THE DEVELOPMENT OF THE

PAROLE SUCCESS SCALE

A THESIS

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THE FACULTY OF THE DEPARTMENT OF PSYCHOLOGY

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IN PARTIAL FULFILLMENT

OF THE REQUIREMENTS FOR THE DEGREE

MASTER OF ARTS IN CLINICAL PSYCHOLOGY

BY

LYNN BOYKIN

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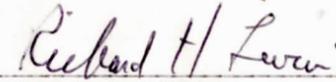PAROLE SUCCESS SCALE

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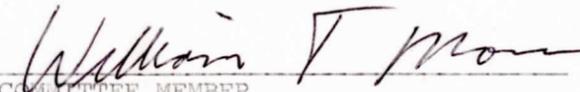APPALACHIAN STATE UNIVERSITY
BOONE, NORTH CAROLINA

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IN PARTIAL FULFULLMENT
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MASTER OF ART
CLINICAL PSYCHOLOGY

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Abstract

In the present study, the Parole Success Scale was developed, using the MMPI answers of 366 inmates paroled from North Carolina Department of Corrections from 1966 through 1971.

The following criteria had to be met for inclusion in this study: 1) male; 2) age 21 or above; 3) serving a felon sentence of at least two years; 4) a Beta IQ of 80 or above; 5) a Wide Range Achievement Test score of at least 6th grade level. MMPI test results on these individuals met the following criteria: 1) L less than T score of 70; 2) F less than T score of 85; 3) K less than T score of 70; 4) ? less than raw score of 30. The sample of 366 inmates who were eligible for inclusion in this study were equally divided into two groups of parole violator and parole non-violator. The two groups of 183 were then randomly divided into three equal groups each - - one for the test development sample and the other two groups for the cross-validation samples. The two test development groups' MMPI answer sheets were arranged in a frequency distribution of responses (either true or false). A Chi-Square statistic was then utilized to determine those questions that significantly differentiated between violators and non-violators. MMPI items that separated the two groups were chosen at the .01 and .05 levels of significance. These items were then grouped into a test, the Parole Success Scale (PSS), composed of 32 items. In scoring the items, one point was allowed for each item answered in the direction in which violators differed from the non-violators. A frequency distribution of raw scores for the violators and non-violators on the PSS was then gathered. A point of greatest dichotomy was then established. The subsequent MMPI scores on the PSS were analyzed by a one-way analysis of variance. A post hoc' analysis using the Scheffe' multiple comparison method was conducted with group means.

Results of this study suggest that the 32 item Parole Success Scale should contribute to successfully determining appropriate candidates for parole. A table

for predicting other percentages of parole success or failure was given. Comparison was also made between the PSS and Panton's Parole Violation Scale.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF APPENDICES

CHAPTER I

INTRODUCTION

The North Carolina Department of Corrections houses the largest per capita inmate population in the United States. As of 1975, there were over 13,400 men incarcerated in North Carolina's prisons, with facilities to house only 10,980 people. Without parole as an alternative to confinement, the 7,192 men who are currently (December, 1976) on parole would be significantly contributing to the already crowded conditions in North Carolina. In addition, the lesser cost of parole makes this program an even wiser investment. In 1975, the cost of housing an inmate was approximately $12.88 a day whereas the cost of keeping him on parole was only $1.04 per day.[1]

The North Carolina Parole Commission is a five member board appointed by the Governor to review an inmate for parole after he has served one-fourth of his sentence. According to the pamphlet entitled Community Programs and Functions of the Parole Commission, August 1974, the following factors are considered in parole selection.

1. Nature and circumstances of crime.
2. Previous criminal and court record.
3. Conduct and attitude while in prison.
4. Length of time served.
5. Psychiatric, psychological, and medical reports.
6. Background information from the community.
7. Community reaction to the inmate's return to free society.
8. Impressions gained through interviews relative to stability, attitude, and ability to exercise self-control.
9. The opinions and facts submitted by officials.
10. The work and residence plan proposed.
11. Indication of need of supervision and willingness and ability of inmate to follow supervision.
12. Other items which are judged to have a bearing on the merits of the particular case under supervision. (p. 8)

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[1]These figures are from North Carolina Department of Corrections records or from Department officials. (See reference note.)

In 1966, 2,002 men were paroled and in 1975, 2,257 men were paroled.[2]

Once an inmate is approved for parole, he must sign a form entitled "Agreement between the North Carolina Parole Commission and the Parolee" stating that he will abide by the following rules:

1. I will report promptly to my parole officer when instructed to do so and in the manner prescribed by my parole officer and the Parole Commission.
2. I will work steadily at an approved job and not change jobs or residence without permission from my parole officer. If I am discharged from my job or evicted from my home, I will notify my parole officer immediately. I will also support any persons dependent on me to the best of my ability.
3. I will obey all municipal, county, state, and federal laws, ordinances, and orders. If I am arrested while on parole, I will report this fact to my parole officer within 24 hours of such arrest with the understanding that the Commission may exercise its authority to place a detainer against me which could, in effect, prevent me from making bond pending disposition of the charges.
4. I will not leave any county of residence without obtaining permission from my parole officer. I will not leave the State of North Carolina without permission from the Parole Commission.
5. I will not consume alcoholic beverages to excess or drugs in violation of state and federal statutes.
6. I will not own or possess any firearms or deadly weapon without permission from my parole officer.
7. I will notify my parole officer in writing three weeks in advance of any plans to alter my marital status (marriage, separation, divorce).
8. I will allow my parole officer to visit my home or place of employment at any time.
9. I do hereby waive extradition to the State of North Carolina from any state of the United States and also agree that I will not contest any effort by any state to return me to the State of North Carolina.
10. I will not enter into any agreement to act as an "informer" or special agent for any law enforcement agency without permission from the Parole Commission.
11. I will comply with the following special conditions which have been imposed by the Parole Commission.

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[2]These figures are from North Carolina Department of Corrections records or from Department officials. (See reference note.)

Violation of any of the preceeding rules is grounds for revocation, although final disposition is decided at a permanent revocation hearing in which two Parole Commissioners must be present. In 1966, 554 parolees were revoked, or 27.6% of all men paroled. In 1975, 332 parolees were revoked, or 14.7% of all men paroled.[3]

The basic philosophy of parole is to place an individual back into society as soon as it can be determined that he is capable and willing to become a law-abiding citizen. There are many factors which determine this decision. While many of these factors have never been empirically investigated with regard to their predictive validity in terms of parole performance, some have and will be examined in the following review of the literature. It is the intent of this study to develop an empirical scale which will predict parole violation from a test frequently used by the Department of Corrections, the Minnesota Multiphasic Personality Inventory. (1943)

Literature Review

Behavioral scientists have long been intrigued at the prospects of predicting human behavior through the use of scientific methodology. What appears to be a problem for behavioral scientists has historically fallen in the realm of criminologists and sociologists. Hornell Hart (1923) directed his initial efforts at predicting parole success to an "experience table."

Hart found that parole violators and non-violators displayed statistically significant differences (greater than would be exceeded by chance once per 100 times) on areas such as nature of crime, individual character, physical conditions, and home environment. He suggested that the decision for or against parole could be significantly improved with the use of his tables.

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[3]These figures are from North Carolina Department of Corrections records or from Department officials.

In any discussion of parole prediction, four pioneering studies in the late 1920's and early 1930's must be looked at. Burgess' study (1928) entailed a review of 21 factors for 3,000 men paroled from three Illinois state prisons. These factors included such items as nature of offense, marital status, type of criminal, and nature of sentence. These factors were arranged in an expectancy table to predict parole successes and failures. The factors which suggested a high violation percentage and conversely, those tending to indicate a low violation percentage were set up as significant items predicting parole failure and success respectively. Tibbitts (1931), following Burgess' study, borrowed 18 factors from Burgess and added four additional factors of his own, the use of alcohol, and community in which the individual returned, the last work assignment in the institution, and first job on parole. He applied this scoring procedure to 3,000 men paroled from the Illinois State Reformatory. His findings were the same as Burgess' in that an expectancy table was set up and the high violation percentages were significant items in predicting parole failures and the low violation percentages significant in predicting parole success. These factors listed by Burgess and Tibbitts were said to be classified on the basis of subjective interpretations. Both studies therefore reached the same conclusion that prior to any attempt at the prediction of parole, a more scientific classification system would have to be developed.

Because previous investigations into parole prediction had proved inadequate, Glueck and Glueck (1930) explored the possibility of using an experience table to predict post-parole recidivism. Their study included 510 prisoners released from the Massachusetts Reformatory for a five year period. By devising a seven factor prognostic table for the Parole Boards, they aided the Board in making decisions not only about parole selection but also in determining the probable length of parole supervision needed in each specific

case.

Vold (1931), having concluded that experience tables were not of outstanding usefulness in predicting parole outcome, developed contingency coefficients between individual factors and outcome on parole. By studying 1,192 Minnesota parolees' demographic and life history data, Vold devised a 17 factor prediction scale on which all items had a contingency coefficient value above .100. His scale included such items as previous criminal record (highest in predicting parole outcome), nature of crime, habits, and character of the inmate, to home conditions (lowest in predicting parole outcome).

Thus the foundation had been laid for a predictor of parole success, crude as the experience table may sound. In an attempt to test the idea that experience tables could predict parole outcome in the immediate future, Sanders (1935) examined a group of parolees released from July 1, 1933, through June 30, 1934 and compared them with another group released from July 1, 1934, through December 31, 1934. The groups were scored on the same experience table. The violation rates of the first group showed a regular progression whereas violation rates of the second group showed an erratic progression, possible a result of chance. Thus Sanders concluded that the same items which predicted parole success accurately might not be applicable to a period in the near future or to another group of parolees. Sanders gave no explanation as to why he believed time was a variable.

Another criticism of these earlier studies came from Laune (1935) who claimed that much of the material previously used was irrelevant. Laune felt that objective data from an inmate's prison record could prove useful, as well as personal knowledge of an inmate. He hypothesized that the same method that inmates use to "size up" their cell mates could be used to predict parole success. He devised a questionnaire based on two prisoner's "hunches" in

regards to parole prospects of 150 inmates with whom they were acquainted. However, a verification of the predictive validity of these ratings was never accomplished.

Over the next 25 years, research was aimed at the experience table and its methodological concerns, rather than concentrating on specific factors which predict behavior on parole. Energies were directed at determining the efficiency of the experience tables, the optimum number of items in a prediction inventory, and the problems of weighing which items. In July of 1962, Crime and Delinquency (8, 3) devoted an entire issue to parole prediction. The editor's conclusion was that the experience table has its distinct value, but that its validity is less than ideal.

In more recent years, California researchers have been expanding on the experience table, labelling their tool the Base Expectancy Scale. In 1958, the Research Division of the California Department of Corrections formally developed the Base Expectancy Scale (BE 61A) for prediction of parole outcome. And in 1961, the use of this scale became regular procedure for all male felons entering California's Department of Corrections, either as a new admission or as a parole violator. The BE 61A was originally created to predict favorable parole outcome for a two year period following release. The scale predicts the percentage of inmates who will have a favorable parole outcome: the higher the score, the greater the likelihood of favorable outcome. The scores range from 0-76, with 0-32 being "low", 33-45 "medium", and 46-76 "high" possibility of favorable parole outcome. Following is a list of characteristics and assigned points which comprise the base expectancy table:

12. Arrest-free for five or more consecutive years
9. No history of any opiate use
8. No more than two jail commitments
7. Not committed for burglary, forgery, or checks
6. No family criminal record

6. No alcohol involvement
5. Not first arrested for auto theft
5. Six or more consecutive months for one employer
5. No aliases
5. First imprisonment under this serial number
4. Favorable living arrangement
4. Not more than two prior arrests

As of September 17, 1974, the Research Services Unit of the California Department of Corrections states "Even though the BE 61A scale accounts for less than 20% of the variation in parole outcomes, its predictions for favorable parole outcome are better than chance. Therefore, it can be helpful to administrators and in program evaluations."

It would appear that the success and continued use of the base expectancy tables can be best supported by the saying that "the best predictor of future behavior is past behavior." However, relying largely on past behavior, this base expectancy table seems rather limited, as it leaves no room for current changes in the individual. There is always the possibility that while incarcerated, one might significantly reconsider his past behavior pattern and become a better risk for parole. But in using the base expectancy tables, any change in his behavior would not be considered, as the table is computed on his past record.

It would appear that parole outcome would fall under the domain of psychological assessment, yet, historically, sociologists and criminologists have devoted their efforts to parole prediction by use of the expectancy tables. Criticisms of the expectancy tables which arise from clinicians include the fact that they are too heavily loaded with past demographic data. In addition, the expectancy tables ignore the basic personality structure of the individual, which if modified while incarcerated, may make one an excellent parole prospect.

Over the years the Minnesota Multiphasic Personality Inventory (MMPI)

has been the preferred tool used in studies predicting criminal behavior. The MMPI was designed by Starke Hathaway and J.C. McKinley in the late 1930's to measure major personality characteristics objectively. In its present day form, the MMPI contains 566 items from which four validity scales and ten clinical scales are derived.

The four validity scales were originally designed to measure test-taking attitudes but have also become important personality indicators. The $?$ scale indicates the number of items an individual did not answer true or false. The L (Lie) scale made up of 15 items gives the subject the choice of denying or admitting bad things about himself, which in fact, likely to be true. The F scale, composed of 64 items, is widely diversified and no more than 10% of normals answer in the scored direction. These items range from merely admitting to unconventional beliefs to having outright bizarre sensations. The fourth validity scale, K, gives an index of an individuals defensive system through the use of 30 items which detect a more sophisticated attempt to not answer items honestly than does the L scale. A proportion of the K scales' raw score is also added to five of the clinical scales to serve as a correction factor for the test-taking attitude of the subject. The eight original clinical scales derived from specific diagnostic groups are: Hypochondriases (Hs, scale 1); Depression (D, scale 2); Hysteria (Hy, scale 3); Psychopathic Deviate (Pd, scale 4); Paranoia (Pa, scale 6); Psychasthenia (Pt, scale 7); Schizophrenia (Sc, scale 8); Hypomania (Ma, scale 9). The Masculinity-Feminity (Mf, scale 5) was developed from the Terman and Miles Attitude Interest Analysis Test and the Social Introversion scale (Si, scale 0) of Drake's (1946) was added in 1947.

Clark (1948) was one of the first to utilize a psychological instrument to differentiate AWOL recidivists from non-recidivists. Using the MMPI, he

developed a 24 item recidivism scale. He administered the MMPI to 100 randomly
selected soldiers who were housed in a processing and rehabilitation center
because they were absent without leave (AWOL) from their units. The groups
were divided as follows: 45 were first offenders and 55 had been AWOL at
least once before. By performing an item analysis, 24 items were found to
discriminate by a difference of 10 points between the two groups. For example,
on the item "I have used alcohol excessively" (a "true" response is a deviant
one), 13 of the non-recidivists answered true whereas 24 of the recidivists
answered true. Tetrachoric r's indicated an insignificant relationship
between the standard MMPI subscales and recidivism. Insignificant differences
were found in the individual profiles of these standard scales for the two groups
although items from the psychopathic deviancy and hypomanic scale did show
slight differences between the two groups.

Using the 24 item scale which was developed by Clark (1948), Freeman
and Mason (1952) attempted to validate this scale on 60 recidivists and 40 first
offenders, housed at the Washington State Penitentiary. They found that Clark's
key showed no differentiation. They then constructed their own 41 item scale
borrowing only one item from Clark's key. They failed at this attempt because
they found that it was inadvisable to "assume the validity of a test or key until
its validity has been demonstrated on subjects other than those from which the
measure was derived" (p. 208).

Clark (1953) took his original 1948 study and attempted to cross
validate his 24 item recidivism scale on a new sample of men who were AWOL from
basic training. Thirty first offenders and 74 recidivists' mean scores and
differences in mean scores were computed using a t test. This t test revealed
a difference of 2.02, a finding significant at the .05 level of confidence. By
additional item analysis, he developed a shorter recidivism scale comprised of 10

significant valid items. A cross-validation of this short scale was not done.

In 1962, Panton sampled 41 parole violators and 41 non-violators by
comparison of their MMPI profiles. He studied the differences in responses to
items by conducting an item analysis using Chi-Square. He discovered 26 items
significant at the .05 level. Violators scored 80.5% above the cut off raw
score of 11. Using this information, he developed the Parole Violation Scale
(PaV) and cross-validated it on a group of 28 violators. Of this group, 78%
or 22 men had scores of 11 or above. Panton warned however, that further
validation was necessary before using this scale as a screening device for parole
selection.

Pruskie (1963), using the same methods Panton had used, developed his
own 62 item scale labelled the Parole Prediction Index. He administered the
MMPI to 202 parole violators and 211 men who successfully completed their paroles.
Comparing items which had at least a 10% or higher difference using Chi-Square,
he found 62 items which were significantly different at the 1% level of confidence.
Using 30 or above as a cut off score, 69% of the parole violators and 69% of the
successful parolees were identified. Pruskie cross-validated these items on
another sample of 25 violators and 25 successful parolees and found that the
cut off score of 38 would distinguish both 46% of the violators and 64% of the
successful parolees. Pruskie then concluded that "parolability is at least in
part determined by the consistency of certain personality variables and that
professional subjective decision making in regards to parole readiness can be
enhanced by the utilization of this objective method." (1963, p. 4).

Lytle (1963), hoping to predict probation success or failure by
developing a scale based on MMPI items, performed an item analysis using Chi-
Square on the test data of 173 men who were successful probationers and 63 who
were not. Criterion for failure was set at one year since previous research
had determined that 73% of all men who violate probation do so in the first year.

Lytle did develop scales which were able to differentiate failures from successes in 80% of the experimental cases, but cross-validation predicted only 65% of the men successfully completing probation. Lytle concluded that the difficulty in devising an MMPI scale to predict probationers' success lies in defining the criterion to be predicted.

Mandel and Barron (1966) reached basically the same conclusion as Lytle (1963) when they attempted to develop and cross-validate a scale which would predict recidivism. They developed a scale of 35 statistically significant items and cross-validated this by administering the MMPI randomly to 100 parolees from the State Reformatory for Men, 50 of whom were previous parole violators and 50 who had not violated parole within one year of their release from prison. No significant differences in responses of either group were found. They argued that there appeared to be no reliable carry over from one geographic area to another in terms of their offender population due to the varied environmental backgrounds from which these individuals came and to which they return.

Frank (1970) successfully utilized Black's (1967) Recidivism-Rehabilitation Scale on a population other than the population from which the scale was originally developed. This Recidivism-Rehabilitation Scale was originally devised for youthful offenders from an Oklahoma State Reformatory and Frank successfully applied it to adult felons from a Federal Reformatory in El Reno, Oklahoma. Black (1967) had developed a 22 item scale that had 86% ex post facto predictive accuracy from MMPI test results obtained on 50 individuals, 25 of whom were recidivists and 25 of whom were labelled "rehabilitated". The time limit defining recidivism was set at nine months. Frank's study employed 180 adult felons who were released as subjects with the criterion that recidivism would imply parole violation and/or reconviction during during a two year follow-up period. The Recidivism-Rehabilitation Scale accurately predicted 130 post release outcomes from the 180 tested and released.

Mandel and Barron (1966) had felt that personality differences of criminals were not as important as environmental factors such as familial, socioeconomic status, educational and vocational opportunities. However, both Black (1967) and Frank (1970) felt that there were personality differences between the violator and the non-violator. Black (1967) characterized the recidivist as having a "brooding, resentful, emotional tone and antisocial values accompanying a tendency to externalize responsibility for failure. Recidivists were predominately extroverted and prone to seek immediate gratifications at the expense of long range goals." (p. 1691-B). Frank (1971) stated "the general success of the Recidivism-Rehabilitation Scale was thought to reflect a personality profile of the recidivist. The Recidivist was defined as an individual who thought of himself as a victim and yet who continued his active role in antisocial behavior. Arrest, conviction, and confinement were defined as the goal of his activity." (p. 557-B).

Rapaport and Marshall (1962) used a battery of clinical psychological tests to attempt to predict rehabilitative potential of Army Stockade prisoners. They tested 287 prisoners, most of whom were AWOL from basic training. Their battery of tests included: a) the Block Design and Comprehension subtests of the Wechsler Adult Intelligence Scale; b) The Minnesota Multiphasic Personality Inventory; and c) The Rosenzweig Picture Frustration study. These test results were interpreted by two clinical psychology officers who also looked at historical data such as a) intelligence; b) personality diagnosis; and c) rehabilitative potential (outstanding, average, or dubious). A follow up of a year and a half later looked at the military status of all these men in terms of ranging from "on duty" to "dishonorable discharge". No relationship was found between biographical, intellectual, or personality diagnosis in respects to rehabilitative potential. There were low but consistent correlations between MMPI subtests and the predictions of the psychologists, thus giving some support to the contention

that with further research clinical predictions of rehabilitative potential may have some value.

Gough, Wenk, and Rozynoko (1965) compared the California Psychological Inventory (CPI), the MMPI, and a Base Expectancy Index to predict parole outcomes using a multiple-regression technique. The six combinations devised and cross-validated were: a) Base Expectancy (BE) alone; b) BE and MMPI; c) BE and CPI; d) CPI alone; e) MMPI alone; and f) CPI and MMPI. Their initial sample included 183 violators and 261 non-violators; the evaluation battery was then cross-validated on 130 violators and 165 non-violators. All 739 subjects were administered the CPI and MMPI and had a life history interview during initial admission procedures. A failure was defined as revocation of parole either for violation of parole rules or commission of a new offense within an initial two year period. The Socialization Scale (So) on the CPI differentiated significantly between violators and non-violators in both samples. The Self Control (Sc) scale of the CPI differentiated initially at the .01 level and at the .05 level in the second sample. The Hypomania (Ma) scale on the MMPI differentiated between violators and non-violators in both samples. The BE Index was the best predictor of parole outcome from a single source. From the CPI, the major contribution found was that those scales measuring management of impulse and externalization of value (Sc and So) more often differentiated between violators and non-violators. From the MMPI, the measures which revealed the most significant promise were those measures of modality and strength of impulses (k - corrected Ma scale). Gough, Wenk, and Rozynko concluded "The two special scales from the MMPI did not fare as well. Panton's scale for parole violation gives only a slight and insignificant difference between the two samples and the proposed cutting score of 11 would be quite ineffective. Clark's recidivism scale yields a difference just significant at the .05 level, and as a quick diagnostic measure, may therefore

have value." (p. 437)

Mandel and Barron (1966), prior to their attempts at developing an MMPI scale to predict criminal recidivism, employed five clinical psychologists trained in the use and interpretation of the MMPI to do a "blind sort" on 372 MMPI profiles of men who had been released from the Minnesota State Reformatory for at least five years. These psychologists were asked to predict recidivism and non-recidivism on the basis of these profiles. Their definition of a recidivist was "an individual who is released from the institution and continues to be a chronic lawbreaker or commits one or more serious offenses." A non-recidivist was defined as "an individual who is released from the institution and has no record of an offense, or who commits one or more minor offenses such as any ordinary citizen might commit." There had to be an agreement between three judges before a profile was placed in any category. No statistically significant differences were found between recidivists and non-recidivists, according to the judges. It was discovered that predictions of non-recidivism were less correct than chance alone, whereas recidivism predictions were a little better than chance. This study agrees with Clark (1948) who felt "blind" inspectional analysis had little or no value in predicting recidivism or non-recidivism. The authors conclude that the use of the MMPI in conjunction with other information such as past history, interview, and additional test data might provide a more precise prediction method.

Taylor (1967), in following the thinking of Laune (1935) that inmates could perhaps make accurate judgments of parolability on their peer group, attempted to validate subjective evaluations against actual post-release performance and reliable and valid psychometric data. Eleven delinquent girls were asked to rank their peers in order of who was most deserving of release.

Their predictions correlated remarkably high with those girls the Parole
Board subsequently released. Also, those subjects who were ranked low by
both the girls themselves and the Board were re-convicted within six months
after release. The MMPI, 16 Personality Factor Test, IPAT Humor Test, Eysenck
T.R. Scale, Raven's Progressive Matrices, a Criminal Attitude Scale, and two
Behavior Rating Scales were all administered to determine if any discrimination
could be made between those high in rank order, those low in rank order, or
those who were subsequently re-convicted. This psychometric data did not reveal
any statistically significant factors of behavior, attitude or personality
between those girls who were convicted and those who were not. Taylor concluded
that there is a definite need for psychometric and behavioral tests of moral
values.

Smith and Lanyon (1968), using basically the same approach as Gough
et.al. (1965), studied 287 juvenile offenders who had been placed on probation
for one year. Their interest was in the 114 juveniles of this group who were
subsequently returned to court within this one year period of probation. Comparing
a five item Base Expectancy Table with MMPI predictions, both clinical and actuarial,
they found the predictions made from a BE table were better than chance whereas,
the MMPI predictions were at chance level. They believed, as did Gough et. al.
(1965) that past behavior of offenders is still a better indicator of future
behavior than any measure of personality difference. They added, however, that
perhaps real personality differences between the two groups did exist but limited
development in personality theory and test data tend to make these differences
difficult to identify and measure.

Bennett (1970), choosing to utilize the MMPI in an entirely different
way, attempted to predict parole adjustment by examining the test taking "insight"
of inmates being considered for parole. His premise was that since one of the
many criticisms of the use of psychological tests in predicting parole success has

been that an individual will "fake-good" that it is just as logical to assume
if someone does not respond in this manner, he is more likely to have difficulty
adjusting to parole or society than the individual who does. To test this premise,
32 inmates were administered the Composite Opinion and Attitude Survey (COAS--
and experimental questionnaire composed of 880 items from both the MMPI and
the California Personality Inventory) and instructed to answer the way a "normal"
individual would. Bennett's definition of normal was "a person working steadily,
meeting his family obligations, and fulfilling his role as an average citizen."
Seven clinical psychologists were then asked to judge the profiles in terms of
psychological adjustment and likelihood of parole or parole success. Followup
was measured at the end of six months by a questionnaire and at the end of two
years by a review of records. Results revealed that parolees could not "fake-good";
only 33% of the experimental group were rated as "normal". Neither the six months
or the two year followup in terms of parole adjustment and correlation to the COAS
were statistically significant. Bennett noted that "insight as measured in this
study and with this sample was unrelated to parole adjustment". He felt that
although his study using total profiles was not adequate that perhaps a new scale
using item analysis might be more effective as a prediction device.

Rahn and Gilbert (1972) explored the clinical judgment of correctional
psychologists in making predictions about the parolability of prison inmates.
Parole success and/or failure was examined on a biased sample of 682 inmates who
were referred for pre-parole personality evaluations from January, 1963 through
June, 1967. These inmates had been referred because a) their charges were
dangerous or aggressive, b) they had a psychiatric history, c) their institutional
adjustment reflected a need for a professional view, d) they were serving extended
sentences, or e) having been seen by the Board previously, there was a need for
professional evaluation. The evaluations performed on these inmates included

a) his institutional adjustment and progress, b) his test results (mental, aptitude, personality), c) his personality and mental status, and d) an estimation of his parolability. The psychologists were asked to place these inmates in one of five categories: (1) certain parole success; (2) probable parole success; (3) indecision; (4) probably parole failure, and; (5) certain parole failure. Success was measured by the parolee either obtaining a final release without violation of parole and/or not being returned to prison within a year. Results revealed that correctional psychologists generally tend to be rather conservative in their predictions and could predict parole success easier than parole failure. In those cases where an inmate was considered a good parole risk, psychologists tended to overestimate parole success as well as underestimate parole success on those inmates who were considered poor parole risks.

Summary and Purpose

Many attempts have been made by researchers using the MMPI to measure personality differences between violators and non-violators of parole. Scales have been developed, through item analysis, which would predict parole success or failure. The Parole Violation Scale (PaV) developed by Panton in 1961 is still in use today in North Carolina's prisons to measure parole success or failure. The initial validation on this scale was accomplished with 28 parole violators. A more recent cross-validation of this scale by Van Buren (1976) was accomplished with 185 parole violators and 185 parole non-violators. Whereas initially the PaV Scale predicted 80.5% of the parole violators and non-violators, Van Buren has shown that it now only predicts 65.4% of the violators and 69.7% of the non-violators. One of her explanations for this was that the "predictive validity of the scale was considerably more accurate with the group for which it

had been initially developed". (p. 34). Therefore, a new scale appears to be needed, as North Carolina's correctional psychologists continue to predict parolability on the basis of the original PaV Scale.

CHAPTER II

METHOD

Subjects

A sample of 366 inmates, who have been processed through and paroled from the North Carolina Department of Corrections from 1966 to 1971, were used as subjects. Following critera for inclusion were used: they had to be males, 21 years old or above who were serving a felon sentence of at least two years and have a Beta (1920) IQ score of 80 or above and a Wide Range Achievement Test (1965) score of at least 6th grade level. These 366 were divided into two equal groups of 183 each depending on whether they were classified as parole violator or a parole non-violator.

Apparatus

As was true in Panton's study (1962), the subjects were obtained from inmates being initially processed through the Reception Center at Central Prison in Raleigh, North Carolina. A battery of tests were administered by a case analyst, trained by the North Carolina Department of Corrections. The subjects were tested in a single room, seated at a large table with partitions between each subject. Standard instructions for administration of the Beta, Wide Range Achievement Test, and the booklet form of the MMPI were followed.

Procedure

The sample used in this study was previously used by Van Buren (1976). Her method of inclusion, as is true in this study, was accomplished in the following manner. A computer printout was obtained to identify all inmates who had been paroled from the North Carolina Department of Corrections during the period of January 1, 1966 through December 31, 1971. In order for the subjects' name to appear on this printout, the following criteria had to be met:

(a) male; (b) age 21 or above; (c) serving a felon sentence of at least two years; (d) a Beta IQ score of 80 or above; (e) a Wide Range Achievement Test score of at least a 6th grade level.

A total of 1,293 names appeared on this list: 778 were parole non-violators who had been successfully released from parole supervision for at least a year and 515 were parole violators who had been returned to the North Carolina Department of Corrections during the time period of 1966 through 1971. Test results on these individuals, as communicated by Panton (1975), had to meet the following criteria: (a) L less than T score of 70; (b) F less than T score of 85; (c) K less than T score of 70; (d) $?$ less than raw score 30. In addition, the inmate could not have taken the MMPI due to a psychiatric referral or because he was being reprocessed due to parole violation.

Following this procedure, 185 inmates were eligible for inclusion into the parole violation group while a total of 234 inmates were eligible for inclusion into the non-violator group. A table of random numbers was then employed by Van Buren to select from those 234 a total of 185 inmates to constitute the non-violator group equal in size to the violator group. For this present study, two MMPI profiles of the non-violator group were lost in transition making the non-violator group equal 183. Thus, a table of random numbers was used to select 183 out of the 185 violator group so that the two violator and non-violator groups would be equal.

The two groups of 183 were then randomly divided into three equal groups each -- one for the test development sample and the other two groups for the cross-validation samples. Thus, the parole violator and non-violator test development samples each contained 61 subjects and the two cross-validation samples of both the violators and non-violators contained 61, totaling 366 inmates.

Demographic comparative data of all subjects can be found in Appendix A.

The two test development groups' MMPI answer sheets were arranged in a frequency distribution of responses (either true or false). A Chi-Square statistic was then utilized to determine those questions that significantly differentiated between violators and non-violators. Items that separated the two groups were chosen at the .01 and .05 levels of significance. These items were then grouped into a test, comprised of 32 items. In scoring the items, one point was allowed for each item answered in the direction in which the violators differed from the non-violators. These 32 items were designated the Parole Success Scale and assigned the code symbol PSS. A frequency distribution of raw scores for the violators and non-violators on the PSS was then gathered. A point of greatest dichotomy was then established. The subsequent MMPI scores on the PSS were analyzed by a one-way analysis of variance. A post hoc' analysis using the Scheffe' multiple comparison method was conducted with group means.

RESULTS

The violator and non-violator test development groups made significantly different responses beyond the .05 level of significance to 32 of the 566 items appearing on the MMPI. The 32 items are listed in Appendix B with the direction of scored response, either true or false, for the violators. These 32 items were labelled the Parole Success Scale, PSS. A list of these items can be found in Appendix B.

Table 1 presents the frequency distribution of raw scores for the violator and non-violator groups. The point of greatest dichotomy was established at a cut-off score of 15, which served to identify 73.8% of the violators and 72.1% of the non-violators. It is noteworthy that 24.6% of the violators achieved higher scores than the highest score of any non-violator, and that 21.3% of the non-violators achieved lower scores than the lowest score of any violator.

The subsequent MMPI scores on the PSS were analyzed using a one-way analysis of variance. The analysis was conducted upon the two experimental (test development) groups in comparison to four control (cross-validation) groups, two of which were violator controls and two of which were non-violator controls. The means for these six compared groups are presented in Table 2. A significant treatment effect was found, F (5,360) = 14.64, p .001. A summary of this analysis of variance is presented in Table 3.

TABLE 1

Frequency Distributaion of Raw Scores of the

32 Item Parole Success Scale (PSS) For Parole Violators

And Non-Violators Test Development

Raw Score	Violators (N=61)	Non-Violators (N=61)
28	1	
27	1	
26	1	
25	4	
24	2	
23	6	
22	5	2
21	3	1
20	5	
19	5	3
18	3	4
17	3	1
16	3	3
15	3	3
*	(73.8%)	(27.9%)
	(26.2%)	(72.1%)
14	4	5
13	3	1
12	2	2
11	3	6
10	2	9
9		3
8	2	5
7		3
6		3
5		2
4		1
3		2
2		1
1		1

* Point of greatest dichotomy

TABLE 2

Group Mean and Standard Deviations

On the PSS

Group	Means	Standard Deviations	N
Experimental Violator	18.3770	5.0238	61
Experimental Non-Violator	11.4098	5.0806	61
Control Violator[1]	16.4262	5.4664	61
Control Violator[2]	16.6557	5.4095	61
Control Non-Violator[1]	13.3115	5.5873	61
Control Non-Violator[2]	13.7541	5.0914	61

TABLE 3

Summary of Analysis of Variance

Source	df	MS	F	Significance of F
Total	365			
Treatment Group	5	408.358	14.64	< .001
Within	360	27.89		

Post hoc' analyses using the Scheffe' multiple comparison method were conducted with group means on the PSS. Results suggest that the experimental violator group scored significantly higher than the experimental non-violator group, $F=53.036$, p .001. A comparison also was made between the experimental violator group and the two control non-violator groups. This also showed a significant effect with violators scoring significantly higher than non-violators, $F=34.217$, p .001. A comparison between the experimental non-violator group and two control violator groups revealed the violator groups scored higher, $F=33.389$, p .001. A comparison between the experimental violator group and two control violator groups revealed no significant differences, $F=4.9139$, p .05. Likewise, a comparison between the experimental non-violator group and two control non-violator groups revealed no significant differences, $F=6.56167$, p .05.

CHAPTER IV

DISCUSSION

Results of this study suggest that the 32 item Parole Success Scale should contribute to successfully determining appropriate candidates for parole. This is statistically supported through cross-validation data which indicates that a significant scoring difference was not only found between the violator-non-violator population from which the study was established, but also that these differences were consistent when compared with four non-related control groups. One cross-validation revealed the PSS could identify 65.9% of the violators and 55.7% of the non-violators. Another cross-validation revealed the PSS could identify 60.7% of the violators and 57.4% of the non-violators.

The PSS can certainly be useful in predicting violators of parole, since it can predict 73.8% of violators. A table for predicting other percentages of parole success or failure can be found in Appendix D. This table will be useful in choosing another cut-off raw score, if desirable.

In comparing the PSS with Panton's Parole Violation Scale (1962), only four MMPI questions were found to be the same, questions 67, 89, 157, and 338. It is difficult to interpret the reasons why only four questions are the same for both parole violator scales. Panton's validation only encompassed 28 parole violators, whereas the present study was validated on 244 violators and non-violators. Also, Panton's study was accomplished on inmates entering the prison from the years 1956 through 1958. The present study used inmate profiles for the years 1966-1971. Perhaps there was a time element involved, in that the population other than the population that Panton developed his scale on, varies significantly over chronological time. This chronological aspect can be supported by descriptive data yielded by the two separate populations: the present study's mean age was 28.2 as compared with Panton's mean age of 24.4; the mean education was 10.3 as

compared with Panton's mean education of 7.7; the mean IQ was 102.5 as compared with Panton's mean IQ of 95.6. Perhaps the present study is more representative of the present-day total prison population. These factors could best be determined through further study.

APPENDIX A

Comparative Data of Subjects

Items	Test Development Violators Non-Violators N=61 N=61		Cross-Validation #1 Violators Non-Violators N=61 N=61		Cross-Validation #2 Violators Non-Violators N=61 N=61	
Age						
$\overline{X}$	27.3	28.4	26.9	29.9	27.3	29.1
SD	7.0	8.6	6.2	6.7	6.3	8.0
Education						
$\overline{X}$	9.7	10.5	10.0	11.1	10.0	10.6
SD	2.1	1.9	2.3	.6	1.8	2.4
Beta IQ						
$\overline{X}$	98.8	104.2	102.1	105.5	100.1	104.2
SD	9.0	9.7	12.2	16.7	8.5	9.4

APPENDIX B

List of Items Comprising the Parole Success Scale

And Direction of Violator's Response

T 13. I work under a great deal of tension.

T 27. Evil spirits possess me at times.

T 67. I wish I could be as happy as others seem to be.

T 84. These days I find it hard not to give up hope of amounting to anything.

T 89. It takes a lot of argument to convince most people of the truth.

F 91. I do not mind being made fun of.

T 93. I think most people would lie to get ahead.

F 95. I go to church almost every week.

T 117. Most people are honest chiefly through fear of being caught.

T 124. Most people will use somewhat unfair means to gain profit or an advantage rather than to lose it.

T 129. Often I can't understand why I have been so cross and grouchy.

T 157. I feel that I have often been punished without cause.

T 172. I frequently have to fight against showing that I am bashful.

T 186. I frequently notice my hand shakes when I try to do something.

T 224. My parents have often objected to the kind of people I went around with.

T 238. I have period of such great restlessness that I cannot sit long in a chair.

T 337. I feel anxiety about something or someone almost all the time.

T 338. I have certainly had more than my share of things to worry about.

T 370. People often disappoint me.

F 371. I love to go to dances.

T 376. It makes me feel like a failure when I hear of the success of someone I know well.

T 382. I enjoy social gatherings just to be with people.

T 389. Whenever possible I avoid being in a crowd.

T 397. I like parties and socials.

T 411. Religion gives me no worry.

T 416. It bothers me to have someone watch me at work even though I know I can do it well.

T 421. One or more members of my family is very nervous.

T 483. Christ performed miracles such as changing water into wine.

T 484. I have one or more faults which are so big that it seems better to accept them and try to control them than to try to get rid of them.

T 518. I have often felt guilty because I have pretended to feel more sorry about something than I really was.

T 525. I am made nervous by certain animals.

T 558. A large number of people are guilty of bad sexual conduct.

APPENDIX C

Significance of MMPI Items Comprising the PSS Scale

Item #	Chi-Square	df	Significance
13	6.86	2	< .05
27	7.54	2	< .05
67	6.37	2	< .05
84	8.08	2	< .05
89	22.08	2	< .01
91	8.79	2	< .05
93	9.01	2	< .05
95	6.67	2	< .05
117	11.17	2	< .01
124	7.76	2	< .05
129	11.87	2	< .01
157	8.04	2	< .05
172	6.10	2	< .05
186	7.99	2	< .05
224	7.02	2	< .05
238	10.19	2	< .01
337	8.56	2	< .05
338	10.30	2	< .01
370	7.76	2	< .05
371	8.74	2	< .05
376	7.72	2	< .05
382	11.12	2	< .01
389	8.38	2	< .05
397	6.07	2	< .05
411	7.31	2	< .05
416	6.64	2	< .05
421	10.00	2	< .01
483	8.75	2	< .05
484	6.21	2	< .05
518	6.56	2	< .05
525	7.67	2	< .05
558	8.71	2	< .05

APPENDIX D

Table of Percentages for Predicting

Parole Success or Failure

Raw Score	Violators (N=61)	Non-Violators (N=61)
28	1.6%	
27	3.3%	
26	5.0%	
25	11.5%	
24	14.8%	
23	24.6%	
22	32.8%	3.3%
21	37.7%	5.0%
20	45.9%	
19	54.1%	9.8%
18	59.0%	16.4%
17	63.9%	18.0%
16	68.9%	23.0%
* 15	73.8%	27.9%
14	26.2%	72.1%
13	19.7%	63.9%
12	14.8%	62.3%
11	11.5%	54.0%
10	6.6%	49.2%
9		34.4%
8	3.3%	29.5%
7		21.3%
6		16.4%
5		11.5%
4		8.2%
3		6.6%
2		3.3%
1		1.6%

* point of greatest dichotomy

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Figures listed from pages 1 and 2 are from Mr. Jim Panton and Mrs. Patricia Van Buren.