

Separate word-frequency norms for males and females and for those word categories which vary with intelligence are provided in tabular form. The norms presented here can be used to compare our sample with groups of individuals with various types of medical and personality illnesses.

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PERFORMANCE AND VERBAL IQ IN A GROUP OF SOCIOPATHS

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PROBLEM

Following Wechsler's⁽¹⁴⁾ manual and other studies^(9, 10), many clinicians assume that the intelligence test results of sociopaths will, among other things, be characterized by a Performance IQ that exceeds the Verbal IQ. Commenting on this assumption, Schafer writes: "The generalizations to be advanced about them are not based on formal statistical investigations; they are considered to be valid because we have had a high degree of success in applying them in our every day work"^(10, p. 14). A review of the research literature reveals that (a) few studies support this assumption, and (b) those studies that are reported use such divergent definitions of sociopathy or psychopathy that Rabin and Guertin⁽⁸⁾ were led to suggest that the *inconsistency* in the use and meaning of this diagnostic label meant that different investigators were most likely studying very different kinds of subjects.

In the reviews of research with the Wechsler-Bellevue by Rabin⁽⁷⁾, Watson⁽¹³⁾, Rabin and Guertin⁽⁸⁾, and Guertin, Frank and Rabin⁽⁴⁾ reference is made to five studies with adults that bear directly on the present investigation. Clark⁽¹⁾ found a lower verbal score in "institutionalized behavior problem groups" of civilians and American and Mexican soldiers, and thus substantiated the clinical assumption of a higher performance IQ in this group of offenders. However, Strother⁽¹¹⁾ in a group of "psychopaths," and Thurston and Claden⁽¹²⁾ in a group of "tuberculosis patients who left against medical advice", did not find the higher performance IQ. Similar negative findings were reported by Clark and Moore in their differentiation of "military offenders" into groups of "no NP disorder and immaturity reaction" versus "psychopaths"⁽²⁾, and by Gurvitz who attempted to differentiate "psychopathic" and "non-psychopathic" inmates in a prison⁽⁵⁾. Thus, of the five studies, one reported a performance IQ higher than verbal IQ, and four studies did not.

This study investigates whether sociopathic patients earn a significantly higher performance IQ than verbal IQ on the Wechsler test of adult intelligence. The operational definition of sociopath used was a behavioral one: the experimental subjects were a group of 112 sex offenders (all of whom, at the time of examination, already *had been convicted* in a court of sexual crime against another person) sent to the

Oregon State Hospital for psychiatric and psychological examination.¹ The criterion for inclusion in this study thus emphasized "overt" rather than "latent" behavior.

A second observation prompted this present study; namely conflicting data regarding the intellectual level of sex offenders. Karpman⁽⁶⁾ and Ellis and Brancalle⁽³⁾ review approximately equal numbers of studies suggesting lower than average intelligence, average intelligence, and above average intelligence for groups of sex offenders.

PROCEDURE

From 1955 to 1957, 142 convicted male sex offenders were admitted to the Oregon State Hospital for study. Of this group, 112 patients were referred and studied by means of psychological tests, including the Wechsler-Bellevue, Form I in 81 cases, the Wechsler Adult Intelligence Scale in 29 cases, and the Wechsler Intelligence Scale for Children in two cases.

Our subjects were these 112 males ranging in age from 14 years to 64 years, mean 32.4 years. Sixty per cent were between the ages of 20-39. Of this group of 112, 50 men were married, 42 were single, 16 were divorced, three were separated from their wives and one man was a widower. The offenses for which they were convicted were: contributing to the delinquency of a minor (29 Ss), sodomy (21 Ss), rape (21Ss), statutory rape (12 Ss), indecent exposure (5 Ss), assault with intent to rape (4 Ss), attempted rape (4 Ss), assault with a deadly or dangerous weapon (3 Ss), delinquency (3 Ss), and homosexual activities (2 Ss). Eight additional cases were accounted for by a variety of sexual offenses. In 90 cases the offense was listed as being against a child, and in 15 cases against an adult; the preponderant number of cases (72) involved a female child.

The clinical psychiatric diagnosis given these men after intensive study, in contrast to the more rigorous behavioral classification of sociopath given to all 112, was sociopathic personality disturbance (72 Ss), mental deficiency (8 Ss), schizophrenia (9 Ss), psychoneurosis (2 Ss), inadequate personality (4 Ss), adjustment reaction of adolescence (3 Ss), adult situational reaction (1 S), depressive reaction (1 S), schizoid personality (2 Ss), chronic brain syndrome (3 Ss), and 7 Ss without mental disorder. These clinical diagnoses are presented for informational purposes only, since they involve the well-known lack of reliability for clinical diagnoses. In educational background the 112 subjects ranged from no formal education to one year of graduate study with a mean education of ninth grade; 19 per cent had not completed the eighth grade and 23 per cent had more than three years of high school. With the exception of one man who stayed in the hospital beyond the duration period of this study, the range of hospitalization was from one to 882 days with a mean hospitalization period of 51 days.

RESULTS AND DISCUSSION

The range of Full Scale IQ's for this group of 112 subjects was from 64 to 135, with a mean IQ of 100.1 and a standard deviation of 15.3, these values being almost identical with Wechsler's⁽¹⁴⁾ standardization sample. Therefore, our sample of 112 subjects in no way differs from a random sample of males from the general population with respect to general intelligence. A breakdown of the Full Scale IQ's of the various sexual offense sub-groups (listed earlier) revealed average Full Scale IQ's for each sub-group. Thus, a second conclusion from this initial finding is that specific sex offense seems to be independent of intellectual level.

The results shown in Table 1 allow us to answer the main question of this study. It is clear that, as a group, the 112 sociopaths earned a statistically significant higher (.001 level of confidence) performance IQ than verbal IQ. Thus when the criterion of sociopathy is clearly defined by overt behavior the assumption that sociopaths

¹Since 1953, Oregon law has required the psychiatric examination of certain persons convicted of sex crimes. These limits are quite general and inclusive and pertain to all offenses involving a child under 16 years of age.

TABLE 1. COMPARISON OF PERFORMANCE AND VERBAL IQ FOR GROUP OF 112 SOCIOPATHS

	Performance Scale IQ	Verbal Scale IQ	<i>t</i>	<i>P</i>
Mean	104.0	97.6	5.41	.001
S. D.	15.0	17.3		
Range	62-137	69-130		

have a higher performance than verbal IQ is established. While the mean difference (6.4 IQ points) is not large, it is clearly large enough to attain an unusually high degree of statistical significance, and thus can be presumed to be a reliable finding.

Of the 112 subjects in our sociopathic group, 81 had a higher performance IQ than verbal IQ and 31 had lower performance IQ. This difference was significant at the .001 level and is a clear indication that, whether dealing with group or individual data, our group of sociopaths do, in fact, earn a higher performance than verbal IQ. It would thus appear that as suggested by Rabin and Guertin⁽⁸⁾, other investigators may have been studying different kinds of subjects than those that comprised our sample, and that, if the definitional problem of what is a sociopath could have been overcome, they might have found similarly positive results.

These findings are duplicated in entirety in the subgroup of 72 subjects out of the 112 given the *clinical psychiatric diagnosis* of "sociopathic personality disturbance". This sub-group obtained the following mean scores: Full scale I.Q. 102.4, Verbal scale I.Q. 99.4, and Performance scale I.Q. 105.5. The group difference of 6.1 I.Q. points between performance and verbal scales is statistically significant at the .001 level ($t = 5.11$). In addition, taking the 72 subjects as individuals, 53 (74%) had a higher performance scale I.Q., while only 19 had a higher verbal scale I.Q. This difference also is significant at the .001 level (Chi-square 16.1).

SUMMARY

This study investigated whether or not a group of 112 sociopaths, defined in terms of overt behavior (court conviction for a sexual crime), would earn a higher performance than verbal IQ. Both for the group as a whole, and for the subjects taken as individuals, the findings were clear cut that the performance IQ is higher than the verbal IQ.

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