

EFFECT OF CERTAIN ENVIRONMENTAL CONDITIONS UPON NEUROTICISM AMONG DELINQUENT AND NON-DELINQUENT BOYS*

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The impact of certain environmental factors on neuroticism among delinquent and non-delinquent *Ss* was investigated. Each group consisted of 200 boys in the age range 13-18 years. The two groups did not differ significantly with respect to degree of neuroticism. Environmental factors had no effect upon the neurotic tendency of the non-delinquent boys whereas for the delinquent boys two factors namely (a) parents' affection and (b) presence of mother in the family had significant effect.

In recent years research workers have been increasingly recognizing the importance of taking into account certain environmental and personality factors for better understanding of the juvenile delinquents. Many investigators have verified and emphasized that motives for delinquency are closely related with the experience of the individuals within the family and the environment (Glueck and Glueck, 1966). Levy (in Bennett, 1960) observed that delinquency can be classified under the following two heads: (a) delinquency generated due to reaction to environmental pressure (b) delinquency arising out of the nature of the individual's personality. Neurotic delinquency falls under the latter category, but it is difficult to isolate the delinquent behaviours which are

purely due to neuroticism from those which are not.

The present study compares the effect of environmental conditions of the family on neuroticism in two groups of adolescent boys—delinquent and non-delinquent.

METHOD

Subjects

The first group was composed of 200 inmates of a detention home (HOD) situated in West Bengal. These inmates were undertrial juvenile offenders in the age group 13 to 18 years. Most of these boys had negligible education. The second group consisted of 200 boys in the same age range living in various slum areas of the city of Calcutta. These two groups were comparable in the economic status, educational level of the subjects and that of the family members,

* Data were collected by Smt. Sadhana Mitra, Calcutta University, under the guidance of the first two authors.

Table 1

Kolmogrove-Smirnov test for the difference between the neurotic score distributions

	HOD BOYS	SLUM BOYS
Percentage of Normal	52.00	61.50

Maximum difference between two cumulative frequencies—19; $n_1 = 200$, $n_2 = 200$, $D = 19/200 = .095$ and this is insignificant.

residence in underprivileged areas and several other social factors. The intelligence level of the two groups was more or less similar on a non-language test of intelligence (Chatterji and Mukerji, 1968). All the information was collected separately in connection with an extensive study in this area.

Instrument

The neurotic tendency was measured by Kundu's Neurotic Personality Inventory (1965). There are sixty-six statements in this Inventory. Individuals scoring less than 182 in the inventory are considered as normal whereas the score range 182-215 indicates slight and the score range 216-240 indicates moderate neuroticism. Score above 240 is identified as the region of high neuroticism.

Analysis of data

The distributions of the scores on the KNPI in the two groups under consideration, were compared. Kolmogrove-Smirnov non-parametric test (8) was applied to test the hypothesis that the two distributions were identical. The results are presented in Table 1.

The result indicates that the two groups did not differ significantly so far as the distribution of neuroticism was concerned.

The next point of analysis was to investigate the effect of the family environmental factors upon neuroticism among the two groups of subjects. Step down regression analysis was carried out to identify the relative importance of these factors and the results are presented in Table 2.

The results show that the family environmental factors considered under this investigation, were significantly related to neuroticism only in the HOD group. The two groups had marked difference so far as the relative importance of the environmental factors for neuroticism was concerned though no general conclusion could be derived as the relation was not significant in the slum group.

It was observed from the stepdown regression analysis that the increase in multiple correlation was not proportional to the number of predictor variables. Hence, it was decided to identify the minimum number of predictor variables, which would give as accurate a prediction as could

Table 2

Regression coefficients of environmental factors in the order of their relation to the neuroticism scores

SLUM BOYS	Reg.Coef.	HOD BOYS	Reg.Coef.
Parent's affection	2.25	Parent's affection	-4.63
Relation between parents	-1.20	Mother's presence	8.46
Nature of discipline at home	-0.88	Nature of discipline at home	-3.57
Monthly income	0.28	Father's presence	8.40
Reared by parents or by parent substitute	-1.24	Monthly income	0.62
Number of siblings	-6.44	Attachment to home	1.00
Mother's occupation	0.98	Relation between parents	-2.70
Father's occupation	-1.68	Reared by parents or by parent substitute	3.91
Mother's presence	12.30	Mother's occupation	1.86
Father's presence	2.94	Number of siblings	-1.62
Parents presence	1.05	Parents presence	1.90
Rank among siblings	0.40	Father's occupation	-0.63
Attachment to home	-0.17	Rank among siblings	-0.25
Multiple correlation	.18		.34*

*p less than .05

Table 3

Analysis of Variance for testing the significance of the increase in multiple correlation by adding second most important factor to the first in the HOD group.

Variance due to	DF	SS	S	F
Regression	2	8890.22	4445.11	
(a) one variable	1	3655.37	3655.37	6.93*
(b) Remainder	1	5234.85	5234.85	9.92*
Residual	197	103924.78	527.56	
Total	199	112820.00		

* p less than .01

be obtained with all the thirteen variables. The computational procedure suggested by Johnson and Jackson (1959) was followed here and the result is presented in Tables 3 and 4.

Table 4

Analysis of variance for testing the significance of the increase in multiple correlation by adding the third most important factors to the first and second important factors in the HOD group.

Variance due to	Degrees of Freedom	Sum of Squares	Mean Squares	F-Value
Regression	3	9623.55	3207.85	
(a) First & Second variables	2	8890.22	4445.11	8.44*
(b) Remainder	1	733.33	733.33	1.39
Residual	196	103196.45	526.51	
Total	199	112820.00		

* *p* less than .01

Table 4 reveals that only two of the thirteen factors had significant effect upon the score on neuroticism and these were (a) parents' affection towards the boy, (b) presence of mother in the family. This means that delinquent boys who feel lack of parental affection or are brought up in a family where mother is not present, are more likely to become neurotic. All other factors such as parents, occupation, number of siblings, had no effect upon the neurotic tendency of the delinquent boys.

Discussion

The data from this study demonstrate that delinquents and non-delinquent boys do not differ

significantly with respect to their tendency towards neuroticism though the percentage of normal boys was 52 among the HOD inmates while this was 61.5 in case of slum boys (Table 1) indicating slightly more neurotic tendency in HOD inmates. Marked difference was observed with respect to the effect of environmental conditions upon neuroticism between the two groups. Non-delinquent boys remained unchanged under different family conditions so far as their neurotic tendency was concerned indicating more stable personality than the HOD inmates. The HOD inmates reacted more towards neuroticism under two out of the thirteen family conditions.

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