

Personality Characteristics of Parole Officers

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Introduction

The present study is concerned with the personality functions of the correctional counselor, specifically, the parole officer. It will be postulated that there may be some description of personality which could be described as optimum in the correctional field, optimum being described in terms of the success or failure in so far as the completion of parole is concerned. This study will seek to determine whether a specific personality description for parole officers is predictive of greater success as a parole counselor.

In Canada, the function of the parole officer is described in the Parole Act. Pursuant to that act, the Board has "exclusive jurisdiction and absolute authority to grant or revoke parole" (5; Sec. 5). Office support under the supervision and direction of the Chairman of the Board shall carry out the business of the Board (5; Sec. 4(2)). Part of the office support includes the parole supervisor or parole officer who is charged with the guidance and supervision of a paroled inmate for such a time as the Board considers desirable (5; Sec. 2F, 4(2)). The Board has established rules and regulations for the conduct of

its business and these rules are contained for the most part in the Procedures Manual of the National Parole Service (18). The functions of the parole officer are many and varied and only those dealing with the supervision of paroled inmates shall be mentioned here. The officer must implement the objectives of parole as they relate to the rehabilitation and surveillance of the parolee for the purpose of protecting the public. The powers of the individual parole officer are derived through delegation from the Board by the phrase "...or any person delegated by the Board... (5; Sec. 12). This means in practice that the parole officer himself, or his immediate supervisor (a district representative, an assistant district representative or a unit supervisor) exercises those responsibilities described in Section 8, Section 12 and Section 14 of the Parole Act (5).

Board decisions are made largely on the basis of information provided by parole officers. The information provided to the Board is confidential (5; Sec. 9, 12(4), 19) but, at the same time, is admissible as evidence in court proceedings (5; Sec. 20). The interpretations, bias, and presentation of information to the Board may be influenced by the personality of the individual officer.

In this study the parole officer will be viewed essentially as a counselor. The effect of the counselor upon the counselee has been discussed by many authors both in and out of the field of corrections. The counselor should provide a new experience with authority (20), he should contribute toward improving relations amongst people in society and between social institutions (22), and his impact with respect to these effects should be measured in terms of the subsequent behavior of his clients (3). Some of the difficulties involved in the exercise of these functions and correctional counselor orientations in view of them have been discussed by Miles (16, 17).

There has been considerable writing on the subject of the effectiveness of counseling, and counseling in general has been found to be less effective than had been thought (2, 9, 21, 24). It has been suggested that the average effect of counseling may be comparable to receiving no help at all, the argument being advanced that while some counselors are helpful, some are actually detrimental (6, 28). Several authors have advanced possible methods to maximize the effects of counseling and have emphasized the relationship between counselor and counselee (22, 24), the

interaction between counselor characteristics and counselee characteristics (30), and the conditions which exist during the practice of counseling (6, 28).

Regardless of the means used to maximize the effect of counseling, the personality of the counselor is seen as being of considerable importance as far as the process and effect of counseling are concerned. Many characteristics are seen as important by different authors (1, 4, 6, 22, 23, 25, 28, 29). Some more empirical studies have also suggested patterns of personality which may be of importance (7, 8, 14). The ability to be an accurate judge of interpersonal situations has been discussed regarding counselors and various aspects such as formal education, sex, intelligence, age, interests, motivation, and emotional adjustment have been seen as important (10, 12, p. 65, 13, 26).

Figure I outlines specific suggestions given by various authors as to the personality characteristics of good counselors. Inspection of Figure I will turn up immediate problems regarding definition. How does one define for testing purposes "friendly understanding or love" (24; Pi-ix), "external frame of reference" (7), "depth" (6; Pxi), "pretty mature" (4) or "well integrated" (29).

Some opposing views are also apparent. Kelly has stated that the ability to judge accurately increases to age 30-40 (12; P.65). The evidence cited by Lanyon and Goodstein (13; P.175) suggests that ability to judge is not related to age.

In spite of the problems a general trend appears evident indicating that the personality of the counselor is important to his success with his clients and that specific testable personality parameters may be present. This study will attempt to assess the personality of parole officers as it relates to their success or lack of success as a counselor. The success will be measured in terms of the rate of client recidivism.

Measuring client recidivism is not as clear cut as it may seem. The use of official records, in this case National Parole Service files, has been qualified. A discussion of the qualifications can be found in Tappan's (27) article but the conclusion reached tends to favor the use of official records as representing the closest approximation to the violators in question which is available in terms of the law or laws violated. McCord and McCord (15; P.10) have suggested that recidivism or lack of

recidivism is the most consistent indicator of rehabilitation which is available. The Ouimet Report (19; P.297) indicates that the successful completion of a probation period was used as a definition of "success" by the Ontario Probation Officer's Association. Since completion of a period of parole requires adherence to both the criminal law and the parole act, it was felt that the completion of a period of parole could be an approximation to the influence exerted upon the parolee by the parole officer. There may well be other influences of considerable import, but in view of the discussions mentioned previously (4; 8; 10; 14; 20; 24; 25; 28) it is suggested that the influence of the parole officer is considerable. Hood and Sparks (11; P.178) have suggested that measurement of failure by reconviction will usually account for failure measured by other criteria as well.

Follow-up may be seen as the time during which an individual parolee is under supervision, or at risk, following his release from prison. The period of follow-up after release which should be considered as being relevant to the criterion of success or failure appears to be somewhat controversial. The assumption that the rate of recidivism is different at different time periods after release has been questioned. There is the suggestion that

the rate of reconviction is relatively constant throughout the period at risk and it has often been assumed that the first few months after conviction or release carry the greatest risk of recidivism in terms of the individual (11; P.179). Since this study is attempting to observe parole officer personality as it is related to parole success, it has been assumed that a minimum period of supervision will be required in order that the parole officer's personality may exert its effect. In view of the finding that the rate of recidivism is relatively constant throughout the period at risk and due to the lack of consensus said to exist around this subject (11; P.179), a minimum period of supervision appears to account for the school of thought which suggests early high rates of recidivism and uses the suggestion of a constant rate throughout the period at risk in such a way as to maximize the long term effects of parole officers' personality and its effects on the parolee.

This study will use a personality inventory to measure personality. Biographical information, together with the personality measure will be used as measures of the personality input of the parole officer into his cases. The outcome of his cases as measured by their rate of

recidivism after having had at least six months of parole supervision by the same parole officer will be used as a measure of parole success or failure for the individual officer. We will attempt to determine whether parole officers' personality is predictive of parole success or failure.

Figure 1. Summary of Theoretical Suggestions for Counselors.

Kelly

- ability as a judge not related directly to sex or intelligence.
- increases to age 40
- academic training questioned.

Lanyon and Goodstein

- (from Taft and Vernon)
- ability as a judge not related to age, sex.
- positively related to intelligence, artistic and dramatic interests, good emotional adjustment, social detachment, similarity of background, motivation to be a judge.
- negatively related to formal training in social sciences and to authoritarian attitudes.

Hjelle

- on the CPI:
To, Wb, Py, scales significantly related to good judges.

Burbank and Goldsborough

- good probation officer should be pretty mature, have a well integrated personality, be responsible, and able to work with aggressive persons.

Wallen

- good counselors: not anxious, well adjusted, no desire to manipulate clients, insight into self tolerance, integrity and self control.

Truax and Carkhuff

- empathy, genuineness, and non possessive warmth.

Carkhuff

-good counselors are:
alive and growing,
empathic, warm, genuine, spontaneous,
more typically feminine, less aggressive,
ascendant and achievement oriented.

Cambridge-Somerville

-good counselors have
friendly understanding
with ingredient of love,
good will, maturity of
judgment, adaptability,
persistence, consistency.

Gerald Albert

-good counselors
show lack of
hostility, of
obtusiveness, show
openness, sensitivity
and good adjustment.

Donnan, Harlan and Thomas

-from 16PF and Rogerian
counseling conditions,
Factors A (outgoing &
warmhearted) sig. with
warmth; Factor I (tender-
minded) sig. with con-
gruence; Factor C (af-
fected by feelings) sig.
with congruence; Factor
II (venturesome) sig. with
trust.

McClain

-from the 16PF better men
counselors outgoing,
assertive, happy go lucky,
venturesome, liberal.
-better female counselors
reserved, humble, sober, shy,
conservative.

Combs and Soper

-better counselors
have external frame
of reference, and
an optimistic view
of man.

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II

Methodology

Choice of Instruments

The choice of instruments for the present study is the California Psychological Inventory (CPI). The Inventory was developed using empirical and internal consistency methods and is intended to provide descriptive concepts possessing a broad personal and social relevance. The characteristics scored are basically meant to describe parameters important to social living and to social interaction (7). In the words of the test author H.G. Gough (8; P.283) "The California Psychological Inventory is addressed to the measurement of interpersonal dispositions that arise from and enter into fundamental domains of the social environment. These 'folk concepts' are theorized to be cultural universals that either singly or in concert, can forecast and account for any significant and recurrent mode of social conduct".

The CPI has received relatively good critical acclaim. E. Lowell Kelly (11) states that "all in all... the CPI...is one of the best, if not the best, available instruments of its kind". Lanyon and Goodstein (13; P.82) have reviewed evidence to the effect that the CPI tends to

be regarded as a reasonably useful instrument for the multi-dimensional description of the normal personality. Kleinmuntz (12; P.239) has tended to agree with the positive general assessment of the CPI. Dissenting opinion includes Alexakos (1; P.346) who states "...developed in 1957...for use with normal adolescents and young adults...proved very poor in terms reliability and validity". R.L. Thorndike (18) also attacks the CPI as providing a redundant, inefficient and confused picture of a person. He points out that only 4 of the 18 scales fail to correlate at least 0.50 with some other scale. This lack of independence is judged undesirable.

Additional scales have been developed for the CPI which include an Anxiety Scale, a Social Maturity Scale and A Leadership Scale.

A.M. Leventhal has developed an anxiety scale (14) for the CPI upon which high scorers are seen as erratic, conflicted, and self centred in their dealings with others, and as demonstrating diverse signs of difficulty in social situations. The scale is said to be correlated at a significant level with the Taylor Manifest Anxiety Scale, the Welsh 'A First Factor', and the IPAT anxiety measure.

Leventhal reports a mean of 8.92 with a standard deviation of 3.58 for males and a mean of 5.50 with a standard deviation of 2.21 for females. These figures are based on a cross validation group of 1454 males and 1291 females (15).

H.G. Gough (9; P.236) has developed a Social Maturity Scale. He states "the goal of the socialization process is to produce individuals who are in harmony with the mandates of the culture, but at the same time free enough to set them aside when they become destructive or illegitimate...a notion with which one can moderate the idea of socialization so as to identify people who can live comfortably with others, who can respond to both ordinary and extraordinary stress, but who can also, when appropriate, rise above or depart from the mores and institutionalized givens of social control." The socially mature individual is said to be able to conform but also be open to change an experimentation. The pattern for counselor personality in several of the articles mentioned previously would seem to be essentially similar to the concept of social maturity and it would seem therefore, to be a suitable area of investigation regarding counselor effectiveness. Each of the parole officers then received a score computed from

Gough's equation: Social Maturity = $28.062 + 0.148Do + 0.512So - 0.317Gi - 0.274Cm + 0.227Fx + 0.334Re$.

This equation is weighted in order that an unselected sample will converge upon a mean of 50.00 with a standard deviation of about 3.50 (9).

H.G. Gough has also developed a Leadership index for the CPI in much the same way as the Social Maturity index mentioned above. High scorers are seen as able individuals (rational, logical and clear thinking) and as being dominant and self confident at the same time as being egotistical and apt to behave in an aggressive and demanding manner. Low scorers tend to be seen as cautious, withdrawn and submissive. In addition, low scorers tend to be seen as patient, peaceable and co-operative (8). These descriptions would seem to have general reference to some observations which were cited previously, especially Carkhuff (2), Donnan Harlan and Thomas (4) McClain (16), and the material summarized in Lanyon and Goodstein (13; P.175) regarding the attributes of good judges. Using the equation developed by Gough: $Leadership = 14.130 + 0.372Do + 0.696Sa + 0.345Wb - 0.133Gi + 0.274Ai$; Parole officers were assigned a score as indicated above. Using raw scores,

Gough reports a mean in the neighborhood of 54.74 with a standard deviation of approximately 5.14 (8).

Several types of personality testing devices are available and all have problems inherent in their assumption and design. Lanyon and Goodstein (13; Chpts. 7 & 8) and Wallen (19; chpt. 11) offer overviews of the nature of the problems.

Procedures

The study involved asking parole officers to participate in the study by completing the CPI and allowing the writer to have access to the names of the parolees which they had supervised over the last 18 months (approximately). The parole officers were interviewed individually by the writer at the time that the CPI was completed.

The CPI was administered personally in order to assure as high a rate of participation as possible. While the CPI has been administered on a mail out-mail back basis it was felt that a higher response rate could be obtained by personal administration. A high response rate appeared mandatory in view of the small sample anticipated. At the time the test was administered, biographical information was taken.

The parole officers were selected from a National Parole Service telephone list which contained all the names of all the officers then in the Ontario region. Through the cooperation of the National Parole Service headquarters administration, the employee's DATA stream record was examined to determine the date upon which employment commenced with the National Parole Service. Only those officers with at least one year of service as of 15/9/72 were included. This was done in order that each of the officers in the study had the opportunity to be exposed to whatever training period was maintained in their respective offices and in order that they had opportunity to have acquired a caseload and to have serviced that caseload. Only parole officers in the Ontario region were chosen because of travelling and resource limitations.

The parole officers were initially approached by mail. Each of the officers whose name was obtained as above was sent a letter, to his respective office, addressed personally to him or her and marked Personal on the envelope. This letter was in accordance with Fiske's (6; P.210) suggestion that a contract be undertaken with the respondent regarding his being truthful in exchange for honesty on the

part of the test administrators. Included in each letter was a card bearing a coded number. The purpose of the card and the number code was to guarantee confidentiality to the respondents. A copy of this card is included as Appendix 4. Copies of the two letters which were sent out to the parole officers are included in Appendices 2 and 3.

In accordance with Stricker (17) it did not seem necessary to control for test wiseness during administration of the CPI. The writer's presence, or lack of presence at the time that the CPI was completed was controlled. Each of the prospective subjects was placed in alphabetical order by name and office of employment and was assigned a random number, taken in two's, in rows, from the left of a random number table (5; P.134). The purpose of this was to randomize the effect, if any, of the writer. A coin was flipped and it was determined that the writer would remain in the room while those parole officers to whom even numbers had been assigned, completed the CPI.

While testing, a concerted effort was made to maintain an air of informality. Upon arrival at the office of the parole officer who was to complete the CPI, the purpose of the test and the uses to which the information were to be put were explained and any questions answered.

This was done in accordance with the suggestion by Fiske (6; P.210). The explanations were illustrated by a CPI profile which the writer had completed on himself. Any questions which were asked by the officer as he was completing the CPI were answered in accordance with Gough's suggestions (7; P.6).

A personal information sheet was completed with the help of each officer prior to the completion of the CPI. A copy of this sheet is to be found in Appendix 6.

A list of the names of parolees who had been supervised was obtained from Form PS 34 (rev) which is maintained in each office. Copies of these forms for the years 1972 and 1971 were obtained.

Data of the form shown in Appendix 7 was collected from the headquarters file as the final phase in the collection of data. This data was collected from the following sources on the headquarters file:

A. FPS Number

FPS sheet or parole certificate.

B. Date of Release

Penitentiary Release Form.

C. Termination Date on Parole.

Warrant expiry date on Penitentiary

Release.

Form or on MDC 2-02.

D. Aggregate Sentence.

Front page of Parole Service Cumulative

Summary, or PS 48 or FPS.

- note that the aggregate sentence
was deemed not to include any period
of probation which was imposed
consecutively.

E. Number of previous Convictions.

The number of previous convictions
was classified in accordance with the
maximum sentence which was called for
in the Criminal Code of Canada. Each
entry on the FPS was counted as one
occurrence even if there was more than
one charge appearing per entry.

e.g. January 1, 1970

- 1) Possession of House-breaking
instruments, Sec. 309 CCC

- 2) B&E with intent, 14 charges
Sec. 306 CCC
- 3) Theft over \$50, 3 charges
Sec. 294 (a)
- 4) Possession

In accordance with the Criminal Code,
the above example would have been scored
as:

14 yrs - 2 occasions

10 yrs - 1 occasion

2 yrs - 1 occasion

If the section of the FPS was not
provided, the least possible maximum
under that section was used. Only Criminal
Code of Canada violations were tabulated
and only Criminal Code violations were
used in the assessment.

F. Present Conviction

Offences against the person included
assaults, rape, robbery kidnapping,
homicide etc. All others were considered
as property offences including Narcotics

offences. If an individual had three entries on his FPS for his present conviction, the first two theft and the last one robbery, his present offence was considered as one against persons regardless of what any concurrent charges might be.

G. Length of time Incarcerated

This was calculated from the date of admission (taken from the Penitentiary Release Form or from the 'effective date' on the first page of the Cumulative Summary) to date of release on parole as in B above.

H. Date of Birth

This was taken from the Penitentiary Release Form or from the Cumulative Summary.

I. Number of Months on Parole

This was calculated from the date of release on parole to: Revocation of Forfeiture; Termination of Parole; January 1, 1973; whichever came first.

In all cases the Penitentiary Release Form was the

preferred document, if available. Other forms were used as indicated including the Management Data Centre Form MDC 2-20 and PS 48 where the primary sources were not available.

Only those parolees who had been under the same officer's supervision for a minimum of six months were considered as being on that officer's caseload. The rationale for this six month minimum period of supervision was discussed in Chapter I.

Those who violated parole in less than six months or who transferred to another location or officer with less than six months supervision under the first officer were not charged to the officer who had supervised for less than six months. Parolees who died while on parole were charged to the officer if the parolee had been on that officer's caseload for at least six months prior to the death.

Failures were those parolees whose parole was revoked or forfeited between six months after release and the termination of parole. Withdrawn warrants of suspension or cancelled suspensions were not counted as failures. Parolees whose parole was forfeited but who were granted immediate re-parole were considered as failures. If the

particular parole officer's name could not be tied to the particular parolee, that parolee was not charged to that officer. The tie-up could be made either through the supervisor's report on the file or, if the officer's name appeared on the parole certificate and no amendments to the parole certificate allowing for the transfer of supervision appeared.

Methods of Analysis

The analysis in this study was proceeded upon in two ways. A percentage criterion was calculated as follows: the number of parolees supervised by a given officer for six months or more and who had not been subject to revocation or forfeiture, was divided by the total number of parolees supervised by that officer for a period of six months or more. This criterion was used as a measure of greater or lesser success for a given officer. The "better" group was then examined with respect to the "poorer" group. This method of criterion calculation is referred to as the crude criterion later in this study.

Using the second method of analysis, research suggestions from Hood and Sparks (10; P.180) were incorporated to the effect that "an offender's chances of

recidivism are greater, the more previous convictions he has, the shorter the time since his last conviction, the younger he is and the younger he was when first convicted; men have higher reconviction rates than women and offenders against property generally have higher reconviction rates than those committing offences of violence". Using exponential failure curve techniques (3) the individual's age at release on parole, the length of his parole, the number of previous convictions and the nature of the parolee's last conviction (whether against persons or property) were used to establish a probability of that parolee not having his parole revoked or forfeited. For each individual parole officer a probable rate of parole success in terms of revocation and forfeiture could be calculated and this compared to the observed rate. Correlations were made with this refined criterion and a regression equation was calculated. More detailed descriptions of the methods of calculation will be found in Appendix 9.

Permission to approach Parole Service personnel for this study was obtained from Mr. J.H. Leroux and a copy of a letter which was sent by Mr. Leroux authorizing the writer's activities is found in Appendix 1.

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III

Results

Using the crude criterion described in Chapter II (P. 26) no significant correlations were found between either the biographical or personality inventory data and the criterion.

Using the refined criterion (P. 26) described in Chapter II, the Self Acceptance (Sa) scale was found to be significantly correlated with parole outcome. A regression equation which was significant at the 5% level was found which employed the scales of Self Acceptance (Sa), Achievement via Independence (Ai), and Achievement via Conformance (Ac) from the California Psychological Inventory (CPI) and months of service with the National Parole Service together with months of previous non correctional counseling, from the biographical data.

Findings using a Crude Criterion

The results to be presented in this section of this chapter are based on the crude percentage criterion described in the previous chapter. Arbitrarily, all correlations of 0.1 or less will be considered as zero. Guilford's formula for efficiency (3; P.378) provides the rationale.

Figure 2 Number of Cases per Parole Officer and his Crude
Criterion Score.

<u>No. of Parolees</u>	<u>Criterion</u>
8	0.000
25	0.080
46	0.087
22	0.107
15	0.133
44	0.159
18	0.167
11	0.182
43	0.186
31	0.194
14	0.214
9	0.222
17	0.235
16	0.250
4	0.250
43	0.255
23	0.261
26	0.260
10	0.275
22	0.286
21	0.286
13	0.302
43	0.354
22	0.409
7	0.429
44	0.444

Figure 3 Biographical Data based on the Crude Criterion score.

	<u>BETTER</u>	<u>POORER</u>
Mean years of education	17.62	17.20
Level of education:		
BA or less	9	6
Masters	4	7
Marital status		
Married	9	8
Separated/Divorced	2	1
Single	2	4
Counseling Training		
Yes	7	5
No	4	5
No answer	2	3

All of the officers selected for the study were maintained in the study in spite of the small numbers of parolees that some of the parole officers were credited with handling. The number of cases handled by a given officer and the crude criterion is presented in Figure 2. It should be noted that in Figure 2 criterion values closer to zero indicate a more effective parole officer in terms of the crude criterion. Those tables presented in this section with correlations calculated using the crude percentage criterion indicate that negative correlations refer to qualities beneficial to being a more effective parole officer while positive correlations refer to qualities detrimental to favorable parole outcome.

The scores presented in Figure 2 were arbitrarily split between criterion levels 0.235 and 0.250 thus dividing the group into two which were labeled better and poorer. This point was chosen because the mean of the parole terminations by forfeiture and revocation during 1969 and 1970, the latest figures available from the National Parole Board is approximately 24% (4, 5).

The mean number of years of education of the better group was 17.62 years and that of the poorer group 17.20

Figure 4 Obtained Correlations from the sample data using
the Crude Criterion scores.

Do	-0.122
Cs	0.028
Sy	-0.355
Sp	-0.192
Sa	-0.345
Tb	0.123
Re	-0.006
So	-0.160
Sc	0.04 ^o
To	0.053
Ti	0.045
Cm	0.127
Ac	-0.127
Al	0.222
Ie	0.034
Py	0.05 ^o
Fx	0.008
Fe	0.176
Months of previous working experience	
a) unrelated to corrections	0.201
b) non-correctional counseling	-0.167
c) correctional counseling	-0.264
Length of Service	0.294
Age (as of 15/9/72)	0.010
Number of parolees supervised	0.036
Anxiety	0.004
Leadership	-0.168
Social Maturity	-0.152

years, a non significant difference. Of the better group 9 were married 2 divorced or separated and 2 single; of the poorer group 8 were married, 1 separated and 4 single. Of the better group 7 had had formal counseling instruction as a part of their formal education. Of the poorer group 5 had received formal counseling instruction. In terms of the level of education achieved, of the better group 9 had BA or less, 4 had Masters degrees. Of the poorer group 6 had a BA or less, 7 had Masters degrees. The field in which a parole officer's educational background specialized was observed. There appeared to be no real trend with respect to the better and poorer officers. The results will not be presented in order that the identities of the individual parole officers may be protected. The above data is presented in Figure 3.

Figure 4 presents obtained correlations between parole officer data and the crude criterion. With respect to biographical data, there was a non-significant correlation of 0.202 between months of previous employment which was unrelated to corrections and counseling and the criterion. This would suggest a slight tendency for those parole officers having no previous counseling experience to have a higher rate of forfeiture and revocation. The correlation

of -0.167 with months of previous non correctional counseling and -0.264 with months of previous correctional counseling would indicate a slight tendency for those officers with previous counseling experience to have lower rates of forfeiture and revocation.

There was a correlation of 0.294 between length of service with the National Parole Service and the rate of revocation and forfeiture. This would indicate a slight tendency for those parole officers with more service to have a higher rate of revocation and forfeiture.

There was essentially no correlation between the age of the officer as of 15/9/72 and the rate of revocation and forfeiture. There was also essentially no correlation between the number of parolees in the sample per parole officer and the rate of revocation and forfeiture.

A brief description of high and low scorers on individual CPI scales and the Anxiety, Leadership and Social Maturity measure is found in Appendix 8.

No significant correlation with the crude criterion was found with the Anxiety, Leadership or Social Maturity scales on the CPI.

The Cs, Re, To, Sc, Gi, Py and Fx scales had

correlations of 0.1 or less. No other scale had a correlation which reached significance although the Sy and Sa scales were relatively close. The Sy and Sa scales were correlated with each other at 0.78 which would suggest that the two scales were measuring very similar qualities. Gough suggests that the two scales are correlated at 0.57 (2; P.40). Parole officers having lower rates of revocation and forfeiture tended to score lower on these scales.

Figure 5 gives the mean, standard deviation, and standard deviation of the mean for the two groups as artificially divided on the criterion.

A visual representation of these means is found in Figure 6. No attempt will be made to interpret the scores one from the other due to the lack of any significance. The profile in Figure 7 tends to resemble the profile suggested for social workers (2; P.39). Profiles for several occupational groups are presented in Figure 7.

Results Using a Refined Criterion

The results to be presented in this section of the third chapter are based on the exponential failure curve techniques (1) presented earlier and outlined in more detail in Appendix 9.

Figure 5 Mean, standard deviation and standard error of the mean for Better and Poorer groups using the Crude Criterion.

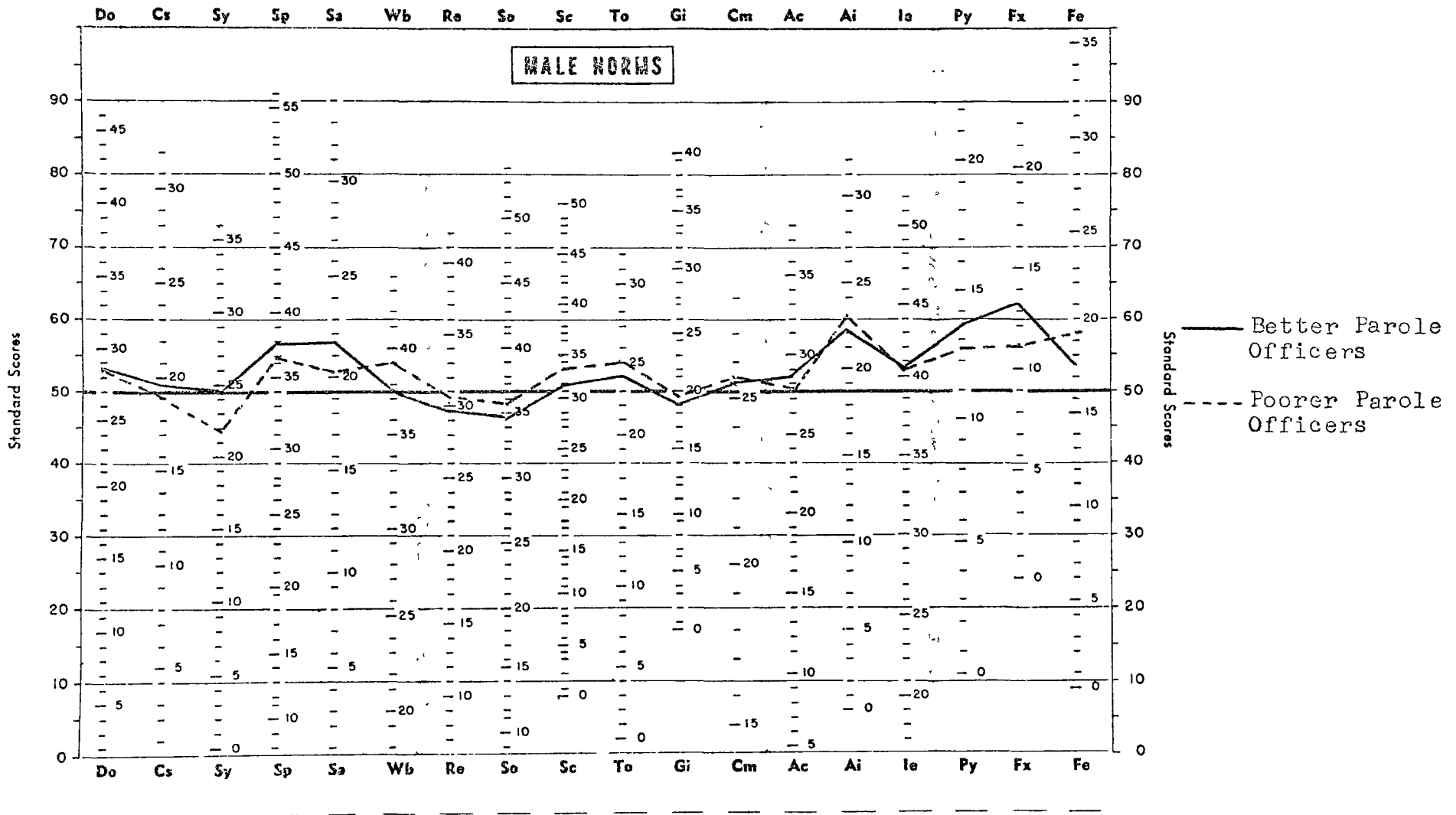
	BETTER			POORER		
	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error of Mean</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error of Mean</u>
Do	28.69	5.22	1.45	28.46	6.00	1.66
Cs	19.62	2.10	0.53	19.07	3.07	0.85
Sy	24.46	4.48	1.24	21.92	4.25	1.10
Sp	37.92	4.15	1.15	36.69	7.00	1.94
Sa	21.62	5.30	0.92	20.15	4.36	1.21
Vb	37.54	4.11	1.14	39.08	4.73	1.31
Re	29.60	4.60	1.30	30.38	4.23	1.17
So	31.77	5.36	1.49	35.77	5.07	1.41
Sc	31.87	7.76	2.15	33.15	7.24	2.00
To	24.08	4.21	1.17	25.00	2.53	0.70
Gi	19.00	5.40	1.50	19.77	5.57	1.54
Gn	25.46	2.60	0.72	26.15	1.66	0.41
Ac	20.62	4.61	1.20	27.46	4.12	1.14
Ai	22.15	4.10	1.15	23.15	3.51	0.97
Ie	40.62	5.24	1.45	40.30	4.21	1.17
Py	13.33	1.94	0.54	12.62	2.81	0.70
X	17.15	3.91	1.08	11.08	4.70	1.30
We	17.69	5.31	1.47	19.23	3.75	1.04

PROFILE SHEET FOR THE *California Psychological Inventory*: MALE

Name Figure 5 Means of Better and Poorer Parole Officers Age _____ Date Tested _____

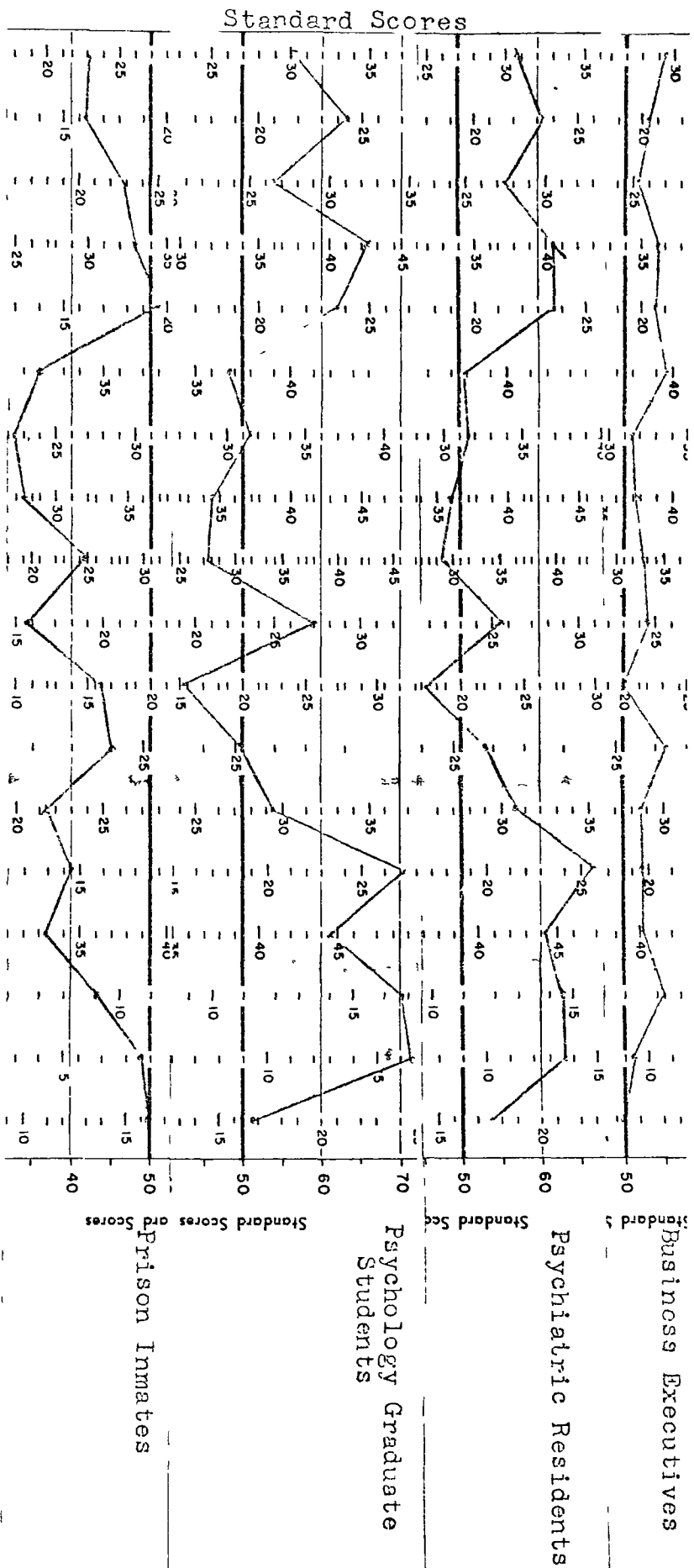
Other Information Using the Crude Criterion

Notes:



Male Norms

Figure 7 (continued)



The criterion in this section are presented in the form of Z scores derived from the formula:

$$Z = \frac{(\text{observed proportion of success}) - (\text{calculated proportion success})}{\text{Standard deviation of expected proportion}}$$

Here the observed proportion success is taken as the criterion presented in Figure 2 and the calculated proportion success (or expected proportion success) is equal to the sum of the probabilities of success for each parolee handled by a given officer. The standard deviation is calculated from Guilford's formula (3; P. 169).

Positive Z values are indicative of a parole officer more successful than would have been expected from his caseload. If the Z value is greater than, or less than ± 1.96 we would expect such deviations from the expected value only once in twenty times by chance.

Figure 8 presents the values of the refined criterion in descending order. These values are used to calculate all the correlations in this section. As in the previous section, correlations of less than 0.1 will be

considered as zero. The obtained correlations are presented in Figure 10. Those figures presented with correlations using the refined criterion indicate that negative correlations refer to qualities detrimental to favorable parole outcome while positive correlations refer to qualities beneficial to being a more effective parole officer.

Figure 9 indicates that the mean number of years of education of the better group was 19.75 while the poorer group had 18.00 years of formal education. This compares with the overall mean of all the parole officers ($N = 26$) of 17.5 years. Of the better group three had bachelors level degrees a one had a masters degree. Of the poorer group, one had a bachelors level degree and three had masters level degrees. In the better group two were married and two were single. One half of each of the two groups had had previous formal training in counseling. Again, field of formal education was examined and no pattern was found. This last category of data will not be presented for reasons of confidentiality.

With respect to other biographical data, Figure 10 indicates that no correlation was found between months of previous employment which was unrelated to corrections, and the criterion. A correlation of 0.230 was found between

Figure 8 Z scores (refined criterion) in descending order.

3.0019
2.5217
2.2195
2.0501
1.1828
1.6862
1.0534
0.9515
0.7821
0.7638
0.5928
0.2541
0.2056
-0.1156
-0.3754
-0.4460
-0.7108
-1.0568
-1.3680
-1.4363
-1.4621
-1.8667
-2.5946
-2.7234
-3.1840
-4.2902

Figure 9 Biographical data based on the Refined Criterion score.

	<u>BETTER</u>	<u>POORER</u>
Mean years of education	19.75	18.00
Level of education		
BA or less	3	1
Masters	1	3
Marital Status		
Married	4	2
Separated/Divorced	0	0
Single	0	2
Counseling Training		
Yes	2	2
No	2	2

months of previous employment in counseling in a non correctional setting, and the criterion. A correlation of 0.212 was found between months of previous correctional counseling and the criterion. These latter two associations would tend to suggest that those officers with previous counseling experience tend to be more effective. A negative correlation of -0.252 between months of previous service with the National Parole Service and the criterion indicated, as was found previously in this study, that those who serve longer tend to become less effective. Again, there is no correlation between age and the criterion.

The CPI scales will now be dealt with in the same manner as with the crude criterion. The correlations obtained are presented in Figure 10. The following scales will be considered as having no correlation: Cs, Wb, Sc, Ie, Py.

The Sa scale was found to be significant at the 5% level. The Sa scale attempts to identify those with a comfortable sense of personal worth and who are comfortable in all kinds of social behavior. High scorers tend to be seen as confident, enterprising, egotistical, imaginative, opportunistic, outgoing, polished, self-confident, self-

Figure 10 Obtained Correlations from the sample data using the
 Defined Criterion.

Do	0.225
Cs	0.000
Sy	0.368
Sp	0.232
Sa	0.410
Tb	0.051
Re	0.191
So	0.174
Sc	-0.012
To	-0.192
Ti	0.133
Ca	-0.101
Ac	0.293
Ai	-0.122
Ie	-0.096
Py	-0.047
Fx	-0.152
Te	-0.130

Months of previous working experience

a) unrelated to corrections	0.049
b) non-correctional counseling	0.230
c) correctional counseling	0.212

Length of Service -0.252

Age (as of 15/2/72) 0.050

Anxiety 0.013

Leadership 0.416

Social Maturity 0.254

seeking and sophisticated. Again, as with the crude criterion the Sy scale was near significance. As will be seen in Figure 10 no other measure neared significance.

The best nine CPI scales in terms of the size of their correlations (Do, Sy, Sp, So, To, Ac, and Ai) were examined for regression and $r^2 = 0.281$ together with a non significant $F = 0.693$ were found. As will be noted in Appendix 10 there are strong intercorrelations on several of the scales, notably Sy, Sp and Sa with each other and with Do. The To scale is intercorrelated with Re and Ai and the So scale with the Ac.

The Sa scale, found to be significantly correlated with the criterion can be combined into a regression of:
 $y = 0.199 Sa - 4.306$. This was found to be significant at the 5% level, $F = 4.85$.

Using the other data derived from the biographical information the following 5 scales appeared to give the maximum $r^2 = 0.410$ with $F = 2.781$ ($0.95F_{(5, 20)} = 2.71$).

This equation is as follows:

$$y = 0.084 Sa + 0.134 Ac - 0.167 Ai + 0.016 WkB - 0.27 Ms - 1.64.$$

No allowance for selection was made in calculating

the F statistic and while the calculated F is significant at the 5% level, this regression equation may only be an indication of the nature of prediction which could be made using a much larger sample. The variable means, variable standard deviations, variance covariance matrix, correlation matrix, inversion of the correlation matrix, B weights, R^2 and r are presented in Appendix 10 for the best 9 CPI scores and in Appendix 11 for the 5 item regression.

Figure 11 gives the mean and standard deviations for the better and poorer groups as determined by the refined criterion, that is, those officers with Z scores greater than or less than ± 1.96 .

A visual representation of these means is found in Figure 12. No profiles will be presented for other occupational groups.

Figure 11 Mean and standard deviation for Better and Poorer groups using the Refined Criterion.

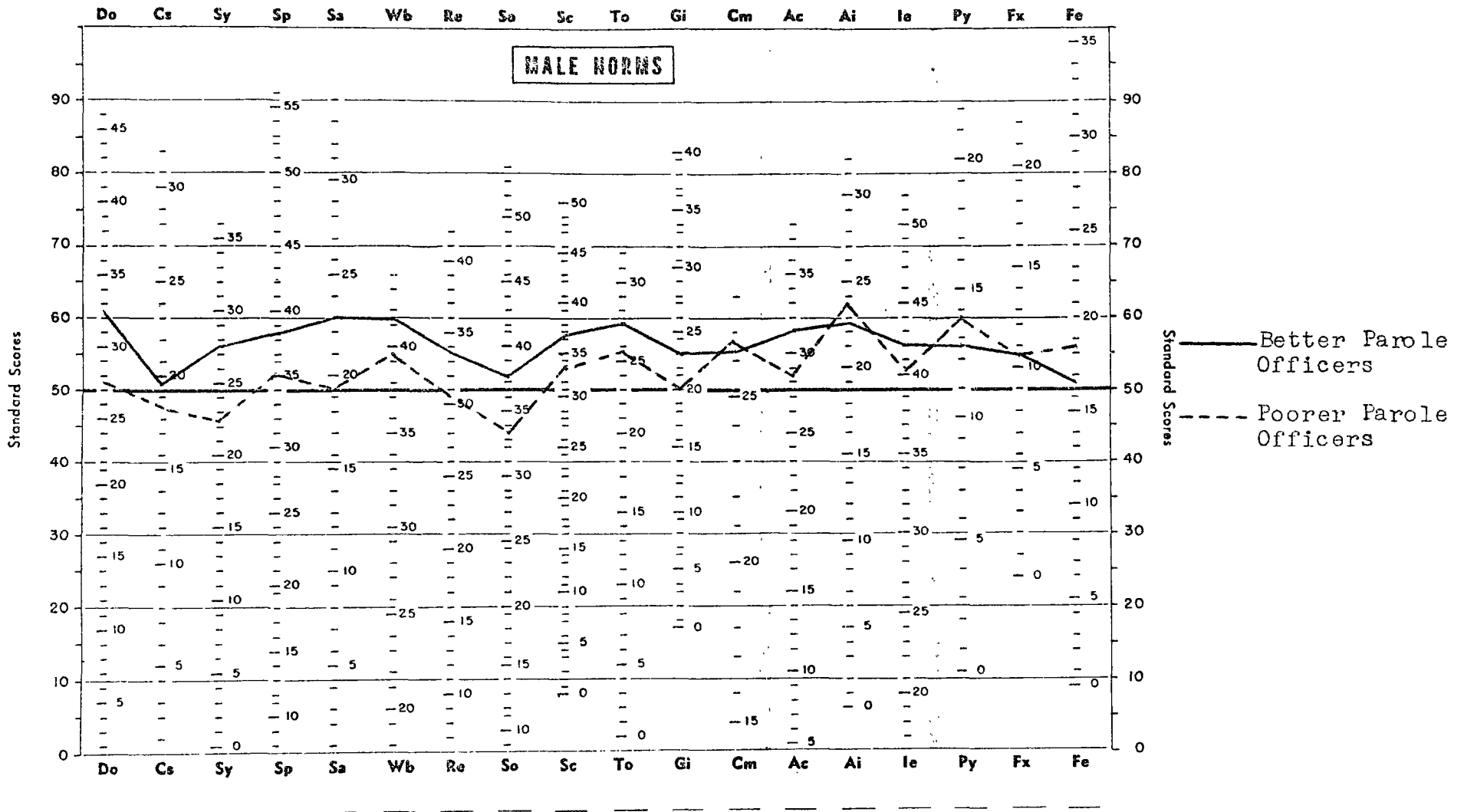
	<u>BETTER</u>		<u>POORER</u>	
	<u>Mean</u>	<u>Standard Deviation</u>	<u>Mean</u>	<u>Standard Deviation</u>
Do	32.250	4.500	27.750	3.461
Es	19.750	1.258	19.500	5.065
Sy	27.500	3.109	22.250	6.021
So	33.250	3.775	35.000	7.102
Sa	23.000	2.309	19.250	6.021
Tb	41.250	0.957	39.500	3.000
Pe	32.500	3.973	30.500	5.260
So	37.750	2.650	33.500	2.032
Sc	36.250	2.217	32.000	5.033
To	27.000	2.823	25.750	2.976
Gi	23.000	3.559	20.000	3.742
Cm	26.250	1.709	26.750	1.258
Ac	31.000	2.914	29.500	4.041
Aj	22.250	3.202	23.750	3.862
Ie	42.000	8.271	40.250	6.131
Py	12.750	2.217	13.750	1.500
Fx	10.750	2.976	10.750	6.170
Ie	16.750	2.075	19.500	6.137
Sh	51.300	2.351	47.295	4.019
LDoc	59.250	3.259	55.725	7.397
Ax	3.500	1.291	3.500	1.291

PROFILE SHEET FOR THE *California Psychological Inventory*: MALE

Name Figure 12 Means of Better and Poorer Parole Officers Age _____ Date Tested _____

Other Information Using the Refined Criterion.

Notes:



Male Norms

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2. GOUGH, H.H. (1964) Manual for the California Psychological Inventory. Palo Alto Calif.: Consulting Psychologists Press.
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5. National Parole Board (1970) National Parole Board Statistics 1970. Ottawa: Queen's Printer. Table 3:1.

Conclusions

With only one significant correlation and a regression equation based on only 26 individuals the present study provides little substantial support for the concept that there is a specific personality type which is, by itself, associated with successful parole outcome.

The Anxiety measure developed by Leventhal resulted in virtually no correlation with either the crude criterion or the refined criterion. This would seem to indicate that anxiety, at least as measured by the Leventhal scale, has no bearing on being a successful parole officer. It may also indicate that the scale is not measuring anxiety.

The combination scales of Leadership and Social Maturity were not included in consideration for the regression equations because of their being regression equations in themselves. Their effect in the calculation of a regression equation would add confusion. The Leadership scale, using both criterion, was more positively associated with good parole officers than was the Social Maturity scale. Neither of them were as strongly associated with good parole officers as was the 5 item regression equation suggested in Chapter III. High scorers on both

the Leadership and Social Maturity scales are described in Appendix 8.

With respect to the 5 item regression it is interesting to speculate on an explanation for the negative loading found with respect to the number of months of service with the National Parole Service and the effectiveness of the officer. It is possible that those officers having served less time with the National Parole Service are less strict with their parolees and therefore have fewer revocations and forfeitures.

It may also be possible that service in the Parole Service changes in some way a parole officer's orientation toward achievement. The correlations between the number of months of non-correctional counseling and the Ac and Ai scales are 0.136 and 0.324 respectively. However, the correlation between months of service in the parole service and the Ac and Ai scales are 0.175 and -0.026 respectively. It could be speculated that months of service in the National Parole Service serves to inhibit those responses leading to higher Ai scores. This would tend to suggest that a parole officer with an optimum number of previous months of counseling experience and relatively high Ac and Ai scores

would be seen as efficient, mature, organized and stable at the outset of his parole service career and more compliant industrious, moderate and quiet after some months (2; P.9). It would seem that the manner in which this change is applied to the job of being a parole officer changes the rate of success. A longitudinal study of parole officers at the beginning of their parole service career and at later periods may serve to shed light on this problem.

The Months of Service with the National Parole Service measure was found, using both criteria, to have a relatively high negative association with successful parole outcome suggesting that those parole officers serving for a longer time tended to become less successful. This finding would seem to indicate a need for further study.

Of the four officers who achieved significantly better results than would have been expected, all four came from different District Offices. Of the four officers who obtained significantly worse results than would have been expected three came from the same office. One of the better officers was from the same office as one of the worst. There would appear to be some need to study the issue of Office atmospheres, management styles, workloads and other

management issues and their relation to successful parole outcome. It is possible that the difference between offices is due to the application of different definitions or different office policy. Perhaps there are community differences. Considerable research would appear to be indicated in the general area of differential rates of success.

A Spearman Rank Difference calculation was performed with respect to the descending rank ordering of the individual parole officers according to the two criterion which were used. A Rank Difference correlation of 0.81 was found. This would suggest that the characteristics of age of the parolee at the beginning of parole, type of offence, previous record and months on parole are distributed among parolees who are randomly distributed among parole officers. This means that all the parole officers have essentially the same type of caseloads and it could indicate that since all the parole officers in the sample had essentially the same type of caseloads, there was no need for the six month minimum counseling period in order to overcome the effects of early parole forfeiture or revocation.

The age of the parole officer was found, using both criteria, to have very little association with successful

parole outcome. The mean age of the parole officers was 32.6 years with a standard deviation of 8.5 years which suggests a skewed distribution with more officers less than 32 years than older than 32 years. Since age does not seem to be a factor in the prediction of successful parole officers and the length of previous parole counseling does seem to be a factor, perhaps further study could be directed to the question of what is the optimum amount of previous experience.

There would appear to be no relation between success as a parole officer, at least as measured in this study, and the field of education. Virtually all the individuals in this study had been educated in fields related, broadly speaking, to the social sciences. Different sources have suggested that accuracy in interpersonal judging is not related to educational level in general and to the social sciences in particular (3; 3, P.175; 6). This finding then should not be surprising. The observation of this study that when using both methods of analysis, those officers having educational levels of BA or less tended to be found in the "better" group and conversely masters in the "poorer" group lends support to the reduced importance of formal education to the success of a parole officer.

The individuals in the present study showed no difference as to success when compared on their having had or not having had counseling training. The references cited above lead us to expect a difference.

Two methods of analysis were used in the present study. The first method using a simple percentage criterion did not lead to any significant associations. The second method using exponential failure curve techniques can be seen, by comparing Figure 4 and Figure 10, to provide more pronounced associations in most cases. The second method takes advantage of more information than the first, and also overcomes the theoretical drawbacks involved in dichotomizing groups. This study supports the conclusion that more sophisticated statistical analysis may demonstrate associations not previously seen using other methods.

The calculation of the refined criterion in this study assumed that the probability of a parolee having his parole revoked or forfeited was the same during the 7th month as it was during the 60th month or during any two given time periods. While the six month minimum supervision time may account for the contention that the greatest number of parole failures occur in the first six months,

the bases on which these assumptions rest have not been demonstrated in the population in question.

Overall, better parole officers tend to be seen as active, persistent, independent and tolerant. While being informal, the better officers tend to be intelligent and to plan ahead and to initiate, direct and coordinate such endeavors. There is a tendency to be demanding and aggressive although this is tempered by tolerance (1, 2).

It will be noted in Figure 11 that the standard deviations of the CPI scores are rather large. Thus, we would expect some of the better and poorer officer's scores to overlap. In terms of the means however, the poorer officers tend, as compared to the better officers, to be conventional, cautious, conforming, somewhat inhibited and generally retiring. They tend to be disorderly and forgetful and while they can be demanding, this tends to be rather more defensive than with the better officers (1, 2).

The better officers scored higher on scales indicative of poise, ascendancy, self assurance and interpersonal adequacy as well as those indicative of socialization maturity and interpersonal structuring of values. There appears to be little overall difference with respect to

those scales indicative of achievement potential, intellectual efficiency and interest modes.

The literature used to support the present study comes from various disciplines in addition to correlations. The findings in this study are not far removed from what the literature from these various field would have led us to expect. It is suggested then that there seems to be little use in seeking solutions to the problems of corrections as though corrections were a science unto itself. It appears that counseling in the National Parole Service operates under the same contingencies as other forms of counseling for the most part.

The data on which the present study is based is accurate to the best of the author's knowledge and ability. However, gathering data from the National Parole Service adds considerably to the errors for which the author must take sole responsibility. The list of names obtained for parolees was not always up to date. In view of this, one must ask if all the names were there and if the names of the parolees were correctly associated with the correct parole officer. Further, the headquarters files had few single and consistently defined pieces of data. Several different forms from three departments, the Penitentiary

Service, the Royal Canadian Mounted Police and the National Parole Service had to be used. These comments are not meant to impugn the integrity of any of the many persons through whose hands data such as that which was used in the present study must pass. However, short of a much more cohesive and automated system of data and data recovery, attempts at compilation of truly useful research on the actual situation at any given time with respect to those on parole and their outcomes and those things which affect those outcomes, would seem to be a gargantuan, almost futile endeavor.

One of the major problems in this study, as with others of the same type involves the use of "success" and "failure" regardless of the euphemisms in which the concepts are couched. "A major reason for the difficulty in conducting research on counseling lies in the inability to arrive at satisfactory criteria of success. Most research into counseling falls short of being definitive because the criteria usually amounts to little more than a value judgement implicit in an instrument or on what happens to the counselee after counseling which is assumed to be desirable" (5; P.339). The interpretations of the data in this study are subject to exactly these limitations.

References

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MEMORANDUM



GOVERNMENT OF CANADA

Appendix 1

NOTE DE SERVICE

GOUVERNEMENT DU CANADA

63

FROM
DE

J.H. Leroux,
Assistant Executive Director,
National Parole Service.

TO

SECURITY - CLASSIFICATION - DE SÉCURITÉ
OUR FILE - N/RÉFÉRENCE
199/44
YOUR FILE - V/RÉFÉRENCE
DATE
July 13, 1972

SUBJECT
SUJET

Research Project - G. Parry

As you are aware, Mr. Parry is undertaking a research project as part of the requirements for his M.A. Thesis.

He proposes to visit your office in the course of the Summer, at which time, he would like to check certain supervisory reports and records.

This project has official approval and while individual participation by officers of the Parole Service is purely voluntary, it will be greatly appreciated if you will make available for inspection by Mr. Parry, the records and reports which he requires.

J.H. Leroux.

JHL/gmcb

Dear

I am presently a research assistant at the University of Ottawa, Centre of Criminology, and am on extended leave of absence from the National Parole Service. Prior to returning to the university, I worked for slightly over two years in the Calgary office. The purpose of this letter is to solicit your participation as a part of the sample necessary for the completion of my M.A. thesis.

You have been picked as a part of a sample of parole officers with the National Parole Service who have had at least one year of service. The study will attempt to determine what, if any, relationship exists between supervising parole officers and the parolees with whom the officers have dealt in the past or have been dealing with for six months or longer. A statistical analysis will be conducted under the supervision of Dr. J.B. Garner of the Centre of Criminology, University of Ottawa, using the results of a psychological test which the officers will be asked to complete together with information from the headquarter's file of the supervised parolees.

In order that absolute confidentiality may be guaranteed all names will be converted into a number code in order that no individual or location may be identified. No individual results will be available to the National Parole Service, although the completed study will be available. Completion of the test should take 45-60 minutes.

As you can no doubt appreciate, there are relatively few parole officers in Ontario who fit the criteria which are needed for this study. For this reason, and in order to allow for a reasonable statistical sample, it is very desirable that as many officers as possible participate. If, however, you feel apprehensive about some aspect of the outlined procedure, I would be pleased to provide further information on request, either by phone at the Ottawa district office, or by mail at the address indicated at the top of this letter.

Appendix 2 (cont.)

A coded card which bears the coded identification to be used throughout the analysis is enclosed together with a stamped envelope. I am prepared to see you at your office during the last two weeks in July, the final date depending on absences due to vacations etc., with respect to the completion of the psychological test. Please indicate on the enclosed card whether this would be convenient and forward the card to me as soon as possible.

I would encourage you to discuss this matter with your fellow officers, some of whom will no doubt have received a letter similar to this one. Any further comments you may wish to make will be appreciated.

Sincerely,

Gordon D. Parry

Appendix 3

2-20 Chapleau Ave.,
Ottawa K1M 1E2
Aug 25, 1972.

Dear

As you may recall, I was in contact with you by mail during the early part of July regarding your possible participation in the sample necessary for the completion of my M.A. thesis. I was asking that you volunteer to complete a psychological test which would then be submitted to a statistical analysis.

It had been planned to carry out this testing during the last week in July and the first week in August however due to my being involved in a minor car accident, this was not possible. It proved impossible to make further arrangements during the summer due to holidays .

Many of you indicated a willingness to participate and I will assume that this willingness is still valid. I have assumed that those who did not reply were not interested in participating. I now expect to be in your office September 1972. Should you have a change of heart, one way or the other, please feel free to express this to me when I visit your office.

I trust that this will be satisfactory to you. Should you have any questions , I may be reached at the above address or at 992-4277 in Ottawa during the day.

Sincerely,

Gordon D. Parry

A1234

Convenient: Yes _____ No _____

Alternative Date:

Comments:

Appendix 5Parole Officer Biographical Data

A. Educational Experience.

1. Less than B. A. - university training or less in any field.
2. Bachelor's - Bachelor's degree in any field plus any additional training short of a Master's degree.
3. Master's - Receipt of the Master's degree in any field.
4. Any instruction during the years of formal education in counseling methods etc.

B. Previous Working Experience.

1. Divers unrelated - Previous full or part time experience in any field not directly related to correctional work or general counseling.
2. Counseling, Unrelated - Previous full or part time counseling in a field entailing counseling as a part of the duties but not correctional counseling.
3. Counseling, correctional. - Previous full or part time experience in corrections where counseling was part of the job description.

Appendix 5 (cont.)

C. Sex - Male or Female.

D. Marital Status

1. Single- not presently legally married or common law.
2. Married- legally married, and common law.
3. Separated- legally separate from a legal marriage.
4. Divorced- legally divorced from a legal marriage.

Appendix 6Parole Officers

A. Previous Educational Experience

- a) less than B. A.
- b) B. A.
- c) Masters

B. Number of Years of Formal Education

C. Field of Previous Educational Emphasis

D. Any Formal Counseling Instruction as a Part of Formal Education

yes	no
<hr/>	<hr/>

E. Previous Working Experience

- a) Divers, unrelated
- b) Counseling, Non-Correctional
- c) Counseling, Correctional

F. Number of Months of Previous Experience

- a) In Corrections
- b) Non-Correctional

G. Sex

- a) Male
- b) Female

H. Marital Status

- a) Single
- b) Married (including C/L)
- c) Separated (including C/L)
- d) Divorced (from formal marriage)

I. Number of Months employed with U. P. S.

Appendix 7Parolee File Data.

A.	P. P. S. No.	_____
B.	Date of release on Parole	_____
C.	Termination date on Parole	_____
D.	Aggregate sentence	_____
E.	Date of any intervention	_____
F.	No. of previous Convictions	_____
	Summary	_____
	2 tr. max.	_____
	5 yr. max.	_____
	10 yr. max.	_____
	14 yr. max.	_____
	Life	_____
G.	Present Conviction	_____
	Non-violent prob.	_____
	Person	_____
	-----	_____
	Violent prob.	_____
	Person	_____
H.	Length of time incarcerated, admission to parole (admission date)	_____
I.	Date of birth	_____
J.	No. of months on Parole	_____

Appendix 8

The descriptions following are taken from Gough (1957) and Gough (1968) and refer to the subscales of the California Psychological Inventory.

Do The Dominance scale of the CPI was developed to identify individuals behaving in a dominant, ascendant manner, taking initiative in interpersonal situations and being seen as forceful, self-confident and capable of influencing others. Gough suggests that neither high scoring males or females are the kind of person before whom one would admit weakness or personal shortcomings. High scoring males are seen as ambitious, dominant, forceful, optimistic, planful, resourceful, responsible, self-confident, stable and stern. Low scoring males are described as apathetic, indifferent, of narrow interests, irresponsible, pessimistic, restless rigid, reckless, susceptible and submissive.

Cs The Capacity for Status scales attempts to identify qualities of ambition and self-assurance which underly and lead to status. Status refers to the relative level of power and prestige attained in one's sociocultural milieu. High scoring males are seen as discreet, forgiving, imaginative, independent, secure, opportunistic, pleasant, unassuming, and positively self-reliant. Low scoring males are seen as bitter, gloomy, socially avoiding, narrow interests, sensitive, resentful, restless, touchy

and unkind.

2y The Sociability scale is intended to identify persons of outgoing, participative temperament. High scorers are seen as clever, confident, of wide interests, logical, mature, outgoing, reasonable, resourceful, self-confident and sociable. Low scorers are seen as bitter, cold, complaining, non used, hard hearted, of narrow interests, quitting, shallow and unkind.

2z Items for this scale were chosen to embrace behaviors involving social noise, verve and spontaneity. High scoring individuals are seen as adventurous, of wide interests, pleasure seeking, relaxed, self-confident, uninhibited, unconventional, uninhibited, cautious, cooperative, of narrow interests, kind, unceremonious, patient, and ingenious and shy.

3a The Self Acceptance scale seeks to identify those with a comfortable and identifiable sense of personal worth and who would be seen as sure of their lives whether passive or active in social behavior. High scorers tend to be seen as confident, extroverting, optimistic, imaginative, participative, outgoing, bold, self-confident, self-assertive and sophisticated. Low scorers are seen as bitter, nonverbal, of narrow interests, quitting, reckless, submissive, tense, unskillful, withdrawn and self-denial.

3b The Self Being scale attempts to identify those who place an excessive emphasis on personal problems and are often self-

iments. Higher scores should indicate a sense of good health and feeling of being equal to the demands for time and energy which are encountered in everyday social living. Low scorers, on the other hand, should indicate a diminished reserve of energy and feelings of hesitation and unwillingness when faced with personal demands. High scorers tend to be seen as conservative, dependable, dependent, good natured, inhibited, logical, pleasant, poised, praising, relaxed and sincere. Low scorers are described as anxious, bluntery, distractible, forgetful, hurried, impulsive, mischievous, quitting, shallow and restless.

Re The Responsibility scale is intended to identify those who are articulate about rules and order, and who believe that "life is best if governed by reason". High scoring males are seen as capable, conscientious, dependable, reasonable, reliable, responsible, steady, serious, stable and thorough. Low scorers are seen as careless, disorderly, forgetful, irresponsible, lazy, mischievous, pleasure seeking, reckless, show off, and spend-thrift.

So The Socialization scale attempts to identify people along a continuum of socialization ranging from original types to thoroughly rule respecting and socially conforming people. High scorers are said to be aware of the feelings of others and to be in tune with social requirements. High scorers are described as adaptable, efficient, honest, inhibited, kind, organized,

reasonable, sincere, thorough and wholesome. Low scorers are seen as being unreceptive to the needs of others, "little guided by interpersonal nuances and given to rash and precipitative behavior".

Sc The Self-Control subscale attempts to assess the degree and adequacy of self-regulation and self-control and freedom from impulsivity and self-centredness. The high scorers on this scale are said to reflect over control, too much suppression of impulse and too great an involvement in the damping and restraint of individuality. High scoring males are seen as considerate, dependable, hard headed and self-centred. Low scorers are seen as conceited, fault finding, hasty, headstrong, impulsive, individualistic, self-seeking, spunky, temperamental, and unrealistic.

To The Tolerance scale is intended to reflect a continuum from humanitarian progressiveness at one end to hostility and detachment at the other. High scorers are seen as forgiving, generous, good natured, independent, informal, pleasant, reasonable, soft hearted, thoughtful and unselfish. Low scorers are seen as affected, cold, egotistical, bossy, hard hearted, self-centred, shallow, thoughtless, whiny and fault finding.

Gi The Good Impression scale seeks to identify those who try too hard to present themselves in a favorable light on the one hand, and those who adopt either a highly compensating pattern of self-

identifying behaviors or a highly individualistic pattern of self-identifying behaviors on the other. High scorers are seen as adaptable, changeable, considerate, kind, self-denying, soft hearted, tactful, unselfish, warm and friendly. Low scorers are seen as complaining, dissatisfied, fault finding, hasty, headstrong, indifferent, nagging temperamental pessimistic and unkind.

Cq The Commonality scale attempts to identify those who answer in a random manner on the one hand, and to differentiate between modal and idiosyncratic responses on the other. High scorers are seen as cautious, conscientious, deliberate, efficient, formal, organized, practical, responsible, thorough, and thrifty. Low scorers tend to be seen as attractive, careless, courageous, daring, distractable, forgetful, leisurely pleasure seeking, reckless and wasteful.

Ac The Achievement via Conformance scale is intended to identify those with strong needs to achieve, and who couple that need with a deep appreciation of structure and organization. These persons would tend to do well in situations in which performance is structured and the criteria of excellence are clearly specified. High scorers are seen as ambitious, capable, conscientious, considerate, intelligent, logical, mature, responsible, resourceful, and reasonable. Low scorers are seen as apathetic, distrustful, and hard hearted, irresponsible, distrustful, pleasure seeking,

reckless, rude, shallow, brittle, and snobbish.

Ai The Achievement via Independence scale tends to identify need for achievement which is channelled along independent, innovative, and self-actualizing lines. High scorers tend to be seen as farsighted, informal, intelligent, lazy, pleasant, rational, sarcastic, touchy, and versatile. Low scorers are described as affected, bossy, cautious, cool, conventional, fearful, frivolous, hesperly, sound and stern.

Ie The Intellectual Efficiency scale is intended to indicate the degree of personal and intellectual efficiency which the individual has obtained. The scale is said to be a reliable test of intelligence and a means to assess the capacity of an individual with which an individual is able to direct the efforts and apply his capabilities. High scorers are seen as capable, confident, efficient, farsighted, independent, intelligent, reasonable, self-controlled, sophisticated and effective. Low scorers are seen as a timid, cold, forgetful, irresponsible, overreactive, passive, suspicious, sensitive, and slow to adjust.

Iy The Psychological Independence scale tends to indicate the degree to which an individual is interested in and dependent on the ideas and opinions of others and is a measure of the individual's need for independence, self-reliance, and self-direction. High scorers are seen as independent, self-reliant, self-sufficient, and self-directed. Low scorers are seen as dependent, self-doubting, self-doubting, and self-doubting.

Fx The Flexibility scale attempts to identify those of flexible, adaptable or changeable temperament. High scorers are seen as easy going, fickle, independent, lazy optimistic, pleasure seeking, quick, sharp witted, spendthrift, and spontaneous. Low scorers are seen as determined, efficient, hard headed, organized, planful, practical, stubborn, stolid and thorough.

Fe The Femininity scale attempts to differentiate males from females, distinguish between deviant and sexually normal persons, and to define a continuum of behaviors which could be described as masculine at one end and feminine at the other. High scorers were seen as appreciative, complaining, feminine, formal, meek nervous, self denying, sensitive, weak, and worrying. Low scorers were seen as adventurous, aggressive, clear thinking, daring impulsive masculine, outgoing, pleasure seeking, show-off, and strong.

Anxiety High scorers are seen as erratic, conflicted and self-centred in their dealings with others, and as demonstrating diverse signs of difficulty in social situations.

Leadership

High scorers are seen as able individuals (rational, logical and clear thinking) and as being dominant and self-confident at the same time as being egotistical and apt to behave in an aggressive and demanding manner. Low scorers tend to be seen as cautious, withdrawn and submissive, patient, peaceable, and cooperative.

Social Maturity

Seeks to identify people who can live comfortably with others, who can respond to stress and, if necessary rise above the mores of institutionalized social controls. Low scorers would not be in harmony with the mandates of the culture but may well not be able to put them aside if they become destructive or illegitimate.

Appendix 9

The calculation of the refined criterion took into account the age of the offender at the time of his release on parole, the length of his parole, the number of previous convictions he had and whether the most recent offence for which he was against property or persons.

here "incident" refers to a parole revocation or forfeiture, and t refers to time in months,

$$\text{Pr}(\text{exactly } x \text{ incidents in time } t) = \frac{(\lambda t)^x}{x!} e^{-\lambda t}$$

which follows Poisson's distribution with parameter λt .

If the probability of there being a revocation or forfeiture and there not being a revocation or forfeiture equals one,

$$\text{Pr}(\text{no incidents in time interval } (0, t)) = e^{-\lambda t}$$

$$\text{and } \text{Pr}(\text{at least one incident in time interval } (0, t)) = 1 - e^{-\lambda t}$$

which by differentiation gives

$$\text{Pr}(\text{failure in time interval } (t, t + \Delta t)) = \lambda e^{-\lambda t} \Delta t$$

This assumes that the probabilities of failure to revocation are occurring in non-overlapping time intervals and that the probabilities per time period remain constant, i.e. given λ over the entire range of the time periods examined.

In our case it was decided that there should be a six month minimum (t_0) period of supervision provided to the individual parolee by his parole officer before the outcome of that parolee

attached to the parole officer's supervision record. The reasons for this are outlined in the text.

Here T refers to the time to the first incident,

$$\begin{aligned}
 & P_r (t < T \leq t + \Delta t \mid T > t_0) \\
 &= \frac{P_r (T < T \leq t + \Delta t) \text{ and } (T > t_0)}{P_r (T > t_0)} \\
 &= \frac{P_r (T < T \leq t + \Delta t)}{P_r (T > t_0)} \quad \text{if } t > t_0 \\
 &= 0 \quad \text{if } t < t_0 \\
 &= \frac{\lambda e^{-\lambda t} \Delta t}{e^{-\lambda t_0}} \\
 &= \lambda e^{-\lambda(t-t_0)} \Delta t
 \end{aligned}$$

$$\begin{aligned}
 & P_r (\text{failure in time interval } (t_i, t_i + \Delta t_i \mid T > t_0)) = \lambda e^{-\lambda t_i} \Delta t_i \\
 & P_r (\text{survivor at time } T_j \mid T > t_0) = e^{-\lambda(T_j - t_0)}
 \end{aligned}$$

... at the outcome of each observation, the probability of survival at time t_i is $e^{-\lambda(t_i - t_0)}$. The joint probability (likelihood) for the sample is

$$\begin{aligned}
 & \prod_{i=1}^n \lambda e^{-\lambda(t_i - t_0)} \Delta t_i \quad \prod_{j=1}^m e^{-\lambda(T_j - t_0)} \\
 &= \lambda^n e^{-\lambda \left\{ \sum_{i=1}^n t_i + \sum_{j=1}^m T_j - (n+m)t_0 \right\}} \prod \Delta t_i
 \end{aligned}$$

The log likelihood is

$$l = n \ln \lambda - \lambda \left\{ \sum_{i=1}^n t_i + \sum_{i=1}^m \tau_i - (n+m)t_0 \right\} + \text{constant}$$

and maximizing l and assuming λ is a constant then

$$\hat{\lambda} = \frac{n}{\left\{ \sum_{i=1}^n t_i + \sum_{i=1}^m \tau_i - (n+m)t_0 \right\}}$$

denotes the maximum likelihood estimate for λ .

Supposing now that λ is a function of independent variables x_1, x_2, x_3, \dots , and taking the exponent of a linear combination of these independent variables to ensure that the failure rate is positive

$$\ln \lambda = \alpha_0 + \alpha_1 x_1 + \alpha_2 x_2 + \alpha_3 x_3 + \dots$$

Since x was taken to be equal the sample was split into groups on the variables x_1, x_2, x_3, \dots , and plotted against $\ln \lambda$ from $\hat{\lambda}$ above to check the linearity of the regression. From this it was decided;

- to analyse the failure rate of persons with last offence against property separately from those persons with first offence against property.
- x_1 was taken as 10 (age - 17.5)
- x_2 was taken as 10 (no. of previous convictions + 0.5)
- x_1, x_2 were used to construct the regression set for x_1 and x_2 which appeared to be present.

The following regression equations were obtained:

A. $\lambda = \exp \left[-3.24 \ln(\text{age} - 17.5) + 1.68 \ln(\text{no. of previous convictions} + 0.5) - 0.40 \ln(\text{age} - 17.5)(\text{no. of previous convictions} + 0.5) \right]$
for last offence against property.

B. $\lambda = \exp \left[-2.73 - 0.55 \ln(\text{age} - 17.5) + 0.28 \ln(\text{no. of previous convictions} + 0.5) - 0.026 \ln(\text{age} - 17.5)(\text{no. of previous convictions} + 0.5) \right]$
for last offence against persons.

For each parolee we found the probability of failure over the time at risk conditional on the information that he had been successfully paroled for six months.

$$\begin{aligned} & \Pr \{ \text{failure in time } t \mid \text{no failure in time } t_0 \text{ (or 6 months)} \} \\ &= 1 - \Pr(\text{no failure in time } t \mid t > t_0) \\ &= 1 - e^{-\lambda(t-t_0)} \end{aligned}$$

where λ is the explicit value of the parameter given by the parolees record and expression A. or B.

If p_i denotes the conditional probability of failure for the i th member of a parole officer's caseload, then the expected probability of failure of this parolee is p_i . For each parole officer we formed the standardized statistic.

$$Z = \frac{\text{Expected no. of failures (or } \sum p_i) - \text{observed no. failures}}{\sqrt{\text{The variance of the expected no. of failures or } \sum p_i(1-p_i)}}$$

Appendix 10

VARIABLE MEANS:

28.57692308 23.19230769 37.30769231 20.88461538 30.03846154 35.20923077 24.57692309 28.03846154 22.65384615

VARIABLE STANDARD DEVIATIONS:

5.407779844 4.385458758 5.566170005 3.785873775 4.300900066 5.034927111 3.3760910 4.237931001 3.741064304

SUM OF SQUARES AND CROSS-PRODUCTS MATRIX:

760.3461538	393.1153846	481.3846154	350.7307692	211.4230769	109.0384615	19.34615385	71.42307692	147.8076923
393.1153846	500.0384615	430.4015385	303.5700231	149.0076923	29.05384615	4.115384615	150.8076923	135.2692308
481.3846154	430.4015385	805.5384615	373.0230769	104.0076923	1.046153846	10.01538462	79.69230769	95.23076923
350.7307692	323.5769231	373.0230769	372.6538462	60.11538462	54.00769231	73.26923077	173.1153846	107.0384615
211.4230769	148.8076923	64.30769231	60.11538462	40.0615385	182.7307692	197.4230769	212.9615385	115.3461538
109.0384615	29.65384615	1.046153846	54.00769231	182.7307692	59.1153846	130.9615385	338.7307692	38.42307692
19.34615385	4.115384615	10.01538462	73.26923077	197.4230769	130.9615385	296.3461538	88.42307692	171.1923077
71.42307692	150.8076923	79.00230769	173.1153846	312.0615385	338.7307692	89.42307692	466.9615385	86.34615385
147.8076923	135.2692308	95.23076923	107.0384615	115.3461538	38.42307692	171.1923077	20.04615385	308.8846154

VARIANCE-COVARIANCE MATRIX:

29.24408284	15.11982249	18.5147929	13.48904407	8.131656805	4.193786982	7.7440828402	2.74704142	5.684911243
15.11982249	19.23224852	10.55621302	12.44526627	5.723372781	1.140532544	1.582840237	5.800295858	5.202662722
18.5147929	10.55621302	30.08224852	14.0816508	2.473372781	7.100591716	1.0390532544	3.065088757	3.602721893
13.48904407	12.44526627	14.0816508	14.33284024	2.542890408	2.107988106	2.612047337	6.058284024	4.116863905
8.131656805	5.723372781	2.473372781	2.542890408	12.49852071	7.028106509	7.593195266	8.190828402	4.436390533
4.193786982	1.140532544	7.100591716	2.107988106	7.028106509	25.05059172	5.036922249	13.02810651	1.477810651
7.7440828402	1.582840237	1.0390532544	2.612047337	7.593195266	5.036922249	11.39792899	3.400887574	6.584319527
2.74704142	5.800295858	3.065088757	6.058284024	9.150228402	13.02810651	3.400887574	17.96005917	3.321005917
5.684911243	5.202662722	3.602721893	4.116863905	4.436390533	1.477810651	6.584319527	3.321005917	13.99550213

CORRELATION MATRIX:

1.00000	0.63754	0.01509	0.05828	0.34001	-0.15402	0.04075	0.11986	-0.28100
0.63754	1.00000	0.07224	0.74052	0.30342	0.05105	0.01069	0.31209	-0.31711
0.01509	0.07224	1.00000	0.08247	-0.10331	0.00253	-0.03400	0.12993	-0.17589
0.05828	0.74052	0.08247	1.00000	0.15010	0.11058	-0.00007	0.41499	-0.29067
0.34001	0.30342	-0.10331	0.15010	1.00000	0.02454	0.50000	0.44007	0.27571
-0.15402	0.05105	0.00253	0.11058	0.02454	1.00000	0.00000	0.01057	0.07845
0.04075	0.01069	-0.03400	-0.00007	0.50000	0.00000	1.00000	0.19750	0.02131
0.11986	0.31209	0.12993	0.41499	0.44007	0.01057	0.19750	1.00000	0.20946
-0.28100	-0.31711	-0.17589	-0.29067	0.27571	0.07845	0.02131	0.20946	1.00000

Appendix 10 (cont)

INVERSE OF CORRELATION MATRIX :

004.6108	001.5004	-002.6003	-001.7175	-000.7010	001.7102	-000.6754	-000.0241	001.7856
001.5004	004.5538	-002.7159	-001.6960	-002.2943	001.3067	-000.5972	-000.5570	001.8529
-002.6003	-002.7159	005.0179	-000.0805	003.2447	-001.4420	-000.4544	000.7670	-001.6931
-001.7175	-001.6960	-000.0805	004.7857	000.2591	000.4664	-001.0250	-001.2741	-000.4005
-002.7010	-002.2943	003.2447	000.2591	004.2125	-001.3626	-000.6601	-000.0530	-001.5610
001.8102	001.3067	-001.4420	-000.4664	-001.3626	002.6287	000.0059	001.2542	001.3476
-000.6754	-000.5972	-000.4544	001.0250	-000.6661	-000.6950	002.4026	000.0000	-001.0350
-000.0241	-000.5570	000.7670	-001.2741	-000.0530	001.3643	000.0000	002.6411	000.8501
001.7856	001.8529	-001.6931	-000.4005	-001.5610	001.3476	-001.0350	-000.8501	002.7182

BETA WEIGHTS:

B Do	-0.168
B Sy	0.077
B Sp	0.204
B Sa	0.099
B Re	0.360
B So	0.035
B To	-0.336
B Ac	0.144
B Ai	-0.103

R² 0.281

r 0.53

F 0.693

Note. All matrix entries are, by rows, Do, Sy, Sp, Sa, Re
So, To, Ac, Ai.

Appendix 11

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VARIABLE MEANS:

20.88461538 28.03846154 22.65384615 32.57692308 2.762703077

VARIABLE STANDARD DEVIATIONS:

3.785873775 4.237931001 3.741064304 44.54744496 2.47788273

SUMS OF SQUARES AND CROSS-PRODUCTS MATRIX:

372.6538462	173.1153846	-107.0384615	-506.2692308	-37.12080077
173.1153846	466.9615385	86.34615385	666.4230769	47.65982692
-107.0384615	86.34615385	363.8846154	1404.192308	-6.213612308
-506.2692308	666.4230769	1404.192308	51596.34615	590.3549738
-37.12080077	47.65982692	-6.213612308	590.3549738	159.6374735

VARIANCE-COVARIANCE MATRIX:

14.33284024	6.658284024	-4.116863905	-19.47189349	-1.427723107
6.658284024	17.96005917	3.321005917	25.6316568	1.833070266
-4.116863905	3.321005917	13.99556213	54.00739645	-2.389850888
-19.47189349	25.6316568	54.00739645	1984.474852	22.70596053
-1.427723107	1.833070266	-2.389850888	22.70596053	6.139902826

CORRELATION MATRIX:

1.00000	0.41499	-0.29067	-0.11545	-0.15219
0.41499	1.00000	0.20946	0.13576	0.17455
-0.29067	0.20946	1.00000	0.32406	-0.02578
-0.11545	0.13576	0.32406	0.99999	0.20570
-0.15219	0.17455	-0.02578	0.20570	0.99999

INVERSE OF CORRELATION MATRIX

001.6278	-000.8895	000.6684	000.0059	000.4190
-000.8895	001.5698	-000.5849	-000.0406	-000.4161
000.6684	-000.5849	001.4475	-000.3781	000.3189
000.0059	-000.0406	-000.3781	001.1789	-000.2442
000.4190	-000.4161	000.3189	-000.2442	001.1948

BETA WEIGHTS

B Sa	0.173
B Ac	0.308
B Ai	-0.310
B WkB	0.394
B Ms	-0.369

R^2 0.110

r 0.610

F 2.781 (df 5,20)

note. All matrix entries are, by rows, Sa, Ac, Ai, WkB, Ms, where WkB denotes the number of months previous employment in counseling work unrelated to corrections, and Ms denotes the number of months employed with the National Parole Service.