

**PERSONALITY CHARACTERISTICS**  
**OF**  
**DISHONEST PROPERTY OFFENDERS**  
—  
**IMPLICATIONS FOR REHABILITATION**  
**TRAINING**

JOE PASMORE  
and  
TERRY R DOREY

A Report on a Research Project funded by the  
Criminology Research Council.

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IMPLICATIONS FOR REHABILITATION  
TRAINING

by

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## ABSTRACT

Tyler and Kelly (1962) used personality for classification of juvenile offenders and for the prediction of outcomes in relation to rehabilitation programs. A number of researchers have established that rehabilitation training programs are more effective when based on a precise knowledge of client characteristics: Warren (1968), Moos (1975), Romig (1978) and Barkwell (1980).

In this study, which follows on from the work of Tyler and Kelly (1962), three categories of property offender were investigated: Robbery and Extortion; Fraud and Misappropriation; and Theft, Break and Enter. The personality profile of each offender category was compared with that of non-offenders and with that of prisoners whose offence fell into other than any of the above three categories.

The three hundred and eighty seven prisoners in Queensland participated in the study by completing the Cattell Sixteen Personality Factor Test (16P.F.), the Holland Vocational Preference Inventory (V.P.I.) and a questionnaire relating to criminal history, and demographic information. In addition, Prison staff rated 323 of the participating prisoners on nine, nine point scales relating to honest, dishonest, and other behaviour.

The data was analysed by means of discriminant, regression and factor analysis. Results indicate that significant personality differences exist among different categories of dishonest property offender, and also between each category of dishonest property offender, honest offence prisoners and non-offenders.

Variables found to be significant in discriminating among the categories of offender and non-offenders are: 16 P.F. variables A, B, C, G, I, Q2, Q3, and Q4. The V.P.I. Intellectual, Self-Control, Artistic, Realistic, and Enterprising scales also discriminated among offender and non-offender categories.

Results from the factor and regression analyses, which included ratings of prisoners by prison staff together with prisoner personality data and criminal history data, suggest that certain personality variables found in this study to be related to untrustworthy behaviour, are either not observed or not seen to be related to dishonesty.

It is suggested that the information on the categories of offender investigated, has implications for the design of effective treatment programs for these offender types. The next stage in assessing the utility of this research, is to evaluate the effectiveness of treatment programs which are based on the information on offender type obtained. Such evaluation results would have wider implications for methodology in the future design of rehabilitation training for other categories of offender.

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1.

## INTRODUCTION

### 1.1 General

"There are no simple answers to the question of rehabilitation versus punishment. A role of research may now be to pinpoint which kinds of offenders are most effectively dealt with through so-called punishment; which through rehabilitation; and which by merely being left alone" (Lewis, 1978).

Whatever view the reader takes, it seems apparent that neither the incidence of crime, nor significant reductions in the level of recidivism have occurred, irrespective of which "correctional" philosophy is applied. Perhaps the answer does lie in the best mix of the approaches suggested above!

Prisons are - whether we like it or not - highly formalised organisational structures wherein efficiency is maintained by routines and adherence to rules. Often, a prisoner's suitability to rejoin society is judged on his or her compliance to those factors which ensure a non-chaotic environment, rather than on the personal qualities and attitudes of the offender.

Throughout the literature, there seems to be an underlying assumption that any increase in rehabilitative programs results in a less orderly environment. Cressey (1970) claims that individual treatment of offenders would result in the integrative and coordinated aspects of institutions being broken down. Anderson (1982) reduces the role of prisons to the equivalent of isolation wards:

".... miracles should no longer be expected, whether miraculous reformation of inmates or miraculous control of crime. Prisons are for temporarily isolating society's worst marauders. It is as simple and as complicated as that ...."

The authors are not as pessimistic. Admittedly, many rehabilitative attempts over the years have had limited impact. Researchers, and people designing and implementing programs, could be more critical of their methods and motives in promoting such activities within prisons. Most important is the acceptance of the fact that there is no general panacea. Not only are there intrinsic difficulties in designing and evaluating programs for offenders, but also in determining the effects of the institutional regime on the programs designed to reduce crime and recidivism.

Adams (1976), in a study of military A.W.O.L. first offenders and repeaters (recidivists) using MMPI profiles, suggested that strong personal disregard for social customs and mores is a significant factor of recidivism. The author also claimed that

incarceration tended to increase anti-social attitudes and reinforce recidivist behaviour.

A survey by the Warwickshire County Council, Social Services Department, England (1978) of juvenile property offenders, showed a significant correlation between incarceration and recidivism when compared to offenders engaged in diversionary programs.

However, appropriate training, as Pierson et al (1966) found, may significantly shift juvenile delinquent behaviour in a more favourable direction.

### 1.11 Offending and Personality

Eysenck (1964) asserted that generally criminals are extroverted and poorly conditioned. His theory of deviance is that there are "... certain similarities between people who transgress against the rules of their society, whether formalised or not ...". In 1970, Eysenck expanded his two factor theory of neuroticism and extroversion, to include psychoticism. These three factors became the cornerstone of his basically biological interpretation of criminality.

The Minnesota Multiphasic Personality Inventory (M.M.P.I.) has also been used widely in the assessment of offenders. Gearing II (1979) reviewed seventy-one studies, and although capable of indicating a specific type of violently aggressive behaviour, the test - at best - shows some promise in relation to recidivism, homosexuality and psychopathic behaviour. The author predicts though, that the M.M.P.I. "... may someday prove to be an indispensable factor in the creation of more effective rehabilitative approaches to correctional practice ...." (p. 959). Quinsey et al (1980) did not find the test useful in discriminating between offence types of mentally disordered offenders.

Carlson (1981) after fruitlessly searching for psychological tests of particular relevance to offenders, developed the Carlson Psychological Survey (C.P.S.) consisting of four content areas: chemical abuse, thought disturbance, antisocial tendencies and self depreciation. When compared with the M.M.P.I., an unexpectedly low correlation between antisocial tendencies and the M.M.P.I. scale Pd emerged. The author accounts for this difference by virtue of the fact that the C.P.S. content area deals with assaultiveness, criminal behaviour and respect for others, whereas the Pd scale refers basically to concerns about parents and love.

Further studies of non-specific delinquency were carried out by McQuaid (1970) and Pasmore (1983). Both researchers use Cattell's High School Personality Questionnaire. Both studies suggest that delinquents tend to: lack internalised standards of conduct (G-), be anxious excitable and restless (Q4+), overly dependent on peers and easily lead (Q2-), and immature and emotionally over-dependent (I+). Trends on relative intelligence,

lower for the delinquent group (B-), were in the same direction in both studies but failed to reach significance in the Pasmore study. Factors appearing in one study but failing to reach the .01 level of significance in the other are; obstructive individualism (J+), cool aloofness (A-), guilt-proneness (O+), timidity (H-), depression (P-), low self-assertiveness (E-), and excitable over-activity (D+). These studies reaffirm differences in personality patterns between offenders and non-offenders.

Hoghghi and Forrest (1970) administered the Junior Maudsley Personality Inventory and the Junior Eysenck Personality Inventory to 1,000 boys aged between eleven and seventeen years. All were recidivists, 96 percent of whom were primarily property offenders. The findings illustrated that young repetitive offenders were more introverted than control subjects. The correlation between delinquent behaviour and extroversion was poor.

Because of the predominantly non-specific approach to the study of offenders, various training programs both within prison environments and the community tend to reflect broad based treatment models.

The Californian Community Treatment Project for juvenile offenders produced data which was studied by Palmer (1969) and Warren (1969, 1972), who found that beneficial effects of the program on certain clients were cancelled out by detrimental effects of the same program on others.

Rudolph Moos (1975) has looked at different outcomes to treatment in relation to the type of delinquent and Kiesler (1971) suggests relating competencies and style of the therapist to the type of psychological problem of the client.

In the assessment of offenders therefore, both the non-specificity of offender types and the reliability and predictability of various measures of personality characteristics pose problems for the researcher.

#### 1.12 Property Offenders and Personality

There has been limited research in the area of personality aspects of property offenders and subsequent recidivism.

A survey conducted by Belson (1976) highlighted the fact that by the age of seventeen most boys have indulged in stealing or other dishonest behaviour. The motives for this behaviour are broad e.g. peer pressure, idolness, and the search for excitement.

Aronson and Mettee (1968) found dishonest behaviour and lack of self esteem to be related, while Terris and Jones (1982) suggest that dishonest persons tend to spend considerable time contemplating ways in which it would be possible to steal, to attribute a high level of dishonesty to others who have the opportunity, and to suggest lenient punishment to those convicted of crimes involving dishonesty.

Romney et al (1980) studied two different types of property offenders, comparing offenders imprisoned for fraud with a group imprisoned for other property crimes. A sample of college students ie. non-offenders was included. In contrast to other property offenders, fraud offenders were found to be better educated, more intelligent, more religious, and higher in self-esteem. The elements which predominated among fraud offenders included a 'wheeler dealer' personality, a belief that they could beat the system and a lack of a concrete set of personal ethics. They also indulge in rationalization of contradictory behaviour. Interestingly, no significant difference was found between the fraud group and the college group.

Earlier, McCall and Gagan (1974) surveyed three groups of probationers - forgers, burglars and car thieves. Forgers tended to be more friendly, cooperative, older, yet less truthful, presenting a facade of adjustment. The researchers suggested that the most effective method of treatment "... calls for acceptance, support, realistic expectations, and counselling skill in facilitating confrontation of real problems ...."

Jorm (1977) studied psychoticism, extroversion and neuroticism scores of various types of offenders, held at a minimum security prison in New South Wales. The 116 prisoners were administered the PEN inventory (Eysenck and Eysenck, 1968) and the Lie Scale items from Form B of the Eysenck Personality Inventory. Of particular interest are the following findings:

(1) No statistically significant difference was found between prisoners convicted of property offences compared with those convicted of offences against people;

(2) Within the property offences, no difference was found whether violence - either to property or person - was, or was not, used.

The study which was broader however than property versus non-property offenders, did indicate the heterogeneity of offenders in regards to personality variations between types of offenders.

Some of the problems associated with the apparent poor outcome of rehabilitative efforts, may be linked to the type of research that has involved recidivism. Generally, it has not dealt with specific offender types, but has tended to compare offenders as a total group with non-offenders. Even where specific types of offending have been investigated, with few exceptions, no use has been made of broad-spectrum personality measures as a means of understanding specific offence types. The exceptions have been isolated and have tended to differ in approach and in their findings.

Consequently, little attempt has yet been made to design rehabilitation training programs to meet the needs of specific offender groups on, the basis of experimental analysis of



personality.

Barkwell (1980) outlines a differential treatment program, the Winnipeg-St. Boniface Probation Study, and shows that treatment of delinquents which was tailored to the Jesness (1970, 1971) Interpersonal Maturity Level Classification System (I-Level), was significantly more successful than were either medium intensity casework or minimal supervision treatment. While the I-Level Classification postulates seven successive developmental stages of maturity, and may be useful for treatment purposes, it may well be possible to classify the offenders by type of offence which may be indicative of "gaps" in learning that are more specific than those shown by the I-Levels. Such classification may be just as useful in determining treatment as are I-Levels, more appropriate for adult offenders, and more convenient in the case of convicted offenders since the information is already available.

While the work of Megargee and Bohn (1979) and their development of a computer program, which classifies the M.M.P.I. profiles of criminal offenders into 10 Sub-Types, has had utility in the placement of inmates within prisons, this work does not appear to be finely enough focused to look at specific types of offences (e.g. property offences involving dishonesty).

Tyler and Kelly, as far back as 1962 did look at specific types of delinquent behaviour when they used the Cattell (1969) High School Personality Questionnaire (H.S.P.Q.) as a predictor of institutionalised delinquents, in order to lead eventually to a classification for treatment purposes. They found that delinquent youths, rated by camp counsellors as lying and untrustworthy, to be low on H.S.P.Q. Cattell variables A and Q2 and to be high on variable O. These three variables are found not only in the H.S.P.Q. but also in the 16 P.F. Test.

Both of these studies have gone some way towards using personality information to guide decision making in the correctional field, but neither study goes as far as is desirable in this direction. It was, therefore, decided to follow on from where the work of Tyler and Kelly (1962) and Megargee and Bohn (1979) left off, using broad-spectrum tests of personality to provide a profile of general personality variables.

In almost any other field of human endeavour, be it industrial development, agriculture or commerce, extensive research precedes the implementation of projects or programs, and research continues to monitor their progress throughout their life. There is no sound reason why research should not be similarly utilised in the correctional field.

Biles (1978), draws attention to the extent to which developments in the intellectual or scholarly area, and in the world of ideas, have taken place in the area of the prevention of crime and the treatment of offenders. But, "... notwithstanding these dramatic developments in criminological ideas and

information, there is little evidence to suggest that practical correctional work has forged ahead to anything like the same degree."

2.

## RESEARCH DESIGN

2.1

### RATIONALE

This study is an attempt to redress the lack of precise research in the criminological area. It focusses on the development of training programs for specific types of property offender, based on findings of personality testing and demographic information.

The personality measures chosen for this study were the Cattell Sixteen Personality Factor Test (16 P.F. Test) and the Holland Vocational Preference Inventory (V.P.I.). The 16 P.F. Test was chosen as a general measure of personality while the V.P.I. was chosen as an alternative measure of personality and as an indicator of vocational interests.

Holland J.C. (1975) states:

"The V.P.I. was developed primarily to assess personality. The evidence indicates that it provides a broad range of information about a person's personality traits, values and competencies and coping behaviour. At the same time the evidence also indicates that the V.P.I. is useful for assessing (1) vocational interest, .....(2) Personality types in a theory of careers and (3) stimulating occupational exploration..."

It has been pointed out earlier that most training programs for offenders tend to be general in nature. Romig (1971) has shown, that with few exceptions, training programs have been ineffective.

The few training programs that have been found to be effective, have been targeted as specific behaviours and have taught specific skills or coping strategies or have in some way been targeted at the client's need or developmental level.

It follows from these findings that there is likely to be utility in targeting prisoner training programs to specific behaviour and personality characteristic of categories of offender.

This then raises the problem of the optimal degree of specificity to employ in such a training course.

For example, the question could be asked as to whether it would be more effective to design a course targeted at all prisoners whose offence involves dishonesty, or to have separate courses designed for a specific class of offence such as Theft, Break and Entering or whether even more specific behaviour

patterns need to be targeted.

If classification is to be done on the basis of personality, it seems advisable to choose the degree of specificity of the groups to be targeted, only after considering the degree of success with which it is possible to discriminate in terms of personality, among offender groups.

The three general Australian Bureau of Statistics offence categories which involve dishonesty are, (1)Fraud and Misappropriation, (2)Robbery and Extortion, and (3)Theft and Break and Entering.

In order to try to differentiate, personality-wise, between different types of dishonest offenders it would be useful to see firstly, if it is possible to discriminate between offenders of more specific types of dishonest offence and other offence prisoners. If it is possible to discriminate significantly, then comparing the discriminant function between different types of dishonest offenders should be helpful in understanding the etiology of each type of offence and in planning the treatment for such offenders.

The difference in significance levels and in the ability of the discriminant function to correctly classify cases to their respective groups, should tell something about the effectiveness of the discrimination.

For the purposes of this study, prisoners who reported ever being convicted of one or more of the following offences, Robbery and Extortion, Fraud and Misappropriation, Theft - Breaking and Entering were grouped together and regarded as "Dishonest Property Offenders."

The Australian Bureau of Statistics Uniform Offence Classification - Queensland, puts offences involving dishonesty in three major categories as follows:-

3. ROBBERY AND EXTORTION

- 311 Robbery with major assault
- 312 Robbery with minor assault
- 313 Robbery, armed
- 314 Robbery, other unspecified
- 321 Extortion and blackmail

4. FRAUD AND MISAPPROPRIATION

- 411 Embezzlement by employee
- 412 Embezzlement by trustee, partner etc.
- 421 Currency offences (forgery and uttering)
- 422 Valueless cheques (forgery and uttering)
- 423 Bank card and credit card (forgery and uttering)
- 424 False pretences
- 425 Forgery and uttering (n.e.c.)
- 429 Fraud (n.e.c.)

5. THEFTS, BREAK AND ENTERS ETC.

- 511 Stealing and unlawfully using a motor vehicle (incl. boats)
- 521 Stealing from the person (pickpocketing)
- 531 Stealing livestock (incl. unlawful use)
- 532 Shoplifting
- 539 Other stealing
- 541 Unlawful possession of livestock (incl. branding, killing for private gain, etc.)
- 542 Other unlawful possession of property
- 551 Receiving stolen property
- 561 Burglary and housebreaking - B.E. and S. (dwelling)
- 562 Breaking and entering a dwelling with intent
- 571 Break, enter and steal - other buildings
- 572 Break and enter other building with intent

## HYPOTHESES

The following hypotheses arose from the above consideration or were generated after considering results of some of the earlier analyses in this study.

## Ho 1

- (a) On the basis of 16 PF test variables, it is not possible to discriminate between the following groups: Prisoners reporting convictions of Dishonest Property Offences and other participating prisoners.
- (b) More specifically, in the case of the rejection of Ho 1(a), the inclusion of the following 16 PF variables does not significantly add to the discrimination between groups.
  - (i) 16 pf variable A
  - (ii) 16 PF variable O
  - (iii) 16 PF variable Q2
- (c) On the basis of the 16 PF Test variables it is not possible to discriminate between prisoners reporting convictions of Fraud and Misappropriation, and other participating prisoners.
- (d) On the basis of 16 PF variables it is not possible to discriminate between prisoners reporting convictions of Robbery and Extortion, and other participating prisoners.
- (e) On the basis of 16 PF variables it is not possible to discriminate between prisoners reporting convictions of Theft and Break and Entering, and other participating prisoners.

## Ho 2

- (a) On the basis of V.P.I. variables it is not possible to discriminate between prisoners reporting convictions of Dishonest Property Offences and other participating prisoners.
- (b) On the basis of V.P.I. variables it is not possible to discriminate between prisoners reporting convictions for Fraud and Misappropriation from other participating prisoners.
- (c) On the basis of V.P.I. variables it is not possible to discriminate between prisoners reporting convictions of Robbery, Extortion Offences and other participating prisoners.

(d) On the basis of V.P.I. variables it is not possible to discriminate between prisoners reporting convictions of Theft, Break and Enter Offences and other participating prisoners.

Ho 3

(a) On the basis of 16 PF test variables, it is not possible to discriminate among the following groups: Theft, Break and Entering Male Offenders, Honest Offence Male Prisoners, and Queensland Adult Male Non-prisoner Controls.

(b) On the basis of 16 PF test variables, it is not possible to discriminate among the following groups: Robbery, Extortion Male Offenders, Honest Offence Male Prisoners, and Queensland Adult Male Non-prisoner Controls.

(c) On the basis of 16 PF test variables, it is not possible to discriminate among the following groups: Fraud, Misappropriation Male Offenders, Honest Offence Male Prisoners, and Queensland Adult Male Non-prisoner Controls.

## 2.3

### METHOD

#### 2.31

##### SUBJECTS

Over five hundred inmates from Queensland Prisons responded to a circular letter from the Comptroller General Prison inviting them to take part in the study (see Appendix 1). Of these 456 inmates attended questionnaire completion group sessions. Sixty-nine of the inmates either did not complete the questionnaires or the questionnaires were adjudged to be invalid and were discarded leaving a sample of 387. This sample consisted of 9 females and 378 males.

#### 2.32 Data and Material

Data was gathered simultaneously for all analyses in the study. The prisoners completed three types of questionnaire:-

1. A Survey Questionnaire consisting of ten items on demographic information including age, marital status, self and family education, criminal history, number of children, family and social contact, and training received whilst in prison (see Appendix A2).
2. 16PF test (form A, 1967-8 EDITION R)
3. Vocational Preference Inventory

#### 2.33

##### Prison Staff Ratings

In addition prison staff rated 323 of the participating prisoners on nine, nine point scales on their learning ability, ability to trust staff, guilt feelings, likability, truthfulness, trustworthiness and ease of control (See Appendix Table A1).



## Procedure

2.41 Statistical Treatment

A total of eleven discriminant analyses, 5 regression analyses and a factor analysis were carried out on the data.

2.411 Discriminant Analysis Model

The program used was the Statistical Package for the Social Sciences (SPSS) Stepwise Discriminant Analyses - Wilks Method. This program was designed and programmed by James Tusczy of Vogelbach Computing Centre, North-Western University USA and William Klichka of University of Cincinnati.

This program, at each step, partitions variables into two groups - those entered into the discriminant function calculation and those excluded. Initially no variables are entered. The variable with the greatest contribution to the discrimination is entered and a discriminant function calculated. At the following step the next most important variable when partialled against those already entered is included and a new function calculated using the two variables. Each variable is selected for entry on the basis of the variable with the smallest Wilks Lambda value and which also maximizes the overall multivariate F rates for the test of differences between group centroids and the homogeneity within groups.

As a check, a number of the analyses were repeated using this program in the Direct rather than the Stepwise mode. In this mode all variables are initially included in the analysis.

2.412 Regression Analysis Model

The program used was the Statistical Package for the Social Sciences (SPSS), stepwise Regression Analysis by Jae-On Kim and Frah J Kahout of University of Iowa.

In the REGRESSION subprogram, the variables are entered in single steps from the best to the worst provided that they meet the statistical criteria established in the parameters set. The variable that explains the greatest amount of variance in the dependent variable will enter first; the variable that explains the greatest amount of variance in conjunction with the first will enter second, and so on. The independent variable which is chosen for entry is the one which has the largest squared partial correlation with the dependent variable. Variables which do not meet the statistical criteria as set in the parameter statement are not entered into the regression.

#### 2.413 Factor Analysis Model

The factor analysis model was from the Statistical Package for the Social Sciences and was written by Jae-On Kim of the University of Iowa. The model used was type PA1 which utilizes Varimax rotation.

#### 2.43 The Analyses

In analyses 1 the experimental group (DPO), involved dishonest property offenders. This group was a composite one which comprised Robbery, Extortion Offenders; Fraud, Misappropriation Offenders; and Theft, Break and Enterers. Prisoners who reported offences other than these acted as the control group (OOP).

It should be made clear that for the second, third and fourth analyses, group OOP included the two other categories of Dishonest Property Offender (e.g. for the second analysis, which used Fraud, Misappropriation Offenders (FMO) as the experimental group, group OOP included those members of the Dishonest Property Offenders Group who had been convicted of Robbery or Extortion and/or Theft, Break and Entering group but who had not been convicted of Fraud, Misappropriation Offences).

Analyses five to eight had groups identical to analyses one to four, the difference being that in each of these, V.P.I. data was used instead of 16 P.F. data used in analyses one to four.

In the the first eight discriminant analyses, the discriminant coefficients derived, were used to classify the cases used in the analysis, into groups. These results were checked against the actual groups to which the cases actually belong and the percentage correctly classified above that expected by chance reported in the results.

In analyses 1 to 8 the discriminant coefficients derived were also used on a separate validation sample and the percentage of cases correctly classified above that expected by chance also reported.

Analyses nine to eleven involved 2 groups of male prisoners and non-prisoner controls in a three group discriminant paradigm. Data for these three analyses was from the 16 P.F. Test.

Analyses twelve to seventeen were step-wise regression analyses using prisoner 16 P.F. data and prison staff ratings of prisoners.

Analysis eighteen was a factor analysis involving prison staff ratings of prisoners, prisoner demographic variables, offending rate variables and 16 P.F. Test data.

3.

First Discriminant Analysis  
(16PF Test - 2 Groups DPO, OOP)

3.1

Introduction

In arriving at Ho 1, note was taken that general training programs for offenders are ineffective and that there is a need to understand different classes of offender and "tailor" the treatment programs to meet the rehabilitation needs of specific types of offender (Romig 1971).

The question also arose from these deliberations as to how specific such a course would need to be and whether an effective course could be developed to deal with broad classes of offender or whether training needs to be offence specific.

This led to the question of whether, for example, those involved in dishonest property offences have sufficient in common, to benefit from a similar type of training.

Since personality theory postulates that personality mediates behaviour, it follows that personality profiles would possibly be one useful way of classifying offenders, which would not only be useful in developing categories but would also be helpful in understanding underlying motives for anti-social behaviour.

Such information on offenders would be helpful in finding, for example, whether dishonest property offenders as a group, have sufficient homogeneity personality-wise, for "dishonesty" to be regarded as a suitable basis for the classification of offenders for training purposes.

In order to try to answer some of the above questions, it was asked if it is possible to discriminate, on the basis of 16 P.F. personality, between dishonest property offenders and other offence prisoners.

As a further check of the usefulness of such a discrimination, it was deemed prudent to validate any prediction equation developed using another sample of prisoners, by seeing how effectively such an equation could correctly classify prisoners into dishonest vs honest categories.

### 3.11 Reported Personality of Untrustworthy Youth

Previous work by Tyler and Kelly (1962) found that delinquent youth in U.S.A. judged to be untrustworthy had personalities that tended to be:

- (1) low on Cattell variable A, which in the negative pole expresses itself in a reserved, cool, detached, and critical attitude and an interest in material things rather than people;
- (2) high on variable O - guilt proneness; and
- (3) low on variable Q2. Q2- is expressed by Group Dependency.

The above consideration led to Ho 1 (a) and Ho 1 (b) in Section 2.2.

## 3.2

### Method

#### 3.21 Subjects

For this analysis the group numbers were as follows:-

Group DPO (Dishonest Property Offenders) This group consisted of 216 male prisoners in prisons throughout Queensland and 5 female prisoners; n = 221.

Group OOP (Other Offence Prisoners) This group consisted of 114 male prisoners in prisons throughout Queensland and 4 female prisoners; n = 118

As there were no indications that the groups were greatly dissimilar on demographic variables, no attempt was made to control for variables other than dishonesty.

The validation group consisted of 47 males and 1 female representing all offence categories, selected from the same prisons as the other subjects. They were selected on the basis of the case number being divisible by 8.

#### 3.22 Material

Materials were as outlined in Section 2.32 (16 P.F. data was used in the analysis).

## 3.3

### Procedure

Procedure was as outlined in 2.41, 2.42 and 2.43.

Results (First Analysis)  
(16 P.F. Test - - 2 Groups: DPO, OOP)

The overall stepwise analysis discrimination was highly significant (Chi sq =21,62, df=7, p=.003). When the analysis was repeated using the direct rather than the stepwise method the overall results did not reach the .05 level of significance (Chi sq =23.60, df=16, p=.099).

The discriminant function coefficients derived in the prediction analysis were used to classify the cases used in that analysis and the other 48 cases in the validation paradigm. Classification of the cases in the prediction analysis was 22 percent above that expected by chance and in the validation condition 8.3 percent above that expected by chance.

For the stepwise analysis, Table 1.1 shows the order of entering of variables, Wilks' Lambda and the Significance level. As can be seen from the table the discrimination between groups became highly significant after the entry of 2 variables. The F statistics calculated after step 5 of the step-wise procedure was: (F5,333 = 3.86, p=.002). It will be noted that the inclusion of subsequent variables F and Q4 detract slightly from the discrimination.

Table 1.1

Summary Table - 2 Groups DPO, OOP

Step	Action		Vars In	Wilks' Lambda	Sig.
	Entered	Removed			
1	B		1	.980976	.0110 **
2	G		2	.967858	.0041 *
3	I		3	.957580	.0023 a
4	Q3		4	.951117	.0021 a
5	Q2		5	.945273	.0021
6	Q4		6	.940631	.0023
7	F		7	.937239	.0030

\* p < .05, \*\* p < .01

a Just failed to reach the .05 level of significance

- 3.41 The first variable to be entered was 16 PF variable B, intelligence. As can be seen from table 1.2 the dishonest property offender group (DPO) had a mean score of 3.99 while the other offences prisoners group (OOP) had a mean score of 3.53, suggesting that the dishonest property offenders were more intelligent on average, than other offences prisoners.

Table 1.2

16 P.F. Group Means - Groups DPO, OOP

Variable Name	Group DPO	Group OOP
A	4.21	4.34
B	3.99	3.53
C	4.37	4.50
E	5.18	5.10
F	4.86	4.56
G	4.72	5.04
H	4.82	4.91
I	4.58	4.29
L	5.05	4.83
M	4.38	4.37
N	4.80	4.89
O	5.03	4.97
Q1	4.87	4.82
Q2	5.23	4.86
Q3	5.84	6.14
Q4	4.96	4.95

DPO = Dishonest Property Offenders (n=256)

OOP = Other Offence Prisoners (n=131)

- 3.42 The next variable included was variable G. The group DPO (dishonest property offenders) had a lower mean score on this variable. Table 1.2 shows the mean for the DPO group to be 4.72 while the mean for the OOP group was 5.04, indicating the DPO group to be lower on Superego strength.
- 3.43 In the third step variable I was selected for inclusion. Table 1.2 shows the DPO group to be higher with a mean of 4.58 as compared with the OOP group mean of 4.29. This suggests that dishonest property offenders tend to be more sensitive and overprotected than other offence prisoners.
- 3.44 Variable Q3 was selected in the fourth step but just failed to reach significance. It did however reach the .05 level of significance in step 6 of the analysis. Table 1.2 shows the mean of the DPO group to be 5.84 as compared with that for the OOP group of 6.14. This suggests that dishonest property offenders tend towards being more uncontrolled, lax and careless of social rules than are other offence prisoners.
- 3.45 Although variables Q2, Q4 and F met the entry criteria for the computer program, they failed to increase the significance of the discrimination between the DPO and OOP groups. Their usefulness as a discriminator between the two groups, is therefore, questionable.
- 3.46 Since neither variable A nor variable O reached minimum entry

criteria in the stepwise procedure (an F value of 1.0) thus indicating their failure to significantly add to the discrimination,  $H_0 1(b)i$  and  $H_0 1(b)ii$  cannot be rejected. Variable Q2 was selected for entry into the stepwise procedure at step number 5. The "F to remove" following this step shows a contribution of this variable to the discrimination which failed to reach significance on the basis of a two-tailed test ( $F_{4,382} = 2.59, n.s.$ ). On this basis the null hypothesis  $H_0 1(b)iii$  may not be rejected.

- 3.47 It could be argued that the results of this analysis are in question since its repetition using the direct rather than the stepwise method, reached only the .099 significance level. This view is supported by the little better than chance classification of cases in the validation sample.

## Section Summary - First Discriminant Analysis

In this analysis although the discrimination between dishonest property offenders and prisoners convicted of other offences was highly significant, when the discriminant function coefficients were used to classify a validation sample of prisoners, they did so with a success rate that was 8.3 percent above that expected by chance. The results suggest that dishonest property offenders may be marginally higher on average in the following qualities than are other offence prisoners; Intelligence (B+), Impulsiveness (F+), Expediency, Evasiveness (G-), and are more likely to have an Overprotected Upbringing (I+).



4.

Second Discriminant Analysis  
(Two Groups - FMO and OOP)

4.1

Introduction

In arriving at Ho 1, questions were raised as to the specificity of the type of training which would be most effective in the rehabilitation of different classes of offender.

As will be recalled analysis 1 used a group which combined Fraud, Missappropriation Offenders, Robbery and Extortion Offenders, and Theft, Break and Entering Offenders.

Dishonest as here classified involves a number of offences. In analysis 1 involving general dishonesty, it was found that there appeared to be insufficient homogeneity, 16 P.F. personality-wise, within the dishonest property offender group to get effective prediction in the validation sample.

It was therefore asked if, by restricting consideration to more specific types of property offence, it would be possible to discriminate between such prisoners and other types of offenders including other dishonest ones.

It was also useful to ask how, in terms of 16 P.F. personality, different types of dishonest offenders differ.

These considerations lead inter alia to Ho 1 (c) in Section 2.2.

## 4.2

### Method

#### 4.21 Subjects

For this analysis the group numbers were as follows:-

Group FMO (Fraud, Misappropriation Offenders) This group consisted of 56 male prisoners in prisons throughout Queensland and 3 female prisoners; n = 59.

Group OOP (other offence prisoners) This group consisted of 275 male prisoners in prisons throughout Queensland and 5 female prisoners; n = 280.

The validation group consisted of 47 males and 1 female representing all offence categories, selected from the same prisons as the other subjects. They were selected on the basis of the case number being divisible by 8.

#### 4.22 Material

Materials were as outlined in Section 2.32 (16 P.F. data was used in this analysis).

## 4.3

### Procedure

Procedure was as outlined in 2.41, 2.42 and 2.43.

Results (Second Analysis)  
(16 P.F. Test - - 2 Groups: FMO, OOP)

The overall discrimination was highly significant. After the entry of the first 16 P.F. variable in the stepwise procedure, the discrimination immediately became highly significant,  $p < .0001$ . Five variables were entered during the analysis before failure to meet selection criteria halted the stepwise procedure. The F statistic calculated after six variables had been entered was also highly significant ( $F_{5,333} = 7.09$ ,  $p < .0001$ ). Table 2.1 shows the order of entry of variables for the stepwise analysis.

As in Analysis 1, the discriminant function coefficients were used to classify cases used in the prediction analysis and classify a different sample of cases in the validation condition. In the prediction analysis the correct classification of cases was 42 percent above that expected by chance and with the validation sample also 42 percent above chance expectations.

The repetition of this analysis using the direct rather than the stepwise method also reached an overall highly significant level of discrimination ( $\chi^2 = 36.95$ ,  $df = 16$ ,  $p = .0021$ ).

Table 2.1

Summary Table - 2 Groups FMO, OOP

Step	Action		Vars In	Wilks' Lambda	Sig.
	Entered	Removed			
1	A		1	.957840	.0001 ***
2	B		2	.931360	.0000 **
3	C		3	.919363	.0000 *
4	I		4	.909925	.0000 a
5	Q2		5	.903819	.0000

\*  $p < .05$ , \*\*  $p < .005$ , \*\*\*  $p < .0001$

a Just failed to reach the .05 level of significance

- 4.41 The first variable to be entered was 16 P.F. variable A. As can be seen from table 2.2, the Fraud, Misappropriation Offender Group (FMO) had a mean score of 5.06, considerably higher than the other offence prisoner group which had a mean score on A of 4.14. This points to Fraud and Misappropriation convicts being on average more warmhearted, outgoing, easygoing, participating, adaptable, and careless, than other offence prisoners. Cattell et al (1970) state that A+ individuals express a marked preference for occupations dealing with people, enjoy social recognition, and are generally willing to "go along with expediency".

Table 2.2

## 16 P.F. Group Means - Groups FMO, OOP

Variable Name	Group FMO	Group OOP
A	5.09	4.08
B	4.39	3.71
C	5.02	4.28
E	5.15	5.15
F	4.90	4.72
G	5.14	4.76
H	5.56	4.70
I	4.97	4.37
L	4.78	5.02
M	4.85	4.28
N	4.76	4.84
O	4.53	5.11
Q1	4.83	4.86
Q2	5.17	5.09
Q3	6.30	5.88
Q4	4.70	5.01

FMO = Fraud, Misappropriation Prisoners (n=68)

OOP = Other Offence Prisoners (n=319)

The next 16 P.F. variable entered is B, intelligence. Variable B+ is indicative of higher mental capacity, insightfulness and adaptability. Table 2.2 shows the mean for Fraud, Misappropriation offenders to be 4.38 as compared with a mean of 3.67 for other offences prisoner. This points to Fraud, Misappropriation offender being more intelligent than other offence prisoners

- 4.42 The third 16 P.F. variable to be entered was C. Table 2.2 shows the FMO group to have a mean of 5.02 as compared with 4.28 for the OOP group. This variable was significant at the .05 level. This points to a tendency for Fraud, Misappropriation offenders to be high on C than other offenders. According to Cattell et al (1970) C+ persons have a high ego strength and are emotionally stable.

Regarding variable C they say :-

"This factor is one of dynamic integration and maturity as opposed to uncontrolled, disorganised, general emotionality. High C individuals are far more frequently leaders than are C- individuals."

- 4.43 Following the entry of variable C, variable I was entered in the fourth step, but the "F to remove" of the latter just failed to reach .05 level of significance. Variable I represents the

tender-minded trait of those with an over-protected childhood. Adjectives used to describe I+ individuals are: flighty, self-indulgent, intuitive, affected and theatrical.

While in the fifth step variable Q2 was entered it failed to reach significance in its individual contribution to the discrimination. Q2+ is described by Cattell as Self-Sufficiency.

- 4.44 It is interesting to speculate how the personal qualities related to some of these variables are of relevance to Fraud and Misappropriation offenders. Some of the qualities peripheral to 16 P.F. variables seem to fit into the pattern that would be expected of such offenders. For instance, related to variable A+ warm-heartedness, is proneness to expediency and a tendency to "go along". A+ individuals tend to enjoy social recognition and to be less scrupulous in their dealings than are A- individuals. Occupations high in A+ are Salesmen and Business Executives. It may be that the flighty, self-indulgent, affected and theatrical aspects of the I+ person, the expediency and need for social recognition of the A+ personality and the positive self-image of the C+ personality combine to predispose individuals to Fraud, Misappropriation offending.

## Section Summary - Second Discriminant Analysis

The discrimination of Fraud, Misappropriation prisoners from other offence prisoners was highly significant. The discriminant weights derived correctly classified, on the basis of 16 P.F. personality, a separate validation sample of prisoners at a rate 42 percent above that expected by chance. It is clear that Fraud Misappropriation offenders stand out personality-wise, from other prisoners, including dishonest offenders generally. The discrimination suggests that Fraud Misappropriation offenders are, with respect to other prisoners, more warmhearted and expedient (A+), more intelligent (B+), more emotionally stable (C+), and are more likely to have had an over-protected childhood (I+).

5.

Third Discriminant Analysis  
(16 P.F. - Two Groups - REO,00P)

5.1

Introduction

As stated earlier, in arriving at Ho 1 the question was asked regarding the degree of specificity of training which would be most effective in rehabilitating different of classes of offender.

Although in discriminant analysis 1 variable A was not significant and was not included in the stepwise process, in the second discriminant analysis variable A was the first to be entered and was highly significant ( $F_{1,337} = 14.83, p < .0001$ ).

While in analysis 1 with the Dishonesty Group, the mean for variable A was lower than that for other offence prisoners, there was a change in direction in analysis 2 with the mean for Fraud, Misappropriation Prisoners becoming considerably higher than that for other offence Prisoners.

Variable C was not included in the analysis involving Dishonest offenders but was included in the second analysis with the Fraud, Misappropriation Group making a contribution significant at the .05 level.

It can be seen from analysis 1 and 2 that not only is it possible to discriminate the Fraud, Misappropriation offenders from other offence prisoners but the personality profile of this Sub-Group differs markedly from that of dishonest offenders generally.

In relation to the Sub-Group of dishonest offenders convicted of Robbery and Extortion it is asked if it is possible to significantly discriminate between this Sub-Group and other offence prisoners, and if so, it is further asked how Robbery, Extortion Offenders differ in personality profile from dishonest offenders generally and from the Fraud, Misappropriation Sub-Group.

The above consideration led to Ho 1(d) in Section 2.2.

## 5.2

### Method

#### 5.21 Subjects

For this analysis the group numbers were as follows:-

Group REO (Robbery, Extortion Offenders) This group consisted of 44 male prisoners in prisons throughout Queensland and 2 female prisoners; n = 46.

Group OOP (other offence prisoners) This group consisted of 287 male prisoners in prisons throughout Queensland and 6 female prisoners; n = 293

The validation group consisted of 47 males and 1 female representing all offence categories, selected from the same prisons as the other subjects. They were selected on the basis of the case number being divisible by 8.

#### 5.22 Material

Materials were as outlined in Section 2.32 (16 P.F. data was used in the analysis).

## 5.3

### Procedure

Procedure was as outlined in 2.41, 2.42 and 2.43.



Results (Third Analysis)  
(16 P.F. Test - 2 Groups REO, OOP)

The overall discrimination was highly significant (Chi sq = 35.91, df=10, p<.0001). The significance level for the Robbery, Extortion Sub-Group was greater than that in the first analysis for Dishonest offenders.

The discrimination weights derived in the analysis were used to classify the cases in the predictive analysis and with a validation sample of prisoners. The correct classification of cases used in the predictive analysis was 41 percent above that expected by chance and with the validation sample of prisoners 25 percent above chance expectations were correctly classified.

Table 3.1 shows the order of entry of variables, Wilks' Lambda and the significance level of the discrimination between groups at each stage of of the step-wise analysis.

The repetition of this analysis using the direct rather than the stepwise method also achieved a highly significant discrimination (Chi sq =36.40, df=16, p=.0025).

Table 3.1

Summary Table - 2 Groups REO, OOP

Step	Action		Vars In	Wilks' Lambda	Sig.	
	Entered	Removed				
1	Q3		1	.962480	.0003	**
2	Q2		2	.931884	.0000	**
3	Q4		3	.926272	.0000	*
4	L		4	.921415	.0000	
5	G		5	.914619	.0000	
6	H		6	.910501	.0000	
7	B		7	.906621	.0000	
8	E		8	.903593	.0000	
9	M		9	.900401	.0000	
10	O		10	.897483	.0000	

\* p < .05, \*\* p < .005

5.41 It can be seen from table 3.1 that the discrimination became highly significant after the entry of the first variable, 16 P.F. variable Q3, and that the discrimination was significantly contributed to by 2 other 16 P.F. variables.

Table 3.2

16 P.F. Group Means - Groups REO, OOP

Variable Name	Group REO	Group OOP
A	3.74	4.33
B	4.02	3.80
C	3.87	4.49
E	5.33	5.12
F	4.70	4.76
G	4.87	4.82
H	4.09	4.97
I	4.24	4.51
L	5.44	4.90
M	4.00	4.44
N	4.70	4.85
O	5.61	4.91
Q1	5.02	4.83
Q2	5.89	4.98
Q3	5.00	6.09
Q4	5.22	4.92

REO = Robbery Extortion Prisoners (n=46)

OOP = Other Offence Prisoners (n=293)

Table 3.2 shows the means of both groups and it can be seen that the Robbery, Extortion Sub-Group was lower on 16 P.F. variable Q3. Variable Q3 is labeled, by Cattell et al (1970), as Self-Sentiment Integration (Group REO, mean = 5.00; Group OOP, mean = 6.09).

This tendency to Q3- suggests that the Robbery, Extortion offenders tend to be more Uncontrolled and Lax and Careless of Social Rules and to follow their own urges to a greater extent than do other prisoners.

Cattell et al (1970) say regarding variable Q3+ :-

"that it represents the strength of the individuals concern about his self-concept and social image. ---- it shows socially approved character responses, self-control, persistence, foresight, considerateness of other, conscientiousness and regard for etiquette and social reputation. ---- High Q3 picks out persons who will be chosen as leaders ---- High Q3 is associated with success in the mechanical, mathematical and productive organisational activities".

These results suggest the Robbery, Extortion Sub-Group, being low

on Q3 tends to be deficient in these qualities relative to other offence prisoners.

- 5.42 The next variable to be entered in the stepwise procedure was 16 P.F. variable Q2. It can be seen from table 3.2 that the REO Sub-Group is higher in this variable than the OOP group. The analysis showed that this variable made a highly significant contribution to the discrimination. At this step the "F to remove" value was  $F_{1,336} = 15.44, p < .0002$ . It therefore appears that Robbery and Extortion offenders tend to be high on Q2. Q2+ is described by Cattell et al (1970) as Self-Sufficiency.

They go on to say:-

"The items reveal a person who is resolute and accustomed to making his own decisions, alone, while at the Q2- pole we see a person who goes with the group, definitely depends on social approval more, and is conventional and fashionable. Occupationally, Q2 is very high in farmers, writers and scientists - and criminals."

- 5.43 In the step-wise procedure 16 P.F. variables Q4, L, H, B, E, M, and O were entered in sequence. However in the case of these variables, while they appear to contribute to the discrimination, the "F to remove" at the step in which they were entered failed to reach the .05 level of significance. Following the entry of Q4 in the third step, its significance continued to increase with the entry of each variable until after step 10 the significance of Q4 had reached .025 level of significance.

This suggests that Q4 is also important in discriminating between the REO Sub-Group and Other Offence Prisoners. Persons high in variable Q4 are described by Cattell et al. (1970) as tending to be Tense, Driven and Overwrought.

They go on to describe Q4 individuals thus:

"Ergic tension shows itself by the individual's being irrationally worried, tense, irritable, anxious and in turmoil. The best general interpretation of Q4 at present is that it represents a level of excitement and tension ..... connected with a general level of frustration. Q4 manifestations express the gamut of frustration responses from anger and pugnacity to anxiety and depression."

- 5.34 Both the stepwise and direct procedures in this analysis produced similar standardised discrimination coefficients and none of the variables which were not included in the stepwise analysis appeared to make any marked contribution in the direct analysis procedure.

## Section Summary - Third Discriminant Analysis

The discrimination, on the basis of 16 P.F. personality was highly significant. From these results it appears that Robbery, Extortion offenders differ significantly in personality from other offence prisoners. The discrimination weights derived in the analysis were able to correctly classify cases used in the analysis at a rate 41 percent above that expected by chance. With a separate sample of prisoners in the validation condition, correct classification of prisoners was 25 percent above that expected by chance. It appears that Robbery, Extortion offenders differ from other prisoners in being more Uncontrolled, Lax and Careless of Social Rules (Q3-), higher on Self-Sufficiency and Resourcefulness (Q2+), and more Tense, Frustrated, Driven and Overwrought (Q4+). Intuitively, none of these personality traits are out of character with crimes committed by this class of offender. They markedly contrast with those personality characteristics found in the last analysis with Fraud, Misappropriation offenders.

6.

Fourth Discriminant Analysis  
(16 P.F. Test - Two Groups - TBO, OOP)

6.1

Introduction

As stated in 3.1, in arriving at Ho 1, it was observed that there is a need to understand different classes of offender and "tailor" treatment programs to meet the rehabilitation needs of specific types of offender.

It has long been recognised that some of the most persistent recidivists are Theft, Break and Enterers. Figures from this volunteer sample of the Theft, Break and Enter Sub-Group show that only 24 percent were imprisoned for the first time, 43 percent had been in prison four or more times, and nearly 8 percent had been imprisoned 8 or more times.

High recidivism rates emphasise the utility of any measures which would reduce this cost to the community.

As in analyses 2 and 3, we again ask if it is possible to discriminate on the basis of personality between the Theft, Break and Enter Sub-Group and other offence prisoners and, if so, whether it is possible to do so more effectively than in the case of analysis 1 involving dishonest offenders. Secondly, it is asked how the personality profile of Theft, Break and Enterers differs from that of dishonest offenders generally and the other Sub-Groups considered in analyses 2 and 3.

These considerations lead *inter alia* to Ho 1 (e) in Section 2.2.

## 6.2

### Method

#### 6.21 Subjects

For this analysis the group numbers were as follows:-

Group TBO (Theft, Break and Entering Offenders) This group consisted of 177 male prisoners in prisons throughout Queensland and 1 female prisoner; n = 178.

Group OOP (other offence prisoners) This group consisted of 160 male prisoners in prisons throughout Queensland and 1 female prisoner; n = 161.

While no attempt has been made to control for other variables, there were no indications that the groups were greatly dissimilar on demographic variables.

The validation group consisted of 47 males and 1 female representing all offence categories, selected from the same prisons as the other subjects. They were selected on the basis of the case number being divisible by 8.

#### 6.22 Materials

Materials were as outlined in Section 2.32 (16 P.F. data was used in this analysis).

## 6.3

### Procedure

Procedure was as outlined in 2.41, 2.42 and 2.43.

Results (Fourth Analysis)  
(16 P.F. Test - - 2 Groups: TBO, OOP)

In this fourth analysis involving the Theft, Break and Entering Sub-Group the overall discrimination was highly significant (Chi sq =28.69, df=6, p<.0001). The overall significance level was also greater than that in the analysis involving dishonest offenders. When the analysis was repeated using the direct rather than the stepwise method the overall results were also significant (Chi sq =40.55, df=16, p=.0006).

The discrimination weights derived in the analysis were used to classify the cases in the original analysis and in a validation sample of prisoners. Under the former condition correct classification of cases was 25 percent above that expected by chance. In the latter condition this had slipped to 4.2 percent above chance expectations.

Table 4.1

Summary Table - 2 Groups TBO, OOP

Step	Action		Vars In	Wilks' Lambda	Sig.	
	Entered	Removed				
1	G		1	.969975	.0014	***
2	A		2	.953772	.0004	***
3	Q3		3	.939868	.0001	*
4	Q2		4	.930026	.0001	a
5	I		5	.922367	.0001	
6	B		6	.917687	.0001	

\* p< .05, \*\*\* p< .001

a Just failed to reach the .05 level of significance

Table 4.1 shows the order of entry of variables, Wilks' Lambda and the significance level at each stage of the step-wise analysis. The means of both groups on all 16 P.F. variables are shown in table 4.2.

- 6.41 The first 16 P.F. variable entered was variable G. This variable reached inclusion criteria in analysis 1 with Dishonest Prisoners, and in analysis 3 with Robbery and Extortion Offence Prisoners, but was not included in analysis 2 which involved Fraud, Misappropriation Prisoners. This variable however failed to reach the .05 significance level in its contribution in either of these two previous analyses. The mean for group TBO was 4.56 which is slightly lower than that of group OOP which was 5.12 (see Table 4.2). This and the discriminant Beta weights point to a trend towards G- in the TBO group relative to other prisoners. Cattell

et al (1970) label G- as Low Superego Strength and uses the following labels to describe the variable; Disregards rules, Expedient, Quitting, Frivolous, Self-indulgent, Slack, Indolent, Undependable, Disregards obligations. Basically it represents a lack of acceptance of group moral standards.

Table 4.2

16 P.F. Group Means - Groups TBO, OOP

Variable Name	Group TBO	Group OOP
A	4.02	4.52
B	3.89	3.76
C	4.16	4.68
E	5.21	5.08
F	4.86	4.67
G	4.56	5.12
H	4.59	5.14
I	4.51	4.44
L	5.14	4.80
M	4.28	4.49
N	4.77	4.89
O	5.21	4.78
Q1	4.97	4.72
Q2	5.34	4.84
Q3	5.65	6.27
Q4	5.17	4.72

TBO = Theft, Break and Entering Offenders (n=178)  
 OOP = Other Offence Prisoners (n=161)

6.42 The next variable to be entered was 16 P.F. variable A. This variable made a significant contribution to the discrimination and had a highly significant "F to remove" value after being entered ( $F_{1,336} = 5.70, p < .025$ ). The means for variable A in table 1 and the Beta weights point to group TBO being significantly lower on average than other offence prisoners. Variable A- persons are described by Cattell et al. as being; Detached, Cool, Aloof, Stiff, Distrustful. The A- person tends to be interested in material things rather than in people.

6.43 The next 16 P.F. variable entered was variable Q3 which reached, following its entry, an "F to Remove" value of ( $F_{1,334} = 5.96, p = .025$ ). This variable was significant in the previous analysis involving Robbery, Extortion offenders. Means from Table 4.2 and Beta weights point to the TBO group being lower than other offenders. Q3, called by Cattell et al (1970) Low Self-Sentiment Integration was described more fully in paragraph 5.41. This variable is associated with persons who are lax and



careless of social rules.

- 6.44 Next in the stepwise procedure, 16 P.F. variable Q2 was entered and just failed to reach a significant "F to Remove" value ( $F_{1,344} = 3.54$ ,  $p = .05$ ). This variable was significant in relation to group RE0 in the third analysis and is described in paragraph 5.42. It represents the Self-Sufficient personal quality of those who make their own decisions and go their own way.
- 6.45 Finally variables I and B were entered in the last two steps. These however failed to reach the .05 level of significance in their contribution to the discrimination.

## Section Summary - Fourth Discriminant Analysis

The analyses were highly significant using both the stepwise and direct methods. The correct classification of cases was 25 percent above that expected by chance. In the validation sample this was 4.2 percent above that expected by chance. The variables entered and significant in the stepwise discrimination were: G-, Low Superego Strength; A-, Cool detachment; Q3-, Low Self-Sentiment Integration, Lax, Careless; and Q2+, Self-Sufficiency. It is noteworthy that Theft, Break and Enterers appear to be a less well defined group than either the Fraud, Misappropriation group or the Robbery and Extortion group. In contrast to the Fraud, Misappropriation offenders, they appear to be low on warm-heartedness and social skills. In common with Robbery, Extortion offenders they appear to be relatively lax, have poor self-sentiment integration and be careless of social rules (Q3-).

7.

Fifth Discriminant Analysis  
(V.P.I. - Two Groups - DPO, OOP)

7.1

Introduction

As stated earlier, in arriving at Ho 1 in relation to the 16 P.F. Test, it was noted that previous research has found general training programs to be generally ineffective in the rehabilitation of offenders (Romig 1978). It is suggested that there is a need to understand different classes of offender so as to design treatment program to meet the rehabilitation needs of different classes of offender.

The question also arose as to how specific such a course would need to be in order to be effective. In the four previous analyses using 16 P.F. Test data we have seen that there are considerable differences in personality among the four groups as compared to other prisoners.

The Holland Vocational Preference Inventory as a measure of personality differs from the 16 PF in several aspects. Since the subject in doing the test merely marks list of occupations which would interest him, it is likely to be less transparent than the 16 PF Test.

The vocational emphasis of the V.P.I. may also throw light on the career interests of various classes of offender and so be relevant to any training program for the rehabilitation of offenders.

The above considerations lead to asking whether it is possible to discriminate between dishonest offenders and other offence prisoners on the basis of the V.P.I. personality profile, and if so, how the groups differ.

The above considerations led to Ho 2(a) in Section 2.2.

## 7.2

### Method

#### 7.21 Subjects

For the stepwise analysis and the repeated direct analysis the group numbers were as follows:-

Group DPO (Dishonest Property Offenders) This group consisted of 250 male prisoners in prisons throughout Queensland and 6 female prisoners; n = 256.

Group OOP (Other Offence Prisoners) This group consisted of 127 male prisoners in prisons throughout Queensland and 4 female prisoners; n = 131

As there were no indications that the groups were greatly dissimilar on demographic variables, no attempt was made to control for variables other than dishonesty.

In analyses 5 - 8, discriminant analyses were repeated after adjusting the case numbers so as to obtain a validation sample. For the second repeat analysis in the validation condition the group numbers were as follows:-

Group DPO (Dishonest Property Offenders) This group consisted of 216 male prisoners in prisons throughout Queensland and 5 female prisoners; n = 221.

Group OOP (Other Offence Prisoners) This group consisted of 114 male prisoners in prisons throughout Queensland and 4 female prisoners; n = 118

The validation group consisted of 47 males and 1 female representing all offence categories, selected from the same prisons as the other subjects. They were selected on the basis of the case number being divisible by 8.

#### 7.22 Materials

Materials were as outlined in 2.32 (V.P.I. data was used in this analysis)

## 7.3

### Procedure

Procedure was as outlined in 2.41, 2.42 and 2.43

7.4

Results - Fifth Discriminant Analyses  
(V.P.I. - 2 Groups, DPO, OOP)

In this analysis the overall discrimination was highly significant (Chi sq = 21.03, df=5, p=.0008). This overall significance level is somewhat greater than that for the 16 P.F. discriminant analysis of the same groups. The correct classification of cases used in the analysis by the discriminant coefficients was 20 percent above that expected by chance.

When this analysis was repeated using the direct instead of the step-wise method the overall significance level fell somewhat (Chi sq =22.27, df=11, p=.022).

When the analysis was again repeated using the split sample validation paradigm the correct classification of second case sample was 12.5 percent above that expected by chance.

Table 5.1 shows the order of the variables entered Wilks' Lambda and the significance level of the discrimination between groups.

Table 5.1

Summary Table - 2 Groups DPO, OOP

Step	Action		Vars In	Wilks' Lambda	Sig.
	Entered	Removed			
1	Int	-	1	.977470	.0031 ***
2	Co	-	2	.963013	.0007 *
3	Art	-	3	.952141	.0003 *
4	Real	-	4	.949501	.0005
5	St	-	5	.946513	.0008

\* p < .05, \*\*\* p < .005

7.4) The first V.P.I. variable to be entered in stepwise procedure was variable Int, the Intellectual Scale. Following the entry of this variable the discrimination became highly significant (F1,385=8.87,p=.003).

As can be seen from table 5.2 the Dishonest Property Offenders Group mean for variable Int of 4.18 was lower than that of 5.6 for Other Offence Prisoners (OOP).

Table 5.2

## V.P.I. Group Means

Variable Name	Group OOP	Group DPO
Real	6.30	5.79
Int	5.60	4.18
Soc	4.37	3.90
Conv	3.05	2.64
Ent	4.71	4.82
Art	5.11	5.04
Co	8.18	7.53
Mf	7.92	7.57
St	7.16	6.77
Inf	7.95	7.81
Ac	11.57	10.93

DPO = Dishonest Property Offenders (n=256)

OOP = Other Offence Prisoners (n=131)

Holland (1978) describes the high pole of this variable as indicating concern for science, mathematics and theory, and a tendency to "think through" problems rather than to "act out" problems. It therefore appears that, on average, members of the DPO group tend to be less concerned with science or with intellectual pursuits than are other offence prisoners and are more likely than other offence prisoners to "act out" problems rather than think them through. This appears to be so despite their obtaining a slightly higher mean 16 P.F Intelligence score than other offence prisoners. The mean B score for the DPO group was 3.93 as compared with the mean of 3.53 for the OOP Group. This suggests that variable Int is attitudinal rather than an ability related.

The above results suggest that any rehabilitation training may benefit by the inclusion of a segment which encourages the use of the "scientific method" and the "thinking through" of problems as opposed to "acting out".

7.42 The next variable to be entered in this analysis in the stepwise procedure was V.P.I. variable Co. Immediately after the entering of Co, its "F to remove" was significant ( $F_{1,384}=5.8, p<.05$ ).

It can be seen from table 5.2, that the mean for the dishonest property offenders Group (DPO) was 7.5, which is lower than that of 8.2 for the other offending prisoner Group (OOP).

Holland (1978) labels V.P.I. variable Co as Self-Control. He goes on to say that low scorers lack self-control, tend to impulsiveness and towards "acting out". Low scorers also lack a

realistic fear of dangers and have tendencies to rebelliousness.

This raises speculation as to whether training in the development of self-control would enhance chances of offender rehabilitation.

- 7.43 V.P.I. Artistic Scale variable was the next to be entered in the stepwise procedure in this analysis. Immediately after entry the "F to remove" was significant for this variable ( $F_{1, 383} = 4.4, p < .05$ ).

The standardised canonical discriminant function coefficient for the V.P.I. Artistic Scale variable, suggests that Dishonest Property Offenders are likely to be high on this variable.

Holland(1982) labels variable Art as the Artistic Scale. High scorers have artistic, musical and literary interests. They tend to resemble the stereo-type of an artist in some ways and may be immature, anxious, sensitive, original, expressive, imaginative, complex, unconventional and introverted.

From the above it appears that many dishonest offenders fall into this category.

- 7.44 In the fourth and fifth steps in the analysis V.P.I. variables Real and St were entered. These appear to detract from the overall significance of the discrimination between groups and their "F to remove" value failed to reach the .05 level of significance.

## Section Summary - Fifth Discriminant Analysis

The discriminant analyses in this section using V.P.I. personality and Dishonest Property Offenders and other offence prisoners were highly significant. In the prediction condition cases used in the analysis were correctly classified at a rate 20 percent above that expected by chance. In the validation condition a separate case sample was correctly classified at a rate 12.5 percent above chance. The analyses indicate that dishonest property offenders, as compared with other prisoners, are more likely to "act out" rather than "think through" problems (Int-), have poorer self-control (Co-), and have greater artistic and literary interests (Art+).



8.

Sixth Discriminant Analysis  
(V.P.I. - Two Groups - FMO, OOP)

8.1

Introduction

In arriving at Ho 2(b) the question was asked as to whether it is possible to discriminate between Sub-Groups of dishonest offending prisoners and other offence prisoners in terms V.P.I. personality profiles.

Previous analyses show, in terms of 16 P.F. Test personality profiles, that with Dishonest Property Offence prisoners (DPO) and the three Sub-Groups, FMO, REO and TBO, there are considerable differences among the groups.

As was outlined in paragraph 7.1, the Holland Vocational Preference Inventory provides a useful contrasting measure of personality to that of the 16 P.F. Test. It also provides some emphasis on vocational preference, which may help in the understanding of the etiology of specific classes of offences and the relationship of job preference to criminal behaviour.

It was also asked whether there is a difference in the ability to discriminate on the basis of personality between other offence prisoners and groups DPO, and Sub-Group FMO.

The above considerations led to Ho 2(b) in paragraphs 2.2.

## Method

### 8.2

#### 8.21 Subjects

For the stepwise analysis and the repeated direct analysis the group numbers were as follows:-

Group FMO (Fraud, Misappropriation Offenders) This group consisted of 63 male prisoners in prisons throughout Queensland and 5 female prisoners; n = 68.

Group OOP (Other Offence Prisoners) This group consisted of 315 male prisoners in prisons throughout Queensland and 4 female prisoners; n = 319

As there were no indications that the groups were greatly dissimilar on demographic variables, no attempt was made to control for variables other than dishonesty.

For the second repeat analysis in the validation condition the group numbers were as follows:-

Group FMO (Fraud, Misappropriation Offenders) This group consisted of 55 male prisoners in prisons throughout Queensland and 4 female prisoners; n = 59.

Group OOP (Other Offence Prisoners) This group consisted of 277 male prisoners in prisons throughout Queensland and 3 female prisoners; n = 280

The validation group consisted of 47 males and 1 female representing all offence categories, selected from the same prisons as the other subjects. They were selected on the basis of the case number being divisible by 8.

#### 8.22 Materials

Materials were as outlined in section 2.32 (V.P.I.) data was used in this analysis).

### 8.3

#### Procedure

Procedure was as outlined in 2.41, 2.42 and 2.43.

Results (Sixth Stepwise Discriminant Analysis)  
(V.P.I.) - 2 Groups FMO, OOP)

8.4

In this step-wise analysis the overall discrimination was highly significant (Chi sq =27.49, df=5, p<.0001). The overall significance of the discrimination is greater for this Fraud, Misappropriation group than it was in the case of the Dishonest Offending Prisoners where the probability p, equalled .0008. The cases used in the analysis were correctly classified at a rate of 41.6 percent above that expected by chance, using the discriminant function coefficients.

This analysis was repeated using the direct rather than the step-wise method. Although the overall significance level dropped somewhat the discrimination was still highly significant (Chi sq =29.13, df=11, p=.0022).

When the analysis was again repeated using the split sample validation paradigm the correct classification of second case sample was 41.7 above that expected by chance.

Table 6.1 shows the order of entry of variables, Wilk's Lambda and the significance level at each step.

Table 6.1

Summary Table - 2 Groups FMO, OOP

Step	Action		Vars In	Wilks' Lambda	Sig.
	Entered	Removed			
1	Real	-	1	.971939	.0009 ***
2	Ent	-	2	.945521	.0000 **
3	Int	-	3	.937589	.0000 a
4	Conv	-	4	.933582	.0000
5	Co	-	5	.930889	.0000
6	Ac	-	6	.928306	.0001
7	-	Conv	5	.930639	.0000

\*\* p< .005, \*\*\* p< .001

a Just failed to reach the .05 level of significance

8.41 In this analysis the first variable entered during step 1 was V.P.I. variable Real. After its entry the discrimination between groups became highly significant the "F to remove" attributable to this variable being, F1, 384=11.11, p=.0009.

From table 6.2 it can be seen that the mean for FMO group for variable Real was 4.62 which is considerably lower than 6.25, the mean for Group OOP.

Table 6.2

V.P.I. Group Means

Variable Name	Group FMO	Group OOP
Real	4.62	6.25
Int	3.84	4.84
Soc	4.53	3.96
Conv	3.38	2.65
Ent	5.63	4.60
Art	5.06	5.06
Co	8.79	7.53
Mf	7.35	7.76
St	7.29	6.82
Inf	7.87	7.86
Ac	11.25	11.13

FMO = Fraud, Misappropriation Offenders (n=68)

OOP = Other Offence Prisoners (n=319)

It appears likely that Fraud, Misappropriation Offenders are distinctly lower on this variable which Holland (1982) calls the Realistic Scale than are other offence prisoners.

Holland (1982) describes this variable as follows:-

"High scorers regard themselves as practical minded, masculine, normal people. Their hard headed orientation is consistent with their mechanical skills and interests and their lack of skills in interpersonal relations, low social interests, and aversion for problems requiring sensitivity to one's own feelings, and those of others as in the arts or persuasive roles."

It would therefore appear that Fraud, Misappropriation Offenders, being lower scorers, tend away from this hard headed orientation towards the persuasive role. Clearly the possession of a high degree of interpersonal skills would be expected as part of the "professional qualifications" of a successful confidence trickster.

It is interesting to speculate as to whether any rehabilitation training for such offenders could be enhanced by the inclusion of material to encourage the development of a more realistic, frank and practical approach to problems which is characteristic of the positive pole of the V.P.I. Realistic Scale.

8.42 At step 2 in the procedure variable Ent, the Enterprising Scale was entered. Its contribution to the discrimination was highly significant, the "F to remove" being  $F_{1,383}=20.73, p<.01$ .

From table 6.2 it can be seen that the mean on the Enterprising Scale, Ent, of the V.P.I. was 5.63 for Fraud, Misappropriation Offender as compared with 4.6 for Other Offence Prisoners.

This result is not surprising since examination of criminal offence histories and of the newspapers show no shortage of enterprising schemes by persons charged with Fraud and Misappropriation Offences.

Holland (1982) describes the V.P.I. enterprising scale positive pole scorers as dominant, sociable, cheerful, and adventurous. He goes on to say:-

"This scale is, in one sense, an activity scale which represents euphoric behaviour at the one extreme and depressive behaviour at the other."

He goes on to describe attributes of high scorers -

".... prefer social interaction as a medium of personal expression, but dislike well-defined language or work situations. Conceive of themselves as strong leaders. Regard their verbal and persuasive skills as their greatest assets. Have strong needs to achieve and secure high status."

It appears that the above description may provide us with an unusually clear insight into some of the underlying values of this group of offenders.

- 8.43 The next variable included was V.P.I. variable Int, the Intellectual Scale. This variable was entered in step 1 of the sixth discriminant analysis with group DPO and OOP.

This V.P.I. Intellectual Scale variable, Int, contributes to the discrimination since the "F to remove" for this variable was significant ( $F_{1,383} = 3.2, p < .05$ ).

As in the case with Dishonest Property Offenders the mean of Int is lower for this FMO Group than for Group OOP (see table 6.2). This V.P.I. Intellectual Scale was discussed in detail previously in paragraph 7.41.

- 8.44 In the fourth, fifth and sixth steps V.P.I. variables Conv, Co and Ac were included. None of these however reached the .05 level of significance for its "F to remove" so their contribution to the discrimination is in doubt. Variable Conv was included in the analysis in step 4 and removed again in step 7 since it failed to maintain the inclusion criteria level.

## Section Summary - Sixth Discriminant Analysis

The analyses using V.P.I. personality to discriminate between Fraud, Misappropriation Offenders and other offence prisoners obtained highly significant results. By using the discriminant function coefficients, correct classification of cases was at a rate of 41 percent above the rate expected by chance, using cases in the analysis, and also at a rate of 41 percent above chance using a fresh sample of cases in the validation paradigm. Results suggest that Fraud, Misappropriation Offenders, as compared with other offence prisoners, are: more interested in persuasive roles and possess a higher degree of interpersonal skills (Real-), tend to be more dominant, sociable, cheerful, adventurous and enterprising (Ent+), and are less concerned with intellectual and scientific pursuits and tend to "act out" rather than "think through" their problems (Int-).

9.

Seventh Discriminant Analysis  
(V.P.I. - Two Groups - REO, OOP)

9.1

Introduction

In arriving at Ho 2(c) it was asked whether it was possible to discriminate between Robbery, Extortion Offenders and other offence prisoners in terms of V.P.I. personality profile.

In analyses 5 involving Group DPO, it was found that this group was, on average, lower on the V.P.I. Intellectual and Self-Control Scales than were other offence Prisoners. It was also noted that the canonical discriminant function suggests that they tend to be high on the Artistic Scale. In analysis 6 with Group FMO, the Realistic and Enterprising Scales replaced the Self-Control and Artistic Scales but the Intellectual Scale was again significant as it was in analysis 5.

From the 16 P.F. analyses only one variable was common to all Sub-Groups and dishonest offenders generally. Other 16 P.F. variables differed considerably among the groups.

In this analysis it is asked if it is possible to discriminate between Robbery, Extortion Offenders and other offence prisoners, on the basis of the Vocational Preference Inventory (V.P.I.) personality profile, and if so what are the personality differences as compared with dishonest property offender and other Sub-Groups of dishonest offenders.

The above considerations led to Ho 2(c) in Section 2.2.

## 9.2

### Method

#### 9.21 Subjects

For the stepwise analysis and the repeated direct analysis the group numbers were as follows:-

Group REO (Robbery, Extortion Offenders) This group consisted of 54 male prisoners in prisons throughout Queensland and 3 female prisoners; n = 57.

Group OOP (Other Offence Prisoners) This group consisted of 324 male prisoners in prisons throughout Queensland and 6 female prisoners; n = 330.

As there were no indications that the groups were dissimilar on demographic variables, no attempt was made to control for variables other than dishonesty.

For the second repeat analysis in the validation condition the group numbers were as follows:-

Group REO (Robbery, Extortion Offenders) This group consisted of 44 male prisoners in prisons throughout Queensland and 2 female prisoners; n = 46.

Group OOP (Other Offence Prisoners) This group consisted of 287 male prisoners in prisons throughout Queensland and 6 female prisoners; n = 293.

The validation group consisted of 47 males and 1 female representing all offence categories, selected from the same prisons as the other subjects. They were selected on the basis of the case number being divisible by 8.

#### 9.22 Materials

Materials were as outlined in section 2.32 (V.P.I. data was used in this analysis)

## 9.3

### Procedure

Procedure was as outlined in 2.41, 2.42 and 2.43.



Results - Seventh Discriminant Analysis  
(V.P.I. - 2 Groups - REO, OOP)

The overall discrimination in this analysis was highly significant (Chi sq =10.23, df=2, p=.006). This level of significance is lower than that achieved for either the Dishonest Property Offenders or Fraud, Misappropriation Group in relation to other offence prisoners. In the stepwise analysis cases within the analysis were correctly classified at a rate 7 percent above that expected by chance..

When the analysis was repeated using the direct method, although the level of significance fell to below .05 (Chi sq =18.63, df=11 p=.068 ns.) cases within the analysis were correctly classified by the discriminant coefficients at a rate of 30 percent above that expected by chance.

When the analysis was again repeated using the split sample in the validation paradigm, cases in the validation group were correctly classified at a rate 37.5 percent above that expected by chance.

Table 7.1 shows the order of entry of variables, Wilks' Lambda and the significance level at each step.

Table 7.1

Summary Table - 2 Groups REO, OOP

Step	Action		Vars In	Wilks' Lambda	Sig.
	Entered	Removed			
1	Int	-	1	.987698	.0291 *
2	Art	-	2	.973724	.0060 *
3	Co	-	3	.971585	.0114
4	St	-	4	.966305	.0107
5	Mf	-	5	.959681	.0076
6	Ac	-	6	.956205	.0089
7	Conv	-	7	.954237	.0126

\* p < .05

- 9.41 In this analysis the first variable to be entered in the step-wise procedure was variable Int, the V.P.I. Intellectual Scale. Following the entry of the Intellectual Scale variable the discrimination between groups became significant (F<sub>1,385</sub>=4.8, p=.029).

It can be seen from Table 7.2 that mean for variable Int for Group REO is lower than that for Group OOP.

Table 7.2

V.P.I. Group Means

Variable Name	Group REO	Group OOP
Real	5.51	6.04
Int	3.47	4.87
Soc	3.68	4.13
Conv	2.61	2.81
Ent	4.54	5.82
Art	5.23	5.02
Co	7.54	7.79
Mf	7.21	7.78
St	6.99	6.89
Inf	7.88	7.85
Ac	10.23	11.31

REO = Robbery, Extortion Offenders (n=57)  
 OOP = Other Offence Prisoners (n=330)

This Intellectual Scale variable, Int, was the first entered in analysis 5 involving Dishonest Property Offenders and other offence prisoners, and was highly significant. This variable has been described in detail in paragraph 7.41

It was also significant in analysis 6 involving Fraud, Misappropriation Offenders and other offence prisoners. It appears lower scores on the Intellectual Scale are common to most types of dishonest property offenders.

9.42 In step 2 of this analysis V.P.I. variable Art, the Artistic Scale variable was included in the analysis. The "F to remove" value indicates that its contribution is highly significant to the discrimination between the groups ( $F_{1,383}=5.5, p<.01$ ).

This variable also was significant in analysis 5 involving Dishonest Property Offenders where its "F to remove" reached the .05 level. It appears that variable Art is of even higher significance in this Robbery, Extortion Sub-Group. These results suggest that Robbery, Extortion Offenders tend to have high artistic, musical or literary interests as compared with other offence prisoners. It is of note that persons who score highly on this variable also tend to be immature, anxious, complex and introverted. This Artistic Scale variable was discussed in detail in paragraph 7.43.

9.43

Although none of the other V.P.I. variables reached the .05 level of significance in their individual contribution the discriminant function coefficients derived suggest that the REO

group, relative to other offenders, may: be low on self-control (Co-), aspire to higher status (St), prefer masculine occupations (Mf), and may tend to confident and perhaps overconfident (Ac-).

## Section Summary - Seventh Discriminant Analysis

This analysis using V.P.I. personality was highly significant in the stepwise mode but failed to reach the 05 level of significance in the direct mode. Although these analyses using the V.P.I. do not have such clear-cut results as those involving the REO group and the 16 P.F. Test, they do appear to have some discrimination power. In the validation condition the discriminant coefficients were able to correctly classify the validation group at a rate 37.5 percent above that expected by chance. The results suggest that, as compared to other prisoners, Robbery, Extortion offenders tend to "act out" rather than "think through" problems (Int-), and tend to be immature, anxious, complex and have high artistic interests (Art+). There were suggestion that they may lack self-control, aspire to status, be confident and prefer to masculine occupations.

10.

Eighth Discriminant Analysis  
(V.P.I. - Two Groups - TBO, OOP)

10.1

Introduction

In analysis 5, 6 and 7 involving the V.P.I. data, it was found that Dishonest Property Offenders, Fraud, Misappropriation Offenders and Robbery, Extortion Offenders all were significantly lower on the Intellectual Scale than were other offence prisoners. Both Dishonest Property Offenders and Robbery, Extortion Offenders were higher on the Artistic Scale than were Other Offence Prisoners. Apart from the above mentioned similarities there were considerable differences in personality profile among the groups.

In arriving at Ho 2(d) in 2.2 it was asked whether it was possible to discriminate between Theft, Break and Entering Offenders and other offence prisoners on the basis of V.P.I. personality.

If it is possible to so discriminate it is also asked if it is possible to do so more effectively than in the case of groups DPO, FMO and REO. It is further asked how the V.P.I. personality variable discriminant coefficients differ from those found in the case of Dishonest Property Offenders and other Sub-Groups.

The above consideration led to Ho 2(d) in 2.2.

## 10.2

### Method

#### 10.21 Subjects

For the stepwise analysis and the repeated direct analysis the group numbers were as follows:-

Group TBO (Theft, Break and Entering Offenders) This group consisted of 201 male prisoners in prisons throughout Queensland and 4 female prisoners; n = 205.

Group OOP (Other Offence Prisoners) This group consisted of 177 male prisoners in prisons throughout Queensland and 5 female prisoners; n = 182.

As there were no indications that the groups were dissimilar on demographic variables, no attempt was made to control for variables other than dishonesty.

For the second repeat analysis in the validation condition the group numbers were as follows:-

Group TBO (Theft, Break and Entering Offenders) This group consisted of 174 male prisoners in prisons throughout Queensland and 4 female prisoners; n = 178.

Group OOP (Other Offence Prisoners) This group consisted of 157 male prisoners in prisons throughout Queensland and 4 female prisoners; n = 161.

The validation group consisted of 47 males and 1 female representing all offence categories, selected from the same prisons as the other subjects. They were selected on the basis of the case number being divisible by 8.

#### 10.22 Materials

Materials were as outlined in section 2.32 (V.P.I. data was used in this analysis)

## 10.3

### Procedure

Procedure was as outlined in 2.41, 2.42 and 2.43.

Results - Eighth Discriminant Analysis  
(V.P.I. - 2 Groups - TBO, OOP)

In this step-wise analysis the overall discrimination between groups was highly significant (Chi sq =26.27, df=6, p=.0002). In this analysis the discriminant coefficients correctly classified cases used in the analysis at a rate 22 percent above that expected by chance.

A repetition of this analysis using the direct method also showed the overall discrimination to be highly significant (Chi sq =28.12, df=11, p=.003).

A repetition of the analysis using a separate validation group and discriminant coefficients, correctly classified cases at a rate 21 percent above that rate expected by chance.

Table 8.1 shows the order of entry of variables, Wilks' Lambda and the significance level at each step.

Table 8.1

Summary Table - 2 Groups TBO, OOP

Step	Action		Vars In	Wilks' Lambda	Sig.
	Entered	Removed			
1	Int	-	1	.981604	.0075 **
2	Co	-	2	.954044	.0001 **
3	St	-	3	.945899	.0001
4	Inf	-	4	.941679	.0001
5	Ac	-	5	.937615	.0002
6	Art	-	6	.933550	.0002

\*\* p < .01

- 10.41 In this analysis the first variable to be included was the V.P.I. variable Int, the Intellectual Scale. Following this step the discrimination between groups became highly significant (F<sub>1,385</sub>=7.22, p=.0075).

It is clear from the means of the two groups in Table 8.2 and from the standardised discriminant function that Theft, Break and Enter Offenders are lower on variable Int, the Intellectual Scale than are other offence prisoners. Being low, relative to other offence prisoners, on this personality variable has been common to the Dishonest Property Offender Group and to all Sub-Groups tested. In the analyses completed so far, V.P.I. variable Int- was the only variable common to the dishonest offenders group and all three Sub-Groups tested.

Table 8.2

## V.P.I. Group Means

Variable Name	Group TBO	Group OOP
Real	6.03	5.89
Int	4.09	5.30
Soc	3.73	4.44
Conv	2.43	3.18
Ent	4.45	5.15
Art	4.93	5.21
Co	7.27	8.29
Mf	7.63	7.76
St	6.70	7.14
Inf	7.66	8.08
Ac	10.61	11.75

TBO = Theft, Break and Entering Offender (n=205)  
 OOP = Other Offence Prisoners (n=182)

Variable Int- was previously described in Paragraph 7.41. It is clear that in the design of any rehabilitation training program for dishonest property offenders, it would be wise to consider carefully how the personality characteristics associated with this variable relate to offending behaviour.

- 10.42 In the second step V.P.I. variable Co, the Self-Control Scale was included. Its contribution to the discrimination between groups were highly significant as indicated by the "F to remove" value ( $F_{1,384}=11.09, p<.01$ ). Both the standardised discriminant function and the means (see Table 8.4) show the Theft, Break and Entering Offenders to be lower on this Self-Control Scale. The standardised discriminant function in analysis 5 involving Dishonest Property Offenders also showed them to be low on the Self Control Scale. The implication of low scoring on this variable were described in some detail in paragraph 7.42.

This leads to speculation as to whether Dishonest Property Offenders, including Theft, Break and Entering Offenders would be likely to have their rehabilitation chances increased by training in self-control.

- 10.43 In the third step, the variable included was V.P.I. variable St, the Status Scale. This variable had a significant "F to remove" ( $F_{1,383}=3.3, p<.05$ ). This variable has not reached significance in analyses 5, 6 and 7. Although the "F to remove" for this variable was significant, its inclusion does not appear to greatly improve the discrimination between the two groups, the probability remaining at .0001, the figure shown prior to its inclusion.

The standardised discriminant function suggests that the



Theft, Break and Enter Group tends to be higher on the Status Scale than are prisoners convicted of other offences. However Table 8.4 shows the means of this group to be lower. The role of this variable needs further clarification.

The standardised discriminant function weights achieved when the analysis was repeated using the direct rather than the step-wise method, are similar in magnitude to those achieved by the step-wise method for V.P.I. variables Int, Co, St, Inf, Ac and Art. However the coefficients for variables Real and Ent also appear to make some lesser contribution to the discrimination in the direct method. It also appears that the variable AC makes a contribution, the TBO group being lower on acquiescence.

## Section Summary - Eighth Discriminant Analysis

The analyses using the V.P.I. personality to discriminate between Theft, Break and Enterers and other offence prisoners were highly significant. In the validation condition the discriminant function coefficients were used to correctly classify the validation group cases at a rate 22 percent above that expected by chance. The results indicate that, compared with other offenders, Theft, Break and Enterers are more likely to "act out" rather than "think through" problems (Int-), and have lower self-control (Co-). The direct method analysis in which all variables were included, suggests that Theft, Break and Enterers also tend to be low on acquiescence (Ac-).

11.

Ninth Discriminant Analysis  
(16 P.F. Test - 3 Groups TBMO, HOMP, CTL)

11.1

Introduction

In this study the aim has been to understand different classes of offender in order to be able to "tailor" treatment programs to the needs of specific offender types.

As stated earlier some of the most persistent recidivists are Theft, Break and Enterers. Figures, from this volunteer sample of prisoners, show that only 24 percent of Theft, Break and Enterers were imprisoned for the first time, while 43 percent imprisoned for this offence had been in prison 4 or more times.

While it has been seen from the previous analysis that it was possible to discriminate among offender groups on the basis of personality, Theft, Break and Enterers have not yet been compared with honest offenders and non-offenders.

It would therefore be useful to use the discriminant analysis in its more powerful three group mode, to find whether it is possible to discriminate among Theft, Break and Entering Offenders, Honest Offence Prisoners and Non-Prisoner Controls and if so how they differ from each other personality-wise. Since there were only a few females in the prisoner sample it was decided to exclude these to control for variability due to sex and to use male Controls for comparison purposes.

The above consideration led to Ho 3(a) in Sect 2.2.

## 11.2

### Method

#### 11.21 Subjects

For this analysis the group numbers were as follows:-

Group TBMO (Theft, Break and Entering Male Offenders). This group consisted of 177 male prisoners reporting convictions for Break, Entering and Stealing in prisons throughout Queensland.

Group HOMP (Honest Offence Male Prisoners) This group consisted of 114 male prisoners who reported convictions for offences other than ones involving dishonesty, in prisons throughout Queensland.

Group CTL (Controls - Queensland Adult Males) This group consisted of 49 adult males with varied occupations including some unemployed and who had no known criminal convictions. The data was drawn from that already available to the researchers and is thought to be representative of the general male Queensland population.

The validation group consisted of 40 males representing various offence categories, selected from the same prisons as the other subjects plus 7 non-prisoner controls. They were selected on the basis of the case number being divisible by 8 but with dishonest offenders, other than Theft, Break and Entering offenders, being deleted.

#### 11.22 Materials

Materials were as outlined in Section 2.32 (16 P.F. data was used in this analysis).

## 11.3

### Procedure

Procedure was as outlined in 2.41, 2.42 and 2.43.

Results (Ninth Analysis)  
(16.P.F. Test - 3 Groups: TBMO, HOMP, CTL)

This ninth analysis involved the Theft, Break and Entering Sub-Groups, Honest Offence Male Prisoners Sub-Group and Controls in a three-way analysis. The first discriminant function was highly significant (Chi sq =21.55, df=9, b=.01). The cases used within the analysis were correctly classified at a rate 66 percent above that expected by chance. Within the validation sample correct classification of cases by using the discriminant coefficients was 40 percent above that expected by chance. A supplementary analysis using only groups TBMO and HOMP was carried out to assist in the interpretation of the results. This analysis had an overall significance level of .0003 and correctly classified cases used in the analysis at a rate 22 percent above that expected by chance.

Table 9.1 shows the order of entry of 16 P.F. variables, Wilks' Lambda and the significance level at each stage of the three-way step-wise analysis. The significance related to the "F to Remove" of individual variables is indicated by asterisks. As can be seen 10 of the 16 variables were entered during the analysis stepwise procedure.

Table 9.1

Summary Table - 3 Groups TBMO, HOMP, CTL

Step	Action		Vars In	Wilks' Lambda	Sig.	
	Entered	Removed				
1	B		1	.737330	.0000	***
2	Q3		2	.692965	.0000	**
3	C		3	.660312	.0000	**
4	I		4	.646852	.0000	*
5	G		5	.630746	.0000	*
6	A		6	.621301	.0000	
7	Q4		7	.615228	.0000	
8	Q2		8	.609600	.0000	
9	F		9	.605099	.0000	
10	H		10	.598775	.0000	

\* p<.05, \*\* p<.005, \*\*\* p<.0001.

Table 9.2 shows the F statistics and significances between pairs of groups after step 10. Each F statistic has 10 and 374 degrees of freedom.

Table 9.2

	Group	HOMP	TBMO
Group			
TBMO	F. Value	2.64	-
	Signif.	.0042	-
CTL	F. Value	18.56	14.79
	Signif.	.0001	.0001

As can be seen the non-prisoner control group is clearly discriminated from both Honest Offence Prisoners and Theft, Break and Enter Prisoner Groups. There was however also a highly significant discrimination between the HOMP and TBMO prisoner groups.

The scatter plot and territorial map produced (see figures 9.1 and 9.2) during the analysis suggest that the discrimination between the prisoner groups and the controls is done almost entirely on the basis of the first discriminant function, while the honest vs theft offence prisoners discrimination involves mainly discriminant function 2 with discriminant function 1 playing a lesser part in the discrimination.

ALL-GROUPS SCATTERPLOT - \* INDICATES A GROUP CENTROID

CANONICAL DISCRIMINANT FUNCTION 1

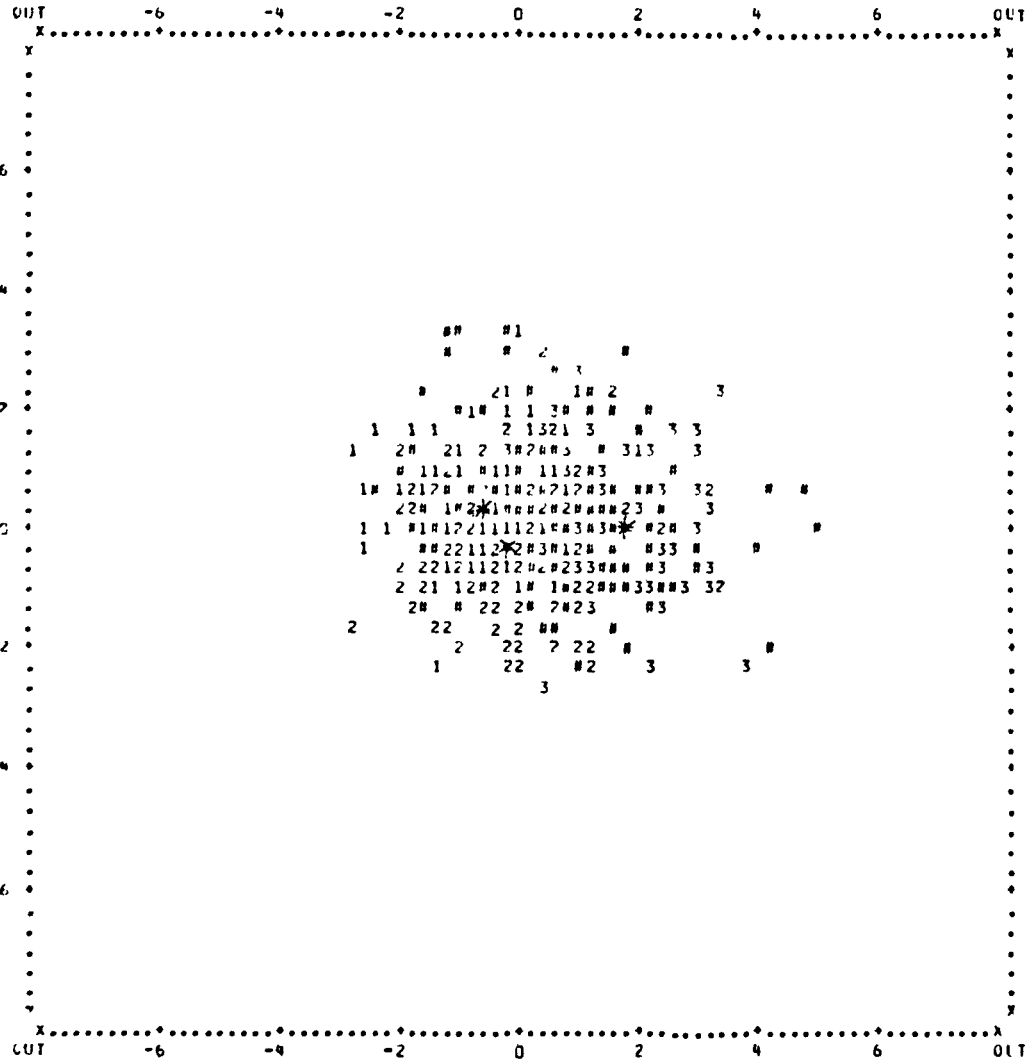
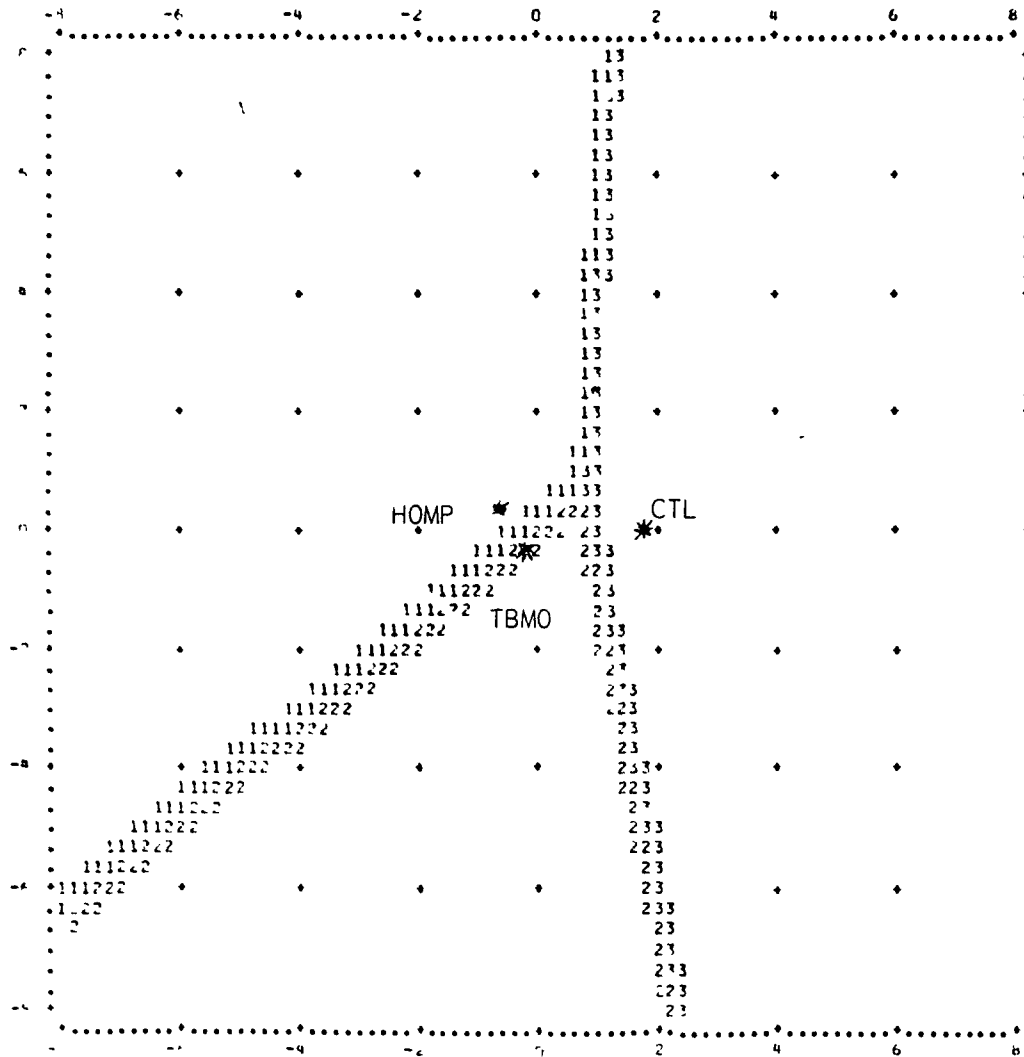


Figure 9.1 Scatterplot showing Group Centroids - Three Groups

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CANONICAL DISCRIMINANT FUNCTION 1

TERRITORIAL MAP \* INDICATES A GROUP CENTROID  
CANONICAL DISCRIMINANT FUNCTION 1



TBMO = Theft, Break and Entering  
Male Offenders

HOMP = Honest Offence Male Prisoners

CTL = Non-Offender Male Controls

Figure 9.2 Territorial Map Showing Group Centroids



The pooled within-groups correlations between the canonical discriminant functions are shown in Table 9.3

Table 9.3

Pooled Within-Groups Correlations between Canonical Discriminant Functions and Discriminant Variables

16 P.F. Variables	Function 1	Function 2
B	.77689*	.14131
F	.20336*	-.11719
Q1	.12134*	-.04843
M	.09506*	.08811
N	-.01705*	-.01599
C	.19545	.56732*
Q2	.03520	-.52787*
G	-.13428	.48761*
A	.13783	.48650*
H	.03888	.38694*
O	-.11618	-.32663*
Q4	-.08906	-.31421*
Q3	-.28156	.30549*
L	-.07032	-.23257*
I	.17286	-.18690*
E	.05791	.08766*

From Tables 9.1 and 9.3 it appears that the first discriminant function indicates that the controls are higher than the prisoners on 16 P.F. variable B and therefore more intelligent. This finding was also supported by the 2 group supplementary analysis. However it is also noted that TBMO group members are somewhat higher on average than are HOMP group members, though both these groups are considerably lower in intelligence than were CTL group members.

11.41 It can also be seen from the Table 9.3 that the contribution of the second function discriminating between the HOMP and TBMO prisoner sub-groups appears to correlate with ten of the 16 P.F. personality variables. Of these, variables B, Q3, C, I, and G reach significance in their individual contribution to the discrimination, during the step-wise procedure(see Table 9.1). The univariate F-ratio of variables A and Q2 were also significant and it will be noted from table 9.3 that both of these variables correlate with the second discriminant function.

From these results and from the results of the supplementary analysis, it appears that the TBMO group differs from the HOMP group in being, on average, of lower Ego-Strength (C-), more

Self-Sufficient (Q2+), of lower Super-Ego Strength (G-), more cool and detached (A-), more lax and careless of social rules (Q3-), and have greater Protected Emotional Sensitivity (I+).

## Section Summary - Ninth Discriminant Analysis

This discriminant analysis involving Theft, Break and Entering prisoners, honest offence prisoners and non-prisoner controls and 16 P.F. personality data, was highly significant in its discrimination among the three groups. The discriminant function coefficients were used to correctly discriminate the cases used in the analysis at a rate 66 percent above that expected by chance. The correct classification of cases in the validation sample was 40 percent above the rate expected from chance. The discrimination between prisoners and non-prisoner controls was most marked. The basis of this discrimination appears to be mainly greater intelligence, on the part of the controls. The controls were also on average, considerably higher on Ego Strength (C+) than were either of the prisoner groups. From the second discriminant function and in the supplementary analysis it appears that Theft, Break and Enterers differ from honest offenders in being, on average, of lower Ego-Strength (C-), more Self-Sufficient (Q2+), of lower Super-Ego Strength (G-), more cool and detached (A-), more lax and careless of social rules (Q3-), and have protected childhood (I+).

12.

Tenth Discriminant Analysis  
(16 P.F. Test - 3 Groups: REMO, HOMP, CTL)

12.1

Introduction

As stated previously in this study the aim has been to understand different classes of offender in order to be able to "tailor" treatment programs to the needs of specific offender types.

In the ninth discriminant analysis, involving three groups, it was noted that the first discriminant function which appeared to discriminate between Honest Offence Prisoner and Non-Prisoner Controls and was found to be closely related to Intelligence.

Discriminant function 2 which appears to discriminate between Male Theft, Break and Enterers and Honest Offence Male Prisoners seemed to do so mainly on the basis of: Low Ego Strength (C-), Self-Sufficiency (Q2+), laxness and carelessness regarding social rules (Q3-), Cool detachment (A-), Low Super-Ego Strength (G-) and Protected Emotional Sensitivity (I+).

It would be useful to again use 3 way discriminant analysis to see if it is possible to discriminate among Male Robbery Extortion Offenders, Honest Offence Male Prisoners and Non-Prisoner Controls, and if so, to find how the groups differ personality-wise and whether 16 P.F. variables significant in relation to Theft, Break and Enterers also discriminate among the groups when Robbery, Extortion offenders are substituted.

The above consideration led to Ho 3(2) in 2.2.

## 12.2

### Method

#### 12.21 Subjects

For this analysis the group numbers were as follows:-

Group REMO (Robbery, Extortion Male Offenders). This group consisted of 45 male prisoners reporting convictions for Robbery and/or Extortion, in prisons throughout Queensland.

Group HOMP (Honest Offence Male Prisoners) This group consisted of 114 male prisoners, who reported convictions of offences other than those involving dishonesty, in prisons throughout Queensland.

Group CTL (Controls - Queensland Adult Males) This group consisted of 49 adult males with varied occupations including some unemployed and who had no known criminal convictions. The data was drawn from that already available to the researchers and is thought to be representative of the general male Queensland population.

The validation group consisted of 23 males representing various offence categories, selected from the same prisons as the other subjects plus 7 non-prisoner controls. They were selected on the basis of the case number, being divisible by 8 but with dishonest offenders, other than Robbery, Extortion offenders, being deleted.

#### 12.22 Materials

Materials were as outlined in Section 2.32 (16 P.F. data was used in this analysis).

## 12.3

### Procedure

Procedure was as outlined in 2.41, 2.42 and 2.43.

Results (Tenth Analysis)  
(16 P.F. Test - 3 Groups: REMO, HOMP, CTL)

This tenth analysis involved Robbery Extortion Male Offenders, Honest Offence Male Prisoners, and Non-Prisoner Male Controls in a 3 way discriminant analysis. The first discriminant function was highly significant (Chi sq =155.85, df=18, p<.0001). The second discriminant function was also highly significant (Chi sq =23.49, df=8, p=.0028). The correct classification of cases used within the analysis by the application of the discriminant function coefficients was 100 percent greater than that expected by chance. In the validation sample correct prediction was 70 percent above that expected by chance. A supplementary analysis using only groups REMO and HOMP was carried out to assist in the interpretation of the results. This analysis had an overall significance level of .0001 and correctly classified cases used in the analysis at a rate 40 percent above that expected by chance.

Table 10.1 shows the order of entry of 16 P.F. variables, Wilks' Lambda and the significance level at each stage of the stepwise analysis. The significance related to the "F to Remove" of individual variables is indicated by Asterisks. As can be seen from the table 10.1, 9 of the 16 variables were entered during the stepwise analysis procedure.

Table 10.1

Summary Table - 3 Groups REMO, HOMP, CTL

Step	Action		Vars In	Wilks' Lambda	Sig.	
	Entered	Removed				
1	B		1	.622186	.0000	***
2	Q3		2	.569382	.0000	**
3	C		3	.536891	.0000	*
4	Q2		4	.515373	.0000	*
5	I		5	.496311	.0000	*
6	G		6	.481378	.0000	a
7	Q4		7	.472600	.0000	
8	L		8	.466334	.0000	
9	O		9	.460535	.0000	

\* p<.05, \*\* p<.005, \*\*\* p<.0001.

a Just failed to reach .05 significance level.

Table 10.2 shows the F statistics and the significances between groups after step 9 in the analysis. Each F statistic has 9 and 197 degrees of freedom.

Table 10.2

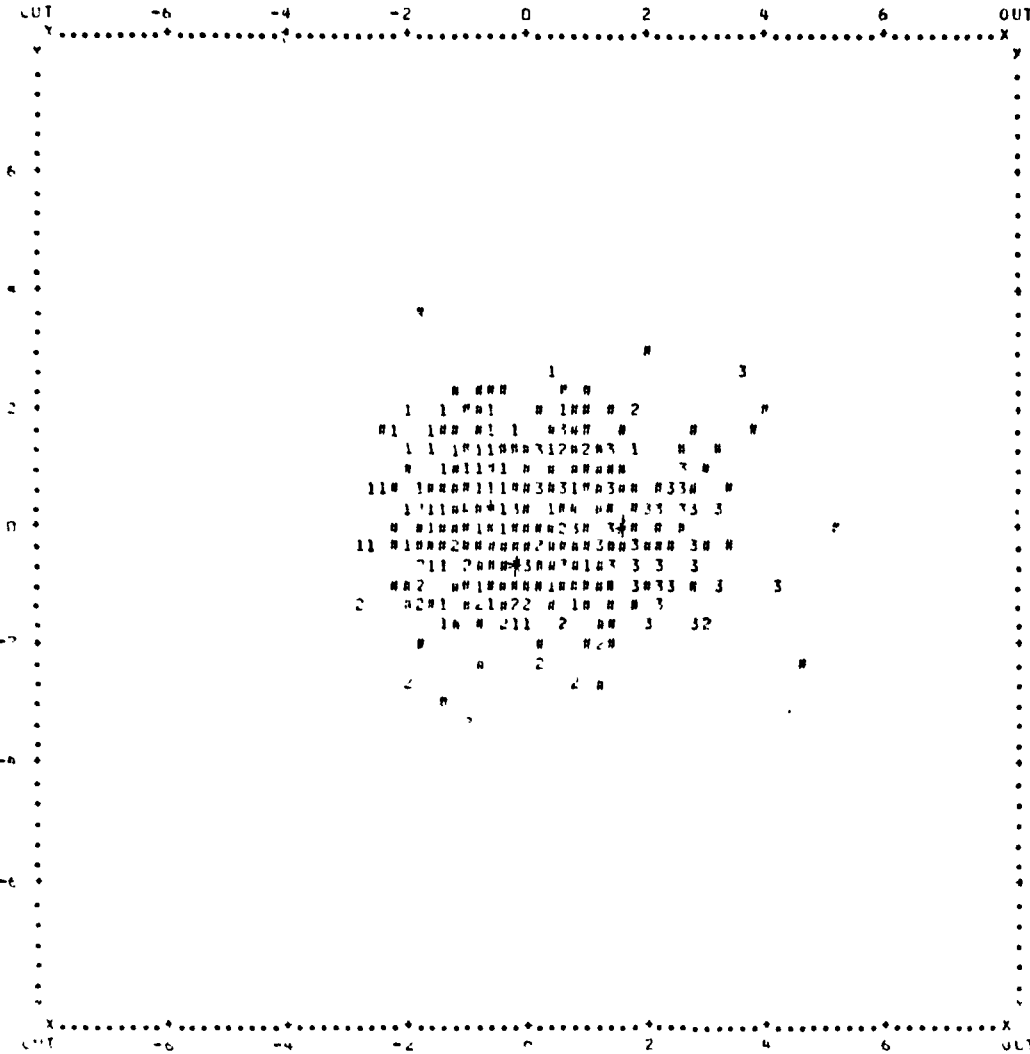
	Group	HOMP	REMO
Group			
REMO	F. Value	3.54	-
	Signif.	.0004	-
CTL	F. Value	20.29	9.98
	Signif.	.0001	.0001

As can be seen from significance levels in table 10.2 there was clear discrimination among the groups, but there was a more distinct separation between the prisoners and controls.

The scatter plot (figure 10.1) and territorial map (figure 10.2) produced during the analysis, as in analysis nine, indicate that the discrimination between the prisoner group and the controls is done largely on the basis of the first discriminant function while it is mainly the second discriminant function that accounts for the separation of the honest offenders from the robbery, extortion offenders.

ALL-GROUPS SCATTERPLOT - \* INDICATES A GROUP CENTROID

CANONICAL DISCRIMINANT FUNCTION 1



- 1 = HOMP (Honest Offence Male Prisoners)
- 2 = REMO (Robbery, Extortion Male Offenders)
- 3 = CTL (Non-Offender Male Controls)
- # = Ungrouped Cases

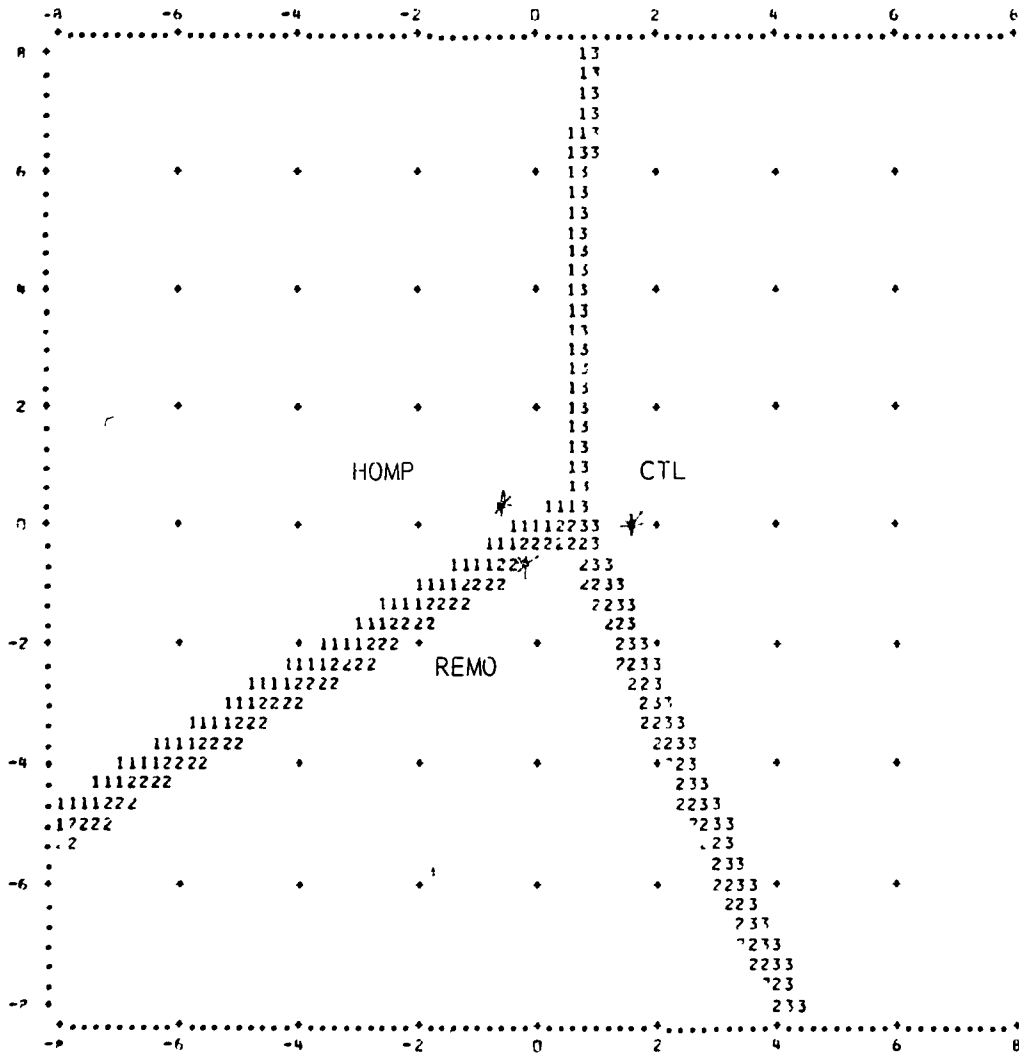
CANONICAL DISCRIMINANT FUNCTION 1

Figure 10.1 Scatterplot showing Group Centroids - Three Groups.



TERRITORIAL MAP \* INDICATES A GROUP CENTROID

CANONICAL DISCRIMINANT FUNCTION 1



HOMP = Honest Offence Male Prisoners

REMO = Robbery, Extortion Male Offenders

CTL = Mon-Offender Controls

Figure 10.2 Territorial Map Showing Group Centroids

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The pooled within-groups correlations between the canonical discriminant functions and the discriminant variables are shown in Table 10.3.

Table 10.3

Pooled Within-Groups Correlations between Canonical Discriminant Functions and Discriminant Variables

16 P.F. Variables	Function 1	Function 2
B	.80617*	.11371
Q1	.20121*	-.07923
I	.19836*	.16179
G	-.15757*	.01369
F	.08440*	.07326
Q2	.04978	-.58694*
C	.16449	.54563*
O	-.17482	-.54191*
Q3	-.26857	.51256*
L	.02877	-.42239*
H	.05765	.41572*
Q4	-.07265	-.23569*
M	.09459	.22276*
A	.06703	.21070*
E	.08809	.11070*
N	-.00989	-.08695*

- 12.41 From table 10.3 there is a similar pattern of 16 P.F. variables that correlate highly with discriminant function 1. Intelligence again appears to be the major variable separating out the controls from the prisoners.
- 12.42 It can be seen that discriminant variables correlating with the second discriminant function, while somewhat similar to those in the ninth analysis, have become reordered. Also variable G has dropped from significance to be replaced by Q2 and the direction of variable I has reversed.
- 12.43 Variable Q3- was found to be a highly significant discriminator between Robbery, Extortion Prisoners and other offence Prisoners in the third analysis. In this analysis as, in the last one, the Q3- contribution is also highly significant, its "F to remove" being  $F(1, 205) = 9.46, p < .005$ .
- 12.44 Consideration of the above results together with those of the supplementary analysis suggest that like Theft, Break and Enterers, Robbery and Extortion offenders are, relative to honest offenders, more lax and careless of social rules (Q3-), and lower in Ego-Strength (C-). However Self-Sufficiency and a tendency to plan alone rather than in company (Q2+) appear to be of greater

significance in the robbery offenders than with theft offenders. Other differences between these two groups is that robbers appear to be more tough minded and independent (I-), and thieves tend towards being tender-minded (I+). Table 10.3 and the supplementary analysis indicate that there is also significance for the Robbery group of Self-Opinionated Suspiciousness (L+), Depressive Apprehensiveness (O+), and surprisingly, Restrained Shyness (H-). This the first evidence in this study to support the involvement of variable O+ found by Tyler and Kelly in relation to rated untrustworthiness in delinquent youths.

## Section Summary - Tenth Discriminant Analysis

This discriminant analysis involving Robbery and Extortion offenders, honest offence prisoners and non-prisoner controls was highly significant in its discrimination among the groups. The application of the discriminant functions was able to correctly classify cases used within the analysis at a rate of over 100 percent above that expected by chance. The validation cases were correctly classified at a rate of 70 percent above chance expectations. This points to the robbery and extortion offenders being relatively more homogeneous personality-wise, than are other offenders. The first discriminant function appears to separate the control and prisoner groups mainly on the basis of the controls being more intelligent (B+). The second discriminant function appears to discriminate mainly between robbers and honest offence prisoners. Results suggest that, as was found in the last analysis with Theft, Break and Enterers, Robbery and Extortion offenders are, relative to honest offenders, more lax and careless of social rules (Q3-), and lower in Ego-Strength (C-). Self-Sufficiency (Q2+) appears to be of greater significance in the robbery offenders than with theft offenders. Another difference between these two groups is that robbers appear to be more tough minded (I-), and thieves tend towards being tender-minded (I+). Variables (L+) Self-Opinionated Suspiciousness, (O+) Depressive Apprehensiveness and (H-) Restrained Shyness also appear to be personality characteristics of significance which discriminate the robbery group from honest offence prisoner group. It will be recalled that O+, Depressive Apprehension was found to be significant in the Tyler and Kelly (1962) study in relation to youths who were rated as untrustworthy.

13.

Eleventh Discriminant Analysis  
(16 P.F. Test - 3 Groups FMMO, HOMP, CTL)

13.1

Introduction

In this study the aim has been to understand more in detail, the personality characteristics of different classes of offender in order to provide information on what training is likely to be effective in rehabilitation.

In analyses 9 and 10 which compared male prisoners with controls it was noted that 16 P.F. variable (B+) appeared important in discriminating between controls and prisoners.

When in analysis 10 group Robbery, Extortion Male Offenders were substituted for Theft, Break and Enter Male Offenders used in analysis 9, it was noted that while discriminant function 1 showed little change in 16 P.F. variable composition, while the second discriminant function showed some change. The main effect was the reversal of the direction of variable I. It appears that robbers tend to be more tough-minded whereas thieves more tender-minded. Variable Q2 which failed to reach significance in its individual contribution with thieves was significant in the case of robbers.

It would therefore be useful to again use 3 way discriminant analysis to see if it is possible to discriminate among Male Fraud, Misappropriation Offenders, Honest Offence Male Prisoners and Non-Prisoners Controls, and if so, to find how the groups differ in personality.

The above consideration led to Ho 3(3) in 2.2.

## 13.2

### Method

#### 13.21 Subjects

For this analysis the group numbers were as follows:-

Group TBMO (Fraud, Misappropriation Male Offenders). This group consisted of 56 male prisoners reporting convictions for Fraud and/or Misappropriation in prisons throughout Queensland.

Group HOMP (Honest Offence Male Prisoners) This group consisted of 114 male prisoners who reported convictions of offences other ones involving dishonesty in prisons throughout Queensland.

Group CTL (Controls - Queensland Adult Males) This group consisted of 49 adult males with varied occupations including some unemployed and who had no known criminal convictions. The data was drawn from that already available to the researchers and is thought to be representative of the general male Queensland population.

The validation group consisted of 22 males representing various offence categories, selected from the same prisons as the other subjects plus 7 non-prisoner controls. They were selected on the basis of the case number being divisible by 8 but with dishonest offenders, other than Fraud, Misappropriation offenders, being deleted.

#### 13.22 Materials

Materials were as outlined in Section 2.32 (16 P.F. data was used in this analysis).

## 13.3

### Procedure

Procedure was as outlined in 2.41, 2.42 and 2.43.

Results (Eleventh Analysis)  
(16 P.F. Test - 3 Groups: FMMO, HOMP, CTL)

The eleventh analysis involved the Fraud, Misappropriation Male Sub-Group, Honest Offence Male Prisoners, and Non-Prisoner controls in a three way discriminant analysis. The first discriminant function was highly significant (Chi sq =136.68, df=14, p<.0001). The second discriminant function failed to reach the .05 level of significance (Chi sq =10.1, df=6, p=.1212). By using the discriminant weights derived in the analysis, cases used in the analysis were correctly classified at a rate 93 percent above that expected by chance. The rate of correct classification in the validation sample was 86 percent above that expected by chance. A supplementary analysis using only groups FMMO and HOMP was carried out to assist in the interpretation of the results. This analysis had an overall significance level of .0003 and correctly classified cases used in the analysis at a rate 37 percent above that expected by chance.

Table 11.1 shows the order of entry of variables, Wilks' Lambda and the significance level of the discrimination at each step. The significance related to the "F to Remove" of individual variables is indicated by asterisks. Seven of the 16 P.F. variables were included in the analysis.

Table 11.1

Summary Table - 2 Groups FMMO, OOP

Step	Action		Vars In	Wilks' Lambda	Sig.	
	Entered	Removed				
1	B		1	.659357	.0000	***
2	Q3		2	.599332	.0000	**
3	C		3	.577281	.0000	*
4	I		4	.555166	.0000	*
5	G		5	.537985	.0000	a
6	A		6	.532146	.0000	
7	Q2		7	.526399	.0000	

\* p<.05, \*\* p<.005, \*\*\* p<.0001.

a Just failed to reach .05 significance level.

Table 11.2 shows the F statistics and the significances between groups after step 6 in the analysis. Each F statistic has 6 and 211 degrees of freedom.

Table 11.2

	Group	HOMP	FMMO
Group			
FMMO	F. Value	3.89	-
	Signif.	.0011	-
CTL	F. Value	28.53	11.68
	Signif.	.0001	.0001

Table 11.3 shows the pooled within-groups correlations between the canonical discriminant functions and the discriminant variables.

Table 11.3

Pooled Within-Groups Correlations between Canonical  
Discriminant Functions and Discriminant Variables

16 P.F. Variables	Function 1	Function 2
B	.79729*	.10588
F	.09937*	.04874
A	.10212	.60678*
I	.19996	.53113*
Q3	-.28458	.51276*
G	-.17098	.33603*
Q2	.06830	.29149*
H	.04794	.27002*
C	.16470	.26044*
L	-.07163	-.21209*
Q4	.03601	-.20348*
O	-.11471	-.16111*
M	.07075	.15292*
Q1	.12200	-.12304*
N	.03906	-.05799*
E	.03698	-.04975*

As can be seen from Tables 11.3 and 11.4, as in analyses 9 and 10, the first discriminant function again appears to be almost entirely Intelligence (B+).



The results of this analysis are more difficult to interpret since unlike the two previous ones the relationship of the second discriminant function to the separation of the controls from the prisoners is less clear. By comparing Tables 9.1, 10.1, 11.1, 9.3, 10.3 and 11.3 it will be seen that the discrimination among groups in the last three analyses is related to 16 P.F. variables B, Q3, C, I, and G. From the consideration of the supplementary analysis it is clear that the discrimination of the FMMO group from the HOMP group is on the basis of variables B, I, A, H, M, and Q2. As compared to honest offence prisoners, fraud prisoners were more intelligent, more tender-minded and dependent, more warm-hearted and easy-going, more socially bold and venturesome, more bohemian and careless of practical matters and more self-sufficient. Comparison of means shows the fraud group to have higher Self-Sentiment Control (Q3+), and to be more persevering (G+) than the other groups. This is in contrast to Theft and Robbery groups in which variables G and Q3 were relatively low.

## Section Summary - Eleventh Discriminant Analysis

The first discriminant function of this discriminant analysis involving Fraud, Misappropriation prisoners, honest offence prisoners and non-prisoner controls and 16 P.F. personality data, was highly significant in its discrimination among the three groups. The second discriminant function failed to reach significance. The discriminant function coefficients were used to correctly discriminate the cases used in the analysis at a rate 93 percent above that expected by chance. The correct classification of cases in the validation sample was 86 percent above the rate expected from chance. As with the first discriminant function, the basis of this discrimination appears to be mainly intelligence. The Controls were also on average, higher on Ego Strength than either of the prisoner groups, the Fraud group being intermediate between controls and honest offence prisoners. As compared to honest offence prisoners, fraud prisoners were more intelligent, more tender-minded and dependent, more warm-hearted and easy-going, more socially bold and venturesome, more bohemian and careless of practical matters and more self-sufficient. In contrast to Theft and Robbery groups Fraud offenders appear to be of higher Superego Strength and to be more controlled and socially precise than honest offence prisoners.

14.

Analyses 12 to 16  
(Regression analyses, 16 P.F. Test and Staff Rating of Prisoners)

14.1

#### Introduction

As pointed out previously, Tyler and Kelly (1962) found that delinquent youths, rated by camp counsellors as lying and untrustworthy, to be significantly low on Cattell variables A and Q2 and to be high on variable O.

In this study their findings regarding variable O were supported in the analysis comparing robbers with honest offenders and non-offender controls. Variable O also contributed to the discrimination in the analysis comparing robbers with other offence prisoners though its contribution just failed to reach significance. In relation to variable A- their results were supported in the case of analysis 4 which involved Theft, Break and Enterers.

The 16 P.F. variable Q2 was found to be significant both in camp supervisor ratings of youths seen to be lying and untrustworthy and in Queensland adult inmates convicted of certain dishonest property offences. However the findings in the Tyler and Kelly study involving ratings of dishonest behaviour, show Q2 to be low, while the results of Analyses 3, 4, 5, 6 and 7 found those convicted of Theft, Break and Entering, Fraud and Misappropriation and of Robbery and Extortion were high rather than low.

Assuming the apparently contradictory results between the two studies are not due to chance, the difference in direction of variable Q2 associated with camp supervisor dishonesty ratings and that with convictions of certain dishonest offence categories needs to be clarified.

The following speculations offer some possible explanations of the difference in findings.

It may be that common misconceptions about the personality of dishonest persons or about factors leading to dishonesty may have been responsible for raters being "wrong" about perceiving dishonest tendencies in those rated. Such common misconceptions could account for persons who do not deserve it, being rated as untrustworthy.

Alternatively it may be that there is some personality difference between the American juvenile delinquents of the Tyler and Kelly (1962) study and the Queensland Adult Prisoner in this study which is related to the reversal of direction of the variable Q2.

It had been originally planned to replicate that part of the

Tyler and Kelly (1962) study which used rating scales that appear relevant to dishonest behaviour, in order to check their findings. This replication is now even more important as a means of exploring the apparently conflicting results.

The rating scale items which intuitively, are most likely to be closely associated with dishonest behaviour are: Suspicion of stealing, Lying, Lack of Guilt, and Untrustworthiness (See items 2, 6, 4, and 8 in Table A1 in Appendix 3). It was also decided to include the "Unlikableness" rating scale item because of the close relationship in terms of Cattell variables, found in the Tyler and Kelly (1962) study, between this rating scale and those scales relating to dishonesty.

It was asked if the relationship between 16 P.F. variables A, O and Q2 and adjudged untrustworthiness and lying, found by Tyler and Kelly (1962) would be also found with adult prisoners rated by prison staff. If so, it was also asked how this can be explained in terms of the apparently contradictory results in relation to Cattell variable Q2, between adjudged untrustworthiness in the Tyler and Kelly (1962) study and actual offending in this study.

## 14.2

### Method

#### 14.21 Subjects

For these analyses the subjects were prisoners convicted of offences of various categories. There were 10 females and 298 males.

#### 14.22 Materials

Materials were as outlined in Section 2.32 (16 P.F. data and Prison Staff Ratings of prisoners - See Appendix 3, Table A1).

## 14.3

### Procedure

#### 14.31

Procedure was as outlined in 2.41, 2.42 and 2.43. In addition, in these analyses, prison staff ratings of prisoners on nine scales were used (See Appendix 3). Six of these scale items were those used by Tyler and Kelly (1962).

The rating procedure replicated that used by Tyler and Kelly (1962) and consisted of having prison staff who had contact with the prisoners, sort cards with their names into nine piles, each standing for one of the nine steps on the rating scales. The nine steps were numbered, with the "number 1" and "number 9" piles having a written statement defining the scale. For example on one scale the "number 1" pile was labeled "Always tells the truth" and the "number nine" pile was labeled "A regular liar". Raters were encouraged to use all nine categories, preferably with more cards in the middle and fewer end piles, but this was not insisted upon.

Results - Analyses 12 to 16  
(Regression Analyses with 16 P.F. Test and Prison Staff Ratings)

Stepwise Regression Analyses using 16 P.F. variables as predictors were carried out on each of the following ratings scales: Suspicion of stealing, Lying, Lack of Guilt, Untrustworthiness and Unlikableness.

The results of these analyses are summarised in Table 12.1.

Table 12.1

Summary of Step-wise Regression Analyses 12 to 16  
Dependent Variables: Ratings of Prisoners by Prison Staff  
Predictors: Prisoner 16 P.F. Data Variables

Analysis	Dependent	Mult. R	R sq.	F Sig	Predictors	Beta
12	Suspicion of Stealing	.14978	.02244	.1414	A	.08
					G	-.08
					M	.09
					H	-.06
13	Lying	.22677	.05143	.0068	L	.14*
					Q2	-.13*
					F	-.12
					E	.11
					Q1	-.07
14	Lack of Guilt	.26527	.07037	.0025	L	.14*
					H	.15*
					M	.11
					Q2	-.10
					F	-.10
15	Untrust-worthy	.19888	.03955	.0315	L	.11
					F	-.13*
					H	.12*
					Q4	.11
					Q2	-.07
16	Unlikable	.13845	.01917	.015	Q4	.14

\*p<.05

14.41

While the amount of variance accounted for by personality variables is not great, variables in three of the analyses reached the .05 level of significance.

As can be seen Q2- featured among the variables included in Analysis 13 with Lying as the dependent variable. Its contribution to the analysis reached the .05 level of significance.

Although it failed to reach the .05 level of significance, Q2- was also one of the variables entered in the stepwise procedure in Analysis 14 in which the dependent variable was "Lack of Guilt".

These findings in relation to variable Q2 are most interesting since they support those by Tyler and Kelly (1962) that persons judged to be untrustworthy have stronger peer group dependencies than those not so judged.

In contrast, analyses 3 to 7 show prisoners convicted of dishonesty tend to be Q2+, not Q2-.

Two possible explanations are:-

1. That group dependent persons, though more prone to dishonesty, are less likely to be caught and convicted than are group independent persons, or that

2. It is a popular misconception that group dependent persons tend to be untrustworthy.

The second explanation, being the more parsimonious, is perhaps to be preferred. It could be that there is a popular mythology that most dishonesty takes place in groups and that therefore those with strong group identity are "up to no good" may be responsible for inaccurate judgements regarding the type of person likely to be dishonest.

It can also be seen from Table 12.1 that Q2- is most strongly related to ratings of lying. There is a popular conception that lying and stealing are closely related and in using the term untrustworthy it has been assumed that it includes both lying and stealing. It may be that the connection is not as close in reality, as commonly presumed.

Perhaps lying is more closely related to the avoidance of threat or possible anger, or to the avoidance of control by others, than it is to stealing.

14.42

As can be seen from Table 12.1, L+ appeared as a predictor in three of the four analyses involving ratings of prisoner

dishonesty, and in two of these analyses, variable L+ reached the .05 level of significance. Variable L+ also appears to be correlated with the second discriminant function in the three way analysis involving Robbery, Extortion Offenders, Honest Offence Male Prisoners, and Controls. However the results of this analysis show that it is a variable of relatively little importance in discriminating between Robbery, Extortion Offenders and others, it being the eleventh entered in the stepwise procedure, failing to reach the .05 level of significance in its contribution to the discrimination. Variable L+ was also entered towards the end of the stepwise procedure of analysis 3, but it also failed to reach significance in that discriminant analysis.

It follows from the above, that the Self-Opinionated Suspiciousness of variable L+ may be a relatively less important characteristic of robbers and extortionists. It also appears from the results of the Regression Analysis that L+ is a characteristic highly visible to raters and is adjudged by them to be an indication of lying, untrustworthiness and lack of guilt. However results arrived at from the "hard data" part of the study indicate that it only significant in the case of robbery and extortion offenders.

This raises speculation as to whether there is an unwarranted generalisation in the public consciousness about personality traits associated with untrustworthy behaviour. It also highlights the need for more research to provide a more detailed and exact understanding of criminal behaviour and its personality correlates.

14.43

#### Dependent Variable Untrustworthiness

The only variables to reach the .05 level of significance in its contribution to the prediction of the Untrustworthiness rating were variable F- and H+. Personality characteristics loading F- are: Sober, Prudent Serious and Taciturn. The descriptive adjectives loading H+ are: Venturesome, Bold, Unhhibited. While variable L+ reached .05 significance in step 2 of the analysis, its contribution fell below this level after the inclusion of variable H+ in the stepwise procedure.

Although F- does not appear to be closely related to dishonest property offence convictions, L+ was included as a predictor in the discriminant analysis involving Robbery and Extortion offences. This is similarly true for variable H+ in the case of prisoners convicted of Fraud or Misappropriation.

Although any conclusions drawn must be tentative because of the small amount of the variance accounted for by personality variables in the analyses and the lack of corroborative evidence from elsewhere, some speculation could provide further hypotheses for testing in some other study. What follows is merely such speculation.



It is easy to understand why prison staff would be mistrustful of venturesome, bold, uninhibited (H+) prisoners since these behaviour qualities would be likely to make such prisoners difficult to control.

Similarly the self-opinionated suspiciousness of L+ prisoners could be expected to make the job of prison staff more difficult.

However it is not immediately obvious how F-, the sober, serious, taciturn personality quality could be involved in a judgement of untrustworthiness. It may, however, be the reluctance of F- persons to communicate and their slowness in responding which arouses the concern of prison staff.

The discrepancies between the findings of analyses involving rated untrustworthiness and those involving dishonest offending could be explained by concluding that people are not very good at successfully perceiving likelihood of untrustworthy behaviour. Perhaps that is why dishonesty of those in positions of trust can often go on for a number of years without anyone suspecting.

## Section Summary - Analyses 12 - 16

These Regression analyses looked at the relationship between staff ratings of prisoners and 16 P.F. personality. Five step-wise Regression analyses were carried out with prisoner ratings on Suspicion of Stealing, Lying, Lack of Guilt, Untrustworthiness and Unlikableness respectively as dependant variables. The independent variables were the 16 P.F. personality variables. Though there was a relatively weak relationship between staff ratings of prisoners and personality, results tend to confirm the findings of Tyler and Kelly (1962) in relation to variable Q2. While the results of these Regression analyses and those of the Tyler and Kelly (1962) study both point to those adjudged as untrustworthy being lower on Q2 (more Group-Dependent), the Discriminant analyses in this study which looked actual offending, strongly point to dishonest offenders being higher on Q2 (more Self-Sufficient). It is speculated that there may be a misconception within the popular consciousness that dishonesty and Group-Dependency go together, when in reality the opposite is true. In these Regression analyses variable L+ appeared to be an important predictor of rated untrustworthiness. This again is somewhat at variance with the Discriminant analyses involving actual offending in this study. In these analyses variable L was found to be significant only in the case of robbery and extortion offenders. In this study adjudged lack of guilt feelings and untrustworthiness appear to be related to the Socially Bold Venturesomeness of H+ prisoners while the Sober Seriousness of F- appears to relate to their adjudged untrustworthiness. There is no clear evidence from earlier analyses to support these findings in relation to variables H and F. Though failing to reach significance, these suggest that Fraud offenders may be H+ while Robbery and Theft offenders tend to H-.

15.

Analysis 17  
(Principle Component Analysis - Varimax Rotation,  
16 P.F. Test and Prison Staff Ratings)

15.1

Introduction

While from table 12.1 in Chapter 14 it can be seen that although certain variables contributed significantly to the regression equation, it is noted that the amount of variance accounted for by 16 P.F. predictor variables, was low. If rated behaviour characteristics account for so little of the personality variance, this leads to the question as to what amount can be accounted for from other prisoner data collected.

In other words, if there is relatively low correlation between prison staff ratings of prisoner behaviour and prisoner personality, it can be asked to what other prisoner characteristics the ratings are more closely related. The answer to this question may lead to some understanding of what other underlying factors apart from personality of the prisoner influenced the rating procedure.

In order to try to tease out the answers to these questions, it was decided to carry out a factor analysis using prison staff rating variables, 16 P.F. variables, other variables summarising criminal history and demographic prisoner variables.

15.2

Method

15.21 Subjects

For this analysis data relating to 308 prisoners (298 males 10 females) from all offence categories was used.

15.22 Material

Materials were as outlined in Section 2.32 (Prison staff prisoner ratings, 16 P.F. prisoner data, criminal history, and prisoner demographic data were used.).

15.3

Procedure

Procedure was as outlined in 2.41, 2.42 and 2.43.

Result - Seventeenth Analysis  
(Factor Analysis - 32 Variables)

From Table 17.1 it can be seen that age, self and parent education levels and times in prison, account for nearly half of the variance whereas personality accounts for about one fifth of the variance

Table 17.1

Variable	Est	Comm	Factor	Eigenvalue	Pct Of Var	Cum Pct
Age	1.0		1	4.718	14.7	14.7
SE (Self-Educ.)	1.0		2	3.542	11.1	25.8
FE (Father-Educ.)	1.0		3	2.679	8.4	34.2
ME (Mother-Educ.)	1.0		4	2.216	6.9	41.1
Timesin	1.0		5	1.603	5.0	46.1
Numdifof	1.0		6	1.441	4.5	50.6
Socsup	1.0		7	1.311	4.1	54.7
Lowcapln	1.0		8	1.135	3.5	58.3
Suspstel	1.0		9	1.125	3.5	61.8
Notrusst	1.0		10	.980	3.1	64.8
Notglty	1.0		11	.915	2.9	67.7
Unlikabl	1.0		12	.843	2.6	70.3
Liar	1.0		13	.791	2.5	72.8
Tftocont	1.0		14	.778	2.4	75.3
Cantrst	1.0		15	.763	2.4	77.6
Stndover	1.0		16	.682	2.1	79.8
A	1.0		17	.658	2.1	81.8
B	1.0		18	.585	1.8	83.7
C	1.0		19	.549	1.7	85.4
E	1.0		20	.527	1.6	87.0
F	1.0		21	.519	1.6	88.6
G	1.0		22	.493	1.5	90.2
H	1.0		23	.477	1.5	91.7
I	1.0		24	.450	1.4	93.1
L	1.0		25	.411	1.3	94.4
M	1.0		26	.369	1.2	95.5
N	1.0		27	.330	1.0	96.6
O	1.0		28	.287	.9	97.5
Q1	1.0		29	.266	.8	98.3
Q2	1.0		30	.238	.7	99.0
Q3	1.0		31	.168	.5	99.6
Q4	1.0		32	.137	.4	100.0

The varimax rotated factor loadings on the variables are shown in Table 17.2

Table 17.3

Component Items And Varimax Rotated Factor Loadings for  
Prisoner Demographic Data, Prison Staff Ratings of Prisoners  
and Prisoner 16 P.F. Personality Data.

	Data Item	Loading
Factor I.	Negative Halo	
	Rated as Untrustworthy	.89
	Rated as Lying	.85
	Rated as Unlikable	.82
	Rated as Standing over other prisoners	.81
	Rated as Not feeling guilt	.77
	Rated as Tough to control	.74
	Rated as Not trusting of staff	.54
	Rated as Suspected of stealing in prison	.26
Factor II.	16 P.F. 2nd Order Factor Anxiety	
	Q4+ Tense, Frustrated, Driven	.83
	O+ Apprehensive, Worrying, Troubled	.79
	C- Emotionally Unstable, Low Ego Strength	.75
	Q3- Careless of rules, Self-Conflict	.57
	L+ Suspicious, Self-Opinionated	.43
	H- Shy, Diffident, Timid	.42
Factor III	16 P.F. 2nd Order Factor Exvia	
	A+ Outgoing, Warmhearted	.69
	H+ Venturesome, Uninhibited	.67
	F+ Happy-go-lucky, Enthusiastic	.66
	E+ Dominant, Aggressive	.55
	Q2- Dependent, "Joiner"	.42
Factor IV	Bright parents, dull inmate	
	ME Mother education/training level	.94
	FE Father education/training level	.93
	B- Dull intelligence of prisoner	.31
	LOWCAPLN Rated Low capacity for learning	.23
	SOCSUP- Low family/social support	.21
Factor V	16 P.F. 2nd Order Factor Independence	
	Q1+ Experimenting, Analytical	.63
	N- Naive, Forthright, Unpretentious	.57
	Q2+ Self-sufficient, Resourceful	.53
	E+ Dominant, Aggressive	.50
	B+ Bright intelligence	.46
	L+ Suspecting, Jealous	.31
	SE+ Self education/training level	.31
	LOWCAPLN- High Learning Capacity	.22

Factor VI	16 P.F. Superego strength, Maturity	
	AGE	.77
	G+ Conscientious, Strong Superego	.55
	SE Self Education/Training	.53
	Q1- Respecting Established Ideas	.32
	F- Sober, Serious	.30
	NOTRUSST- Trusts prison staff	.29
	L- Trusting Adaptable	.27
	Q3+ Controlled Socially-precise	.26
	B+ Bright intelligence	.22
Factor VII	Institutionalised Recidivists	
	TIMESIN Number of times in prison	.83
	NUMDIFOF Number of different offences	.68
	SOCSUP- Low family/social support	.43
	L+ Suspecting, Jealous	.23
Factor VIII	Prisoners Rated as Dull and Dishonest	
	SUSPSTEL Rated Suspected of stealing	.81
	LOWCAPLN Rated Low capacity for learning	.61
	NOTRUSST Rated Not trusting of staff	.24
	G- Expedient, Evades rules	.23
	SE- Low Self Education/training	.23
	NUMDIFOF- Tends to one type of offence only	.21
Factor IX	16 P.F. 2nd Order Factor Prodigious Subjectivity	
	I+ Tender-minded, Over-protected	.82
	M+ Imaginative, Impractical	.49
	NOTRUSST Rated Not trusting of staff	.29
	G+ Conscientious, Strong Superego	.22
	Q3+ Controlled, Socially precise	.21
	E- Submissive	.20
	L- Trusting, Adaptable	.12

15.41

Factor I correlates strongly with seven of the nine variables involving rating of prisoners by prison staff. There is little correlation between these prison staff ratings and prisoner personality or other prisoner variables. It therefore appears that Factor I is best described as negative halo.

15.42

Factors II and III are 16 P.F. Second Order factors Anxiety (vs Adjustment) and Exvia (vs Invia). Exvia and Invia refer to the personality characteristics of extraversion and introversion.

15.43

Factor IV point to these being a group of prisoners with dull intelligence, little family or social support and whose parents are highly educated. This raises the question as to whether as children, they were rejected for not meeting parental ambitions for them. More research is needed on this question.

15.44

Factors V, VI and IX all appear to be closely related to 16 P.F. Second Order Factors. These are respectively Independence (vs Subduedness), High Superego Strength (vs Low Superego Strength) and Prodigal Subjectivity (vs Cool Realism). These have all been previously described by Cattell et al (1970).

15.45

Institutionalised recidivists for whom crime and prison appear to be a way of life, appears to be the most likely interpretation of Factor VII. Factor loading suggest that a sub-group of prisoners exists with little family or social support and have been in prison a number of times for a number of different offences.

15.46

Factor VIII appears to describe a certain class of prisoner who is rated as suspected of stealing whilst in prison, having a low capacity for learning, and as not being trusting of prison staff. Prisoner variables which appear to be associated with these ratings are: G- (low Superego Strength), a poor education and the tendency towards being first offenders. Variable G- was shown to be related to convictions for theft in analyses 4 and 9 and to juvenile delinquency generally, Mc Quaid (1978) and Pasmore (1983). Notably absent in this factor, are correlations with other variables such as Q3- and Q2+ which were found in earlier analyses to be related to convictions of stealing. It appears that the prison staff ratings had some success in judging this group.

15.47

These results suggest an "iceberg effect" with the major personality variables related to untrustworthy behaviour either not being seen or incorrectly interpreted. It would seem that expedient and evasive behaviour of G- may be easily observable, whereas the Q2+ and Q3- personality characteristics, found earlier to be related to dishonest offending, are less easily detected or not interpreted as being related to untrustworthy behaviour.

## Section Summary - Factor Analysis

In order to try to provide answers to the questions raised by previous analyses, a Factor Analysis was carried out using Prison staff ratings of prisoners, 16 P.F. Prisoner data, prisoner criminal history and other prisoner demographic data. Factor I which has little correlation with prisoner personality or with other prisoner variables, comprised the prisoner rating scales. In the absence of any other explanation, this has been interpreted as negative halo. Factors II, III, V, VI, and XI were Second Order Personality Factors previously described by Cattell et al (1970). Factor IV appears to describe a group of prisoners with dull intelligence, little family or social support, and whose parents are highly educated. Factor VII appears to describe institutionalised recidivists for whom crime and prison appear to be a way of life. This group also has minimal social support and has been imprisoned for a number of different offences. Factor VIII appears to describe a class of prisoner who is rated as suspected of stealing whilst in prison, having a low capacity for learning and as not trusting of prison staff. Prisoner variables which correlate with being so rated, are personality variable G-, low Superego Strength which relates to evasive behaviour and expediency, a low level of education and the tendency towards being a first offender. Contrary to the ratings, there is no suggestion of low intelligence in the group which Factor VIII represents, despite the lower education level. Personality variable G- was found earlier in this study to correlate only with Theft, Break and Entering. However, Fraud, Misappropriation offenders were G+. The absence of strong correlations between Factor VIII and variables Q2+ and Q3- suggests the existence of an "iceberg effect" in which certain personality variables, shown in this study to be related to untrustworthy behaviour, are either not observed or are not seen as being related to dishonesty.



### General Summary and Discussion

The indications from the foregoing analyses are that there are some similarities as well as some differences among the classes of dishonest offender investigated. Also it was found that dishonest offenders differ from non-prisoners as well as from prisoners whose offences do not involve dishonesty.

It is also clear from the findings that there is insufficient understanding of the personality basis of criminality. This lack of understanding is also evident from the considerable recidivism rate of some classes of offence and from reported cases of long undetected crime involving dishonesty that come to light from time to time and which often involve large amounts of money and which sometimes involve highly respected citizens.

It also appears that people are not very good in judging persons who are likely to be dishonest. From analyses 12-16, it became clear that there was a weak relationship between rating of dishonest behaviour and dishonest offences. It appears that some personality characteristics related to dishonest behaviour may not be easily identifiable nor seen to be relevant to dishonesty, with casual observation. Some of the results from these analyses suggest that incorrect assumptions may be involved in judging dishonest behaviour. These conclusions are supported by the results of the principle component analysis, particularly in relation to Factor I and Factor VIII.

Following the Costigan Inquiry there has been an increased emphasis on the organisation of criminal activities. However this study which involves convicted prisoners, tends to point to the personality of dishonest offenders being that of self-sufficient, independent loners rather than one of the easily led persons who is likely to be cogs in a bigger organisation.

#### 16.1 Independence in Dishonest Property Offenders

Among the analyses conducted, it appears that the personality characteristics discriminating dishonest property offenders from non-offenders and from other prisoners, are those loading 16 P.F. variable Q2 and V.P.I. variable Int.

Cattell et al (1970) describe Q2+ persons as being:-

"Self-Sufficient, Resourceful, as having a preference for making their own decisions, as being resolute, seclusive, and as being early developers who tended to associate with a few older friends. In group situations they tend to express dissatisfaction with group integration and to make remarks that offer independent solutions which are often rejected."

Six prisoners who did not take part in the earlier part of this study were interviewed. Two of these fell into the Theft Break and Enter category, two into the Robbery Extortion category and two into the Fraud, Misappropriation category. In a structured interview, they were asked a series of questions which were calculated to probe personality characteristics shown to be significant in among any of the above classes of offender in the previous analyses.

Typical of the comments by prisoners in all of the above three categories, when they were asked about their mode of making decisions and the involvement of other people in the process were as follows:-

One prisoner said

"I prefer working by myself because I have always been a bit of an individual, a bit of a loner. I usually plan and make a decision and then tell people what I am doing. My parents always taught me to make my own decisions and not to be influenced by others."

another said

"My decisions are all my own as are the consequences."

and another

"My parents did not encourage me to be independent but I took it upon myself to defy them. .... As a child I had older mates."

and another

"I was my own man. I'd be a person who is dependent on my own thoughts and analysis of the situation. I am very independent."

The above responses to questions, clearly support the findings regarding Q2+ in the previous analyses. It seems likely that independence in decision making, is an important factor with the dishonest property offenders.

The prisoner who chose defiance, reported that his parents were very strict and controlling and that he was not allowed out of the house to visit friends until 16 years old.

From the above responses, it appears that parents may have discouraged consultative decision making and encouraged independence either directly, or indirectly by being so controlling as to give the child no option but to defy his parents, in order to gain independence. In either case, parental

behaviour appears to have promoted tendencies to independent and seclusive decision making.

The strong need for independence that has been developed by these offenders may well have left them feeling isolated and unsupported at times. Indeed one Misappropriation offender who was sent from another State to manage the Brisbane branch of his firm, told about family pressures to financially assist his parents at home, while he was buying and renovating a house. He relates that, away from his family and friends, at the time, he "was like an island in the sea".

The theme of independence and isolation is also borne out by the following response:-

"I was encouraged to be independent. My mother would say at times 'I like things independent', she would just let me go, she would just let me go and do it. .... I never used to talk about things - I just used to bottle it all up. I started thinking the wrong way, dishonest thinking and I started stealing, doing it all as an escape as a child. Could have been a bit of a self-pity trip or a number of things. Not being able to communicate, I was really in despair at the time I committed the attempted armed robbery."

There is another aspect to this independence. It would appear that the self-sufficiency, and the tendency to plan alone without consultation or discussion (Q2+), may contribute to the preservation of values or plans of action which would be likely to be questioned or discouraged if discussed with friends or acquaintances. Such independent behaviour is likely to, on occasions, lead to dishonest offending.

## 16.2 Non-Intellectual Interests in Dishonest Property Offenders

The strong need for independence together with a lack of a well developed value system and an inability to discuss plans with others, may well lead to many crimes, which would not have taken place, if ability to communicate and/or seek appropriate assistance had been a better developed personal skill of the offender.

The other variable found to be significant in all dishonest property offender groups was the V.P.I. Intellectual Scale.

Holland (1978) describes high scores on the intellectual scale as follows:-

"High scorers are concerned with science,

mathematics and theory. Prefer to 'think through' problems rather than 'act out' problems. .... Tend to be bright scholarly and persistent. Have high educational aspirations."

It appears that dishonest property offenders, being low scorers, tend to "act out" problems, to be disinterested in science, and to have low educational aspirations.

It has been noted that scientists and engineers tend to be basically honest. Indeed honesty and integrity appear to be essential to success in these fields and are characteristics that underpin the scientific method used by researchers in search for the truth. It is therefore understandable that scientific interests and training would tend correlate with honesty.

In response to being questioned about their interests, all except one expressed a disinterest in science and mathematics. Little information was obtained as to reason for this disinterest.

A number of dishonest prisoners described their family situations as children as so conflict ridden and chaotic, that any chance of serious study at home must have been almost non-existent. As understanding science and mathematics requires a methodical and systematic approach in studying these subjects, they may have been the first to suffer in such family situations. It is also true that there is a tendency for people to be interested in what they understand and are successful at and to avoid topics at which they do poorly or do not understand.

Fraud, Misappropriation offenders were better educated and expressed interest in a variety of non-science topics. These included reading, history, current affairs, and pottery. Such offenders reported that work interests were in business and people oriented and persuasive occupations. The findings of Romney et al (1980) about fraud offenders are similar. In that study, the offenders were found to be better educated, more independent and more self-confident than offenders convicted of other property crimes. In this study one such offender, who expressed interest in science, reported being tested earlier by a vocational officer and advised to pursue a business career. Interest in science had developed recently for him since being in prison. He said that it was helping him understand what the world was about. It is interesting to speculate as to whether his recent interest in science is related to his progress towards rehabilitation.

One Theft offender expressed interest in nice cars, another, an Armed Robbery offender, was interested in art, an interest which developed at school. He also expressed interest in manual skills.

### 16.3 "Warm" vs "Cold" Personality in Offenders

One contrast to emerge is the relative difference in 16 P.F. variable A of Theft, Break and Enterers and Fraud, Misappropriation offenders. It appears that the latter tend to be relatively warmhearted, easygoing and participating (A+), whereas the former tend to be the opposite (i.e.) cool, aloof, critical, reserved and detached (A-). It is not surprising that the A+ characteristics of sales persons and those highly skilled in handling people, are strong in the Fraud, Misappropriation Group. Indeed many fraud offenders are able to inspire such confidence in their victims, that the latter are often reluctant to accept that they have been defrauded even after evidence pointing to this likelihood appears strong to the detached observer. Clearly some of these operators have a very high degree of interpersonal communication skills.

On the other hand a thief tends to operate in a solitary manner and where possible avoids people. Cattell et al (1970) describe A- people as having a "flatness" and "dryness" of emotionality, a cautiousness in emotional expression, an uncompromising and critical outlook and to be awkwardly aloof in manner.

As seen previously both the fraud and the theft type of offender appear to be high in self-sufficiency. Dishonest behaviour, however, gets expression in different ways, one involving interaction with people, the other involving stealth and the avoidance of people. It seems that from the results of these analyses the offender's 16 P.F. A score is related to the mode of expression of dishonest behaviour.

### 16.4 Enterprise and Creativity in Fraud, Misappropriation Offenders

Enterprise and creativity appear to be important facets of the personality of the Fraud, Misappropriation offender. This is evidenced by the significance, for this type of offender, of the V.P.I. Enterprise Scale in analysis 2 and that of 16 P.F. variable M in analysis 7.

Those scoring high on the Enterprising Scale are seen as being Enterprising, Enthusiastic, Adventurous, Persuasive, Sociable, Cheerful, Pleasure Seeking, and Dependent. According to Holland (1978), Such persons tend to differ from average in their greater need for power and their preference for social interaction as a medium of personal expression and in their dislike of well defined language or work situations. They tend to regard themselves as strong leaders and to regard their verbal and persuasive skills as their greatest assets and to have a strong need to achieve high status. This description appears to be consistent with the biographic data of famous confidence offenders.

High scorers on 16 P.F. variable M appear to have some similar personality traits. They tend to be creative, imaginative

and dependent and somewhat unrealistic and impractical.

Clearly these characteristics capture what appears to be one of the important motivating drives of Fraud, Misappropriation offenders.

#### 16.5 Over-Protection and the Dishonest Offender

It was found from the Discriminant analyses, that both the Fraud, Misappropriation Group and the Theft, Break and Entering Group were high on 16 P.F. variable I while the Robbery Extortion Group was low on variable I.

Cattell et al (1970) states:-

"Presmia, I+ is associated primarily with an over-protected or, at least, sheltering-from-urgent-demands-of-life upbringing."

The I+ personality characteristics of tender-mindedness, fastidiousness, and unrealistic imaginativeness, contrasts with the tough masculine, mature, group-solidarity-generating I- personality.

While it is understandable that those involved in Robbery are likely to have the tough, masculine self-image of I- rather than the sensitive imaginative one typical of over-protected I+ persons, it does not seem to be immediately clear why Fraud and Theft offenders tend to I+.

These differences were explored in the structured interviews and the responses appear to clarify the likely processes involved.

One Misappropriation offender described his mother as follows:-

"She is a very strong person, can be overwhelming and very loving. She was sensitive to my feelings. She has in some aspects been the greatest influence in my life."

and another, the middle of three boys said

"She was very caring and protective. She, me and my brothers sided against our father, so we had our own show. She was docile and easily led. She was one of us."

A theft offender said

"I always had a very close relationship with both parents. Both were always good for me. I left home at 18 years to get married but I was not allowed to go at the wedding."

and another theft offender

"I was kept at home and banned from going out. My father kept my money in a joint account and would not let me spend it, even after I was working when I was 15-17 years old."

The above responses are examples of over-indulgent or over-protective, and/or over-controlling, parents who have either abdicated their role as parents or have been so controlling as not to let their children be responsible for making decisions.

In each case the parents failed to provide a positive learning environment. By providing an over-indulgent atmosphere in which the children reportedly had no guidance and the mother was more dependent on the children, rather than the other way round, no opportunity was provided for the children to learn responsible decision making. By always siding with the children against the father, and over-protecting and rescuing mother has deprived the children of the opportunity to learn responsible behaviour.

Similarly, those parents who expressed their over-protectiveness in an over-controlling way also deprived the child of the opportunity to make mistakes and learn from them. By taking over and making all the decisions, they also deprived the child of the opportunity to learn responsible decision making. Little wonder that when the child rebelled or was left to his own devices, he had poor decision making skills.

It would appear that these offenders have never had the opportunity, when they were younger, to learn from their mistakes and to work out a value system of their own. It would appear that the I+ personality characteristics of being indulgent to self and others, tender-minded, dependent are a result of being over-protected and so deprived of adequate social experience.

It would therefore appear that I+, being an indicator of over-protection, is also an indicator of immaturity which is likely to sometimes be associated with offences of fraud and theft.

#### 16.6 Other Personality Variables Found to be of Significance

The interpretation of the contribution of 16 P.F. variable Q3 is more difficult. Compared with honest offence prisoners, Theft, Break and Entering offenders and Robbery, Extortion offenders were significantly lower on Q3 while Fraud, Misappropriation offenders were significantly higher on Q3.

It was noted in interview that the Fraud, Misappropriation offenders appeared to be more integrated in their values and expressed more concern about social image, irrespective of past

failures, than did either of the other two groups.

Cattell et al (1970), in describing Q3+ says:-

"By hypothesis it represents the development of the conscious, behaviour integrating self-sentiment, i.e., the extent to which the person has crystalised for himself a clear, consistent, admired pattern of socially approved behaviour, to which he makes definite efforts to conform. The degree of attainment of this self-ideal pattern is, not measurable very validly by questionnaire. What we are here measuring is the amount of concern about and regard for these standards."

It appears therefore, that Fraud, Misappropriation offenders have gone further towards this conscious, behaviour integrating self-sentiment control.

The meaning of this in relation to rehabilitation, is not clear. More work needs to be done on the significance of Q3, in relation to criminal behaviour in general and to property offences in particular.

Other variables of significance apart from A, G, I, M, Q2, and Q3 are B+ (Intelligence), C-, (Low Ego Strength) and H- (Depressive Apprehensiveness).

Robbery, Extortion offenders show significant interests in Art as indicated by the V.P.I. Art Scale. Other significant variables found in the case of Robbery offenders were, L+ (Self-Opinionated Suspiciousness), C- (Low Ego Strength), O+ (Guilt Proneness and Depressive Apprehensiveness), H- (Restrained Shyness).

#### 16.7 Implications for Rehabilitation Training

While the difficulty of the task of providing an effective training program for the rehabilitation of property offenders should not be under-estimated, the knowledge of some of the characteristics of dishonest property offenders provides some clues as to the training components likely to be necessary for successful rehabilitation.

From the findings, it appears that independence and seclusiveness in decision-making, together with a lack of family training in sound decision-making, appear to be major factors in the personality of most dishonest property offenders.

This being so, it seems likely that it would be useful to evaluate training programs that show promise in providing training and experience in effective decision making, and in being less



independent and seclusive in so doing.

From the responses to the interviews in this study and from other work by Terris and Jones (1982) it is clear that dishonest property offenders are prone to fantasies on theft-related themes. Clearly such fantasies are, at times, "acted-out". It therefore follows that in any rehabilitation training program it would be wise to include modules which explore such fantasies and to enable trainees to test them against reality and to explore their likely role in predisposing the trainee to future offending.

The role of over-protection in the development of the personality of offenders in the theft and fraud categories also needs to be considered in the design of a treatment program. It appears that an over-protected childhood is likely to have deprived these offenders of the opportunity of developing an adequate value system and a sense of responsibility which would enable them to function without resort to dishonesty. It follows that any training program would be more likely to succeed if a way can be found to provide opportunities enabling offenders to develop their value system and to become more responsible. Here, it is likely that program content structured in ways that provide the opportunity for trainees to examine their present value system, provide motivation and encouragement to change those aspects of their behaviour likely to lead to further offending, and encourage the enhancement of those aspects which are positive, would be most constructive.

In the light of this research, the authors are at present developing a training program incorporating modules targeted at the development and enhancement of skills likely to be necessary for the rehabilitation of specific categories of property offender. The next stage in assessing the utility of this research, is to evaluate the effectiveness of such a training program. Such evaluation results, if encouraging, would have wider implications for methodology in the design of future rehabilitation training for other types of offender.

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APPENDIX 1

# PRISONS DEPARTMENT



B. P. HOUSE, HERSCHEL STREET, BRISBANE, Q

Your ref.

Our ref..

ENQUIRIES Please contact

Postal Address. G.P.O. Box 81, Brisbane, 4001

All correspondence to. Comptroller-General of Prisons

Telephone: (07) 224 0414

## PRISONER TRAINING RESEARCH PROJECT

Since becoming Comptroller-General of Prisons, it has been my policy to encourage improved training services for prisoners, in the hope that such training will help those who take part, find a useful place in society upon release.

A research project on prisoner training is being conducted by a research team involving the Policy Research Unit of the Department of Welfare Services.

The aim of the research is to find some answers that will assist the Prisons Department in improving training courses to prisoners.

You are invited to submit your name for possible participation in the research project. From those willing to participate, a number (possibly up to 500) will be invited to take part in the research.

The task will involve answering questions on any training courses applied for or done, your interests, likes and dislikes. The questions will be answered by ticking answer sheets. The answers supplied by individual prisoners will be collected immediately by the researchers and will be confidential to them. Answers given by individual prisoners will not be disclosed to me nor to any other officer of the Prison Service. The overall results of the research will be published in such a way as to safeguard the confidentiality of answers given by individuals. No information will be published which would allow the identification of any of the prisoners participating.

After the answers supplied by prisoners have been analysed by the researchers, experimental training courses will be offered to a limited number of prisoners.

I hope you feel free to volunteer to take part in the research as your participation will help in planning improved training programs for prisoners.

Comptroller-General of Prisons

Please now complete the section below.

-----  
(Please tick a box below to show whether or not you wish to participate.)

I wish to participate in the research

I do not wish to participate in the research

Name .....

Prison .....

Offence(s) .....

Likely Date of Release ..... Signature .....

APPENDIX 2

STRICTLY CONFIDENTIAL

Name \_\_\_\_\_

Prison \_\_\_\_\_

Instructions

Please complete each of the following questions by circling the appropriate code number/s in the column/s on the right.

1. What is your age?

	<u>Code</u>
17 - 19 years -----	1
20 - 24 years -----	2
25 - 29 years -----	3
30 - 39 years -----	4
40 - 49 years -----	5
50 - 59 years -----	6
60 - 69 years -----	7
70 and Over -----	8

2. What level of education have YOU and YOUR PARENTS\* each completed?

\*(Include step or foster parents where applicable)

	<u>Codes</u>		
(a) <u>HIGHEST SCHOOL YEAR COMPLETED</u>	<u>Self</u>	<u>Father</u>	<u>Mother</u>
Year 6 or under -----	1	1	1
Year 7 -----	2	2	2
Year 8 -----	3	3	3
Year 9 -----	4	4	4
Year 10 -----	5	5	5
Year 11 -----	6	6	6
Year 12 -----	7	7	7
Don't know -----	-	9	9
 (b) <u>FURTHER TRAINING</u>			
No further training -----	1	1	1
Trade Certificate (incomplete) --	2	2	2
Trade Certificate (complete) ----	3	3	3
Other certificate } (incomplete)-	4	4	4
or diploma course } (complete)---	5	5	5
Degree course (incomplete) -----	6	6	6
Degree course (complete) -----	7	7	7
Don't know -----	-	9	9

NOTE: In Question 7 "Girlfriend" was changed to "Boyfriend" in Questionnaires distributed to female prisoners.



3. How many times have you been in prison altogether including this time?

Code

This is the first time .....	1
Once previously .....	2
Twice previously .....	3
Three times previously .....	4
Four times previously .....	5
Five times previously .....	6
Six times previously .....	7
Seven or more times previously .....	8

4. With what present or previous offences have you been convicted? (circle more than one code if applicable to show all past as well as present convictions).

Code

Homicide, manslaughter, etc. ....	1
Assault (other than sex offences) .....	2
Sex offences .....	3
Robbery and extortion .....	4
Fraud and misappropriation .....	5
Thefts, Breaks and enters .....	6
Property damage .....	7
Driving, traffic and related offences .....	8
Drug offences .....	9
Other offences (specify) .....	

5. What is the date of your release? .....

6. How many dependent children do you have?

Code

Number of children	None .....	0
	1 .....	1
	2 .....	2
	3 .....	3
	4 .....	4
	5 .....	5
	6 or more .....	6

7. Who of the following are you likely to have regular contact with upon release? (Circle as many as applicable).

Code

Spouse/de facto .....	1
Girlfriend .....	2
Mother .....	3
Father .....	4
Brother/s .....	5
Sister/s .....	6
Adult child or adult children .....	7
Other adult relatives .....	8
Other friends .....	9

8.

TRAINING COURSES

List below courses applied for while in Prison and place a tick in one of the columns alongside to show attendance.

	Name of Courses Applied for	Never Attended	Attended But "Dropped Out"	Still Attending	Course Completed
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					

9. What type of training do you think would be most useful in helping you to readjust to living outside prison after your release?

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10. Other comments.

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APPENDIX 3

TABLE A1

## Prisoner Rating Scale

1.	Capacity for learning new skills is high	1 2 3 4 5 6 7 8 9	Capacity for learning new skills is low
2.	Appears not to steal in prison setting	1 2 3 4 5 6 7 8 9	Suspected of stealing whilst in prison
3.	* Trusts staff	1 2 3 4 5 6 7 8 9	Does not trust staff
4.	* Feels guilty when does something wrong	1 2 3 4 5 6 7 8 9	Does not feel guilty when does something wrong
5.	* A very likeable person	1 2 3 4 5 6 7 8 9	A very unlikeable person
6.	* Always tells the truth	1 2 3 4 5 6 7 8 9	A regular liar
7.	* Never have to be firm to keep him/her in line	1 2 3 4 5 6 7 8 9	Got to be really tough to keep him/her in line
8.	* Very open and "above board"	1 2 3 4 5 6 7 8 9	Can't trust him/her out of sight; very sneaky and always up to something
9.	Makes no attempt to "stand over" other prisoners	1 2 3 4 5 6 7 8 9	Attempts to "stand over" other prisoners

\*Items used in the Tyler and Kelly (1962) study.