

BEHAVIOURAL CHANGE AND PERSONALITY VARIABLES IN DELINQUENCY

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A group of 28 13-year-old delinquents were rated by institution staff on ten items of behaviour to indicate both present behaviour and perceived behavioural change. The results were compared with scores obtained on the JEPI. Scores for the Maori sub-group (N=20) were not significantly different from a 'normal' group. Neuroticism was unrelated to perceptions of behavioural change but evidence was found that staff perceived a greater degree of positive behavioural change in extraverts than in introverts. Predicted correlations between ratings and inventory scores provided validity data for the JEPI.

The report of the N.Z. Department of Social Welfare on Juvenile Crime in New Zealand (1973) questions the effects of institutional care in the treatment of delinquency and states that its justification is not simple "because we cannot measure the positive effects of all of the influences at work on a young person living in an institution for a year" (p. 28). While it is clear that individuals react differently to the institutional experience, it is less clear on what these differences are based. The personality of each individual would appear to be a significant factor in determining not only his particular reaction to the environment but also the perceptions which staff members will have of his behaviour.

The present study was carried out at a long-term residential institution for delinquent boys between 12 and 15 years of age. The school is the only one of its kind for boys of this age range in New Zealand and accommodates 60 boys at any one time. The average term of residence is 15 months and although there is some emphasis on formal education the primary objective is to resocialize the boys by modifying their attitudes and behaviour in a socially desirable direction in order to bring about the internalization of new standards.

Evaluation of the effects of the institutional environment is based on staff perceptions of changes in the behaviour of individual boys and the subsequent judgments tend to be highly subjective and based on vaguely defined criteria.

The aims of the study were (a) to examine the relationship between staff perceptions of boys' behaviour and the underlying personality dimensions of extraversion and neuroticism as measured by the Junior Eysenck Personality Inventory, and (b) to assess the extent to which judgments of behaviour change in the direction of social desirability relate to personality variables.

METHOD

Subjects

Because of practical limitations such as the irregularity of numbers admitted at any one time, staff changes, and variations in the terms of residence, it was not possible to use random selection procedures. A time sample was therefore taken comprising all boys admitted to the institution between May 1, 1970, and December 31, 1970. This gave a total of 28 boys (originally there were 32 but 4 were discharged before the project could be completed). As the personality assessments and staff ratings were being made in June 1971, this meant that all boys had experienced more than 6 months of institution life and would be sufficiently well known to staff to be rated by several different judges.

The mean age of the sample group was 13.4 years. There were 20 Maori or half-Maori, 5 Pacific Islanders, and 3 Europeans, according to the boys' self-classifications. Mean I.Q. was 85.3 in terms of Raven's Progressive Matrices, and 95.9 in terms of the W.I.S.C. Performance Scale.

Procedure

Extraversion and Neuroticism were defined in terms of scores obtained on the Junior Eysenck Personality Inventory and statistics for the normal population were derived from recent New Zealand standardisation data for the JEPI which included a Maori and European comparison (Bowler and Leitch, 1972). Because so many boys had low "reading ages" resulting from educational retardation, it was necessary to administer the inventory orally to groups of three at a time.

Depending on whether an individual boy's score was above or below the mean for his age, the sample was sub-grouped into stable extraverts, neurotic extraverts, stable introverts, neurotic introverts.

Staff perceptions of behavioural change were made by rating each boy's behaviour at the time when they first knew him (retrospectively) and then giving a second rating describing his present behaviour. Each rating was made on a ten point scale ranging between socially desirable and socially undesirable extremes. The categories of behaviour were verbally conceptualized so as to maximize independence from each other. The ten items were

1. Ability to get on with adults.
2. Ability to get on with peers.
3. Ability to accept share of responsibility.
4. Respect for property.
5. Honesty.
6. General mood—Personal Adjustment.
7. Social skills—Social Adjustment.
8. Freedom from nervous symptoms.
9. Concern for others.
10. Respect for authority.

These items reflect the kinds of behavioural change implicit in the aims of the institution. Superficial examination of the numerical ratings of behavioural change indicated that the rating scale was too fine for the kinds of perceptions which could be validly measured. To establish greater validity the scales were collapsed and the judgments were dichotomised into "positive change" and "negative or no change". The mean numerical ratings of "present" behaviour on each of the ten items were correlated with scores on E and N.

RESULTS

Maori sub-group

The group of delinquent Maori boys in the sample produced Extraversion, Neuroticism, and Lie Scale scores on the JEPI which were not significantly different from those of a non-delinquent group of the same age (see Table 1).

Behavioural Change

Tests on the relationship between the Neuroticism Scale and Behavioural change were not significant for any of the ten items of rated behaviour. This suggests that staff do *not* perceive a greater degree of positive behavioural change in boys who are emotionally stable as compared to boys who are emotionally unstable or neurotic. This applies to all behavioural characteristics which staff consider to be indices of positive success in terms of the training goals of the institution.

There were four categories of behaviour in which the staff did perceive a greater degree of behavioural change in boys who were extraverted than in those who were introverted (see Table 2).

Table 2 shows that by comparison with Introverts, Extraverts were seen to improve more in their relationships with adults, in their acceptance of and ability to get on with adults, in their social skills, in their freedom from nervous symptoms of anxiety, tension, apprehension than Introverts, and in their respect for authority. Extraverts showed a greater movement (as perceived by staff) from disobedience and defiance of rules towards obedience and compliance with rules.

TABLE 1
JEPI scores for Normal and Delinquent 13-year-old Maori boys

	Normal group (from Bowler and Leitch, 1972)			Delinquent group (present study)			t
	N	Mean	S.D.	N	Mean	S.D.	
Extraversion	37	15.56	3.46	20	15.9	3.28	0.354
Neuroticism	37	15.45	5.04	20	12.9	4.59	1.846
Lie Scale	37	2.27	2.05	20	2.85	1.91	-1.025

TABLE 2
Relationship between E Scale and Behavioural Changes
(Significant differences only)

Item	Behavioural Change	Extraverts	Introverts	Chi Square	
Adult Relations	Positive	38	56	3.88	<.05
	Negative or Zero	5	23		
Social Adjustment	Positive	41	58	7.38	<.01
	Negative or Zero	2	21		
Freedom from Nervous Symptoms	Positive	38	50	7.51	<.01
	Negative or Zero	5	29		
Respect for Authority	Positive	37	48	7.51	<.01
	Negative or Zero	6	31		

Relationship between staff ratings and inventory responses

Table 3 presents the Product-Moment correlations between JEPI scores and ratings of "present" behaviour. Extraversion correlates significantly and positively with personal adjustment (tendency to be contented, cheerful and always happy), social adjustment (tendency to be sociable, friendly and open), and freedom from nervous symptoms of anxiety, tension and apprehension (tendency to be settled, calm, unperturbable and self-controlled). Neuroticism correlated significantly and negatively with ability to get on with peers, ability to accept share of responsibility (such as tidiness, classroom routines, duties, assigned tasks), respect for property (belonging to the institution and others) freedom from nervous symptoms and concern for others (tendency to be unselfish, co-operative, considerate and helpful).

TABLE 3
Correlations between JEPI Scores and Ratings of Present Behaviour

Item	Extraversion	Neuroticism
1. Ability to get on with adults	0.1333	0.0396
2. Ability to get on with peers	0.2601	-0.5285**
3. Ability to accept responsibility	0.1606	-0.3276*
4. Respect for property	0.0817	-0.3856*
5. Honesty	0.0018	-0.2538
6. General mood—Personal adjustment	0.3649*	-0.2523
7. Social skills—Social adjustment	0.5893**	-0.1093
8. Freedom from nervous symptoms	0.3200*	-0.5351**
9. Concern for others	0.1046	-0.3471*
10. Respect for authority	0.2281	-0.0119

*p<0.05; **p<0.01 (one-tailed test)

DISCUSSION

Recent British research suggests that the delinquent tends to be neurotic and introverted (Berry, 1971; Eysenck and Eysenck, 1971a), contrary to earlier reports (Eysenck, 1964) which contended that the criminal personality was typified by neuroticism and extraversion. Further investigation (Eysenck and Eysenck, 1971b) has suggested that it is the impulsivity rather than the sociability aspects of extraversion which are involved in criminality.

The present study suggests that delinquent Maori boys are neither more neurotic nor more introverted than a non-delinquent group. However, it has been shown (Bowler and Leitch, 1972) that Maori children tend to be both more neurotic and more introverted than their European peers. The implication is that these personality factors may predispose Maori children towards delinquency and account, in part, for the high incidence of offending behaviour among Maori youth.

The correlations of staff ratings with inventory responses provides validity data in the expected direction. This study shows more significant correlations between neuroticism and behaviour ratings than between extraversion and behaviour ratings, whereas in earlier studies (Eysenck and Eysenck, 1963; Eysenck and Pickup, 1968; Eysenck and Cookson, 1969) few significant correlations were found between behaviour ratings and neuroticism scores.

Probably the most important finding of this study is that institutional staff are more likely to perceive positive behavioural change (in line with their training goals) in boys who are extraverted in personality type, regardless of whether or not they are emotionally stable. The implication is that the introverted boy is likely to be unable to manifest in behaviour any positive and desirable effects which the institution has upon him. On the other hand, it may be that institutional treatment is less effective for introverts than it is for extraverts.

The diagnostic value of the Junior Eysenck Personality Inventory may be found in its capacity to suggest to staff the boys who are least likely to be seen to change. This may enable different criteria of success or a slightly different treatment approach to be used. In this way the potential dangers of confusing the behavioural manifestations of introversion with those of neuroticism may be partly overcome.

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