Spring 1964

An Attempt to Differentiate Delinquents from Non-Delinquents on the Basis of Projective Drawings

Ray Naar

Follow this and additional works at: http://scholarlycommons.law.northwestern.edu/jclc

Part of the Criminal Law Commons, Criminology Commons, and the Criminology and Criminal Justice Commons

Recommended Citation
Ray Naar, An Attempt to Differentiate Delinquents from Non-Delinquents on the Basis of Projective Drawings, 55 J. Crim. L. Criminology & Police Sci. 107 (1964)
AN ATTEMPT TO DIFFERENTIATE DELINQUENTS FROM NON-DELINQUENTS ON THE BASIS OF PROJECTIVE DRAWINGS

RAY NAAR*

Among the many attempts to solve the problem of delinquency, the study conducted by the Gluecks\(^1\) stands out. *Unraveling Juvenile Delinquency* is too well known to go, but briefly, into it. The Gluecks matched 500 delinquent against 500 non-delinquent boys with regard to age, general intelligence, residence in under-privileged neighborhoods, and ethnico-racial origin. The investigation was conducted on the four following levels: the socio-economic, somatic, intellectual, and emotional-temperamental. The last level was explored by means of the Rorschach test, and an analysis of the Rorschach records indicated that delinquents could be differentiated from non-delinquents on the basis of definite psychological traits.

In evaluating their findings, the Gluecks point out that a knowledge of the differences between delinquents and non-delinquents should be utilized for prediction purposes. They suggest prediction tables constructed from social and psychiatric data and from psychological traits determined by the Rorschach test. They recognize, however, the many disadvantages inherent in the Rorschach test for the specific purpose of predicting juvenile delinquency.\(^2\) Among such handicaps are the lack of skilled Rorschach analysts and, when trained clinicians are available, the lack of necessary time. As the Gluecks point out, "If a simpler and less time consuming test could be developed to bring out the presence or absence of particular Rorschach traits shown to be the most differentiative of potential delinquents from non-delinquents, it would be a powerful aid to those clinics, schools, courts and institutions that do not have the trained personnel or cannot take time to administer and interpret the entire test."

The experiment here reported represents an attempt to determine whether delinquents can be differentiated from non-delinquents on the basis of a brief, easy to score, test of personality.

**METHOD**

The test used was the House-Tree-Person (H-T-P) test.\(^4\) The choice of drawings was prompted by a number of reasons, discussed by Hammer,\(^5\) the most pertinent of which are the short time needed for administration and scoring and the general assumption that they are less threatening and more acceptable to adolescents than other of the drawings.

**Subjects**

The experimental group was composed of 30 boys from a correctional institution for white male juvenile delinquents in Virginia, ranging in age from 14.4 to 16.9 years, with a mean age of 15.8 years. The Gluecks' definition of delinquency was adopted,\(^6\) and only such subjects were included in the experimental group as had been convicted of offenses which when committed by persons beyond the age of 16 were punishable as crimes. The control group was composed of 30 white boys from a Richmond public school located in a high delinquency area. They were considered non-delinquent after a check with juvenile court records revealed that they had not come to the attention of juvenile authorities. They ranged in age from 14.4 to 16.8 years, with a mean age of 15.2 years. The two groups were matched for intelligence; the mean total IQ's of the delinquents and non-delinquents, on the California Test of Mental Maturity (CTMM) were 93.06 and 93.16, respectively.

**Scoring**

The traits found by the Gluecks to differentiate delinquents from non-delinquents were grouped

\(^2\) The CLINICAL APPLICATION OF PROJECTIVE DRAWINGS 599–610 (Hammer ed. 1958).
under the four following categories: (1) hostility, (2) impulsiveness-lack of control, (3) suspiciousness-paranoid indications, (4) lack of anxiety. (See Appendix A.) H-T-P signs, indicative of the above traits, were selected from different sources. (See Appendix B.)

Two judges, one having considerable personal experience with the H-T-P and the other, a skilled clinician, but relatively inexperienced with the technique, were presented with the 60 drawings, each accompanied by a check-list listing the H-T-P signs. They were requested to check the signs present in each drawing. The only information available to the judges was the sex, age, and IQ of the subjects. The number of check marks constituted the score.

RESULTS

Tables I and II show the means, standard deviations, and \( t \) ratios for the two judges respectively. Only one \( t \) ratio was significant: the two groups differed in their "lack of anxiety." The * of 2.045 is significant at the .05 level with \( df \) 29. 

\( t \) of 2.756 is significant at the .01 level with \( df \) 29.

† Significant, but not in the expected direction.

\[ \text{Table I} \]

<table>
<thead>
<tr>
<th>Category</th>
<th>Delinquents</th>
<th>Non-Delinquents</th>
<th>( t )</th>
<th>( \beta^* )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( M )</td>
<td>( \sigma )</td>
<td>( M )</td>
<td>( \sigma )</td>
</tr>
<tr>
<td>Hostility</td>
<td>2.20</td>
<td>1.400</td>
<td>2.16</td>
<td>1.0140</td>
</tr>
<tr>
<td>Impulsiveness</td>
<td>2.03</td>
<td>1.016</td>
<td>2.10</td>
<td>1.0115</td>
</tr>
<tr>
<td>Suspiciousness</td>
<td>.90</td>
<td>.9781</td>
<td>.73</td>
<td>.7272</td>
</tr>
<tr>
<td>Lack of anxiety</td>
<td>1.73</td>
<td>.6798</td>
<td>2.3</td>
<td>.7371</td>
</tr>
<tr>
<td>Total</td>
<td>6.86</td>
<td>2.156</td>
<td>7.3</td>
<td>1.9348</td>
</tr>
</tbody>
</table>

* \( t \) of 2.045 is significant at the .05 level with \( df \) 29. 

\( t \) of 2.756 is significant at the .01 level with \( df \) 29. 

† Significant, but not in the expected direction.

\[ \text{Table II} \]

<table>
<thead>
<tr>
<th>Category</th>
<th>Delinquents</th>
<th>Non-Delinquents</th>
<th>( t )</th>
<th>( \beta^* )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( M )</td>
<td>( \sigma )</td>
<td>( M )</td>
<td>( \sigma )</td>
</tr>
<tr>
<td>Hostility</td>
<td>1.53</td>
<td>1.0562</td>
<td>1.80</td>
<td>1.1072</td>
</tr>
<tr>
<td>Impulsiveness</td>
<td>1.23</td>
<td>.6155</td>
<td>1.50</td>
<td>.8850</td>
</tr>
<tr>
<td>Suspiciousness</td>
<td>.73</td>
<td>.8537</td>
<td>.37</td>
<td>.6032</td>
</tr>
<tr>
<td>Lack of anxiety</td>
<td>1.00</td>
<td>.7303</td>
<td>1.53</td>
<td>.7630</td>
</tr>
<tr>
<td>Total</td>
<td>4.5</td>
<td>1.8028</td>
<td>5.2</td>
<td>1.8330</td>
</tr>
</tbody>
</table>

* \( t \) of 2.045 is significant at the .05 level with \( df \) 29. 

\( t \) of 2.756 is significant at the .01 level with \( df \) 29. 

† Significant, but not in the expected direction.

\[ \text{Table III} \]

<table>
<thead>
<tr>
<th>Category</th>
<th>( r )</th>
<th>( \beta^* )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hostility</td>
<td>.53</td>
<td>.01</td>
</tr>
<tr>
<td>Impulsiveness</td>
<td>.52</td>
<td>.01</td>
</tr>
<tr>
<td>Suspiciousness</td>
<td>.73</td>
<td>.01</td>
</tr>
<tr>
<td>Lack of anxiety</td>
<td>.67</td>
<td>.01</td>
</tr>
<tr>
<td>Total</td>
<td>.58</td>
<td>.01</td>
</tr>
</tbody>
</table>

* \( r \) of .355 is significant at the .05 level with \( df \) 29. 

\( r \) of .456 is significant at the .01 level with \( df \) 29.

difference, however, was not in the expected direction; the delinquent group seemed to suffer from anxiety more than did the non-delinquent group.

Tables III and IV show inter-scorers’ reliability in their scoring of the H-T-P’s drawn by delinquents and non-delinquents respectively. Correlations were all significant at the .01 level, with
TABLE IV  
INTER-SOCRERS RELIABILITY  
NON-DELINQUENT GROUP  

<table>
<thead>
<tr>
<th>Category</th>
<th>r</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hostility</td>
<td>.60</td>
<td>.01</td>
</tr>
<tr>
<td>Impulsiveness</td>
<td>.39</td>
<td>.05</td>
</tr>
<tr>
<td>Suspiciousness</td>
<td>.53</td>
<td>.01</td>
</tr>
<tr>
<td>Lack of anxiety</td>
<td>.57</td>
<td>.01</td>
</tr>
<tr>
<td>Total</td>
<td>.69</td>
<td>.01</td>
</tr>
</tbody>
</table>

* r of .355 is significant at the .05 level with df 29.  
* r of .456 is significant at the .01 level with df 29.

One exception. The reliability of the two judges in scoring the degree of “impulsiveness” of the non-delinquent group was significant at the .05 level.

**DISCUSSION**

The above negative results cast much doubt on the ability of projective drawings to differentiate between delinquents and non-delinquents. In fact, when drawings are used in the manner described, such differentiation is impossible. Yet, it would be premature to discard drawings as a helpful device in detecting character and personality problems. Indeed, scoring was necessarily limited to a narrow interpretation of the drawings' contents. Many of their expressive aspects, such as sequence, pressure, quality of stroke, were lost. Furthermore, in an effort at objectivity, the judges were reduced to the rank of clerks, and no use was made of their clinical skill. It may be appropriate, at this time, to point out that Ernest and Anna Schachtel (the Rorschach analysts in Unraveling Juvenile Delinquency) derived their conclusions more from the subjects' "subjective interpretation of the test situation" than from formal Rorschach components. In any case, this experiment injects a further note of caution against the tendency to use a sign-to-sign instead of a total approach in the interpretation of projective drawings.

The only difference found between the two groups is puzzling. In direct contradiction to the Schachtels' findings, delinquents were judged to be significantly more anxious than non-delinquents. Two questions suggest themselves: could the Schachtels' sample have been biased by a high proportion of psychopathic delinquents with little or no anxiety, or, on the other hand, could the sample used in this experiment have been biased by a high proportion of neurotic personalities?

**SUMMARY**

An attempt was made to differentiate delinquents from non-delinquents on the basis of their projective drawings. The H-T-P's of 30 delinquents and 30 non-delinquents were scored by two judges on the following four factors: (1) hostility, (2) suspiciousness, (3) impulsiveness, (4) lack of anxiety.

The two groups did not differ on the first three factors. Contrary to expectations, however, delinquents were found to be more anxious than non-delinquents. In spite of the negative results, it was not felt that drawings should be discarded as a useful technique, but caution was suggested against the sign approach to their use.

**APPENDIX A**

**RORSCHACH TRAITS WHICH DIFFERENTIATE DELINQUENTS FROM NON-DELINQUENTS GROUPED UNDER FOUR CATEGORIES**

<table>
<thead>
<tr>
<th>Rorschach Traits</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defiant</td>
<td>Hostility-aggression</td>
</tr>
<tr>
<td>Resentful</td>
<td>Hostile</td>
</tr>
<tr>
<td>Hostile</td>
<td>Destructive</td>
</tr>
<tr>
<td>Sadistic</td>
<td>Extroverse</td>
</tr>
<tr>
<td>Suspicious</td>
<td>Suspiciousness</td>
</tr>
<tr>
<td>Impulsive</td>
<td>Impulsiveness/lack of control</td>
</tr>
<tr>
<td>Vivacious</td>
<td>Extroverse</td>
</tr>
<tr>
<td>Suffer less from fear of failure</td>
<td>Lack of anxiety</td>
</tr>
<tr>
<td>Less self-controlled</td>
<td>Less masochistic</td>
</tr>
</tbody>
</table>

**APPENDIX B**

**H-T-P CHARACTERISTICS***

**HOSTILITY**

1. Open attic windows (2, pp. 9–10)
2. Windows without panes, curtains or shutters (2, pp. 9–10)

* In this appendix, the numerals 1, 2, 3, and 4 refer to the following sources:
1. Hammer, *Frustration-Aggression Hypothesis Ex-*
3. Keyhole tree (2, pp. 9–10)
4. Two-dimensional branches resembling clubs or sharply pointed branches or leaves (2, pp. 9–10)
5. Side edge of page employed as edge of tree (2, pp. 9–10)
6. Mutilated person or degraded tree (2, pp. 9–10)
7. Sharply pointed fingers and toes and other similarly treated details (2, pp. 9–10)
8. Sharply squared shoulders (2, pp. 9–10)
9. Well outlined but unshaded hair in the person (2, pp. 9–10)
10. Person presented in threatening attitude (2, pp. 9–10)
11. Drawings conspicuously too large for the page (2, pp. 9–10)
12. Absence of windows (4, p. 51)
13. Absence of windows from ground floor (4, p. 51)
14. Eyes drawn as hollow sockets (4, p. 81)
15. Teeth prominently presented (4, p. 95)
16. Person carrying weapons (1, p. 600)

**IMPULSIVENESS/LACK OF CONTROL**

17. Mid-point of drawn whole to the left of mid-point of page (2, p. 5)
18. Items within the whole to the left of mid-point of whole (2, p. 5)
19. Overly large branch structure on relatively small trunk (3, p. 189)
20. Branches intended to be two-dimensional but actually not “closed” at the distal end (4, p. 91)
21. Tree leaning to left (4, p. 69)
22. Arms broader at hand than at shoulder (4, p. 77)
23. Omission of neck (4, p. 91)

**SUSPICIOUSNESS**

24. Roots drawn talon-like which do not appear to enter the ground (2, p. 13)
25. Emphasis upon eyes, slits or apertures (2, p. 13)
26. Hat brim low over eyes (2, p. 13)
27. Partial back view of the person (2, p. 13)
28. Emphasis upon locks or hinges (3, p. 170)
29. Arms folded across chest (4, p. 77)
30. Over-emphasis upon ears (4, p. 81)

**LACK OF ANXIETY†**

31. Lack of excessive, irrelevant detailing (2, p. 7)
32. Lines firm, not faint or hesitant (2, p. 7)
33. Lack of shading (2, p. 7)

† While Hammer (2) mentions characteristics No. 31, 32, and 33 as indicative of anxiety, he does not specify that the absence of such characteristics indicates a lack of anxiety. It was, therefore, left pretty much to the judges to determine whether or not anxiety was present or absent.