

## The Effect of Low Intelligence on the Emotional and Environmental Concepts of Retarded Offenders

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### INTRODUCTION

Over the past thirty years the emphasis on low intelligence as a major causal factor in criminality has decreased considerably. When intelligence tests were less refined, early in this century, authors considered a depressed intelligence score as an important determinant in delinquency. Improved psychometrics, with their culturally non-biased test items, have since proved that individuals from deprived upbringing and adverse social learning situations do relatively poorly on verbal items. Woodward (1955) pointed out that both in this country and in the United States the delinquent is only 8 I.Q. points behind the normal population. Opinions amongst psychologists have gradually but radically changed, and it is for this reason that research workers now look elsewhere for causal factors in the subnormal offender rather than attributing his delinquencies to low intelligence.

That criminals as a class are endowed with low intelligence can be disproved quite simply by obtaining the IQ range of all criminals detained at a particular time in a given institution. East *et al.* (1942), in a survey of 4,000 youths examined at Wormwood Scrubs Prison, found that only 3.5 per cent were certifiable as mental defectives; and Gibbens (1963) found 3 per cent of borstal boys could be described as 'border-line defectives'. Obviously therefore, retardates do not account for more than a small minority of the population of offenders. Further, McCord (1959) found that in a group of convicted individuals 42 per cent had intelligence quotients of not more than 90, and that in a matched group without convictions the proportion was 44 per cent; the excess of dullards in both groups was accounted for by the fact that the whole sample came from broken-down delinquent neighbourhoods, where

the intelligence range of the population is generally depressed. McCord's follow-up study showed (West, 1967) that under these circumstances individual dullness bore no significant relationship to likelihood of a criminal conviction.

When examining the supposed association of mental subnormality with criminality, the term mental subnormality is often used indiscriminately. It is useful to regard the retardates as constituting two major groups, those who are subnormal from organic defects and those who are described as the 'subcultural' group, whose retardation is due to normal genetic variation. The former group is unlikely to be involved in criminal activities, by reason of the severe social restrictions resulting from their mental and, commonly, physical handicap. We are therefore, concerned with those retardates who are by and large 'normal' except for low intelligence. Previous studies (Clarke *et al.*, 1954; Stein *et al.*, 1960; and Castell *et al.*, 1965) have suggested that low intelligence in subcultural subnormals is attributable not only to genetic variation but also to such factors as deprived social intercourse, inadequate home background and poor stimulation. These are factors which are commonly correlated with anti-social behaviour. In her attack on the role of intelligence in delinquency, Woodward (1955) examined several ways in which low IQ might be operative in producing crime, viz lack of foresight, lower threshold to stress, or increased exposure to stress.

Considering, firstly, the assumption that lack of foresight might be causal: foresight might be postulated to be related to mental age; yet there is no evidence of delinquency decreasing with increasing mental age. Next, as to the assumptions that the dull individual might have a lower threshold to stress, and that his

TABLE I  
Mean scores for the evaluative and potency factors in respect of

		Average intelligence					
		Slum district		New housing estate		Non-offenders	
		e	p	e	p	e	p
Myself .. ..	(M)	20.4	10.4	20.1	11.2	16.1	9.3
Myself as I would like to be ..	(Id)	11.7	6.7	12.0	6.5	9.8	5.4
Mother .. ..	(Mo)	10.3	14.4	11.5	14.3	8.5	15.4
Father .. ..	(Fa)	17.3	9.7	14.5	7.4	12.5	6.2
My feelings when I am angry ..	(A)	36.2	11.7	37.0	11.9	32.0	10.1
Home .. ..	(H)	16.7	13.3	13.8	12.0	10.6	12.1
Work .. ..	(W)	24.2	11.8	22.3	10.7	21.2	8.8
Teacher .. ..	(T)	19.7	13.7	22.5	16.1	16.5	11.2
Sexual intercourse	(S)	19.6	13.0	21.1	12.2	16.0	11.8
Neighbourhood	(N)	30.8	15.8	28.0	15.7	19.3	14.5
Friend .. ..	(F)	19.8	12.1	19.3	11.8	14.2	10.7
Police .. ..	(P)	27.1	11.9	28.5	11.9	23.7	10.1
Glasgow .. ..	(G)	33.9	14.5	33.4	13.9	30.1	13.6
Girl friend ..	(Gf)	14.0	15.9	13.2	16.2	9.2	15.9

lower intelligence might subject him to special stresses such as inability to cope at school or in society: what evidence there is (Glueck, 1935) suggests that the intellectually dull offender suffers at least as much stress as his average offender counterpart. Woodward found, moreover, that in one group of handicapped offenders, social or educational misfitting did not arise from low intelligence. Thus neither lesser degree of stress implying lower thresholds nor greater degrees of stress due to misfitting have been convincingly proved. The weight of evidence is that intelligence plays a small part in the causation of delinquency, if at all. Previous studies have generally fixated on IQ measurement rather than on personality or perception of social situations.

In a recent study (Bhagat and Fraser, 1970a), it was demonstrated that offenders and non-offenders were discriminable by their Apparent Social Perception (ASP). In a further study (Bhagat and Fraser, 1970b), it was concluded that the retardates could perform competently on the Semantic Differential (Osgood *et al.*, 1957), and that defective and non-defective offenders had significant differences as well as resemblances in their ASP. In the present study we have utilized the Semantic Differential

to attempt to identify any relationship between low intelligence and delinquency.

We (Bhagat and Fraser, 1970a) found that offender propensity was identifiable by an abnormal ASP especially in self, love-affection and environmental areas. We hypothesize that intelligence is not an important variable in crime and that the causes of crime in offenders of average intelligence and in subnormal offenders are the same, i.e. an individual basis of adverse home and upbringing. This will be reflected by a relatively 'hostile' ASP in the self and love-affection areas, independent of intelligence. Conversely, the ASP of the non-offenders, irrespective of intelligence, will show a relatively benign view of self and love-affection, which is assumed to stem from a secure background and meaningful personal experiences.

#### SUBJECTS

Twenty young offenders from a slum district, twenty young offenders from a new housing estate (range 16 to 19.11 years), and a further group of twenty non-offenders (range 16.8 to 21.11 years) constituted the average intelligence group. Eighty-one subjects constituted the mentally retarded group. The retardates mean IQ was

*the fourteen concepts for the seven groups of subjects*

Sub-normal intelligence							
Satisfactory		Unsatisfactory		Institutionalized		Maximum security	
e	p	e	p	p	e	e	p
14.0	9.2	14.5	9.6	11.5	7.4	14.5	9.0
9.6	6.6	10.2	8.0	9.1	5.4	10.4	8.7
9.6	13.3	9.5	13.7	9.1	12.0	11.3	12.0
14.6	8.5	16.0	9.5	10.9	6.7	12.2	8.8
23.6	11.0	23.5	11.0	19.5	9.6	23.4	10.1
12.3	10.9	13.6	10.9	9.9	9.6	11.8	10.0
16.0	10.5	19.0	11.9	11.2	8.0	11.6	7.5
13.5	9.7	16.6	12.4	12.6	8.4	13.4	10.6
23.2	13.4	22.0	16.2	25.3	14.2	19.8	15.0
18.6	12.5	20.0	12.8	10.4	9.0	13.9	11.0
12.8	9.8	16.2	12.0	10.6	6.9	14.8	11.1
15.4	8.2	18.5	10.2	15.0	5.8	17.0	9.0
26.2	13.4	26.2	15.2	18.0	9.7	23.6	12.0
17.4	14.6	16.8	16.2	13.9	12.7	14.3	14.7

65 (range 45 to 85) and their mean age was 29 years (range 19 to 39). The retarded population was sub-divided into four groups. The Satisfactory: 25 subjects, discharged from the hospital and living a satisfactory life within the community; the Unsatisfactory: 17 subjects, discharged but having subsequent criminal records; the Institutional: 20 subjects, in-patients in Lennox Castle Hospital; and the Maximum Security: 19 subjects, who after discharge were considered so disturbed as to require indefinite detention in a special secure hospital. The subnormal subjects were those of Fraser's (1970) study.

**PROCEDURE**

The Semantic Differential technique, method of administration, methodological problems encountered with the retardates, the reliability and validity studies are discussed elsewhere. (Bhagat and Fraser, 1970a, b).

Fourteen concepts relevant to delinquency were administered to the retardates and their intellectually average counterparts. They were selected on the assumption that they would represent three important areas, i.e. personal, love-affection and environmental. The fourteen concepts were Myself, Myself As I Would Like To Be, Mother, Father, My Feelings When I

Am Angry, Home, Work, Teacher, Sexual Intercourse, Neighbourhood, Friend, Police, Glasgow and Girl Friend. Each subject was given a booklet, one page for each concept, each page containing fifteen identical bipolar adjectival scales. The subject was required to put an X mark for each item on a seven-step scale. The direction of attitude, favourable or unfavourable, was simply indicated by the selection of the polar terms by the subject. The fifteen scales represented the three Factors, i.e. evaluation (e), potency (p), and activity (a). The following seven scales represented (e) dimension. They were, Good . . . Bad, Clean . . . Dirty, Kind . . . Cruel, Safe . . . Dangerous, Pleasant . . . Unpleasant, Honest . . . Dishonest, and Valuable . . . Worthless. The other two dimensions were represented by four scales each, and they were, (p) by Masculine . . . Feminine, Brave . . . Cowardly, Strong . . . Weak, and Productive . . . Destructive, and (a) by Fast . . . Slow, Sharp . . . Dull, Hot . . . Cold, and Excitable . . . Calm.

*Method of analysis*

Each scale was marked from 1 to 7; in the case of evaluative dimension, the lower end representing good, kind, etc., end of the scales,

the upper representing bad, cruel, etc., end of the scales. The range of scores for e was 1 to 49, lower score indicating more positive evaluation. A low score on the potency and activity dimensions indicated that subjects viewed the concepts as being strong, etc., and fast, etc., respectively. The range of scores for p and a were 1 to 28.

RESULTS

In this study we have focused largely on the evaluative results. The potency and activity dimensions have been discussed at length in previous papers (Bhagat and Fraser, 1970a, b).

The group evaluative and potency factors means, for the individual concepts, are shown in Table I. The mean evaluations of each concept, as shown in Fig. 1, by the intellectually subnormal offenders are, with the exception of Sexual Intercourse and Girl Friend, uniformly more benign than evaluations by the intellectually average offenders.

The analysis of variance demonstrates (Table II, col. 1.) that the seven groups studied did

not differ significantly on the concepts Myself As I Would Like To Be, Mother, Father, and Sexual Intercourse. When, however, the seven groups did differ significantly on their evaluations of a certain concept, a more detailed analysis of between which groups the differences occurred was undertaken.

This analysis initially examined the differences between average v. sub-normals (col. 2) and

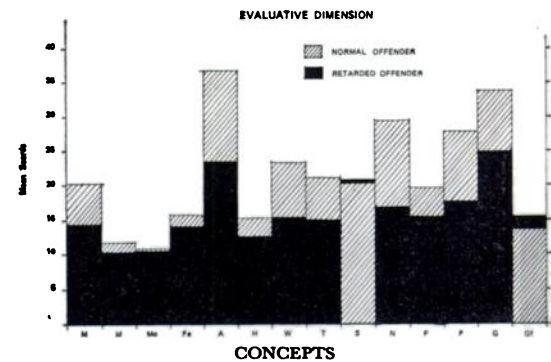


FIG. 1.—A comparison of intensity of attitudes on fourteen concepts by the two normal and two retarded offender groups.

TABLE II  
Analysis of variance of evaluative responses to fourteen concepts by three average and four retarded groups

	1	2	3	4	5	6	7
	Between seven groups	Average v. sub-normals	Offenders v. non-offenders	Differences within the average	Differences within the sub-normals	Differences within the offenders	Differences within the non-offenders
Myself .. .. . (M)	.001	.001	.01	.05	N.S.	.01	N.S.
Myself as I would like to be .. (Id)	N.S.	—	—	—	—	—	—
Mother .. .. . (Mo)	N.S.	—	—	—	—	—	—
Father .. .. . (Fa)	N.S.	—	—	—	—	—	—
My feelings when I am angry .. (A)	.001	.001	.01	N.S.	N.S.	.001	.001
Home .. .. . (H)	.01	N.S.	.01	.01	N.S.	N.S.	N.S.
Work .. .. . (W)	.001	.001	.05	N.S.	.001	.001	.001
Teacher .. .. . (T)	.001	.001	.01	.05	N.S.	.01	N.S.
Sexual intercourse .. .. . (S)	N.S.	—	—	—	—	—	—
Neighbourhood .. .. . (N)	.001	.001	.001	.001	.01	.001	.001
Friend .. .. . (F)	.001	.001	.001	.05	N.S.	N.S.	N.S.
Police .. .. . (P)	.001	.001	.01	N.S.	N.S.	.001	.01
Glasgow .. .. . (G)	.001	.001	.05	N.S.	.05	.01	.001
Girl friend .. .. . (Gf)	.01	.01	N.S.	.05	N.S.	N.S.	.01

the differences between offenders v. non-offenders (col. 3). From this we find that of the concepts which the groups evaluated differently, only Home showed a significant difference on the second comparison and not on the first comparison; while only Girl Friend was significant on the first comparison and not on the second.

As the above two comparisons were non-independent, a further examination was undertaken where both of the above comparisons had proved significant. For instance, My Feelings When I Am Angry showed significant difference on both comparisons (col. 2 and 3, < .001 and < .01 respectively) but there were no differences within average and within subnormal groups (col. 4 and 5), while difference existed within the offender groups (col. 6) and within the non-offender groups (col. 7). We concluded from this that differences were due to normality variable (col. 2) rather than delinquency variable (col. 3). The significant effect in the analysis offenders v. non-offenders could be attributed to the experimental design.\* In a similar manner we concluded that differences in group evaluation of Police were attributable to intelligence and the differences in Friend to the delinquency continuum. In the rest of the cases, both intelligence and delinquency variables appeared important, and these concepts were, Myself, Work, Teacher, Neighbourhood and Glasgow.

When, therefore, the concepts are delineated according to influencing variable, we find (Table III):

TABLE III

Variable	Concepts
Intelligence	My Feelings When I Am Angry, Police, Girl Friend
Delinquency	Home, Friend
Intelligence and Delinquency	Myself, Work,† Teacher, Neighbourhood, Glasgow†

\* The comparison of treatment means assumes that the offender groups are homogeneous with respects to the degree of offence and similarly the average and subnormal groups are homogeneous with respect to the degree of intelligence.

† Intelligence more than delinquency.

DISCUSSION

Both intelligence and delinquent propensity appear to affect or at least appear to be reflected in Apparent Social Perception as measured on the Semantic Differential. Delinquent propensity was shown to produce a raised, uniformly more 'hostile', Apparent Social Perception (Bhagat and Fraser, 1970a). The histogram shows low intelligence tends to lower the ASP. Thus intelligence appears primarily to alter the intensity of the ASP. The relationships between the responses of average and subnormal offenders to each concept, however, remain fundamentally the same; except strikingly, the intellectually retarded have reversed the perception of concepts Sexual Intercourse and Girl Friend indicating negative evaluation. Because of the nature of the experimental design, the concept Sexual Intercourse was not significantly discriminated on the analysis of variance. Perception of 'sex', however, is shown to be influenced by intelligence. The most severely subnormal appear to view both Sexual Intercourse and Girl Friend as 'bad'.

When we look in detail at each concept, focussing on the intelligence variable (Table III), we find My Feelings When I Am Angry, Police and Girl Friend apparently affected by intelligence alone, and Myself, Work, Teacher, Neighbourhood and Glasgow partially influenced by intellect.

This perception of Girl Friend supports our opinion that the subnormal views sexuality differently from his average counterpart. Milner (1949) indicated that there was a larger proportion of sexual offences committed by retardates than would be expected from the overall British criminal figures.

If an individual is in the period of pre-operational thinking, he is unlikely to be able to decentre, i.e. view concepts from another standpoint than the one he is currently occupying (Piaget, 1926). This would explain the subnormal's relatively benign view of My Feelings When I Am Angry and also of Myself (as not being immediately experienceable or recollectable from another's view).

Nevertheless, most of the differences in the retardate's perception of his world seem likely to be due to cultural restriction. There

was one variable which we could not wholly control in this design, i.e. hospitalization. All of our mentally handicapped group had experienced exclusion from society at some time. This was not so of the average group. The intellectually handicapped was less likely to have as negative an attitude to Police or to Work, Neighbourhood and Glasgow, since his experience of these concepts was limited. When he had come in contact with the police it is probable that they had not generally adopted a hostile approach to him, and, further, he is likely to have been exposed in hospitals to an encouraging work ethos.

As delinquency is commonly attributed to adverse upbringing, it is not surprising that

Home appears affected by the delinquency variable alone. The delinquent's Friend is often selected for territorial rather than value judgement reasons. Further, Myself, Teacher and Neighbourhood are partially influenced by delinquent propensity (and Work and Glasgow to a small extent). Low self-esteem, antipathy to schooling and rationalizations about their adverse neighbourhood are common in delinquents.

This 'shift' towards a more 'hostile' ASP of self, emotional and environmental areas by the offender groups of both average and sub-normal intelligence is more clearly demonstrated when the second dimension, potency, is introduced and the concepts are graphically displayed in Semantic Space (Fig. 2). A positive

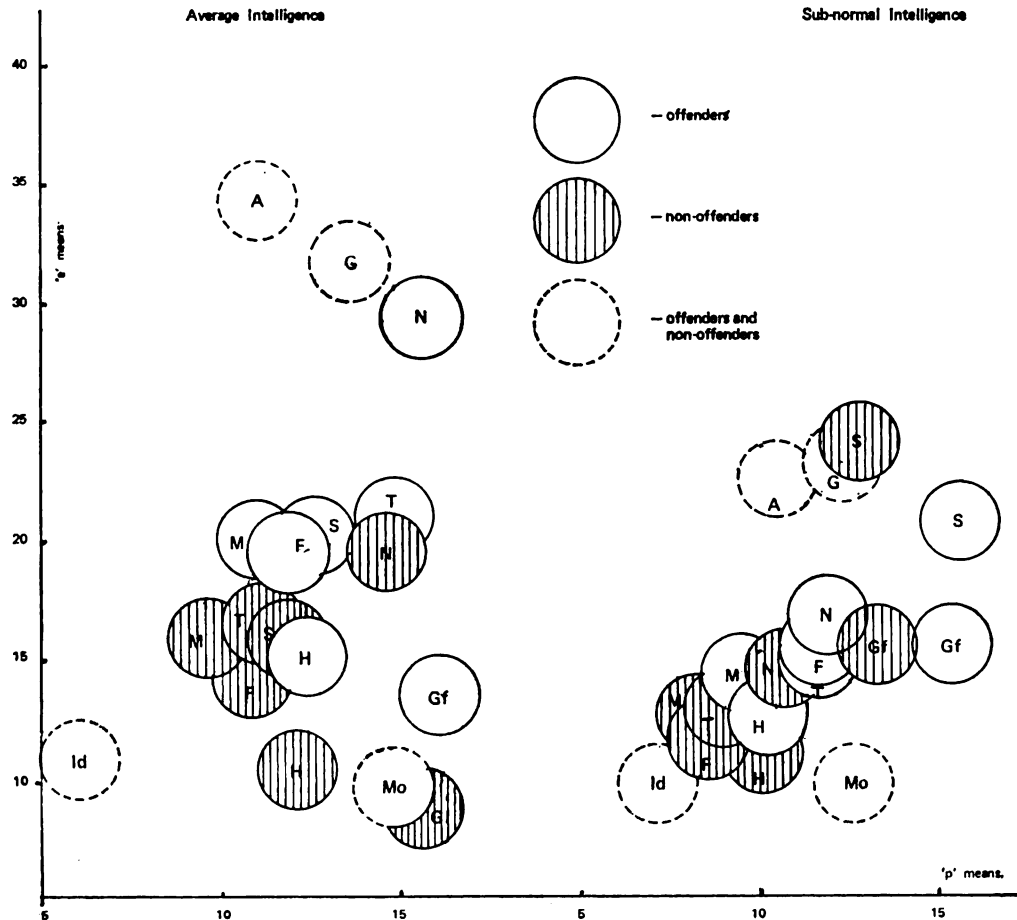


FIG. 2.—The semantic spaces of average intelligence and sub-normal intelligence subjects viewed from 2D.

'evaluation' and 'strength' is indicated by a low score on ordinate 'e' and a low score on abscissa 'p' respectively, as in the concept *Myself As I Would Like To Be (Id)*; conversely *Glasgow (G)* and *My Feelings When I Am Angry (A)* occupy the negative evaluation position in the 'hostility' area. On the other hand, the concept *Mother (Mo)* is placed in the 'love-affection' area, indicating a positive evaluation but lesser 'strength'. These concepts do not vary in position between offenders and non-offenders. The constraining effect of intelligence on perception can be seen in the sub-normal group, but more strikingly there is a parallel displacement by average and sub-normal offenders of *Home (H)* and *Friend (F)* from position of 'goodness and strength'. A similar shift of *Myself (M)*, *Neighbourhood (N)* and *Teacher (T)* in an adverse direction is demonstrated. The paradoxical disturbance of sexual concepts i.e. *Sexual Intercourse (S)* and *Girl Friend (Gf)* by sub-normal offenders is again of note.

West (1969) found that non-delinquents displayed a markedly less hostile attitude towards the Police. We could not substantiate this on Semantic Differential. One explanation is that the districts in our study were so much more materially deprived that the delinquent subculture's projections had pervaded the district; alternatively West's non-delinquents might have shown more hostility to police if they were given such a non-intimidating procedure as the Semantic Differential.

It appears, therefore, that intelligence and delinquency both affect the way these young men perceive their world. It is interesting to note that the non-offenders of average intelligence and the retardates of good outcome do not appear to view their homes in a significantly discriminate manner. Rather, the way the young man viewed the love-affection areas of his world appeared predominantly related to his delinquent propensity, and his view of certain other experiential areas depended on his intelligence.

#### SUMMARY

A fifteen scale, seven-point Semantic Differential of fourteen concepts pertinent to delinquency

was administered to seven groups of young males: non-offenders, slum offenders and new housing estate offenders of average intelligence; subnormals in an institution, discharged sub-normal non-offenders, discharged subnormal offenders, and subnormals in a Maximum Security Hospital.

Intelligence and delinquent propensity both appear to affect Apparent Social Perception; while low intelligence seemed to limit the ability or opportunity to experience certain concepts, the delinquent, regardless of intellect, showed less favourable views of his love-affection areas and upbringing.

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