

## EXTRAVERSION, INTELLIGENCE, AND ABILITY TO DRAW A PERSON

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*Summary.*—Drawings of a person made by 50 girls and 54 boys were rated on the Harris Qualitative Scale by four independent raters; reliabilities were in the neighbourhood of .8. Ratings were correlated with the Extraversion scores on the Junior E.P.I.; extraverted children produced better drawings. Intelligence was correlated both with quality of drawing and with E, but even with intelligence partialled out positive but insignificant correlations between E and quality of drawing remained. The results tentatively support the hypothesis that in young children extraversion is related to drawing ability.

Artists are traditionally looked upon as extraverts; bohemian modes of conduct seem to resemble extraversion carried to extremes. The possibility exists that personality may in fact be connected with ability to draw and paint; work of this kind certainly requires close observation of the outer world and manipulation of tools, both likely to come more easily to the extravert. To test this hypothesis, 54 boys and 50 girls between 10 and 11 yr. of age were asked to complete the Junior E.P.I. (S. B. G. Eysenck, 1965) and to draw a person; these tasks were undertaken in school but were supervised by a psychologist. Using the Qualitative Scale published by Harris (1963), four raters independently rated the quality of the pictures produced by the children. Inter-rater reliability averaged .8 for both boys and girls; these values are well within the range reported by Harris for his standardization sample. Ratings were combined by simple averaging to give scores for the children, boys and girls being kept separate at all stages. Using the norms of the Harris scale, boys had a mean score of 100, girls of 106.

Product-moment correlations were run between the E, N and L scales of the J.E.P.I. and the drawing scores of the children. Correlations for N and L were low and insignificant. For E, correlations were positive and significant; 0.28 for the boys and 0.31 for the girls. These figures seem to support the hypothesis, but they do not take into account the influence of intelligence. H. J. Eysenck and Cookson (1969) have shown that the relation between E and intelligence is complex, being positive at primary school ages and negative above 13 yr.; this finding, taken together with the well-known correlation between intelligence and drawing ability (Harris, 1963), suggests that the observed correlation may be an artifact. Intelligence test scores were available, and it was found that E correlated with intelligence 0.34 for the boys and 0.42 for the girls; this is in line with

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the Eysenck and Cookson data. Intelligence also correlated with drawing ability, the correlations being 0.29 for the boys and 0.55 for the girls. Partialling out intelligence from the correlations between E and drawing ability reduces these to 0.11 for boys and 0.20 for girls.

These figures are significant on a one-tailed test, but this would hardly be appropriate in view of the weakness of the theory proposed (H. J. Eysenck, 1960). On the other hand, partial correlations do not furnish much information about causal relationships; it will be noted that the correlations between drawing ability and E are only a little lower than those with intelligence. If we were to partial out E from the correlation between drawing ability and intelligence, this too would be reduced to a degree which would make one doubt its significance. Clearly no definitive conclusion emerges from this study; experiments involving different age groups (particularly older children, for whom the correlation between E and intelligence is negative) seem required in order to settle this matter.

#### REFERENCES

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