System was the direct antithesis of the Eastern Penitentiary System and was characterized as congregate and silent. It's prisoners were permitted to work together in shops during the day under a strict

rule of silence, and at night were locked in individual cells. For a more complete discussion, see Barnes and Teeters, New Horizons in Criminology, Prentice-Hall 1943.

12. Sue Titus Reid, The Correctional System: An Introduction, Holt, Rinehart and Winston, New York, 1981, p. 155.
13. Gregory Allen Miller, "The Predictive Efficiency of Certain Factors in Selection of Prisoners for Trusty Status," Unpublished Dissertation, Michigan State University, 1955, p. 3.
14. Ibid, p.3 .
15. Edwin I. Megargee, Research in Clinical Assessment, Harper and Row, New York, 1966.

## CHAPTER II

### REVIEW OF THE LITERATURE

#### Introduction

This chapter contains a review of the literature directly related to adult prison escape behavior. The literature follows three distinct patterns of discussion about escape; this chapter will parallel these patterns. The first section reviews the impact of incarceration on inmates and the influence of imprisonment on the adjustment of inmate behavior. The second section reviews the development of prison classification and its impact on the sociological escape prediction studies that are based primarily on demographic data. The third section contains a review of psychological predictors of escape behavior focusing primarily on M.M.P.I. data.

#### The Impact of Incarceration

A man is free within the limits of his economic position until he is sentenced for a crime by the court. Then his situation is radically altered, i.e., "his movements are restricted to a few hundred square yards

within high walls, his daily program must conform strictly to a timetable of overpowering punctuality; his means of communication with friends or relatives reduced to a bare minimum, he may be forced into association with a heterogeneous crowd of men whom he would never have chosen for companions."<sup>(1)</sup> For this reason, Erving Goffman has called the prison a "total institution."<sup>(2)</sup>

The entry into a total institution often marks the beginning of a destructive process for the inmate. He enters with the self-image and supports which permitted him to survive; however, he is immediately stripped of these and is systematically, even if unintentionally, mortified.<sup>(3)</sup> The institution's admission procedures -- the relating of personal history, taking of photographs and fingerprints, the assignment of a number, a corporal search and inspection, the abandonment of personal objects, the undressing, the baths, the disinfection, the cutting of the hair, the issuing of clothes typical of the institution, the indoctrination of discipline and the assignment to a ward -- signal the first state of this process and provoke the disintegration of roles that preceeded imprisonment. After his admission to the institution, the inmate's life is organized according to this monotonous rhythm and according to schemes that induce the inmate to resort to a series of subterfuges and to suffer a series of humiliations in

exchange for his psychological and sometimes physical survival.(4)

According to Goffman, the mortification process is the same in prisons, mental hospitals, and concentration camps; in fact, it exists in all total institutions. It includes cutting off family and occupational ties, and other channels of communication with the outside world are restricted or eliminated. Deprived of his unique outside world, each inmate assumes the stigmatized status of prisoner. The justification for this treatment in prisons is security, and the process does help to maintain discipline and control.

The mortification process described by Goffman in Asylums has greatly influenced sociological studies of prisoners and prisons. One of these studies by Richard Cloward views the process "as a series of 'status degradation ceremonies' which begin at the time of contact with the police and end with the expiration of one's sentence." (5) Cloward concludes that status degradation destroys an individual's former identity and replaces it with a new identity. It is only natural that incarceration places great pressure to restore prisoner status and in many ways explains deviant behavior within the prisons.

Donald Clemmer in his study states that prisonization, which he defines as, "taking on in greater or lesser degree of the folkways, mores, customs, and general culture of the penitentiary" is one way of achieving inmate status.(6) He

also believes that "every prisoner undergoes prisonization." Sykes and Messinger<sup>(7)</sup> describes this stripping away process in terms of ego destruction. They concluded that the pain of deprivation is not simply physical, it has deeper psychological significance, as an attack on the prisoner's sense of himself and of his personal adequacy.

Another major study of the mortification process, The Society of Captives, by Gresham Sykes,<sup>(8)</sup> posits that prisoner behavior is greatly influenced by psychological pressures on the prison staff. According to Sykes, custody predominates over treatment in prisons because officials know that their continued employment is linked to security. Sykes believes the concern for security in prisons at times resembles paranoia. The staff is convinced some unknown number of inmates will attempt escapes and this feeling is reinforced by occasional escape attempts.

The consequences of staying in prison has been studied by sociologists, psychologists, and psychiatrists alike, and most agree that institutionalization has a negative impact on persons. Sommer and Osmond synthesize the results of the research and identify the following effects of staying in an institution: (1) erosion of individuality (deindividuation), damage to the individual capacity of thinking and acting in an autonomous manner; (2) disculturalization, the loss of values and attitudes that the subject has before entering the institution; (3) estrangement, the incapacity

to adjust to the technological development and external environment after being released from the institution; (4) physical and psychological damages that afflict the individual during the period of his institutionalization; (5) isolation, the lack of social interaction with the external world and with other institutionalized individuals; (6) stimulus deprivation, adaptation to the stark physical environment that surrounds the individual and the slow, monotonous rhythm of institutional life.(9)

The prison even at its best is still an abnormal environment. It denies men their basic liberty and freedom which is sufficient to cause them to rebel. It compels men to live social lives under unsocial conditions, it degrades men physically, mentally and spiritually. If that was not enough, he is confronted with a prison subculture that promotes crime, violence, and sexual abuse. The physical abuses often are less devastating than the psychological ones. He must adapt or be destroyed. He may simply ignore the institution and situationally withdraw, or he may rebel. In either case, he strains to the breaking point those things that come naturally to people in a free environment. The healthiest and most logical conclusion he can reach to maintain his individual personality from prisonization is to escape.



## The Evolution of the Prison Classification System

Historically the identification of criminals is not new to the field of criminology. Early criminological theories attempted to identify criminal or criminal types from the general population. Later as the movement for prison reform shifted from a punishment to a rehabilitation model, interest transferred to identifying specific types of criminals and the development of a prison classification system.

One of the early studies that attempted to identify criminals was conducted by Cesare Lombroso. Lombroso, who is generally considered the father of modern criminology, believed that criminals were psychologically different from the rest of society. Lombroso's work led him to identify five types of criminal, the "born criminal", the "insane criminal", the "criminal of passion", the "habitual criminal", and the "occasional criminal".- He felt that the born criminal, who represented atavistic throw-backs to earlier and more primitive stages of human evolution, represented the vast majority thus he devoted most of his attention to them. He maintained that this group would be characterized by primitive physical characteristics such as low sloping forehead, long lower jaw, flattened nose, scanty beard and low sensitivity to pain.<sup>(10)</sup> Although studies showed Lombroso's approach and theories were invalid, the

fact that they were empirically testable was a major advance. However, the impact of Lombroso's work laid the foundation for the biological theory of criminal identification and classification of criminals which prisons readily adapted. Classification under this system really meant segregation - by race, age, and sex, with no attempt to assess the problems of offenders within a context of a treatment program.

In 1870 American correctional leaders from all parts of the country met in Cincinnati, Ohio and discussed new correctional policies and practices that resulted from shifts in correctional philosophy. These new concepts of the nature of man and of the interrelationship between man and society led to the development of 36 principles to guide the new correctional approach to the offender.<sup>(11)</sup> The National Congress on Penitentiary and Reformatory Discipline endorsed the "declaration of principles" which included two statements concerning the early classification system. Those statements are as follows:

#### Declaration III

The progressive classification of prisoners, based on character and worked on some well-adjusted mark system, should be established in all prisons above the common jail.

#### Declaration XIX

Prisons as well as prisoners should be classified or graded so that there shall be prisons for the untried, for the incorrigible

and for other degrees or depraved character,  
as well as separate establishments for women  
and for criminals of the younger class.(12)

By 1930 the classification idea was extended to include specialized screening and individualized treatment planning for all prisoners. The classification plan was based on medical, psychiatric, psychological, vocational, educational, sociological, religious and disciplinary phases of each prisoner's life and included assignments for placement in housing, or treatment and for work.(13) In more recent times, and with more sophisticated skills, more specific classification systems have attempted to identify criminal personality types. And finally, there have been attempts to identify and predict specific types of inmate behavior like violence and escape behavior. The assumption being that correct or appropriate classification of inmates significantly improves the chances of rehabilitation, minimizes the impact of incarceration and provides greater opportunity for the inmate to help himself. If classification is based on the potential to "succeed" in prison, those same factors could be used to predict other behavior, namely escape.

### Sociological Escape Studies

The evolution of prediction studies began in the early 1920's but progressed rather slowly until the late 1950's. One of the major reasons for this occurrence was that there were two basic approaches to prediction being studied. On the one hand, there were clinical or judgemental predictors, and on the other statistical or actuarial predictors.

Clinical predictors were normally made by a professional after some form of case analysis had been completed which involved collecting great amounts of information. Obviously, this was a costly process in terms of time and money in addition to the predictions being subject to the objectivity of the professionals. Contrary to this method, statistical predictions ultimately relied on less information, less experience, and tended to use information in a more systematic way.<sup>(14)</sup>

Criminologists who were seeking probabilities for behavior which occurred at appreciable rates attached themselves to the statistical predictor model which resulted in a preponderance of predictor literature. This literature was, and continues to be, devoted to prediction of parole outcome, probation outcome of other types of correctional outcome with base occurrence rates of 25 percent and 75 percent while neglecting behavior with extremely low occurrence rates.<sup>(15)</sup> However, as statistics utilized by

researchers became more sophisticated in the 1970's considerably more work upon escape prediction has emerged.

### Early Escape Studies

In 1942, William H. Johnson, Senior Sociologist at the State Prison of Southern Michigan, gathered data on 46 escapees and compared them with 200 non-escapees on several factors, by percentage. He concluded that prisoners with two or more prior offenses are the best risk, and the assaultive offender is the poorest risk. He also found escapees to be younger in age. Factors of no importance seemed to be length of residence in the state and the presence of parental family in the state of incarceration. This study seemed to have promise in the selection of factors studied; however chance differences were not ruled out and the samples were small.(16)

In another study, H.D. Pigeon posits that prisoners will escape if they have long sentences, if they have long criminal records, have a bitter attitude, are psychopathic, have been denied parole, worry about their families, are concerned about the fidelity of wives and sweethearts, are young and/or have no families ties.(17)

Probably the last early attempt to systematically investigate escape behavior was a study by Nelson Cochrane in which he conceptualized the personal characteristics of individuals indicating high probabilities of escape. Based

on a sample of 60 inmates who had escaped from the Massachusetts Prison Colony between 1928 and 1948 Cochrane selected eight factors which appeared likely to have some relation to escape risk. The list included the following individual factors: 1) amount of time to be served; 2) proportion of term already served; 3) type of offense committed; 4) seriousness of prior criminal record; 5) age; 6) geographic stability; 7) vocational stability; 8) strength and nature of family ties. Several other factors such as: intelligence, psychiatric diagnosis, attitude towards authority, and disciplinary record were not included because their numbers were not sufficient for statistical tabulation.(18).

An analysis of these data led Cochrane to develop a balance sheet of ten favorable and thirteen unfavorable factors that identified escape-prone inmates. It became obvious after identifying the number and location of these factors whether or not the inmate was a reasonably good minimum security risk. The items included in the balance sheet were:(19)

Favorable Factors

Congenial Marital ties  
Served half of entire term  
Less than 1 year to parole hearing  
Less than 3 years to maximum  
Occasional or first offenders

Unfavorable Factors

Work or non-existent home ties  
Served less than 40% of term  
More than 18 months to parole hearing  
More than 4 years to maximum  
Habitual offender

Over 35 years old  
Fair geographical  
stability  
Fair employment record  
No detainer or file  
Generally cooperative  
attitude  
Mild inaggressive  
personality

Under 30 years old  
Frequent transient  
Poor employment record  
Detainer or file  
Uncooperative attitude  
Daring, aggressive personality  
Mental instability  
Inferior intelligence

Cochrane noted that of the sixty escapees in the study, all but four escaped while living or working outside the walls. He also noted the inclusion of several common items not analyzed in the study. He concluded that "the selection of suitable inmates for minimum security assignments depends on the good judgement and experience of a man who understands criminals." (20)

A major shortcoming of this study rests in its inability to ascertain the relative significance of each characteristic because the study has no control group with whom we can compare the findings. However, as the interest and concern about escape prediction increased, studies investigating escape behavior become more scientific. We note in the earlier studies a lack of control groups for comparison and lack of statistical analysis.

In 1959, one of the first escape studies to utilize the growing knowledge in statistical prediction was conducted by Loving, Stockwell, and Dobbins at the Louisiana State Penitentiary. They selected 100 white male inmates to represent the non-escape control group. Black inmates were

intentionally excluded from this study because Louisiana and the Federal Bureau of Prisons both have extremely low escape rates for Blacks. The majority of Black inmates are long-term residents of the state, are not geographically mobile, and presumably have relatively strong family ties.(21)

The two groups were matched with respect to month and year of admission and custody level at the Louisiana State Penitentiary in an attempt to equate time served and opportunity for escape from the institution. The two groups were then compared on twenty-two variables thought to be related to escape behavior. The statistical analysis yielded the following eight significant variables:

- 1) Number of dependents.  
-Significantly more inmates escaped who had no persons financially dependent on them
- 2) Number of previous commitments.  
-Significantly more inmates escaped who had one or more previous commitments outside Louisiana.
- 3) Type of offense.  
-Significantly more inmates escaped who had committed property crimes.
- 4) Number of juvenile commitments.  
-Significantly more inmates escaped who had records of one or more juvenile commitments.
- 5) Age at first arrest.  
-Significantly more inmates escaped who were first arrested at an early age.



- 6) Size of community of residence.  
-Significantly more inmates escaped who resided in cities of 100,000 population.
- 7) Mileage to home state.  
-Significantly more inmates escaped whose home states were further from Louisiana.
- 8) Years of residence in Louisiana.  
-Significantly more inmates escaped who had resided in Louisiana less than 2 years.(22)

In addition to the above, three other variables, length of sentence (6.5 years or more), tested education achievement (grade level less than 6.5 years), and age of commitment (below 29.5 years) narrowly missed being significant. The remaining eleven (11) variables, (IQ, marital status, broken vs. unbroken homes, urban vs. rural, number of siblings, number of prisoners commitments in Louisiana, veteran vs. non-veteran, history of psychiatric disorder, years school completed, and siblings in correctional institutions) were not significant and discarded.

Further statistical analysis of the significant variables in this study produced two clusters of four interrelated variables. The first cluster labeled "Transient Criminality" described inmates as vagabond type individuals with weak home ties who continued his criminal activities shortly after moving into the state. The second cluster labeled "Early Criminal History" described inmates

as persons with a record of juvenile institutionalization, youthful when first arrested and without a dependent family and committed a property crime. Although the study was not representative of all characteristics which were available, the similarity between certain significant factors in this and Cochrane's study suggest the results may be valid for describing escape behavior in general.(23)

Another study conducted in 1967 by David I. Morgan attempted to isolate specific variables related to escape behavior and to collaborate the results of previous research in this area. He matched fifty (50) escapees and fifty (50) non-escapees on sex, race, custodial level, prison work assignment and date of admission. He then compared the two groups on fourteen variables with respect to their relationship to escape behavior. A summary of the differences between the experimental and control groups were as follows:

- 1) Length of sentence: Significantly more inmates escaped who were serving sentences of five years or less.
- 2) Marital status: more inmates escaped who were single.
- 3) Number of dependents: significantly more prisoners escaped who had no dependents.
- 4) Education: more inmates escaped who had achieved a secondary education.
- 5) Age: significantly more inmates escaped who were younger than 24.5 years
- 6) Intelligence: significantly more inmates escaped who had IQ scores above 96.5.

- 7) Number of commitments to the South Carolina State Penitentiary: significantly more inmates escaped who had only one commitment.
- 8) Time served before escape: significantly more inmates escaped who had served less than half their sentence.
- 9) Home backgrounds: more prisoners escaped who were from broken homes.(24)

The remaining variables, prior commitments elsewhere, types of offenses, residency in South Carolina and psychiatric commitments were not significant, while number of juvenile commitments narrowly missed being significant at the .05 level.

Morgan's investigation of his fourteen variables indicated that nine were significantly related to escape behavior. Five of these variables (marital status, number of dependents, time served before escape, age, intelligence quotient) agreed with comparative studies. Two other variables (length of sentence and education) were found to be in disagreement, while number of commitments and home background were not significant in previous studies.(25)

James H. Panton, a pioneer in escape studies, conducted an important study of escape behavior in the North Carolina Department of Corrections. Panton's descriptive study was a computerized statistical analysis of 7,088 non-escapists and 607 escapists. He found escapists to be brighter, less well-educated, more likely to have been divorced, less

religious and employment stable, and more likely to have criminal fathers or brothers than non-escapists.(26)

A study conducted at the Robert F. Kennedy Youth Center contained two-hundred and fifty-six males and nineteen females who had escaped during the first five years the Center was in operation (1966-1973). This group was compared to the current population that was confined at the Center. The findings showed that the male escapee is likely to be white, young and convicted of an auto theft, and had the tendency to escape during the first few months at the Center. Females, on the other hand, were more difficult to characterize due to the extremely small sample size. The fact that escapees (males or female) were more likely to be white than non-white was the only hypothesis supported in this study.(27) However, previous studies at the Center had suggested that the demographic variables such as age, offense, and race, were related to escape.

Several studies were conducted to investigate the motives behind the escape behavior. One such study conducted at the Preston School of Industry at California (1958-1960), found that pressure from within the institution accounts for some escapes. These pressures could range from an inability to adapt socially to fears regarding homosexuality and aggression, or even to a seemingly slight matter of owing a pack of cigarettes.(28) Specific motivation would include an impetus on the part of the

inmate to be home because of emergencies, a reaction formation against dependency, or receiving a letter of the "Dear John" variety. The study concluded that best predictions of escape was the inmate's past record, and that the typical escapee was white, young, and in the institution four months or less. Another study conducted by the Michigan Department of Corrections (1976-1978) on escape from minimum security camps concurs with the Preston study. They found that a resident does not usually plan to escape, but some crisis situation was the most likely reason an inmate tried to leave camp or escape. According to prison officials a crisis situation may include the following:

- Parole delay
- Family problems
- Disciplinary action against the resident(29)

It should be noted that the majority of early studies of escapes were ex post facto and descriptive in nature. These studies primarily described the difference between the escape and the non-escape groups instead of trying to actually predict escape behavior.

### Contemporary Studies and Predication of Escape Behavior

Because of a significant advancement in the field of prediction studies over the classical studies (Warren and Hart, 1923; Burgess, 1928; Glueck and Sheldon, 1950), many unsuccessful attempts at constructing prediction tables have improved. However, the preponderance of studies in the

field of criminal justice have produced basic occurrence rates between 25 percent and 75 percent. And, because of the extremely low occurrence rates studies on escape behavior were limited until more sophisticated research techniques became available during the 1970's.

A review of the literature revealed that the majority of escape prediction studies investigate the persons who have escaped or attempted to escape from an "after the fact" perspective. In doing so, an ex post facto research method of comparing escapees with a control group of non-escapees is utilized. However, there are some limitations and assumptions that must be considered. The basic assumption is that all variables are comparable, with the exception of escape, and can be held constant: therefore any difference between the groups is attributed to the experimental variable, escape.

The second assumption is that all inmates would attempt escape given the appropriate situational variables. Therefore, escape behavior maybe more an environmental than organismic factor. The other possibility is that an escapist is a highly specialized person and that all or almost all of these types do attempt escape. If this is true then no true control group could exist and there would always be difference between the experimental and control groups.<sup>(30)</sup> This means that sociological prediction studies are limited to the past history of persons, while

psychological studies have improved validity but are limited to new information gained from responses to questionnaires or tests.

The first major sociological attempt at escape predictions was at the California Department of Corrections by Arlene Baker during the early 1960's. She sought to develop an escape-proneness scale through a statistical analysis of several hundred variables on both escape and non-escapes in the California Correctional Institution.<sup>(31)</sup> She developed an escape-proneness scale of twenty-one demographic variables which had all shown a significant relationship to escape behavior. The results were that the California Escape-Proneness Scale did differentiate between escape and non-escape groups, and was utilized in California until it was replaced with a newer and more compact scale.

In 1969, William Morrow conducted an escape prediction study of psychiatric offenders from a state hospital maximum security unit. The escape group was compared with a matched control group of one escapee and two matched non escapees. A composite index of four demographic variables was constructed. "A score of -1 each was assigned for four or more previous felony convictions, being usually unemployed, a history of alcoholism and older sibling position, respectively. A score of +1 each was assigned for no previous felony convictions or only one being regularly employed, and youngest sibling position, respectively."<sup>(32)</sup>

The results indicated that sum scores of -3 or -4 would correctly identify twenty-five (25) percent of the escapees, while falsely identifying only two (2) percent of the control group. Scores of -2, -3, or -4 would correctly identify fifty eight (58) percent of the escapees while falsely identifying only fourteen (14) percent of the control group.

Morrow also compared his finding with six non-psychiatric prison populations. The finding in his study indicated that escapees were distinctly younger; more often had been convicted of several previous felonies; had a record of chronic unemployment; had a history of alcoholism; and more often were the older sibling. He also compared these findings with six non-psychiatric escape studies and found escape characterization of age, prior felonies, job stability and alcoholism to be consistent with all or some of the characteristics of the other studies.<sup>(33)</sup> However, the realities of having an extremely small population of escapees <sup>(40)</sup> made generalization questionable.

Escaping from prison is not solely an American problem as indicated in a 1974 British study, Absconding From Open Prisons concludes:

"...Using characteristics recorded centrally for all prisoners - age, current offense, sentence, number of previous convictions and extent of previous sentences to prison and borstal-men received received into open prisons in 1969 and 1970 were divided into broad classes which differed in 'risk' of absconding. All the characteristics were associated with



likelihood of absconding, though none very highly. Medium-term prisoners showed a risk of some 6% compared with about 2% among short-term men; younger men (aged 21-24) were more than twice as likely as older men (aged 30+) to abscond; the risk among the more criminal (with seven or more previous convictions) was nearly twice as high as among relatively 'new' offenders (with at most four). Current offense distinguished fairly reliably between groups of higher and lower risk; burglars were the most likely to go (with a risk of 4.7%); next car thieves (3:1), after which the risk tailed off to 1-7% of men guilty of fraud and men convicted of sexual or violent offenses." (34)

The most important conclusions of this study are that so few men abscond or escape, considering how easy it is to do so. Further, the characteristics of escape behavior were consistent with previous studies.

One of the most detailed studies of escape behavior was conducted by Norman Holt in 1974. (35) It focused primarily on demographic characteristics associated with escape from camps and institutions. Extensive criminal background, property offenses, history of escape, and being white were again more typical of escapees than the control group. The major exception was age. The younger group did not appear more likely to abscond.

The study conclusions indicated that apart from prior escape from custody, institutional behavior is irrelevant in predicting escape behavior. It was also noted that once the inmate's race, escape history, type of offense, age and

criminal background was known, little else was worth knowing in terms of predicting escape potential. The most important factors related to escape behavior in this study were:

- 1) Race was again a strong predictor, Blacks make up only 11.0% of those escaping from institutions and 33% from camps.
- 2) Prior escape history was also related to escape behavior and prior escapes of a more recent nature appear to be important.
- 3) Age was strongly related to escape behavior, and younger offenders are more likely to escape.
- 4) Property offenders were found disproportionately among the escapees, as were parole violators.
- 5) The background characteristics of institutional, camp, and minimum security facilities were surprisingly similar.(36)

The length of sentence and long parole dates had a minimal effect in determining high risk escapees.

This study was conducted at the California Department of Corrections and replaced the earlier prediction scale developed by Baker. The new scale reduced the twenty-nine factors to only seven while improving the prediction ability of the scale. The results of this study was the development of a classification escape risk prediction profile which indicated that demographic factors are indeed the best prediction of escape behavior.

Two more recent prediction studies by Stone (1975) and Cowles (1982) continued the use of multiple regression analysis and computer utilization in their investigation of escape behavior. Stone's study "Factors Related to Escape

Predictions," produced an escape scale of nine demographic variables. The variables used by Stone include: 1) age at time of commitment, 2) escapes from other institutions, 3) escapes from Texas Department of Correction, 4) addictions to opiates, 5) AWOL's from Military Service, 6) maximum sentence, 7) type of offense (robbery), 8) ethnic background, and, 9) number of solitary confinements. However, this study differs from the one conducted by Holt (1974) because the research used a graduated weighting system. It was believed that the weighting would provide a finer definition of escape behavior than the "all or nothing" method used in previous studies.<sup>(37)</sup> On the other hand Cowles' "Race and Correctional Institution Escape Behavior: An Explanatory Study," produced a scale based on demographic variables and resulting in a "Best" model of six variables; custody level, number of furloughs, marital status, prior escapes, type of offense and age.<sup>(38)</sup> The model was then used to compare Black and White inmates on escape behavior, and although the model continued to predict escape, the hierarchical order of the variables significantly differed between the races with whites scoring slightly higher variances on each variable.

## The Use of Psychometric Instruments and Criminal Behavior

The foundation for many theoretical explanations of criminal behavior and personality theories are derived from the quantification of the variables involved in some sort of psychometric instrument. These instruments are generally classified as projective and structured tests. The projective tests are generally subjective in nature and the subject is required to respond to a given stimulus such as an inkblot or picture. On the other hand, structural tests are generally paper and pencil tests consisting of a number of questions or statements which can be answered true or false. Both of these tests have their advantages and limitations.

The hypothesis behind projective testing is essentially that the individual "projects" aspects of his personality onto what is presumed to be a neutral stimulus and that paper evaluation of the projective test protocol will provide information as to the personality structure of the individual so tested. Regardless of the validity of the projective hypothesis, the clinical problems revolve around extraction of information from the protocol as well as interpretation of the information.<sup>(39)</sup> Other limitations and disadvantages in using projective tests include: 1) difficulty in demonstrating response reliability, 2) agreement on scoring is poor, 3) difficulty in unambiguous

interpretation of given responses, 4) must be individually administered by a trained psychologist, 5) uniform training and scoring procedures are missing, 6) projections still do not adequately differentiate among normals. For these reasons projective testing is of marginal utility in the prediction of future criminal behavior.

Although structured tests avoid some of the inherent problems of projective tests, they bring their own unique set of difficulties. A review of the literature relating various forms of structural tests to criminal behavior, with the exception of the Minnesota Multiphasic Personality Inventory, reveals that consistent patterns rarely emerge, and the few isolated reports of successful "prediction" and/or discrimination with a given instrument are rarely followed by successful replication elsewhere.<sup>(40)</sup> And while further research may provide information on criminal behavior, it is apparent that the majority of psychological tests contribute very little to discrimination between criminal groups and control groups.

The Minnesota Multiphasic Personality Inventory has overcome many of the limitations of the previously mentioned test. Copyrighted in 1943, the inventory is familiar to almost everyone in the mental health field as well as in the field of corrections. It is presently used more than any other standardized personality assessment device in criminal justice settings.<sup>(41)</sup> It can be administered to anyone 15

years old or older with at least sixth grade reading abilities and an IQ exceeding 70. The inventory can be administered and objectively scored by clerical workers, making it economical in terms of professional time. A variety of formats are available, and for those with poor reading skills, tape-recorded versions of the MMPI have been demonstrated as reliable alternatives.

In addition, the MMPI is supported by a wealth of research indicating its utility in correctional settings. It has produced profiles and actuarial tables of criminal behavior and it is extremely economical considering the limited professional manpower normally found in correctional settings.

#### MMPI Research and Criminal Behavior

The literature on MMPI research is enormous and includes high school students, college students, psychiatric clients, professionals in many fields and convicted offenders. This selected review will concentrate on research conducted on offenders in the criminal justice or correctional field.

One of the earliest applications of the MMPI involved discriminating juvenile delinquents from non-delinquents. Using a longitudinal design involving testing in junior high school and follow-up examination of police files every subsequent two years, Hathaway and Monachesi found that

delinquents scored higher on the psychopathic deviate (4), schizophrenia (8), and hypomania scales (9).<sup>(42)</sup> They concluded that these scales indeed would differentiate delinquents from non-delinquents. However, later research by R.V. Wurt and P.F. Briggs<sup>(43)</sup> noted the importance of interaction between these MMPI variables and disruption in the family life of youngsters who became delinquent.

James H. Panton, a noted expert in the use of the MMPI with incarcerated criminals, attempted to discriminate between six different criminal types with the MMPI. Using 1,313 profiles of inmates he found no statistically significant differences between these groups. However, he found that white collar criminals had profiles high on the psychopathic deviate (4), depression (2) hypochondriasis scales (1); aggressive assaultive and sex offenders were high on psychopathic (4) and schizophrenia (8), robbery/burglary criminals had elevated psychopathic deviants (4), schizophrenic (8) and depression scales, and aggressive sexual assaultive criminals had elevated psychopathic deviants, depressions on schizophrenia scales.<sup>(44)</sup> Other research by Christensen and LeUnes,<sup>(45)</sup> Kingsley,<sup>(46)</sup> and Clark<sup>(47)</sup> also reported elevated profiles on the psychopathic deviants, schizophrenia and hypomania scales, and no significant differences in their studies. Similarly, T.C. Adams<sup>(48)</sup> in his study of the differences between first and multiple prison admission found elevations

on the psychopathic deviants scale of recidivists. Bauer and Clark<sup>(49)</sup> in a similar study to Adams reported elevations on the psychopathic deviants and hypomania scales for recidivists when compared to first offenders. They also noted that high scores on the psychopathic deviate, schizophrenia and hypomania scales were more common among offenders with longer sentences than among offenders with shorter sentences.

The MMPI has been used to predict violent behavior and to classify inmates in correctional institutions. Although the major focus of this study is not violent behavior it is interesting to note that 78 percent of incarcerated offenders who had committed violent acts scored high on the psychopathic deviant and hysteria MMPI scales.<sup>(50)</sup> However, later research comparing violent criminals to non-violent criminals, sexual offenders and normal controls, did not show significant differences between violent and sex offenders and the control group indicating that the previously mentioned MMPI scales were not substantiated and the prediction of violent behavior with the MMPI alone raises serious questions.<sup>(51)</sup>

Again we find the MMPI is widely used, in part or as a whole, in the classifications on inmates in many correctional institutions. Panton developed a prison adjustment scale in 1956 from 36 items on the MMPI. He concluded that the scale correctly identified 82 percent of the adjusted groups



and 87 percent of the non-adjusted groups and is equally applicable to young and older offenders. However, he suggests that the prison adjustment scale be utilized as an objective aide in the planning of rehabilitation and custody programs for newly committed prison inmates, but should not serve as the sole basis for recommendation for placement.(52) Martin J. Bohn found that the MMPI can provide a strong beginning base for classification. He reports that assignments of men with compatible types to the same living unit could contribute to the improved functioning of an institution and the desire efforts of lessened institutional violence.(53) John Edwards investigated rehabilitation potential as measured by the MMPI and found that he was not able to differentiate among the more homogeneous groups made up of minimum security and first offenders. But he was able to separate these groups from inmates with records of extremely poor adjustments to the prison environments.(54) The evidence of the use of the MMPI as a sole instrument for prison classification is inconclusive. However, recent studies by Megargee and others filled an entire issue of Criminal Justice and Behavior with the results of 6 years of coordinated research on development of a new MMPI classification system.(55)

The aim of this research by Megargee was to develop a comprehensive MMPI classification system for criminal behavior derived from the present MMPI data. He presents a

compelling case for economy, efficiency, reliability, validity and operational utilization of this system compared to existing classification systems. In doing so he formulated eight research questions that all had to be answered positively if the MMPI was to be an adequate base for this classification system. The initial development of this system by Meyer and Megargee<sup>(56)</sup> answered the first three research questions and produced nine profiles of offenders. However, additional profiles were discovered during the revision and refinement of the classification rules by Dorhant and Megargee.<sup>(57)</sup> Each profile type was presented with rules of inclusion into its respective classification, model descriptions of significant characteristics drawn from several assessment sources and case history data, and hypotheses about optimal modes of management and treatment. This computer-assisted system successfully classified 96% of their sample of 1,214 youthful male federal offenders.<sup>(58)</sup> However, further research delineating the types, determining their response to different programs, and the stability of group membership over time are needed, as are studies exploring the applicability of the system to other groups of offenders.<sup>(59)</sup>

## MMPI Research Regarding Race and Sex

Although we are concerned primarily with escape behavior, the issues of race and sex differences using MMPI must be noted. Research with the MMPI has been almost exclusively centered on male offenders. And since women are a minority in the prison population, research has been neglected. Two studies were found that compared samples of male and female inmates: Panton<sup>(60)</sup> and Joesting, Jones and Joesting.<sup>(61)</sup> Both studies concluded that males appeared more emotionally disturbed than the females. On the other hand racial differences with the use of the MMPI has produced more concern.

Caldwell<sup>(62)</sup> found that black inmates obtained significantly higher scores on the Hypochondriasis (1), Depression (2), Masculine-Feminine (5), and Hypomania (9) scales and significantly lower scores on the Psychopathic Deviant (4) scales. Elion and Megargee<sup>(63)</sup> found the black inmates scored significantly higher on the Psychopathic deviant (4) scale than both a group of white inmates and "culturally deprived" black male college students. They concluded that elevations on the Psychopathic Deviant (4) scale validity express levels of racial deviance among young black males but that the present scale norms appear to show racial bias. McCreary and Padilla,<sup>(64)</sup> confronted the issue of racial and cultural bias in the MMPI by comparing 40

blacks, 36 Mexican American, and 267 white male misdemeanor offenders. They concluded that both cultural and socioeconomic factors contribute to the observed MMPI differences between these three groups. Rosenblatt and Pritchard,<sup>(65)</sup> in their study comparing 104 black and white inmates tend to support the position on racial bias in the MMPI. They concluded that the apparent racial bias in the MMPI may actually be due to educational factors, since more intelligent blacks do not seem to display the differences in MMPI performance that less intelligent groups of blacks display. However, more research is definitely needed to resolve the issue of racial and cultural bias in the MMPI.

#### MMPI Studies and Escape Behavior

The pioneering research with the MMPI to predict escape behavior was conducted by James H. Panton at North Carolina Department of Corrections. Panton and Beall's first attempt had been to derive an index of "escapism" to facilitate accurate custodial classification and subsequent assignment of male felon inmates being processed at the Reception Center, Central Prison, Raleigh, North Carolina.<sup>(66)</sup> They produced a 42 item Escape (Ec) Scale from a sample tested after escape attempts had already occurred. This scale correctly identified 76.7% of the escapees and 73% of the non-escapees in the sample. The results of this research was a 42-item scale which identified the point of greatest

dichotomy between escape and non-escapee groups. However, several attempts to replicate Pantton's work have proven fruitless.

Donald Shupe and Paul Brammell, "Predictions of Escape From MMPI Data," found that Beall and Pantton's Escape Scale only differentiated the escape and non-escapee groups at the five percent level of confidence for a one-tailed test.(67) E.S. Stumpe and W.A. Gilbert also attempted to validate Pantton's escape scale at the Ohio Penitentiary and were unable to get significant results from the validation.(68) Adams and West, "Another Look at the Use of The MMPI Index of Escapism," concurred with Stump's findings and advised that consideration should be given to the possibility of supplementary MMPI escape predictions with social background data.(69)

Another study conducted by Johnson of the Iowa State Men's Reformatory did find that the MMPI System (HY) and (M-F) scales showed significant differences between infractor and non-infractor subgroups.(70) However, Mandal and Barron concluded that environmental factors may play an equal or more impartial role than relatively minor personality differences, at least with respect to escape behavior prediction.(71)

A more recent study, "MMPI and Demographic Correlates and Predictions of Female Prison Escape," by Scott, Mount and Duffy investigated the influence of demographic factors,

MMPI factors and the combination of both in predicting escape behavior. The results suggested that adult female felons who escaped from custody tended to be younger, tended to have longer sentences and generally experienced more adjustment problems which resulted in juvenile imprisonment and/or psychiatric hospitalization. The regression analysis using both MMPI and demographic factors was more effective in accounting for escape behavior than were the separate MMPI and demographics above, and accounted for 29 percent of the variance ( $R^2=.2952$ ,  $p=001$ ).<sup>(72)</sup>

The most recent study, "MMPI Prediction of Female Adjustment to Community Placement," Pettigrew, Shaffer, Edwards and Blowin, indicated that "blind use of MMPI and Beta IQ data is generally unimpressive in correctly classifying inmates into success and failure groups related to performance on a minimum security community work assignment, although prediction of failure is more promising than predictions of success."<sup>(73)</sup>

Questions regarding the use of the MMPI as a primary element in classification of inmates has arisen (Megargee, Meyer, and Dorhout.)<sup>(74)</sup> Megargee stresses the need to develop new classification systems and research to make better use of tests like the MMPI. However, Gearing notes: "The MMPI serves as a source of Probabilistic clinical statements that are hypotheses for further exploration, and employment of the MMPI as the sole basis for any kind of

decision affecting the life of a subject constitutes a serious abuse of the test."(75)

### Summary of the Literature

The literature reviewed in this study preliminarily focused on demographic and MMPI research on escape behavior. The studies illustrate that demographic variables are a powerful tool in understanding escape behavior and several studies produced consistent findings. In all of the studies, age was found to be significant and escapees tended to be younger than non-escapees. Race, education, and IQ were found to be significant only in a few studies, however, the escapee tended to be white with low education skills. Family ties, marital status, and state residency were also important in studies using them. When we look at the criminal background of the escapees we find significant relationships between juvenile and adult commitments, length or sentence, time served in prison, and type of offense (see Appendix A for details).

On the other hand, when we look at the MMPI factors we find inconclusive results. The MMPI had been an effective tool in separating psychiatric and non-psychiatric inmates. It has now, with the refinements by Megargee, become a better tool for the classification of inmates and predicting some violent and assaultive behavior. However, as a predictive measure of escape behavior it falls short. The

escape scale has proven to be ineffective and the MMPI alone as a prediction instrument has been seriously questioned.



## Chapter II

### Footnotes

1. Fred Haynes, The American Prison System, McGraw-Hill, New York, 1939, p.335.
2. Erving Goffman, Asylums, Doubleday & Co., Garden City, 1951.
3. Leonard Orland, Prison: Houses in Darkness, The Press, New York, 1975, p. 58.
4. Franco Ferranti, Simon Dinitz, Aldo Peperno, "Mental Deterioration in Prison," originally published by the Journal of the Office of Studies and Research of the General Administration of the Institute of Crime and Prevention, Italy, 1978, p.10.
5. Richard Cloward, "Social Control in Prison," in Theoretical Studies in Social Organization of the Prison, 1960.
6. Donald Clemmer, The Prison Community, Holt, Rinehart & Winston, New York, 1940.
7. Gresham Sykes and Sheldon Messinger, "The Inmate Social System," in Richard Cloward's Theoretical Studies in Social Organization of the Prison, John Wiley & Sons, Inc., New York, 1960.
8. Gresham Sykes, The Society of Captives, Atheneum, New York, 1960.
9. R. Sommer, and H. Osmond, "Symptoms of Institutional Care," Social Problems from Ferranti, Dinitz and Peperno, Mental Deterioration in Prison.
10. A.R. Lindesmith and H.W. Dunham, "Some Principles of Criminal Typology." Social Forces 19: 307-314, 1941.
11. American Correctional Association, Handbook on Correctional Classification, Anderson Publishing Co., Cincinnati, 1978.
12. Transactions of the National Congress 1870, pp. 541 in William E. Stone, Factors Related to Escape Prediction. University of Michigan, 1975.
13. Op cit, p.5

14. Todd R. Clear, "A Model for Supervising the Offender in the Community," unpublished manuscript, 1978, p. 124.
15. William Stone, Factors Related to Escape Prediction, unpublished dissertation, Sam Houston State University, 1975, p. 12.
16. Gregory A. Miller, The Predictive Efficiency of Certain Factors in Selecting Prisoners for Trusty Status, unpublished dissertation, Michigan State University, 1955, p. 18.
17. H.D. Pigeon, Principles and Methods in Dealing with Offenders, State College, PA., Pennsylvania Valley Publishers, 1949
18. Nelson Cochrane, "Escapes and Their Control: A Brief Study of Escape Data," Prison World, 10 (3), 1948, pp.3-5 and 28-39.
19. Ibid p. 4.
20. Ibid p. 29.
21. D.A. Dobbins, F.E. Stockwell and W.S. Loving, "Individual and Social Correlates of Prison Escapes," Journal of Consulting Psychology, Vol. 24, No. 1, 1960.
22. Ibid p. 31.
23. Ibid.
24. David I. Moran, "Individual and Situational Factors Related to Prison Escape," American Journal of Corrections, March-April, 1967: pp. 30-32.
25. Ibid.
26. James H. Panton, "Characteristics Associated with Escapism," North Carolina Department of Corrections, updated.
27. H.E. Cavior, Escapes From the Robert F. Kennedy Youth Center: 1969 to 1973. Kennedy Youth Center Research Office, 1974.
28. R.J. Hildebrand, "The Anatomy of Escape," Federal Probation. Vol. XXXIII, No. 1, 1969.
29. "CAC Reference Manual," Michigan Department of Corrections, Escape/Walkaway Statistics, 1976-78.

30. William A. Stone, Factors Related to Escape Prediction, Ann Arbor, Michigan: University Microfilms International, 1975.
31. Arlene Baker, Development of Escape-Proneness Score. Sacramento, California: Department of Corrections, June 30, 1961.
32. William R. Morrow, "Escape of Psychiatric Offenders," The Journal of Criminal Law, Criminology and Police Science, Vol. 60, No. 4, 1969.
33. Ibid.
34. Charlotte Banks, Patricia Mayhem and R.J. Sapsford, Absconding From Open Prison, Home Office Research Studies, London, 1975.
35. Norman Holt, Escape From Custody, California Department of Corrections, unpublished research report, 1973.
36. Ibid.
37. William A. Stone, Factors Related to Escape Predictions, Ann Arbor, Michigan: University Microfilms International, 1975.
38. Ernest L. Cowles, "Race and Correctional Institutional Escape Behavior: An Explanatory Study,:" unpublished paper presented at the Academy of Criminal Justice Science, 1982.
39. James Randolph Clark, Characteristics of Convicted Offenders As Measured with the MMPI. Dissertation, University of Arizona, 1977, p. 21.
40. Ibid., p. 27
41. V.H. Elion and E.I. Megargee, Validation of the MMPI Pd scale among black males, Journal of Consulting and Clinical Psychology, 43: 166-172, 1975.
42. S.R. Hathaway and E.D. Monachesi, cited by J.N. Butcher (ed) MMPI Research Developments and Clinical Applications. New York, McGraw-Hill, 1969.
43. R.D. Wirt and P.F. Briggs, Personality and Environmental Factors in the Development of Delinquency. Psychological Monographs, 73: 485, 1959.

44. J.H. Panton, MMPI Profile Configurations Among Crime Classification Groups, Journal of Clinical Psychology, 1958, 14, 305-380.
45. A.D. LeUnes and L. Christensen, Reliability of Inmate Test Results. Correctional Psychologist, 1970, 4. 85-93.
46. L. Kingsley, MMPI Profiles of Psychopaths and Prisoners. Journal of Clinical Psychology, 16: 302-304, 1960.
47. J. Clark, The Relationships Between MMPI Scores and Psychiatric Classification of Army General Prisoners. Journal of Clinical Psychology 8: 86-89, 1952.
48. Thomas C. Admar, Some MMPI Differences Between First and Multiple Admission within a State Prison Population, Journal of Clinical Psychology 32: 555-558, 1976.
49. G.E. Bauer and J.A. Clark, Personality Deviancy and Prison Incarceration. Journal of Clinical Psychology 32: 279-283, 1976.
50. J.O. Siner Acturial Methods in Personality Assessment. In B. Maher (ed) Progress in Experimental Personality Research, New York: Academic Press, 1966 pp. 119-147.
51. J.C. Carroll and G.B. Fuller, An MMPI Comparison of Three Groups of Criminals. Journal of Clinical Psychology 27: 240-242, 1971.
52. James H. Panton, Prediction Prison Adjustment with the MMPI, Journal of Clinical Psychology, 14: 308-312, 1958.
53. Martin J. Bohn, Jr., Classification of Offenders In An Institution for Young Adults, Federal Correctional Institution, Tallahassee, Florida, 1977.
54. John Edwards, "Rehabilitation Potential in Prison Inmates as Measured by the MMPI," Journal of Criminal Law, Criminology and Police Science, 1963, 54, 1 182.
55. Edwin I. Megargee (ed) "A New Classification System for Criminal Offenders," Entire Volume Criminal Justice and Behavior, June, 1977.
56. James Meyer and Edwin Megargee, "Initial Development of the System," Criminal Justice and Behavior, June 1977.

57. Brent Dorhout and Edwin Megargee, "Revision and Refinement of the Classificatory Rules," Criminal Justice and Behavior, June, 1977.
58. Milton Gearing II, "The MMPI As a Primary Differentiation and Prediction of Behavior in Prison: A Methodological Critique of Review of Recent Literature," Psychological Bulletin, 1979.
59. Edwin I. Megargee, "Directions for Future Research," Criminal Justice and Behavior, June, 1977.
60. J.M. Panton "Personality Differences Between Male and Female Prison Inmates Measured by the MMPI." Criminal Justice and Behavior, 1974.
61. J. Joestins, N. Jones and R. Joesting "Male and Female Prison Inmates Differences on MMPI Scales and Revised Beta IQ." Psychological Reports, 1975, 37, 471-474.
62. M.G. Caldwell, "Personality Trends in the Youthful Male Offender," Journal of Criminal Law, Criminology and Police Science, 1959, 49, p. 405-16.
63. V. Eliron and E.I. Megargee, "Validity of the MMPI Pd Scale Among Black Inmates." Journal of Consultation and Clinical Psychology, 1975, 43, 166-72.
64. C.P. McCreary and E. Padilla, MMPI Differences Among Black, Mexican American and White Male Offenders," Journal of Clinical Psychology, 1977, 33, 171-77.
65. A.I. Rosenblatt and D.A. Pritchard, Moderators of Racial Differences on the MMPI, Journal of Consulting and Clinical Psychology, 1978, 46, 1572-1573.
66. Herbert S. Beall and James H. Panton, "Use of MMPI as an Index to Escapism," Journal of Clinical Psychology, 12 (1956), pp. 392-394.
67. Donald R. Shupe and Paul F. Bramwell, "Prediction of Escape from MMPI Data," Journal of Clinical Psychology, Vol. 19, No. 2, April 1963.
68. E.S. Stump and W.W. Gilbert, "Experimental MMPI Scales and Other Predictors of Institutional Adjustment," Correctional Psychologist, Vol. 5, No. 3, 1972.
69. Thomas C. Adams and Judy E. West, "Another Look at the Use of the Minnesota Multiphasic Personality Inventory as an Index of Escapism," The Journal of Clinical Psychology, No. 32, 1976.

70. E. Johnston, "The Use of the Minnesota Multiphasic Personality Inventory (MMPI) in the Prediction of Reformatory Rule Infractions," Iowa State Men's Reformatory, 1965.
71. N.G. Mandel and A.J. Barron, "The MMPI Criminal Redicivism," Journal of Criminal Law, Criminology and Police Science, 1966, pp. 35-38.
72. Norman A. Scott, Michael K. Mount and Patricia S. Duffy, "MMPI and Demographic Correlator and Prediction of Female Prison Escape." Criminal Justice and Behavior, Vol. 4, No 3, Sept. 1977.
73. C. Gary Pettigrew, C. Edward Shaffer, Dan W. Edwards and David Blouin, "MMPI Predictions of Inmate Adjustment to Community Placement," unpublished paper presented at the Society of Police and Criminal Psychology, 1981.
74. Edwin Megargee, James Meyer and Brent Dorhout, Criminal Justice and Behavior, June, 1977.
75. M.C. Gearing, "The MMPI as a Primary Differentiator and Predictor of Behavior in Prison: A Methodological Critique and Review of the Recent Literature," Psychological Bulletin, 1979, Vol. 85, No. 5.

## CHAPTER III

### RESEARCH METHODOLOGY

#### Introduction

It has been argued that the primary concern of correctional authorities is custody and security. Maintaining security is a basic requirement of the institution if it is to carry out the functions required by society, namely, punishment and protection of the community.

Prison is a man-made environment, it is not surprising for those being held captive to attempt escape. The psychological, emotional and physical hardships of institutional life are well documented.<sup>(1)</sup> The problem lies in predicting who will attempt escape and who will not.

Recent studies undertaken to date have concluded in aggregate, that: (1) several demographic factors appear to be fairly stable predictors, particularly age, type of offense, and race; (2) escapees tend to be those with the most lose in terms of release and parole; (3) most escapees are walkaways and few are from maximum security institutions; (4) several MMPI items appear related to incidents of escape, particularly among female prisoners; and, (5) there is little evidence that one set of indicators is better than others, specifically when demographic variables are compared to MMPI items.

### Research Question

This study attempts to determine the relationship between MMPI items and selected demographic variables as predictors of escape. Specifically, the questions to be examined are:

1. Which MMPI items are indicators of escape with male inmates? The MMPI is used in all federal and most state prisons for classification of inmates. Its use to predict escape has been limited, although some items were found to be significant escape predictors with female inmates. By examining the relationships between MMPI items and incidents of escape, it is believed that the question of the stability of these items can better be addressed.

2. Which demographic factors are indicators of escape with male inmates? There is considerably more research on demographic variables and escape, but some contradictions do exist. Some studies find certain factors significant; others do not. Frequently this



factor is a function of methodological weaknesses and dated research.

3. Which combination of MMPI items and demographic variables would allow for a better prediction? In addition to addressing whether demographic factors and MMPI items strengthen prediction, the study will also attempt to show which factor is a better predictor of escape.

By addressing these specific research questions, the results of this study should provide a systematic examination of the use of demographic factors and MMPI items in predicting escape.

#### Organizational Setting

The State Prison of Southern Michigan (SPSM) is located on a large tract of semi-isolated land near Jackson, Michigan. It is the largest prison in the Michigan Department of Corrections and houses almost half of the state's 13,600 prisoners. The capacity of SPSM in 1977 was 4,625 men; with the average number confined was approximately 5,400.<sup>(2)</sup> The remainder of the state's penal population is maintained at the following penal institutions: Marquette Branch Prison, Michigan Reformatory, Riverside Correctional Facility, Michigan Training Unit, Muskegon Correctional

Facility, Cassidy Lake Technical School, Huron Valley Women's Facility, and twelve camp programs scattered throughout the state.(3)

The State Prison of Southern Michigan contains ten cell blocks; each is approximately 350 feet long and five stories high. The cell blocks form the front wall of the prison and part of the two side walls. A thirty-foot concrete wall completes the enclosure of the prison yard. This area is approximately fifty-seven acres. SPSM owns the distinction of being the world's largest walled prison.(4)

The prison is divided into four major divisions: close security, medium security, minimum security and the reception and guidance center.(5) The largest number of men are confined to the close security facility within the walls and under maximum custody supervision. The close security facility housed about 3,000 (4,000 until 1977) men and offers ten federally approved apprenticeship programs in skilled trades.(6) It offers remedial education opportunities from secondary to the college level, vocational trade programs, group counseling and clinical services. Organized sports and other leisure activities are also offered. Many inmates cannot take advantage of these programs due to the overcrowded conditions at the prison.

The second largest population of men (averaging 1,385) were confined to the minimum custody facility. Many of the programs and activities described for the close security

facility also apply to the minimum security facility, but there are several differences worth noting. Residents in minimum custody are housed in three cell-type living units on the prison's main grounds and in four barrack-type living units on the farms. Those who qualify are permitted to attend class at Jackson Community College, and others are able to participate in home furlough programs. This arrangement permits some residents to go home for 48 to 72 hours, once every four weeks.

Opened in 1977, the newest facility in the SPSM complex is the medium security unit. The capacity of the new unit is about 1,000 and it was designed to reduce the population of the main walled close security facility. It also has the traditional educational and vocational programs available.

The final section of SPSM is the Reception and Guidance Center. It is housed in a former cell block on the prison proper. Although the facility is physically close to the other cell blocks, alterations in construction have separated it from the rest of the institution. The regular cell block contains five tiers of cells with a gallery on each level.

The Reception and Guidance Center has, in addition to the iron railings, a heavy one-inch wire mesh from floor to ceiling which completely encloses each tier. This wire guard was installed primarily to prevent inmates from committing suicide by jumping off the galleries. The

Reception and Guidance Center cell block differs from other cell blocks. They have small offices and several large rooms, used by the staff to process newly arrived inmates. The cell block also differs because part of the floor space is used as a dining area. All men in the Reception and Guidance Center eat, sleep and carry on all other activities within the cell block and remain separated from the general population of the prison.

Initially, all men sentenced to prison in Michigan are sent to the Reception and Guidance Center at Jackson. Each inmate is tested, evaluated, and subsequently placed in an institution based on his security and programming needs.

#### Site Selection

The State Prison of Southern Michigan was chosen as the site of this study because it is the largest prison in the state and it has all levels of security. The Reception and Guidance Center is the entry point for all male prisoners sentenced in the State of Michigan. It has a heterogeneous group of men serving sentences for a variety of offenses. It is also the central facility for psychological evaluation of all male inmates in Michigan.

Another reason for selecting SPSM is the large number of escapees during the past few years. To illustrate the magnitude of the escape problem, Table 1 indicates that from

1973 to 1976, a total of 2,609 escapes occurred from all security classifications and facilities under the Michigan Department of Corrections.(7)

Table 1

Michigan Department of Corrections Escapes 1973-1976

MDC Population			
Year	in custody	Number of Escapes	Escape Rate
1973	21,973	646	.029
1974	21,854	601	.028
1975	25,790	632	.025
1976	26,882	724	.027

Although the number of escapes in 1976 represents a 12 percent increase over the 1973 figure, it is interesting to observe that the annual escape rate, which varied from 25 to 29 per thousand residents during 1973 to 1976, was relatively stable (see Table 2). It seems reasonable to conclude that the department's level of security did not decline during that period, and the number of escapes

observed was primarily a function of the size of the population served. This trend is supported further by the escapes at the State Prison of Southern Michigan:(8) .

Table 2

SPSM Escapes 1973-1976

Year	SPSM Population		Number of Escapes	Escape Rate
	in custody			
1973	4,279		118	.027
1974	4,306		113	.023
1975	5,353		93	.017
1976	5,671		161	.028

It is within this institutional environment that the population was selected for inclusion in this study.

### Sampling

The target population for this study consists of all male inmates incarcerated at the State Prison of Southern Michigan during the period of January, 1973 through April, 1977. This population was divided into two groups: 1) inmates that escaped or attempted escape, 2) inmates that never attempted to escape. Each group was selected according to the following criteria:

- a. A six month or longer minimum sentence;
- b. Six years of education or a sixth grade reading level;
- c. Evidence of an IQ score above 70;
- d. A complete MMPI file;
- e. A pre-sentence investigation report in the inmate's file.

However, the MMPI was administered to many inmates who could not read at the sixth grade level. They were given an audio tape of the questions and supervised by prison staff while the test was taken. And, although the above criteria had to be satisfied by all inmates in the study, the selection of the two groups was conducted by two different procedures, one for the escape group and one for the control group.

### Escape Group

The escape sample was obtained from a complete computer listing of all inmates that escaped or attempted escape between January, 1973 and April, 1977, in the State of Michigan Department of Corrections. Once this listing was completed, only those inmates from SPSM were selected for inclusion in the sample.

The selection preceded from the most recent escapee backwards and the final escape group consisted of two hundred male prisoners who met the aforementioned criteria. This group represented the entire population of minimum security escapees from SPSM during this time period.

### Non-Escapee Group

The non-escapee sample for this study was a match group of one hundred prisoners who had no reported escapes or attempted escapes from the State of Michigan Department of Corrections. This group was selected if their inmate identification number was consecutive or closely aligned with that of an escapee, and that they were in a minimum security unit at the time of escape of their match. This procedure helped to insure that the comparison sample had served relatively similar amounts of time in prison and in a minimum security unit. Because of this matching procedure and the size of the total population in a minimum security



at SPSM, it was decided that one hundred, matched non-escapees would be more than an adequate representation of inmates in minimum security at SPSM.

## DATA COLLECTION

Two basic types of data were required to achieve the objective of the study: basic demographic information and MMPI test results.

The data in this study were collected from two major sources. These sources were the inmate's institutional folder and a computerized print-out of MMPI reports from the Diagnostic Reception Center at SPSM. The information from the inmates' folder included psychological reports, the pre-sentence investigation report and the classification reports. All of the data for the study were collected from these sources and divided into two major categories: demographic factors and MMPI items.

### Demographic Variables

The demographic factors for the study were divided in three major categories: (1) basic characteristics including race, age, education, marital status, number of dependents, drug dependency, alcohol dependency, in-state, out of state, and community size; (2) prior and current criminal histories including past juvenile and adult commitments, juvenile and

adult probation, current offense, minimum sentence and term in prison; (3) institutional adjustment including security level, work habits, adjustment to staff and inmates, custodial record, family contracts and psychological evaluation.

### MMP I

The Minnesota Multiphasic Personality Inventory is a psychometric instrument designed to provide scores on important phases of personality. Scores are based on the responses to 566 "true or false" questions. The MMP I is administered routinely to all new arrivals at the Reception Diagnostic Center at SPSM as part of the inmates' psychological evaluation. The test is composed of nine clinical scales and five validity scales.

A brief description of the MMPi scales as described in the document manual, Hathway and McKinley, 1951, Dahlstrom and Welsh, 1960(9) follows:

#### Scale W - Question Scale.

A validating scale consisting simply of the total number of items blank or unanswered. The size of this score affects the significance of all other scores; a large number of blank answers invalidates all others.

Scale L - Lie Score.

A measuring of the degree of which the subject may be attempting to falsify his score by always choosing the response that places him in the most acceptable light socially.

Scale F - Validity Score.

This is a personality scale but a check on the validity of the record. This scale usually indicates that the subject was careless or unable to comprehend the items. Occasionally indicates a highly individual and independent person or a person who is rather badly neurotic or psychotic.

Scale (1) Hs - The Hypochondriasis Scale.

Measures the amount of concern about bodily functions. It is characteristic of the hypochondriasis that is immature in his approach to adult problems, tending to fail to respond with adequate insight.

Scale (2) D - The Depression Scale.

Measures the depth of the clinically recognized symptom, depression. A high score suggests a characteristic personality background, in that the person

who reacts to stress with depression is characterized by lack of self-confidence, tendency to worry, narrowness of interests, and introversion.

Scale (3) Hy - The Hysteria Scale.

Measures the degree to which the subject is like patients who have developed conversion-type hysteria symptoms.

Scale (4) Pd - The Psychopathic Deviate Scale.

Measures the similarity of the subject to a group of persons whose main difficulty lies in their absence of deep emotional response and their disregard of social mores. Although sometimes dangerous to themselves or others, these persons are commonly likable and intelligent. Except by the use of an objective instrument of this sort, their trend toward the abnormal is frequently not detected until they are in serious trouble. They may often go on behaving like perfectly normal people for several years between one outbreak and another. Their most frequent digressions from the social mores are lying, stealing, alcohol or drug addiction, and sexual

immorality. They may have short periods of true psychopathic excitement or depression following the discovery of a series of their asocial or antisocial deeds.

Scale (5) Mf - The Interest Scale.

Measures the tendency toward masculinity or femininity of interest pattern. A high score indicates a deviation of the basic interest pattern in the direction of the opposite sex.

Scale (6) Pt - The Psychasthenia Scale.

Measures the tendency toward phobias or compulsive behavior. The compulsive behavior may be either explicit, as expressed by excessive handwashing, vacillation, or other ineffectual activity, or implicit, as in the inability to escape, useless thinking or obsessive ideas. The phobias include all types of unreasonable fear of things or situations, as well as over-reaction to more reasonable stimuli.

Scale (7) Pa - The Paranoia Scale.

Measures the tendency toward suspiciousness, over-sensitivity, and delusions of persecution, with or without expansive egotism.

Scale (8) Sc - The Schizophrenia Scale.

Measures the tendency toward bizarre and unusual thoughts or behavior. There is a splitting of the subjective life or the schizophrenic person from reality, so that shifts in mood of behavior.

Scale (9) Ma - The Hypomania Scale.

Measures the personality factor characteristic of persons with marked over-productivity in thought and action. The word "hypomania" refers to a lesser state of mania. Although the real mania patient is the lay person's prototype for the "insane," the hypomanic person seems just slightly off normal. The hypomanic patient has usually gotten into trouble because of undertaking too many things. He is active and enthusiastic. Contrary to common expectations, he may also be somewhat depressed at times. His activities may interfere with other people

through his attempts to reform social practice, his enthusiastic stirring up of projects in which he then may lose interest, or his disregard of social conventions. In the latter connection, he may get into trouble with the law.

Scale (0) SI - The Social Interest Scale.

Aims to measure the tendency to withdraw from social contact with others.

The basic demographic variables and the MMPI items listed above comprise the majority data used for this study.

The demographics are divided into two categories: basic background information and criminal history. The MMPI variables are the major scales when this test is given. However, MMPI research has developed several subscales used for more detailed assessment of certain groups. These scales are normally not considered in research with the MMPI and are excluded in this study.

## ANALYSIS OF THE DATA

The data in this study presented certain analytical problems because several of the independent variables (race, marital status, offense) were measured on a nominal scale. This scale is the lowest type of measurement and data can

only be placed into categories. This situation made the statistical testing for significant differences between the two samples difficult.

Given these limitations, the analysis of the data proceeded in two phases. The first phase was designed to describe the data and to illustrate the differences between the two groups. Analysis proceeded around contingency tables to present frequency and percentage distributions.<sup>(10)</sup> Statistical testing involved non-parametric and parametric statistics, depending upon the level of measurement.<sup>(11)</sup> The analysis of the basic background data and the results from the MMPI for the escape and non-escape groups was performed in order to determine if the two groups actually differed, and if so, on what factors.<sup>(12)</sup> A t-test was also performed on the MMPI data. These data are designed to indicate the degree to which variations in each of the MMPI scales differ between escapees and non-escapees. This is followed by a plot of the MMPI item results for both groups.

The second phase of the analysis involved the utilization of standard regression techniques. The major dependent variable of this study was the number of escapes or attempted escapes from custody. This variable is represented by the actual number of attempt/escapes compared to those inmates who never attempted to escape. Since the two groups, escapees and non-escapees, have unequal subjects



a probit transfer was performed to give more accurate analysis in the regression procedures.(13)

The predictive variables involved the aforementioned demographic factors, and selected MMPI scales. In addition, stepwise regression techniques were employed to rank and compare the MMPI and demographic variable predictors.

In terms of analysis, the escapee and non-escapee group were compared to determine:

- a. If the groups really differed from each other on demographic and MMPI factors.
- b. What MMPI items and/or demographic factors are good predictors of escape.
- c. If an escape prediction model could be developed for utilization in the prison.
- d. If demographic factors are better predictors than MMPI items.

### Summary

The Prison of Southern Michigan is the largest prison in the state with an average inmate population over 5,400. The prison contains four classifications of inmates and has averaged over 100 escapes per year, 1973 through 1976.

This study employed a quasi-research design, in which a sample of 200 male escapees or attempted escapees were selected and compares with 100 matched male inmates who did not escape.

Demographic variables and MMPI scale items were drawn from inmate files and evaluations to determine whether or not the two groups differed on these factors (and whether demographic or MMPI items are good predictors of escape).

The primary in the objective of this study was to determine what factors are reliable predictors of escape. To determine this, multiple regression techniques were utilized to examine the two basic predictor measurements: demographic factors and MMPI items. In this manner, the study should respond to the larger question of determining who will attempt escape and who will not.

## Chapter III

### Footnotes

For a good discussion of these conditions see:

- 1) Gresham Sykes, The Society of Captives, Donald Clemmer, The Prison Community, Erving Goffman, Asylums, and Phillip Zimbardo, "Pathology of Imprisonment."
- 2) Dimensions: A Report of the Michigan Department of Corrections, State of Michigan, 1977, p. 46.
- 3) Ibid, p.46.
- 4) Edward Henry Steininger, "Changes in the MMPI Profile of First Prison Offenders During Their First Year of Imprisonment," Unpublished Dissertation, Michigan State University, 1957.
- 5) Michigan Department of Corrections Annual Report, State Of Michigan.
- 6) Ibid.
- 7) Ibid.
- 8) Ibid.
- 9) Starke R. Hathaway and J.C. McKinley, MMPI Manual, Psychological Testing Corporation, 1951, and W.G. Dahlstrom and G.S. Welsh, An MMPI Handbook, University of Minnesota Press, 1960.
- 10) Norman Nie, et.al., Statistical Package for the Social Sciences, McGraw-Hill Company, New York, 1975, pp. 224-225.
- 11) Non-parametric statistics, primarily the chi-square was used with nominal and ordinal levels, while the parametric statistics, generally the t-test was employed with an interval or ratio level of measurement.
- 12) Because of Unequal group sizes, a test of homogeneity of variance was conducted for all analyses involving the t-test. For a thorough discussion of this problem, see David G. Kleinbaum and Lawrence L. Kupper, Applied Regression, Analysis and other Multivariable Methods (North Scituate, Massachusetts: Duxbury Press), 1978, p. 248.
- 13) Ibid.

## CHAPTER IV

### ANALYSIS OF DATA

It will be recalled that previous studies of escape relied on poorly conceived or implemented research designs and evaluation efforts. In an attempt to address these issues it was decided to use a quasi-experimental design discussed in the last chapter. Essential to this study is an examination of a number of demographic and psychological factors related to escape.

Chapter IV consists of two sections which present results of the comparisons of the two samples on the demographic and MMPI data. This analysis is based on two-hundred (200) escapees and a comparison group of one-hundred (100) non-escapees from the State Prison of Southern Michigan. Data were coded, punched on computer cards and processed using data analysis programs available in the Statistical Package for the social Sciences.<sup>(1)</sup>

The first section presents an analysis of data on the descriptive characteristics of each groups' relevant independent variables included in the study. Of special importance are the variables concerning: demographic characteristics, special problems, criminal history and

current institutional information. Frequencies for each variable have been generated for each sample to allow a variable by variable comparison of the two groups. The chi-square statistics were computed to determine whether a statistical difference between the groups was evident. In addition, a t-test was used to compare the two groups on MMPI variables. on MMPI variables. The t-test was used because MMPI scores were in raw form thus chi-square was not appropriate for this analysis.

The second part of this chapter uses statistical regression techniques to determine differences between escapees and non-escapees use demographic and MMPI variables. The regression analysis allows us to select variables that attribute to escape behavior while eliminating less important variables. This allowance is to build a model of the best indicators of escape behavior. The results of both sessions are presented in this chapter.

### Demographic Characteristics

Table 3 summarizes the demographic characteristics of the escape and non-escape groups. With regard to variables of marital status, community size, and intelligence the two groups were almost identical. The majority of the subjects were single, grew up in urban cities of over one million and scored similarly on intelligence tests.

Table 3

Demographic Characteristics of the Escape & Non-Escape Samples:  
A Summary Table

Dimension	Escape		Non-Escape		Chi Square	Significance Level
	N	Percent	N	Percent		
Age:						
17-21	8	4.0%	10	10.0%	14.25	.0065
22-26	84	42.0%	27	27.0%		
27-31	65	32.5%	27	27.0%		
32-36	26	13.0%	20	20.0%		
37 +	17	8.5%	16	26.0%		
Total	200	100.0%	100	100.0%		
Race:						
White	87	43.5%	45	45.0%	0.015	N.S.
Black	113	56.5%	55	55.0%		
Total	200	100.0%	100	100.0%		
Marital Status:						
Single	101	50.5%	56	56.0%	0.976	N.S.
Married	51	25.5%	21	21.0%		
Divorced,						
Separated,						
Widowed	48	24.0%	23	23.0%		
Total	200	100.0%	100	100.0%		
Birth Place:						
In-State	126	63.0%	68	68.0%	0.412	N.S.
Out-of-State	71	35.5%	32	32.0%		
Foreign	3	1.5%	0	0.0%		
Total	200	100.0%	100	100.0%		
Dependents:						
None	109	54.5%	51	51.0%	1.489	N.S.
One	35	17.5%	21	21.0%		
Two	20	10.0%	13	13.0%		
Three	23	11.5%	9	9.0%		
Four +	13	6.5%	6	6.0%		
Total	200	100.0%	100	100.0%		
Family						
Composition:						
Intacted	107	53.5%	59	59.0%	4.223	N.S.
Mother Only	71	35.5%	32	32.0%		
Father Only	4	2.0%	3	3.0%		
Other	18	9.0%	6	6.0%		
Total	200	100.0%	100	100.0%		

Table 3 (continued)

Dimension	Escape		Non-Escape		Chi Square	Significance Level
	N	Percent	N	Percent		
Community Size:						
10,000 +	32	16.5%	17	17.0%	7.733	N.S.
50,000 +	29	14.5%	12	12.0%		
100,000 +	19	9.5%	12	12.0%		
250,000 +	20	10.0%	9	9.0%		
500,000 +	2	1.0%	6	6.0%		
1 Million +	97	48.5%	44	44.0%		
Total	200	100.0%	100	100.0%		
Intelligence Q:						
Defective (0-69)	0	0.0%	0	0.0%	4.592	N.S.
Boderline (70-79)	17	8.5%	6	6.0%		
Below Average (80-89)	34	17.0%	17	17.0%		
Average (90-109)	92	46.0%	58	58.0%		
Above Average (110-119)	39	19.5%	14	14.0%		
Superior (120-129)	13	6.5%	4	4.0%		
Very Superior (130 +)	5	2.5%	1	1.0%		
Total	200	100.0%	100	100.0%		
Education:						
(Average Grading Rating)						
Grade 1 - 3.9	13	6.5%	8	8.0%	1.075	N.S.
Grade 4 - 5.9	40	20.0%	16	16.0%		
Grade 6 - 7.9	64	32.0%	34	34.0%		
Grade 8 - 9.9	47	23.5%	22	22.0%		
Grade 10 - 12 +	36	18.0%	20	20.0%		
Total	200	100.0%	100	100.0%		

\*Totals may be less than 200 & 100 due to missing values.

With regard to age, race and birth place, the escape group has greater variation when compared to the non-escape group, i.e., 42 percent of the escapees were under twenty-six versus 27 percent of the non-escapees; 43.5 percent of the escapees were white and 63 percent of escapees were born in Michigan versus 45 percent and 68 percent of the non-escape group.

On family composition and number of dependents the non-escape group show little difference with 53.5 percent versus 59 percent coming from intact families, and 28 percent have two or more dependents compared to 28 percent for the escape group. There is little difference between the two groups on education and on size of community they lived in before being incarcerated. However, non-escapees showed little differences on intelligence test with the exception that they scored higher than 12 percent high on the 90 to 109 scale range. The overall conclusion is that both escapees and non-escapees were equally intelligent.

In summary, a variable by variable analysis of demographic factors suggest few significant differences between the two samples. These data suggest that the two groups are very similar in composition with only one factor: age resulting in a significant difference with non-escapees being older. This insured that any comparison of these groups could be valid and justified.



### Criminal Justice History

Table 4 presents data on the criminal justice history variables of the escape and comparison samples. The time on adult probation data indicates that 55.3 percent of the escape group had previously been placed on probation, compared to 48.5 percent of the non-escape group.

Data gathered on number of prison terms point out that the escape group has spent a significantly larger number of terms in prison. The data also indicate that the non-escape group consists mainly of first time offenders, i.e., 70.0 percent compared to 31.5 percent. This is further supported by the data presented on total time served in prison. The escape group has 31.5 percent of its members serving one year or less to 15.0 percent of the comparison group. Considering that the escape group has served significantly more and longer prison terms it is reasonable to assume they can, therefore, be considered repeat offenders.

Finally, the data on criminal commitments are presented. Total juvenile commitments for the escape group were significantly higher than the comparison group, with 36 percent having one or more commitments compared to 23 percent for the non-escape group. The number of adult commitments show that 17.5 percent of the group has only one commitment compared to 40 percent for the non-escape group which indicates that the non-escape group has had less involvement in a pattern of criminal activity. Again, we

Table 4

## Prior Criminal Justice History of Escape &amp; Non-Escape Samples

Criminal History Indicator	Escape		Non-Escape		Chi Square	Significance Level
	N	Percent	N	Percent		
Adult Probation:						
None	86	43.7%	52	52.0%	4.186	N.S.
One	72	36.5%	28	28.0%		
Two or More	39	18.8%	20	20.5%		
Total	197	100.0%	100	100.0%		
Prison Terms:						
First	63	31.5%	70	70.0%	41.70	.0000
Second	71	39.5%	18	18.0%		
Third	42	21.0%	5	5.0%		
Four or More	24	12.0%	7	7.0%		
Total	200	100.0%	100	100.0%		
Total Time Served in Prison:						
0 to 1 years	63	31.5%	15	15.0%	3.234	N.S.
1 to 3 years	63	31.5%	22	22.0%		
3 to 5 years	36	18.0%	36	36.0%		
5 to 10 years	38	19.0%	27	27.0%		
Total	200	100.0%	100	100.0%		
Juvenile Commitment:						
None	128	64.0%	77	77.0%	5.746	N.S.
One	53	26.5%	18	18.0%		
Two	12	6.0%	4	4.0%		
Three or More	7	3.5%	1	1.0%		
Total	200	100.0%	100	100.0%		
Adult Commitment						
One	35	17.5%	40	40.0%	20.00	.0005
Two	46	23.0%	21	21.0%		
Three	32	16.0%	12	12.0%		
Four	32	16.0%	7	7.0%		
Five or More	55	27.5%	20	20.0%		
Total	200	100.0%	100	100.0%		

Table 4 (continued)

Criminal History Indicator	Escape		Non-Escape		Chi Square	Significance Level
	N	Percent	N	Percent		
Juvenile Probation:						
Yes	102	51.5%	37	37.5%	7.27	0.026
No	96	48.5%	62	62.5%		
Total	198	100.0%	99	100.0%		
Type of Offense:						
Assault	104	52.0%	43	43.3%	2.160	N.S.
Non-Assault	96	48.0%	57	57.0%		
Total	199	100.0%	100	100.0%		

find that the escape group has a significantly higher number of juvenile probations and parole violations when compared with the non-escape group. The final variable in Table 4 is concerned with the offense committed by the inmate. These data indicate that the escape group is more violent in the crimes they committed with 52 percent having committed assaultive or violent crimes compared to 43.3 percent for the non-escape group.

The purpose of these data has been to illustrate that the escape group, while similar on basic demographics, has a significantly less favorable criminal history.

#### Institutional Information

The data on institutional information are presented in Table 5. The purpose of these data is to ascertain the institutional history and adjustment problems of the two groups.

Table 5 indicates that the custodial records indicate the escape group has slightly more adjustment problems than the comparison group with 85.6 percent of the escape group adjusting compared to 90.5 percent of the non-escape group; however, only 14.5 percent of the escape group was rated to have adjusted excellently versus 9.5 percent of the non-escape group. The data also indicate that the escape group has more problems in adjustment than the comparison group in several areas. In regards to adjustment with inmates the

Table 5  
Current Institutional Information of Escape & Non-Escape Samples

Dimension	Escape		Non-Escape		Chi Square	Significance Level
	N	Percent	N	Percent		
Custodial Record:						
Major Adjustment	3	1.5%	0	0.0%		
Marginal Adjustment	25	12.9%	9	9.5%		
Good Adjustment	138	71.1%	64	65.7%	7.34	N.S.
Excellent Adjustment	28	14.5%	24	24.8%		
Total	194	100.0%	97	100.0%		
Adjustment With Inmates:						
Not Adjusting	6	3.1%	1	1.0%		
Marginal	23	11.8%	5	5.0%		
Average	139	71.3%	77	77.5%	6.6280	N.S.
Above Average	27	13.8%	14	19.5%		
Total	195	100.0%	197	100.0%		
Adjustment With Staff:						
Not Adjusting	6	3.1%	0	0.0%		
Marginal	30	15.4%	7	7.3%		
Average	127	65.1%	73	74.9%	9.555	0.048
Above Average	32	16.4%	17	17.8%		
Total	195	100.0%	97	100.0%		
Adjustment to Incarceration:						
Not Adjusting	1	0.5%	0	0.0%		
Marginal	29	15.0%	10	10.5%		
Average	134	69.5%	68	67.0%	2.753	N.S.
Above Average	29	15.0%	20	20.5%		
Total	193	100.0%	198	100.0%		
Minimum Sentence:						
1-5 years	150	75.0%	78	78.0%		
6-10 years	40	20.0%	18	18.0%		
11-15 years	4	2.0%	0	0.0%	2.416	N.S.
16-20 years	3	1.5%	2	2.0%		
over 21 years	3	1.5%	2	2.0%		
Total	200	100.0%	100	100.0%		

Table 5 (continued)

Dimension	Escape		Non-Escape		Chi Square	Significance Level
	N	Percent	N	Percent		
Work and Study Habits:						
Poor	16	8.3%	5	5.0%	4.35	N.S.
Marginal	31	16.2%	13	13.0%		
Average	120	62.5%	62	62.5%		
Above Average	25	13.0%	18	18.5%		
Total	192	100.0%	98	100.0%		
Security Level:						
Camp	15	7.5%	44	44.0%	92.366	.0000
Farm	69	34.5%	14	14.0%		
Minimum	116	58.0%	42	42.0%		
Total	200	100.0%	100	100.0%		

\*The records did not indicate whether closed security was for minimum, medium or maximum security inmates. Normally, closed security means inmates were not with the general population of the institution - or that they were being reclassified and final placement was in process.

escape group was rated marginal to poor 14.9 percent versus 6 percent for the non-escape group; on adjustment with staff, 18.5 percent versus 7.3 percent; on adjustment to incarceration, 15 percent versus 10.5 percent; and on work and study habits, 24.5 percent versus 14.9 percent. The overall indication is that the escape group had shorter minimum sentences when compared to the non-escape group.

### Special Problems

The purpose of these data is to ascertain the special problems of the two groups such as psychiatric history, drug abuse and alcohol dependency.

The data in Table 6 indicate that the escape group has a greater history of psychiatric involvement with 25 percent having had bad problems compared to 17.1 percent for the non-escape group. The incidence of alcohol dependency histories shows 28.7 percent and 27 percent for escape and non-escape groups. Drug abuse history shows almost no difference between the groups, 44.6 percent of the escape group versus 43.2 percent of the non-escape group had a history of prior drug or dependency. The amount of family contact differed for the two groups. The escape group has significantly greater contact with family members on a regular basis, with 66.9 percent having visits or mail compared to 42.7 percent for the non-escape group.

Table 6

## Special Problems of Escapes and Non-Escapes Samples

Problem Area	Escape		Non-Escape		Chi Square	Significance Level
	N	Percent	N	Percent		
Psychiatric History:						
Yes	49	25.0%	17	17.1%	2.152	N.S.
No	147	75.0%	83	83.9%		
Total	196	100.0%	100	100.0%		
Alcohol Abuse:						
Yes	56	28.7%	27	27.0%	0.123	N.S.
No	139	71.3%	73	73.0%		
Total	195	100.0%	100	100.0%		
Drug Abuse:						
Yes	87	44.6%	43	43.2%	2.112	N.S.
No	108	55.4%	57	57.0%		
Total	195	100.0%	100	100.0%		
Family Contact:						
None	6	3.6%	6	6.3%	14.676	0.0007
Limited	50	29.5%	49	51.0%		
Regular	113	66.9%	41	42.7%		
Total	169	100.0%	96	100.0%		



## Psychological Factors

The Minnesota Multiphasic Personality Inventory (MMPI) was utilized to provide a psychological profile of the escape and non-escape groups in this study. Table 7 presents the results of a t-test conducted on the escape and comparison group. The data indicate that both groups were extremely similar and show little or no significant differences on the depression (2), hysteria (3), Masculine-Feminine (5), Paranoia (6) and social introversion (0) scales. There were significant differences between escapees and non-escapees on the hypochondasis (1), psychopathic deviant (4), psychothenia (7), schizophrenia (8) and hypomania (9) scales, with the greatest difference being between scales 7 and 8. These results indicate that the escape group tends to be more inactive, rebellious, anxious, negative and less likely to be bound by custom than his counterpart the non-escape group.

The main thrust of this study was to look at a constellation of demographic and MMPI variables in terms of their impact on escape behavior. The general hypothesis was that demographic variables are better predictors of escape behavior than MMPI variables. The second section of this chapter utilized regression analysis to investigate escape behavior, and it was decided that two testings for the aforementioned hypothesis were in order for both demographic and MMPI variables. The first would be a simple regression

Table 7

T-Test of Escapes and Non-Escapes Samples by MMPI Scales\*

MMPI Item Scale	N	Mean	Standard Deviation	T-Value	Significance
W Scale					
Escape	71	4.01	5.43	-0.75	NS
Non-Escape	12	4.86	7.52		
L Scale					
Escape	200	4.73	2.53	1.16	NS
Non-Escape	99	4.34	2.92		
F Scale					
Escape	200	8.51	6.57	0.30	NS
Non-Escape	100	8.23	8.32		
K Scale					
Escape	200	14.53	5.07	-0.27	NS
Non-Escape	100	14.74	6.92		
HS Scale (1)					
Escape	200	13.61	4.96	2.82	.005
Non-Escape	100	10.96	8.71		
D Scale (2)					
Escape	200	21.50	5.20	-0.21	NS
Non-Escape	100	21.63	4.55		
HY Scale (3)					
Escape	200	20.68	4.92	-0.97	NS
Non-Escape	100	22.01	7.06		
PD Scale (4)					
Escape	200	23.30	5.02	2.68	.008
Non-Escape	100	25.87	8.33		
MF Scale (5)					
Escape	200	24.79	5.28	1.50	NS
Non-Escape	100	23.83	5.10		
PA Scale (6)					
Escape	200	11.88	4.52	-0.61	NS
Non-Escape	100	12.32	6.31		
PT Scale (7)					
Escape	200	27.66	7.28	6.33	0.000
Non-Escape	100	21.00	9.8		

Table 7 (continued)

MMPI Item Scale	N	Mean	Standard Deviation	T-Value	Significance
SC Scale (8)					
Escape	200	29.57	9.40	6.98	0.000
Non-Escape	100	21.11	10.79		
MA Scale (9)					
Escape	200	23.46	4.52	3.14	.002
Non-Escape	100	21.66	4.99		
SI Scale (0)					
Escape	200	25.47	8.65	-0.21	NS
Non-Escape	103	25.69	7.93		

\*A breakdown of raw score distribution is provided  
in the Appendix.

including all variables independently and together to test for their significance and explanation of escape behavior. The second test would be a stepwise regression analysis in an attempt to build the best prediction model. And finally the models would be tested by means of the cross-validation to determine the best prediction model for escape behavior using demographic and/or MMPI variables.

### Regression Analysis

The first procedure was to determine the goodness of fit of all the variables in the study.<sup>1</sup> Table 8 displays the results of the regression of all demographic variables with escape behavior, and the twenty-six variables yielded a multiple correlation (R) of .6071 and  $R^2$  of .3686 which produced an F ratio of 5.187 that was significant at the .000 level. These twenty six demographic variables account for thirty seven (37) percent of the variance of escape behavior and included five significant variables. Those significant variables included average grade rating, number of juvenile commitments, number of prison terms, security level (camp) and IQ.

Table 9 examines the multivariate relationship between escape behavior and MMPI variables. The regression including all ten MMPI variables produced a multiple correlation of .4939 and  $R^2$  of .2440 that was significant at the .002 level. The MMPI variables accounted for twenty-

Table 8

Forced Entry Regression Analysis Between Independent  
Demographic Variables and Escape Behavior

Independent Variables	B	SE B	BETA	F
Family Contact (Regular)	0.1412	0.1316	0.1451	1.151
Security Level (Farm)	0.0152	0.0637	0.0138	0.057
Family Intacted	0.0470	0.0538	0.0484	0.764
Juvenile Probation	-0.0329	0.0574	-0.0342	0.330
Community Size	-0.0004	0.0151	-0.0018	0.001
Age	-0.0072	0.0051	-0.0975	2.036
Maximum Sentence	0.0029	0.0055	0.0659	0.280
Marital Status (Married)	0.0864	0.0713	0.0759	1.467
Average Grade Rating	-0.0042	0.0014	-0.2099	8.675*
Adult Probation	0.0548	0.0368	0.0893	2.217
Adjustment with Staff	0.0523	0.0787	0.0663	0.442
Juvenile Commit- ments	0.0632	0.0281	0.1336	5.097*
Type of Offense	0.1194	0.0658	0.1240	3.286
Prison Terms	0.1152	0.0327	0.2752	12.460**
Marital Status (Divorced)	-0.0049	0.0374	-0.0084	0.017
Security Level (Camp)	-0.4206	0.0728	-0.3648	33.378**

Table 8 (cont'd)

Independent Variables	B	SE B	BETA	F
Race	0.0206	0.0657	0.0212	0.098
Crime Severity	0.0047	0.0031	0.1041	2.302
Adult Commitments	0.0093	0.0141	0.0450	0.432
Number Dependents	0.0098	0.0210	0.0323	0.220
Time Served in Prison	-0.0402	0.0262	-0.1133	2.365
Intelligence Q	0.0059	0.0026	0.1705	5.071*
Adjustments with Inmates	-0.0420	0.0769	-0.0486	0.299
Custodial Record	-0.1124	0.0774	-0.1339	2.109
Maximum Sentence	-0.0061	0.0061	-0.1265	0.988
Family Contact (Limited)	-0.0801	0.1323	-0.0807	0.366
Multiple R	$R^2$	Adjusted R	F Change	F Significance
0.6071	0.3686	0.2975	5.187	0.000

\* Significant beyond .05  
 \*\* Significant beyond .001

Table 9

Forced Entry Regression Analysis Between Independent MMPI  
Variables and Escape Behavior

Independent Variables	B	SE B	BETA	F
Social Introversia Scale 0	-0.0069	0.0036	-0.1239	3.592
Hypomania Scale 9	-0.0051	0.0061	-0.0520	0.706
Conversion Hysteria Scale 3	-0.0088	0.0067	-0.1070	1.711
Masculinity-Femininity Scale 5	0.0013	0.0049	0.0148	0.074
Depression Scale 2	-0.0143	0.0065	-0.8523	4.869*
Psychopathic Deviate Scale 4	0.0081	0.0052	0.1103	2.411
Paranoia Scale 6	-0.0149	0.0063	-0.1585	5.516*
Psychasthenic Scale 7	0.0120	0.0057	0.2171	4.368*
Hypochondriasis Scale 1	0.0047	0.0063	0.0659	0.550
Schizophrenia Scale 8	0.0149	0.0046	0.3380	10.336**
Multiple R	R <sup>2</sup>	Adjusted R	F Change	F Significance
0.4939	0.2440	0.2176	9.262	0.000
* Significant beyond .05				
** Significant beyond .001				

Table 10

Forced Entry Regression Analysis Between Independent  
Demographic and MMPI Variables and Escape Behavior

Independent Variables	B	SE B	Beta	F
Scale SI (0)	-0.0068	0.0042	-0.1189	2.916
Family Contact	-0.0216	0.1280	-0.0095	0.029
Crime	0.0044	0.0030	0.0961	2.056
Security Level (Farm)	0.0530	0.0616	0.0485	0.742
Intelligence Q	0.0061	0.0024	0.1762	6.057
Number of Dependents	0.0194	0.0201	0.0640	0.937
Family Intacted	-0.0051	0.0521	-0.0053	0.010
Scale MA (9)	-0.0083	0.0061	-0.0837	1.847
Adjustment with Staff	0.0917	0.0760	0.1161	1.454
Time Served in Prison	-0.0252	0.0252	-0.0885	1.549
Scale HY (3)	0.0008	0.0070	0.0088	0.015
Minimum Sentence	-0.0053	0.0059	-0.1098	0.790
Community Size	-0.0069	0.0145	-0.0291	0.228
Adult Probation	0.0627	0.0351	0.1024	3.192
Family Contact (Regular)	-0.1703	0.0556	-0.1721	9.386*
Juvenile Probation	-0.0323	0.0552	-0.0336	0.344
Scale MF (5)	0.0030	0.0030	0.0321	0.284
Juvenile Commitments	0.0567	0.0567	0.0273	4.306*
Security Level (Camp)	-0.2539	0.0758	-0.2210	11.223**
Marital Status, Divorced	0.0009	0.0355	0.0015	0.001
Marital Status, Married	0.0598	0.0689	0.0523	0.752
Scale PA (6)	-0.0090	0.0079	-0.0826	1.282
Adult Commitments	0.0035	0.0136	0.0172	0.069
Scale PD (4)	0.0070	0.0067	0.0787	1.097
Type of Offense	0.0855	0.0640	0.0889	1.784
True Age	-0.0089	0.0050	-0.1202	3.170
Race	-0.0308	0.0668	-0.0317	0.212
Scale D (2)	-0.0135	0.0071	-0.1413	3.599
Average Grade Rating	-0.0049	0.0014	-0.2458	11.515**
Scale HS (1)	-0.0060	0.0070	-0.0724	0.744
Number of Prison Terms	0.1220	0.0319	0.2910	14.559**
Adjustment with Inmates	-0.0429	0.0737	-0.0496	0.340
Custodial Record	-0.1093	0.0734	-0.1301	2.219
Scale PT (7)	0.0089	0.0059	0.1638	2.271
Scale SC (8)	0.0145	0.0055	0.3256	6.901**
Maximum Sentence	0.0016	0.0054	0.0390	0.094

\* Significant Beyond .05

\*\* Significant Beyond .001

Multiple R	$R^2$	F	Significance
0.6839	0.4704	5.404	0.000



four (24) percent of the variance in escape behavior. In addition the Depression (2), Paranoia (6), Psychoasthenia (7) and Schizophrenia (8) scales were all significant.

To complete this phase of the analysis a regression procedure containing all twenty six demographic and ten MMPI variables were utilized. The results indicated in Table 10 produced a multiple correlation of .6859 and  $R^2$  of .4704 which produced a F ratio of 5.404 that was significant at the .001 level. The combination of demographic and MMPI accounted for forty seven (47) percent of the variance.

In addition to the aforementioned regression procedures, a regression was run to investigate the influence of MMPI variables after all demographic variables were entered into the regression analysis. The same procedure was also conducted using demographic variables after MMPI variables were entered into a regression analysis. The results indicated that Multiple R for all demographic variables was .6071 and  $R^2$  was .3686 with all twenty six variables included (See Table 8). The MMPI variables were then entered using a stepwise regression procedure. Two MMPI variables, the Schizophrenia Scale 8 and the Social Introversion Scale 0 were added and increased the multiple R to .6649 and  $R^2$  to .4421. It also found that MMPI variables alone yielded a multiple R of .4939 and a  $R^2$  of .2440 (see Table 9). After a stepwise regression of demographic variables to the MMPI variables the multiple R increased to

.6481 and  $R^2$  increased to .4200. The demographic variables, number of prison terms, family contact regular, Security Level Camps, Juvenile Commitments, Average Grade Rating, IQ and severity of crime was responsible for the increases in the Multiple R and  $R^2$ . The indications are that demographic variables account for a greater amount of the variance for escape behavior and are better predictors than MMPI variables alone. However the combination of both demographic and MMPI variables (see Table 10) is better than either independently. It was assumed that the multiple correlation coefficients were not due to sampling fluctuations or measurement error.

As discussed earlier, the major focus of this study was to look at the constellation of demographic and MMPI factors which would affect escape behavior and attempt to isolate their individual relationship with escape. Once isolated, these factors could then be examined to determine how they differentially impacted on the escape behavior of inmates. The first test looked at the individual relationship between each independent variable and escape behavior. The next logical step would be to establish which of the demographic and/or MMPI variables contribute most predicting escape behavior.

### Selecting the Best Model

The final regression procedure sought to determine the relative contribution of demographic and MMPI factors to a combined "best" model. In this multiple regression analysis, a stepwise method was utilized with each demographic and MMPI variable being examined at each step for entry or removal from the model. Table 11 presents a summary of this stepwise procedure with the six best independent demographic variables included and the twenty remaining variables removed. The results of this section of the analysis would indicate that the first and highest ranked variable with a beta weight of  $(-.354)$  was security level, indicating that as it decreases, potential for escape increases. Security level also accounted for eighteen percent of the variance. The second highest ranked variable number of prison terms and the third ranked variable family contact indicated that as they increase, potential for escape also increases, and each variable accounts for an additional four percent of the variance. While the first three variables were significant at the .001 level, the remaining three variables were significant at the .001 level the remaining three variables were significant only at the .05 level. The number of juvenile commitments and adult probation indicated that as they increased, potential for escape also increased, however, custodial records indicates a reversal of this trend, as it decreased, escape potential

Table 11  
Stepwise Regression Analysis Between Independent Demographic Variables  
and Escape Behavior

Independent Variables	Multiple R	R <sup>2</sup>	B	SE B	BETA	F
Security Level (Camp)	0.4255	0.1810	-0.4073	0.0632	-0.3545	56.150**
Prison Terms	0.4770	0.2275	0.0826	0.0228	0.1971	37.260**
Family Contact (Regular)	0.5112	0.2613	0.2162	0.0528	0.2226	29.717**
Juvenile Commitments	0.5321	0.2832	0.0674	0.0252	0.1429	24.789*
Custodial Record	0.5427	0.2945	-0.1072	0.0461	-0.1276	20.874*
Adult Probation	0.5552	0.3083	0.0732	0.0329	0.1195	18.496*

\* Significant beyond .05  
\*\* Significant beyond .001

increases. The total amount of variance accounted for by these six demographic variables was thirty-one percent.

Table 12 displays the stepwise regression results for the MMPI variables. The first and highest ranked MMPI variable was psychasthenia scale (7), which indicated that as it increases the potential for escape also increases. The second ranked variable was the depression scale (2) and its negative beta weight indicated that as the depression scale (2) decreased the potential for escape increased. And the last variable was the psychopathic deviate (4) scale which increases as escape potential increased. This model mentioned three variables while eliminating the other seven. The three variables explained twenty-one percent of the variance while all ten MMPI variables only explained twenty-four percent of the variance regarding escape behavior.

The final stepwise regression, displayed in Table 13, included all demographic and all MMPI variables. It is interesting to note that with the exception of the psychopathic deviate scale (4), all of the variables in this combined model were also in the individual models. This model of five demographic and two MMPI variables explained thirty-seven percent of the variance.

In Table 14, we find a comparison of the demographic MMPI and combined models for predicting escape behavior. It is apparent that the combination of demographic and MMPI

Table 12  
Stepwise Regression Analysis Between Independent MMPI Variables  
and Escape Behavior

Independent Variables	Multiple R	R <sup>2</sup>	B	SE B	BETA	F
Psychasthenia Scale 7	0.3926	0.1542	0.0222	0.0040	0.4074	46.294**
Depression Scale 2	0.4452	0.1982	-0.0250	0.0060	-0.2609	31.271**
Psychopathic Deviate Scale 4	0.4635	0.2149	0.0147	0.0064	0.1658	22.987*

\* Significant beyond .05  
\*\* Significant beyond .001

Table 13  
Stepwise Regression Analysis Between Independent Demographic and  
HMPI with Escape Behavior

Independent Variables	Multiple R	R <sup>2</sup>	B	SE B	BETA	F
Security Level (Camp)	0.4255	0.1810	-0.2749	0.0648	-0.2393	56.150**
Psychasthenia Scale 7	0.4979	0.2479	0.0186	0.0033	0.3461	41.693**
Prison Terms	0.5497	0.3022	0.0898	0.0218	0.2143	36.381**
Family Contact (Regular)	0.5727	0.3280	0.1541	0.0500	0.1586	30.629*
Juvenile Commitments	0.5869	0.3445	0.0658	0.0240	0.1395	26.298*
Depression Scale 2	0.5998	0.3598	-0.0145	0.0055	-0.1517	23.320*
Adult Probation	0.6105	0.3727	0.0709	0.0311	0.1151	21.053*

\* Significant beyond .05  
\*\* Significant beyond .001

Table 14

## Comparison of Escape Behavior Prediction Variables

Prediction Variables	Multiple R	R <sup>2</sup>	Variance
Demographics (N=300)	0.5552	0.3083	31%
MMPI (N=300)	0.4635	0.2149	21%
Demographic and MMPI (N=300)	0.6105	0.3727	37%



variables are the best predictors of escape behavior, and support the general hypothesis that demographic variables are better predictors of escape behavior.

The final stage of the analysis in this study was to cross-validate the models that had been produced and to identify the "Best" model.<sup>2</sup> The total sample of (300) inmates were randomly assigned to a validity (control) group (158) and a derived (experimental) group (142) for each of the models.<sup>3</sup> The results in Table 15 indicate that the cross-validation supported the demographic model with only a three percent difference between their variances. The MMPI model did not cross-validate. The difference between the variances was eight percent and the control group only contributed one percent of the variance explaining escape behavior. And, finally, the demographic and MMPI combined model cross-validated with the experimental group explains thirty-one percent of the control group explains twenty-seven percent of the variance for escape behavior. Thus, we find that the combination of demographic and MMPI variable produce the "best" model to explain escape behavior in this study.

In summary, the analysis addresses three questions or hypotheses with regard to independent variables and escape behavior. The first dealt with demographic variables and the results supported the fact that they are important and explained 31 percent of the variance for escape behavior.

Table 15

## Cross Validation of Escape Behavior Prediction Models

Prediction Model	Multiple R	R <sup>2</sup>	Variance
Demographic Model			
Experimental Group (N=142)	0.3649	0.1339	14%
Control Group (N=158)	0.3218	0.1035	10%
MMPI Model			
Experimental Group (N=142)	0.3128	.0978	9%
Control Group (N=158)	0.1144	.0130	1%
Demographic and MMPI Model			
Experimental Group (N=142)	0.5566	.3098	31%
Control Group (N=158)	0.5214	.2718	27%

The second question addressed the importance of the MMPI factors alone explained only 21 percent of the variance for escape behavior of inmates. The third question addressed the effects of both demographic and MMPI factors on escape behavior which accounted for 37 percent of the variance for escape behavior. The most interesting results were found in cross-validating the models and the large reduction in the variance for the demographic and MMPI variables. This seems to indicate an interaction between several demographic and MMPI variables as shown in their relatively small loss of variance during cross-validation.

## Chapter IV

### Footnotes

1. Assuming you are familiar with the analysis of variance you may have questioned whether there is anything to be gained by using a more complicated regression analysis with the data in this study. It should be remembered that analysis of variance and multiple regression are interchangeable in the case of categorical independent variables, however, multiple regression is superior or the only appropriate method of analysis in the following cases: (1) when the independent variable is continuous (2) when the independent variables are continuous and categorical (3) when cell frequencies are unequal and disproportionate (See Fred N. Kerlinger and Elazar J. Pedhazur, Multiple Regression in Behavioral Research, Holt, Rinehart and Winston, Inc. New York, 1973, pp. 112-114.
2. Note that if one were to apply a set of weights derived in one sample to the predictor scores of another sample and then correlate these predicted scores with the observed criterion scores, the resulting R will almost always be smaller than the R obtained in the sample which occurs in this study especially during cross-validation procedures. The difference between  $R^2$  of the derived sample and the  $R^2$  of the valid sample is an estimate of the amount of shrinkage. If the shrinkage is small and the  $R^2$  is considered meaningful by the researcher, he can apply the regression equation obtained in the derived sample to future predictions. (See cite above pp., 282-84.
3. The random selection and crossvalidation involved merging the SPSS system file with the Biomedical Computer Program (BMDP). The program assigns a random number to each case then randomly divides the cases into comparable groups before executing the cross-validation procedure. (See W.J. Dixon and M.B.Brown (EDS) Biomedical Computer Program P Series, University of California Press, Berkely, 1977).

## **CHAPTER V**

### **SUMMARY AND CONCLUSIONS**

The use of prediction scales to determine behavior, whether in Criminal Justice or other fields, has some major inherent problems. The first and foremost problem is their limited capacity for generalizability. The second problem is that prediction scales created for one population during a specific time span should not be used on other populations without first checking the validity. In fact, an escape prediction scale created today may not be valid for next year's population of inmates. In order to use an escape scale over an extended period of time, it should be periodically updated and improved in order to maintain the validity of the scales. Being aware of these limitations, the results of this study have investigated the similarities and relationships of other escape predictions as indicators for broader generalizations.

The review of the literature constantly presented several variables in other studies on escape behavior. These variables included the following characteristics of escapees: They tend to be young; white rather than non-white; committed non-assaultive crimes; have a history

of other juvenile and jail incarcerations; have longer sentences; have attempted escape from other institutions; are not drug law violators; single or never married; and have significantly different MMPI profiles. Using these variables as a base, the variables for this study will be discussed at this time.

### Demographic Variables

The present study considered twenty-six demographic variables that had previously been related to escape behavior. These variables are not inclusive of all variables that are related to escape behavior, but rather those that availed themselves for collection and analysis in this study. The variables not included but related to escape behavior are: institutions record of infraction, time between parole denied and escape, fear of homosexual or physical assault, dean John letters, emergencies at home or other situational variables. However, the study did isolate several demographic variables that attempt to predict escape behavior.

### Security Level

The first variable found to be significantly related to escape behavior was security level. We must note here that all inmates in this study were assigned to minimum security

placements. However, minimum security includes camp, farm and trusty division outside the prison wall during the day but housed inside the prison walls at night. We found that 44 percent and 14 percent of the non-escape group was assigned to camp and farm placement compared to 7.5 percent and 34.5 percent for the escape group. The trend indicates that inmates in minimum security with less opportunity to escape than inmates in camps or farms tend to escape at a higher rate.

#### Number of Prison Terms

The second variable found to be significantly related to escape behavior was number of prison terms. An example of this is that escapees 31.5 percent had been incarcerated in prison only one time compared to non-escapees 70 percent. This indicates that escapees generally have longer records of incarceration and several other studies agreed with this finding.

#### Family Contact

The third variable found to be significantly related to escape behavior was the amount of family contact. It was found that 66.9 percent of the escape group had regular contact with his family compared to 42.7 percent for the non-escape group. This supported the assumption that strong family ties and family crisis (or situational occurrence)

are an improvement but important factor in understanding escape behavior. This finding is somewhat contradictory to some of the earlier findings on family ties and escape behavior.

#### Juvenile Commitments

Although the relationship between juvenile commitments and escape behavior was not significant in the preliminary analysis, its importance is supported by its inclusion in the regression analysis. Also, the previously mentioned studies agreed that the greater a juvenile is involved in the Criminal Justice System, the greater his potential for escape.

#### Custodial Record

The fifth variable found to be significantly related to escape behavior was custodial record. It is common knowledge that good conduct and adjustment are rewarded in prison. Therefore, we expect inmates in minimum security placement general to have good custodial records. And since good custodial reports gain inmates more responsibility and freedom, it also increases his opportunity for escape. This positive relationship simply indicates that as an inmates behavior and custodial record improves his chances for reclarification and escape also improves.



### Adult Probation

The final demographic variable found to be significantly related to escape behavior was adult probation. Although adult probation was not significant during the preliminary analysis, it was significant in the regression analysis. Fifty-five percent of the escape group had been on adult probation one or more times compared to 48.5 percent for the non-escape group. This finding in combination with the findings of juvenile commitment and juvenile probation indicate that escape behavior increases as his involvement in the criminal justice system prior to incarceration in prison increases.

There were several demographic variables that were consistently significantly in the escape prediction literature which were not related to escape behavior in this study. The major variable was race. All of the studies reviewed indicated that white inmates were more likely to escape than Black inmates. However the portion of Black escapees (56.5%) compared to white escapees (43.5%) revealed that a slightly larger percentage of Blacks were escapees than whites in this study. However we must consider the fact that the State Prison of Southern Michigan is approximately 75-80% Black. Further research is needed with regard to race, and some significance might be suppressed since race was not controlled during the analysis of this study.

Another variable age, also, failed as a significant factor in this study while being repeatedly cited in the literature on escape behavior.

### MMPI Variables

The literature on escape behavior and the MMPI surprisingly had little bearing on the final model produced by this study. We found in the first testing(t-test) of MMPI variables the hypochondriasis (1), Psychopathic deviate(4), Psychosthenia (7), Schizophrenia (8) and Hypomania (9) scale were significant. In the second testing the regression analysis only produced three significant MMPI variables. These variables included two from the previous list, psychopathic deviate (4) and psychoasthenia (7), and added the depression (2) scale. However, these scales were significantly related to escape behavior when they were not competing with demographic variables.

The MMPI group profile for escapees and non-escapees is worth noting. The validity scale configurations reveal that both escapees and non-escapees are admitting problems which are of increasing severity as the F scale increases in elevation and simultaneously is trying to defend himself against these problems (see Appendix C). This profile also indicated that the H (1), HY (3), MF (5), Pt (7), and Si (0) for both escapees and non-escapees were in the normal range; while the D (2) and Ma (6) scales were found to have a

moderate interpretation for both escapees and non-escapees. It was also found that the Pd (4) , Pa (6) and Sc (8) scales of the escapees differed from their counterpart with marked, normal and moderate compared to moderate, moderate and normal interpretation for non-escapees. It should be noted that even without clinical interpretation that the overall MMPI profile could be useful in a preliminary screening for escape behavior.

#### Discussion of the Model

The model created as a final product of this study (Table 13) is similar in some respects to other prediction scales. As with the majority of the other studies demographic variables appear to be better predictors of escape behavior than personality factors. This fact was demonstrated in the several regression procedures used to develop the model. The last procedure being on inclusion, exclusion stepwise regression of demographic and MMPI variables, with the final product containing seven variables, two of which were MMPI variables. The two MMPI variables ranked second and sixth in the final model. The fact that they ranked higher than several demographic variables indicate that the interaction of some demographic and MMPI variables together contributes to escape behavior prediction.

Although this study supports the hypothesis that demographic factors are better predictors of escape behavior the results are limited to a select population and time frame. The results also differ from a similar study, "MMPI and Demographic Correlates and Predictors of Female Prison Escape," by Scott, Mount and Duffy. Their study concluded that for female prisoners three MMPI factors were responsible for 19 percent of the variance, and that MMPI variables were better predictors than demographics or any combination of demographic and MMPI variables.

Escapes are, in many cases situational and can be expected. Prisons are not places that inmates choose for themselves, therefore, given the opportunity, even individuals not considered escape risk, may attempt to escape. Furthermore, no escape prediction scale can guarantee that escapes will not occur. The use of an escape prediction scale may itself create a situation for differential treatment of inmates not classified as escape risks.

It is unfortunate that the utility of this model is only representative of the inmate population at the State Prison of Southern Michigan and is not adequate enough to be used as a sole predictor of escape behavior. The study, however, does provide a MMPI profile that might be useful in

reviewing inmates before being placed in a minimum security unit and several key demographic factors that should be investigated in the future.

In conclusion, the escape prediction model developed in this study, as in other escape studies, accounts for only a moderate amount of variance between escape and non-escape groups. The continued influence of situational and environmental factors will always confound the results of escape behavior studies. However, it is believed that current improvement in the field of prediction studies and the development of new methodology will continue to advance this field. It is hoped that this study is one of these forward steps in the field of behavior prediction.

## BIBLIOGRAPHY

Adams, Thomas C., "Some MMPI Differences Between First and Multiple Admissions within a State Prison Population," Journal of Clinical Psychology, Vol. 32, No.3, July, 1976.

Adams, Thomas C., West Judy E., "Another Look at the Use of the Minnesota Multiphasic Personality Inventory as an Index to 'Escapism'," Journal of Clinical Psychology, Vol. 32, No.8, 1976.

Allen, Harvy and Clifford E. Simonsen, Corrections in America: An Introduction McMillan Publishing Co., Inc., New York, 1980.

American Correctional Association, Handbook on Correctional Classification, Anderson Publishing Co., Cincinnati, 1978.

Baker, Arlene, "Development of Escape-Proneness Score," Sacramento, California: Department of Corrections, June 30, 1961.

Banks, Charlotte, Patricia Mayhem and R.J. Sapsford, Abconding From Open Prisons, Home Office Research Studies, London, 1975.

Barnes, Harry Elmer, The Evolution of Penology in Pennsylvania, Patterson Smith, Montclair, N.J., 1968.

Barnes, Harry E. and Negley K. Teeters, New Horizons in Criminology, Prentice-Hall, Inc., New York, 1943.

Bauer, G.E. and J.A. Clark, "Personality Deviance and Prison Incarceration." Journal of Clinical Psychology, 32: 279-283, 1976.

Bohn, Martin J., Jr., Classification of Offenders in An Institution for Young Adults, Federal Correctional Institution, Tallahassee, Fla., 1977.

Beall, Herbert S. Panton, James H., "Use of the Minnesota Mutiphasic Personality Inventory as an Index to 'Escapism,'" Journal of Clinical Psychology, Vol.. 12, No.4, Oct., 1956.

Bowken, Kee H., Prison Victimization, Elseview North Holland, Inc., New York, 1980.

"CAC Reference Manual," Michigan Department of Corrections, Escape/Walkaway Statistics, 1976-78.

- Cahman, John A., Personality Variables Associated with Narcotic Addiction as Measured by MMPI, Dissertation Abstracts International, 1974 (AHG), Vol. 35 (2-b), p.1039.
- Caldwell, M.G., "Personality Trends in the Youthful Male Offender," Journal of Criminal Law, Criminology and Police Science, 1959, 45: p.405-406.
- Carroll, J.L. and G.B. Fuhler, An MMPI Comparison of Three Groups of Criminals, Journal of Clinical Psychology, 27: 240-242, 1971.
- Cavior, H.E., Escapes From the Robert F. Kennedy Youth Center: 1969 to 1973. Kenneth Youth Center Research Office, 1974.
- Clark, James Randolph, "Characteristics of Convicted Offenders as Measured with the Minnesota Multiphasic Personality Inventory," Unpublished Dissertation, University of Arizona, 1977.
- Clark, Jerry H., "The Relationship Between MMPI Scores and Psychiatric Classification of Army General Prisoners," Journal of Clinical Psychology, Vol. 8, No. 7, 1952.
- Clear, Todd R., "A Model for Supervising the Offender in the Community," unpublished manuscript, 1978, p. 124.
- Cloward, Richard, "Social Control in Prison," in Theoretical Studies in Social Organization of the Prison, 1960.
- Cochrane, Nelson R., "Escapees...and Their Control - A Brief Study of Escape Data," Prison World, Vol. 10, No. 3, 1948.
- Cowles, Ernest L., "Race and Correctional Institution Escapee Behavior: An Exploratory Study," Unpublished Paper presented at the Academy of Criminal Justice Science, 1982.
- Deiker, Thomas E., "A Cross-Validation of MMPI Scales of Aggression on Male Criminal Criterion Groups," Journal of Consulting and Clinical Psychology, Vol. 42, No. 2, (196-202), 1974.
- Dobbins, D.A., Stockwell, F.E., and Loving, W.S., "Individual and Social Correlation of Prison Escapees," Journal of Consulting Psychology, Vol. 24, No. 1, 1960.
- Edwards, John, "Rehabilitation Potential in Prison Inmates as Measured by the MMPI," Journal of Criminal Law, Criminology and Police Science, 1973, 54, 182.

- Elion, V.H. and E.I. Megargee, Validations of the MMPI PD Scale Among Black Males, Journal of Consulting and Clinical Psychology, 43: 166-172, 1975.
- Ferracute, Franco, Siomon Dinitz and Aldo Piperno, "Mental Deterioration in Prison," Journal of the Office of Studies and Research of the General Administration of the Institution of Crime and Prevention, Italy, 1978.
- Gearing, M.C. "The MMPI as a Primary Differentiator and Predictor of Behavior in Prison: A Methodological Critique and Review of the Recent Literature," Psychological Bulletin, 1979, Vol. 85, No.5.
- Goffman, Erving, Asylums, Doubleday & Co., Garden City, 1951.
- Hathaway, S.R. and E.D. Monochesi, cited by J.N. Butcher (ed) MMPI Research Development and Clinical Applications, New York: McGraw-Hill, 1969.
- Haynes, Fred E., The American Prison System, McGraw-Hill Book Company, Inc., New York and London, 1936.
- Hazelbrigg, Lawrence, Prison Within Society, Doubleday and Company, Inc., Garden City, New York, 1968.
- Hildebrand, Richard J., "The Anatomy of Escape," Federal Probation, Vol. XXXIII, No. 1, March, 1969.
- Holt, Norman, Escape From Custody, Research Report No., 52, California Department of Corrections, Sacramento, California, May 1974.
- Joesting, J.N., Joner and R. Joesting, "Male and Female Prison Inmates' Differences on MMPI Scales and Revised Beta IQ" Psychological Reports, 1975, 37, 471-474.
- Johnson, William H., Escape From Custody, Research Report No. 52, California Department of Corrections, Sacramento, California, May, 1974.
- Joesting, J.N., Joner and R. Joesting, "Male and Female Prison Inmates' Differences on MMPI Scales and Revised Beta IQ" Psychological Reports, 1975, 37, 471-474.
- Johnson, William H., Escape Study, unpublished manuscript, 1942.
- Johnston, E., "The Use of the Minnesota Multiphasic Personality Inventory (MMPI) in the Prediction of Reformatory Rule Infractions," Iowa State Men's Reformatory, 1965.



Kerlinger, Fred and Elazur Pedhazur, Multiple Regression in Behavior Research, Holt, Rinehart and Winston, Inc., New York, 1973.

Kingsly, L. "MMPI Profiles of Psychopaths and Prisoners," Journal of Clinical Psychology, 1976 (Oct.), Vol. 32(4), 776-780.

Kundee, Joseph T. and Anderson, Wayne P., "Normalizing the MMPI," Journal of Clinical Psychology, 1976 (Oct.) 32(4), 776-780.

Lanyon, Richard I., A Handbook of MMPI Group Profiles, University of Minnesota Press, 1968.

Larson, Donna, CAC Reference Manual: Escape/Walkaway Experience, Michigan Department of Corrections, 1976-78.

LeUnes A. and L.B. Christensen, Reliability of Inmate Test Results, Correctional Psychologist, 1970, Vol. 4, pp. 85-93.

Levine, Stanley, "Runaways and Research in the Training School," Crime and Delinquency, Vol. 8, No. 1, 1962.

Light, Gail R. (ed), Dimensions: A Report of the Michigan Department of Corrections, Michigan Department of Corrections, 1977.

Lindesmith, A.R. and H.W. Durham, "Some Principles of Criminal Typology," Social Forces, P. 307-314, 1941.

Loving, U.S., Stockwell, E., Dobbins, D.A., PhD, "Factors Associated with Escape Behavior of Prison Inmates," Federal Probation, Vol. XXIII, No. 3, Sept., 1959.

McCreary, Charles, Padilla, Eligio, "MMPI Differences Among Black Mexican American, and white Male Offenders," Journal of Clinical Psychology, Vol. 33, No.1, January 1977.

McCrevy, C.P. and E. Padilla, MMPI Differences Among Black, Mexican American and White Male Offenders," Journal of Clinical Psychology, 1977, 33, 171-172.

McKelney, Blake, American Prison: A Study in American Social History Prior to 1915, The University of Chicago Press, Chicago, Ill., 1936.

\_\_\_\_\_, American Prisoner: A History of Good Intentions, Patterson Smith, Montclair, N.J., 1977.

- McMahon, R., MMPI Data on Youthful Offenders, Raleigh, N.C., unpublished, 1970.
- Megargee, Edwin I., "Directions for Future Research," Criminal Justice and Behavior, June, 1977.
- Meyer, J. and E.I. Megargee, Development of an MMPI Based Typology of Youthful Offenders, Federal Correctional Institutions Research Reports, Vol. 4, p.2.
- Miller, Gregory A., The Predictive Efficiency of Certain Factors in Selecting Prisoners for Trusty Status, Unpublished dissertation, Michigan State University, 1955, p. 18.
- Moore, R.A., MMPI Scale for Measuring Psychopathy Among Prison Inmates, Marshall University, Master's Thesis, 1966.
- Morgan, David I., "Individual and Situations Factors Related to Prison Escape," American Journal of Corrections, Vol. 29, No. 2, 1967.
- Morrow, William R., "Escapes of Psychiatric Offenders," The Journal of Criminal Law, Criminology Police Sciences, Vol. 60, No. 4, 1969.
- Orland, Leonard, Prisons: Houses of Darkness, The Free Press, New York, 1975.
- Panton, James H., "Predicting Prison Adjustment with the Minnesota Multiphasic Personality Inventory," Journal of Clinical Psychology, Vol. 14, No. 3, 1958.
- Panton, J.H., The Response of Prison Inmates to MMPI Subscales, Corrective Psychiatry & Journal of Social Theory, Vol. 5, pp. 233-237, 1959.
- Panton, James H., "MMPI Code Configurations as Related to Measures of Intelligence Among a State Prison Population," Journal of Social Psychology, Vol. 51 (403-407), 1960.
- Panton, J.H., Atlas of Inmate MMPI Profile and Control, Raleigh, N.C., Department of Social Rehabilitation, 1973.
- Panton, J.H., "Inmate Personality Differences Related to Recidivism, Age and Race as Measured by the MMPI," Journal of Correctional Psychology, Vol. 4, pp. 28-35, 1959.
- Panton, James H., "Significant Increase in MMPI MF Scores within a State Prison Population," Journal of Clinical Psychology, July, 1976, Vol. 32, No. 3, pp. 604-606.

- Panton, J.H., "Personality Difference Between Male and Female Prison Inmates Measured by the MMPI," Criminal Justice and Behavior, 1974.
- Panton, James H., "Characteristics Associated with Escapism," North Carolina Department of Corrections, updated.
- Panton, J.H., "MMPI Profiles Configurations Among Crime Classification Groups," Journal of Clinical Psychology, 1958, 14, 305-308.
- Panton, James H., "Predictors Prison Adjustment with the MMPI," Journal of Clinical Psychology, 14: 308-312, 1958.
- Pettigrew, C. Gary, C. Edward Shaffer, Dan W. Edwards and David Blouin, "MMPI Predictions of Inmate Adjustment of Community Placement," unpublished paper presented at the Society of Police and Criminal Psychology, 1981.
- Pigeon, H.D., Principles and Methods in Dealing with Offenders, State College, Pennsylvania, Pennsylvania Valley Publishers. 1949.
- Reid, Sue Titus, The Correctional System: An Introduction, Holt, Rinehart, and Winson, New York, 1981.
- Rosenblatt, A.I. and D.A. Pritchard, "Moderators of Racial Differences on the MMPI," Journal of Consulting and Clinical Psychology, 1978, 46, 1572-1573.
- Schermer, Rodney L, "From Lovercamp to a Prisoner's Right to Escape: An Inescapable Conclusion?" Buffalo Law Review, Vol 26 (413-434), Spring, 1977.
- Scott, Norman A., Michael K. Mount, Patricia S. Duffy, "MMPI and Demographic Correlates and Predictors of Female Prison Escape," Criminal Justice and Behavior, Vol. 4, No. 3, Sept., 1977.
- Shupe, Donald R., Paul F. Bramwell, "Prediction of Escape from MMPI Data," Journal of Clinical Psychology, Vol. 19, No. 2, April, 1967.
- Simon, "Statistical Methods of Making Prediction Instruments," Journal of Crime and Delinquency, Vol. 9, Jan., 1972, No. 1, pp. 46-53.
- Sines, J.O., "Acturnal Methods in Personality Assessment," in B. Maher (ed) Progress in Experimental Personality Research, New York Academic Press, 1966, pp. 119-147.

Sommer, R. and H. Osmond, "Symptoms of Institutional Care," Social Problems from Ferranti, Dinitz and Peperno, Mental Deterioration in Prison.

Sykes, Gresham and Sheldon Messinger, "The Inmate Social System," in Richard Cloward's Theoretical Studies in Social Organization of the Prison, John Wiley & Sons, Inc., New York, 1960.

Stanton, J.M., "The Use of the MMPI to Determine the Group Personality Profile of State Prison Inmates and the Relation of Selected Aspects of Known Antisocial Behavior to Profile Components," Fordham University, Doctorate Dissertation, 1955.

Steininger, Edward Henry, "Changes in the MMPI Profiles of First Prison Offenders During Their First Year of Imprisonment," Unpublished dissertation, Michigan State University, 1957.

Steuber, Harry B., "The Prediction of Academic Achievement with the MMPI and IPI in a Correctional Institution," Dissertation Abstracts International, 1975 (June), Vol. 35 (12-B, pt 1), p. 6117.

Stone William E., "Factors Related to Escape Prediction," unpublished dissertation, Sam Houston State University, 1975.

Sykes, Gresham M., The Society of Captives: A study of Maximum Security Prisons, Princeton University Press, 1971.

Tannenbaum, Frank, Wall Shadows: A study of American Prisons, G.P. Putnam & Sons, New York and London, 1922.

Wheeler, C.A. and E.I. Megargee, Normative Data for 678 Federal Youthful Offenders on 79 MMPI Scales, Federal Correctional Institution Research Reports, 1970, Vol. 2, p. 4.

Wurt, R.D. and P.F. Briggs, "Personality and Environmental Factors in the Development of Delinquency," Psychological Monographs, 73:485, 1959.

## **APPENDIX A**

### **RESEARCH FINDINGS OF DEMOGRAPHIC CHARACTERIZATIONS AND ESCAPE BEHAVIOR**



**APPENDIX B**  
**DATA CODING FORM**

# Escape Study Coding Manual

<u>Variable Index</u>	<u>Variable and Instructions</u>	<u>Deck Column</u>
1	Subject's I.D.	1. [ 2 3 4 5 6 7 8
2	(The letter at the beginning of the ID number is the term in prison A=1, B=2, C=3, D=4, E=5, etc.)	2. (16)
3	Subject's status 1 - escapes 2 - non-escapes	3. (17)
4	Race 1. White 2. Black 3. Chicano 4. Other	4. (18)
5	Age (at time of escape) 1. 17 to 21 2. 22 to 26 3. 27 to 31 4. 32 to 36 5. 37 or older	5. (19)
6	Birthplace 1 - In State 2 - Out of state 3 - Foreign	6. (20)
7	Marital Status 1 - Single, never married 2 - Married 3 - Divorced Separated Widowed 4 - Remarried	7. (21)
8	Number of dependents (Note 0 is a valid code) 0 to 8	8. (22)

(Sources of Variables 1 to 8 Basic Information Sheet)



<u>Variable Index</u>	<u>Variable and Instructions</u>	<u>Deck Column</u>
9	Religion 1 - Protestant 2 - Catholic 3 - Muslim 4 - Other 5 - Other	9. (23)
10	Known History of Mental Illness 1 - yes 2 - no 3 - no information	10. (24)
11	Known Alcohol Abuse 1 - yes 2 - no 3 - no information	11. (25)
12	Known Drug Abuse 1 - yes 2 - no 3 - no information (PSI)	12. (26)
(Source of 9 to 11 Presentence Report/Basic Information, PSI or R & GC report)		
(Source 15 to Correctional History)		
13	Commitments to Juvenile Facilities	13. (27) (28)
14	Commitments to Adult Facilities	14. (29) (30)
15	Total Commitments Add 13 and 14	15. (31) (32)
16	Offense Committed 1. Violence and Assaultive 2. Non-assaultive	16. (33)
17	Juvenile Probation and Arrest 1 - yes 2 - no	17. (34)
18	Adult Probation 1. none 2. one 3. more than one	18. (35)

<u>Variable Index</u>	<u>Variable and Instructions</u>	<u>Deck Column</u>
19	Did Subject Escape Alone 1 - alone 2 - with another inmate(s) 3 - never escaped	19. <u>(36)</u>
20	Prior Escapes 1 - no prior escape 2 - one prior escape 3 - more than one prior escape 4 never escaped	20. <u>(37)</u>
Source Staff Assessment - Classification Review		
21	Ability to Handle Assignments 1 - lack ability 2 - has ability, lacks interests 3 - Average 4 - above average	21. <u>(38)</u>
22	Current Work/Study Habits 1 - poor 2 - fair 3 - good 4 - excellent	22. <u>(39)</u>
23	Adjustment with Staff 1 - no adjusting 2 - marginal 3 - average 4 above average	23. <u>(40)</u>
24	Adjustment with Inmates 1 - not adjusting 2 - marginal 3 - average 4 - above average	24. <u>(41)</u>
25	Custodial Record 1 - major problem 2 - marginal problem 3 - average 4 - above average, no problem	25. <u>(42)</u>
26	Family Contact/Correspondence 1 - none 2 - limited 3 - regular	26. <u>(43)</u>

<u>Variable Index</u>	<u>Variable and Instructions</u>	<u>Deck Column</u>
27	Overall Adjustment as Rated by Counselor 1 - not adjusting 2 - unsettled or marginal 3 - average 4 - above average	27. <u>      </u> (44)
28	Security Level Recommended by R & GC 1 - minimum 2 - medium 3 - close 4 - maximum	28. <u>      </u> (45)
29	Escape From 1 - Camp 2 - Farm 3 - Furlough 4 - Cell Block (Minimum) 5 - Cell Block (Medium) 6 - Cell Block (Maximum) 7 - Never Escaped 8 - Other (Hospital)	29. <u>      </u> (46)
30	Minimum Sentence in Years	30. <u>      </u> <u>      </u> (47) (48)
31	Size of community/city in which subject last resided prior to current term of incarceration. 1 - less than 10,000 2 - 10,001 to 50,000 3 - 50,001 to 100,000 4 - 100,001 to 250,000 5 - 250,001 to 500,000 6 - 500,001 or more (If you are not sure, write the name on the line)	31. <u>      </u> (49)
33	Maximum Sentence in Years	33. <u>      </u> <u>      </u> (50) (51)
34	Parole Violations 1 - None 2 - One 3 - More than one 4 - No information	34. <u>      </u> (52)

<u>Variable Index</u>	<u>Variable and Instructions</u>	<u>Deck Column</u>
35	Subject raised by: 1 - both parents 2 - mother only 3 - father only 4 - other 5 - no information	35. <u>      </u> (53)
36	Birth Order 1 - first child 2 - second child 3 - third child 4 - fourth child 5 - fifth child 6 - sixth child 7 - seventh child	36. <u>      </u> (54)
37	Present Status of Inmate 1 - None 2 - To - 1 year 3 - 1-3 years 4 - 3-5 years 5 - 5-10 years 6 - Over 10 years	37. <u>      </u> (55)
38	The ? Scale (If raw score = 30 disregard total test)	38. <u>      </u> <u>      </u> (56) (57)
39	The L Scale (15 items and a raw score is suggestive of rigidity)	39. <u>      </u> <u>      </u> (58) (59)
40	The F Scale (64 items)	40. <u>      </u> <u>      </u> (60) (61)
41	The K Scale (30 items)	41. <u>      </u> <u>      </u> (62) (63)
42	Scale 1 (Hs) (33 items)	42. <u>      </u> <u>      </u> (64) (65)
43	Scale 2 (D) (60 items)	43. <u>      </u> <u>      </u> (66) (67)
44	Scale 3 (Hy) (60 items)	44. <u>      </u> <u>      </u> (68) (69)
45	Scale 4 (Pd) (50 items)	45. <u>      </u> <u>      </u> (70) (71)
46	Scale 5 (Mf) (60 items)	46. <u>      </u> <u>      </u> (72) (73)

<u>Variable Index</u>	<u>Variable and Instructions</u>	<u>Deck Column</u>
47	Scale 6 (Pa) (40 items)	47. <u>      </u> <u>      </u> (74) (75)
48	Scale 7 (Pt) (48 items)	48. <u>      </u> <u>      </u> (76) (77)
49	Scale 8 (78 items)	49. <u>      </u> <u>      </u> (78) (79)
Subject I D		Card #2
50	Paragraph Meaning from SAT	50. <u>      </u> <u>      </u> <u>      </u> (16) (17) (18)
51	Math Computation	51. <u>      </u> <u>      </u> <u>      </u> (19) (20) (21)
52	Math Application	52. <u>      </u> <u>      </u> <u>      </u> (22) (23) (24)
53	A.G.R. (Average Grade Rating)	53. <u>      </u> <u>      </u> <u>      </u> (25) (26) (27)
54	Intelligence (WAIS)	54. <u>      </u> <u>      </u> <u>      </u> (28) (29) (30)
55	Month of first arrival at SPSM	55. <u>      </u> <u>      </u> <u>      </u> (31) (32) (33)
56	Year of first arrival at SPSM	56. <u>      </u> <u>      </u> <u>      </u> (34) (35) (36)
57	Month of Escape	57. <u>      </u> <u>      </u> <u>      </u> (37) (38) (39)
58	Year of Escape	58. <u>      </u> <u>      </u> <u>      </u> (40) (41) (42)
59	Month inmate was transferred to Camp or Minimum/Medium Security	59. <u>      </u> <u>      </u> <u>      </u> (43) (44) (45)
60	Year inmate was transferred to Camp or Minimum/Medium Security	60. <u>      </u> <u>      </u> <u>      </u> (46) (47) (47)
61	Time served in reduced Custody before escape	61. <u>      </u> <u>      </u> <u>      </u> (48) (49) (50)
62	Present status of inmate 1 - Discharged 2 - On parole 3 - In SPSM 4 - In another Institution 5 - At large 6 - Deceased	62. <u>      </u> <u>      </u> <u>      </u> (51) (52) (53)

## **APPENDIX C**

**PROFILE AND CASE SUMMARY OF ESCAPE  
AND NON-ESCAPE GROUPS FOR THE MMPI**

**Scorer's Initials**

W

**www**

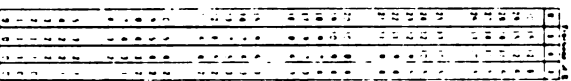
**Date Tested**

Age

Referred by

## NOTES

138



Row Score with E

All rights reserved as stated in the manual and manual.

The Psychological Corporation, 304 F. 3rd Ave., New York, N. Y. 10017

65-3135

Date \_\_\_\_\_

## **APPENDIX D**

### **MEAN AND STANDARD DEVIATION SCORES FOR DEMOGRAPHIC AND MMPI VARIABLES**



Mean Difference of Psychological Factor

Scale	<u>Group Means</u>		<u>Standard Deviations</u>	
	Escapees (N=200)	Non-escapees (N=100)	Escapees (N=200)	Non-escapees (N=100)
Hs Scale (1)	13.61	10.96	4.96	8.71
D Scale (2)	21.50	21.63	5.20	4.55
HY Scale (3)	20.82	21.27	4.93	7.06
PdScale (4)	28.30	25.87	5.02	8.33
MF Scale (5)	24.79	23.83	5.28	5.10
Pa Scale (6)	11.88	12.32	4.52	6.31
Pt Scale (7)	27.66	21.00	7.28	9.18
Sc Scale (8)	29.57	21.11	9.40	9.18
Ma Scale (9)	23.46	21.66	4.52	4.99
Si Scale (0)	25.47	27.69	8.65	7.93
Intelligence Quotion Beta I Q	99.21	99.60	14.25	12.33
Average Grade Rating A G R	7.31	7.41	2.31	2.69
Age	30.01	30.19	6.84	8.95

Mean Differences of Criminal Factors

Variable	<u>Group Means</u>		<u>Standard Deviations</u>	
	Escapees (200)	Non-escapees (100)	Escapees (200)	Non-escapees (100)
Adult Commitments	3.58	2.69	2.29	2.16
Juvenile Commitments	.55	.29	1.10	.59
Total Commitments	4.00	2.97	2.39	2.25
Juvenile Probation	1.42	1.61	.50	.51
Adult Probation	1.73	1.67	.75	.80
Minimum Sentence	5.22	5.68	8.13	12.55
Maximum Sentence	11.44	12.01	9.22	13.40
Time Served	3.17	2.93	1.33	1.32
Prison Terms	2.18	1.52	1.11	.99

**APPENDIX E**  
**CORRELATION MATRIXES FOR**  
**DEMOGRAPHIC AND MMPI VARIABLES**

	Escape	Prison Term	Race	Juvenile Commitment	Adult Commitment	Type of Offense	Minimum Sentence	M.S. Divorced	Number of Dependents
Escape	1.000								
Prison Term	.306*	1.000							
Race	.058	-.090	1.000						
Juvenile									
Commitment	.164*	.0.3	-.064	1.000					
Adult									
Commitment	.177**	.366	.101	.012	1.000				
Type of Offense	.135*	-.095	-.140*	.069	-.151*	1.000			
Minimum Sentence									
Sentence	-.027	-.074	-.103	-.025	-.037	.270*	1.000		
M.S.									
Div. or Sep.	.042	.114	.215*	-.080	.11	-.063	-.028	1.000	
Number of Dependents									
Family Contact	.004	-.092	-.059	-.121	.006	.619	.105	.391*	1.000
Adult Probation	.214*	.018	-.141*	-.072	-.116	.139*	.121	.089	.009
Maximum Sentence	.056	.004	.024	-.038	.290*	-.081	-.021	.093	.080
Juvenile	1.0.	-.032	.367	.105	.071	-.097	-.071	.067	-.010
Probation	-.004	-.098	-.109	.013	-.045	.312*	.899*	.002	.099
True Age	-.152	-.192*	-.086	-.329	-.092	-.008	.092	.038	.111
Adjustment Statf	.033	.270*	-.032	-.058	.291	.092	.020	.348*	.283*
Adjustment	-.116	-.116	.072	-.163*	-.004	-.077	.052	.075	.135*
Inmates									
Custodial Record	-.095	-.095	.018	-.172*	-.018	.072	.071	.052	.157*
Community Size	-.119	-.119	-.010	-.114	-.006	-.001	.188*	.101	.209*
Family	.011	.011	-.457*	-.021	-.164*	.304*	.126*	-.220*	-.027
AGR	.072	.072	-.059	.005	.078	-.109	.054	.054	.090
Severity of Crime	-.062	-.062	.236*	.039	.053	-.073	-.013	-.017	-.053
Time Served In Prison	.043	.043	.089	.005	.183*	-.556*	-.205*	-.030	-.089
M.S. Single	.095	.095	-.013	.161*	.419*	-.001	-.042	.110	-.056
M.S. Married	-.066	-.066	-.219*	.118	-.123*	.011	.028	-.910*	-.523*
Escape Form	.074	.074	.096	-.122	.061	.051	-.012	.191*	.473*
Escape Camp	-.422	-.422*	.151*	-.077	-.096	-.283*	-.157*	-.055	-.056
Family Contact	.191*	.191*	.057	.165*	.137*	.072	-.042	.104	.021
None	-.204*	-.204*	.143*	.135*	-.014	-.102	.103	-.021	-.005
Family Contact Limited	.227*	.227*	-.153*	-.109	-.063	.132*	.122*	.063	.044

	Family Contact	Adult Probation	10	Maximum Sentence	Juvenile Probation	True Age	Adjustment Staff	Adjustment Inmates
Escape								
Prison term								
Race								
Juvenile								
Commitment								
Adult								
Commitment								
Type of offense								
Minimum								
Maximum Sentence								
M.S.								
Div. or Sep.								
Number of dependents								
Family Contact	1.000							
Adult Probation	.013	1.000						
10.	-.164*	-.038	1.000					
Maximum Sentence	.113	-.069	-.036	1.000				
Juvenile								
Probation	-.009	-.025	-.106	-.078	1.000			
True Age	-.131*	.052	.105	.045	.058	1.000		
Adjustment Staff	.150*	.149*	.056	.035	.163*	.054	1.000	
Adjustment								
Inmates	.189*	.170*	-.022	.079	.124	.024	.764*	1.000
Custodial Record	.168*	.156*	.006	.175*	.156	.044	.772*	.689*
Community Size	.051	.004	-.190*	.004	-.003	.010	-.065	.070
Family	-.034	.194*	-.041	.045	-.071	.017	-.007	-.080
AGR	-.073	-.065	.629*	.017	-.071	-.023	.037	.008
Severity of Crime	-.096	.186*	.035	-.324*	-.068	-.138	-.070	-.104
Time Served in Prison	-.090	.060	.106	-.064	-.209*	.365*	-.027	-.044
N.S. Single	-.109	-.062	-.079	.010	-.081	.355*	-.079	-.071
N.S. Married	.084	-.035	.055	-.027	.099	.158*	.039	.067
Escape Form	-.104	.112	.084	-.199	.082	.205*	.086	.002
Escape Camp	-.005	-.068	.030	-.005	-.041	-.014	-.052	-.048
Family Contact								
None	.705*	-.044	.146*	-.099	-.075	.062	-.174*	-.137*
Family Contact								
Limited	.938*	.029	-.169*	.115	.031	-.108	.174*	.179*

	Custodial Record	Community Size	Family	AGR	Crime	Time Served In Prison	M.S. Single	M.S. Married
Escape								
Prison Term								
Race								
Juvenile								
Commitment								
Adult								
Commitment								
Type of								
Offense								
Minimum								
Sentence								
M.S.								
Div. or Sep.								
Number of								
Dependents								
Family Contact								
Adult Probation								
1-0.								
Maximum Sentence								
Juvenile								
Probation								
True Age								
Adjustment Staff								
Adjustment								
Inmates								
Custodial Record	1.000	1.000	1.000	1.000	1.000	1.000		
Community Size	-.076	.007	-.063	.028				
Family	.003	-.172*						
AGR	-.048	-.115			1.000			
Severity of Crime	-.158		.111	.028	1.000			
Time Served In								
Prison	-.056	-.013	.086	.054	.099	1.000		
M.S. Single	-.102	.179*	-.015	.020	.059	-.060	1.000	
M.S. Married	.045	.006	-.071	-.013	-.082	-.072	-.586*	1.000
Escape Form	.032	-.076	.020	-.046	.172	-.051	.060	-.033
Escape Camp	-.026	-.089	-.015	.058	.008	.088	-.099	.030
Family Contact								
None	-.207*	-.076	.014	.026	.096	.020	.015	.004
Family Contact								
Limited	.201*	.067	-.027	-.056	-.104	-.063	-.072	.048

Escape Form	Escape Camp	Family Contact None	Family Contact limited
----------------	----------------	---------------------------	------------------------------

Escape  
 Prison term  
 Race  
 Juvenile  
 Commitment  
 Adult  
 Commitment  
 Type of  
 Offense  
 Minimum  
 Sentence  
 M.S.  
 Div. or Sep.  
 Number of  
 Dependents  
 Family Contact  
 Adult Probation  
 I.Q.  
 Maximum Sentence  
 Juvenile  
 Probation  
 True Age  
 Adjustment Staff  
 Adjustment  
 Inmates  
 Custodial Record  
 Community Size  
 Family  
 MIR  
 Severity of Crime  
 Time Served in  
 Prison  
 M.S. Single  
 M.S. Married  
 Escape Form  
 Escape Camp  
 Family Contact  
 None  
 Family Contact  
 limited

1.000	1.000		
-.319*			
.076	.046	1.000	
-.099	-.026	.908*	1.000