Rorschach Interpretation With
High-Ability Adolescent Females:
Psychopathology or Creative Thinking?

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Highly intelligent and creative persons have long posed interpretation difficulties for users of the Rorschach Inkblot Test. This study examined Exner's (1993) Schizophrenia, Depression, and Coping Deficit indices as adjustment measures in a sample of 43 female adolescents enrolled in an early college entrance program and a comparison group of 19 girls enrolled in public high school gifted programs. Contrary to conventional interpretation, higher scores on the Rorschach Schizophrenia Index among the accelerants were correlated with healthy emotional adjustment on both the California Psychological Inventory and the Self-Perception Profile for Adolescents (SPPA). Further analyses offered support for the hypothesis that among accelerants, elevated scores on the Rorschach constellations did not indicate psychopathology, but rather their creative thinking style.

How do we interpret the Rorschach responses of unusually creative and intelligent persons? Rorschach researchers (Barrett, 1957; Gallagher & Crowder, 1957; Gallucci, 1989) have long observed that particularly creative, intelligent individuals can produce strikingly original, often quite elaborate and unorthodox Rorschach responses that must be carefully distinguished from the responses of emotionally disturbed or psychotic individuals. The distinction between a richly creative response and a psychopathological one may rest not in a single characteristic or score, but in a combination or constellation of factors.

Three of Exner's (1993) special indices—the Schizophrenia Index, the Depression Index, and the Coping Deficit Index—represent especially ambitious efforts to combine a series of scores and response characteristics into more discriminating indicators of psychopathology. There is substantial evidence that these indices
accurately discriminate between patient and nonpatient samples, but the performance of a sample selected for high intelligence and creativity has not been considered. Moreover, the indices were developed on adult samples, and only a few studies have applied them to adolescents. This study investigated the Rorschach performance of female early college entrants, a group that produced an unusually rich series of protocols while participating in a study of the effects of early college entrance on personality adjustment.

SPECIAL INDICES

The Schizophrenia Index was developed on the assumption that schizophrenic individuals would show impairment in four areas—inaccurate perception, disordered thinking, inadequate controls, and interpersonal ineptness—using Rorschach variables including measures of form quality, human movement, and Special Scores (Exner, 1993). The index has been tested with samples of schizophrenics and nonschizophrenics, and accuracy rates fell within the range of 72% to 89%, with false positive rates ranging from zero to 11% (Exner, 1993). None of the 585 participants in Exner’s normative samples of adolescent nonpatients show elevated Schizophrenia scores. In Nettser and Viglione’s (1994) study, the Schizophrenia Index correctly identified 14 of 20 schizophrenics, while misidentifying only 3 of 20 controls. However, in a study of adolescent inpatients, Archer and Gordon (1988) correctly diagnosed only 47% of schizophrenics using Exner’s index. Additionally, 31 of 82 nonschizophrenics received Schizophrenia scores of 4 or more.

The Depression Index was created by identifying variables that discriminated depressed persons from nonpatients. The index was effective in distinguishing depressed persons, with 81% of Exner’s depressed sample showing elevated values, and false positive rates in the 2 to 3% range (Exner, 1993). Less than 1% of Exner’s adolescent norm group (Exner, 1990) produced Depression scores in the elevated range. However, other studies have shown the Depression Index to be less effective. The Depression Index correctly identified only 7 of 67 depressed patients in Archer and Gordon’s (1988) study. However, their rate of false positives was low as well, with only 5 of 121 nondepressed patients receiving elevated Depression scores.

The Coping Deficit Index (CDI) was developed in an effort to improve on the Depression Index. Individuals who score high on this index are likely to have impoverished or unrewarding social relationships, and have difficulty coping with social demands (Exner, 1993). The index correctly identified 81% of a patient group defined as “helpless in the face of contending with a complex society” (Exner, 1993, p. 362), with a false positive rate among nonpatient adults of 3%, and among nonpatient children, 6 to 24%. Less than 1% of Exner’s adolescent norm group showed elevated CDI scores.
RORSCHACH PERFORMANCE OF HIGH-ABILITY SUBJECTS

Research on the Rorschach performance of high-ability subjects has produced mixed results. Early studies (Gallagher & Crowder, 1957; Selig, 1958) reported a high incidence of disturbed thinking among samples selected for high intelligence. More recently, Gallucci (1989) investigated 72 adolescents with IQs higher than 135 and found a preponderance of odd or strange responses (DV and DR), as well as significantly more unusual details (Dd) than a control group of average IQ adolescents. His high-ability adolescents also scored higher on the X – % index, and 72% of the sample were identified as positive for schizophrenia on an earlier version of the Exner Schizophrenia Index. Although their Rorschach results were indicative of psychopathology, the high IQ adolescents did not differ from the control group in behavior problems as measured by the Child Behavior Checklist (CBC). Furthermore, Rorschach scores presumed to be indicative of psychopathology did not correlate with any of the CBC scales. Gallucci cautioned against the conclusion that the unusual Rorschach performance of high-ability adolescents truly reflects psychopathology.

One possible explanation for the seemingly pathological Rorschach performance of high-ability subjects may lie in their creative thinking style. According to Sternberg and Davidson (1983), high-ability individuals often encode and process information in a creative, autonomous, and therefore unusual fashion. Rorschach responses that reflect a creative thinking style might be interpreted as pathological, because unusual and divergent responses are often scored as less reality-based, deviant, and indicative of schizophrenia or thought disorder.

Kris (1952) theorized that creative individuals have a capacity to relax normal ego defenses and use primary process in a productive manner, a process described as "regression in the service of the ego." Holt (1977) applied Kris's formulation to Rorschach performance through the development of scales to measure adaptive regression. Adaptive regression refers to the degree to which primary process responses, which customarily either contain drive-laden, aggressive, or sexual content, or involve illogical thinking processes, are integrated in an adaptive fashion (Dudek & Chamberland-Bouhadana, 1982). Holt (1970) developed a scoring system for adaptive regression, operationally defined to consider both the amount of primary process in a response and the adaptive defensiveness evident in the response.

Although mentally disordered subjects exhibit a high level of primary process on the Rorschach (Dudek, 1970), creative subjects have been found to integrate primary process responses adaptively (Pine & Holt, 1960; Dudek & Chamberland-Bouhadana, 1982). Rorschach responses reflecting adaptive regression meet two criteria: first, they are either aggressive or sexual in nature, or are of deviant form; and second, they are then defended in a realistic, socially acceptable manner. For
example, a response containing aggressive primary process such as "a cannibal feast" can be logically defended and made more acceptable by referring to its cultural context: "a cannibal feast ... they look like African natives" (Holt, 1970, p. 177).

This study concerns the Rorschach performance of a group of adolescent girls who entered college at ages 13 to 17. Girls admitted to the early college entrance program were selected not only on the basis of high intelligence and academic aptitude, but the presence of other personal characteristics judged to be important in undertaking a nonconventional, accelerated education, including independence, maturity, and creativity. Previous researchers have noted the nonconformist and independent styles of early college entrants (Cornell, Callahan, & Loyd, 1991b; Robinson & Janos, 1986).

There are conflicting findings regarding the social and emotional adjustment of high-ability adolescents who enter college at an early age. Several studies have found no differences between accelerants and nonaccelerants on a variety of adjustment measures (Brody & Benbow, 1987; Janos et al., 1988; Robinson & Janos, 1986). Using the California Psychological Inventory (CPI), Cornell et al. (1991b) found early college entrants to be independent, resourceful, and self-assured.

Other authors have found evidence of adjustment difficulties, low self-esteem, and friendship difficulties among early college entrants. Cornell, Callahan, and Loyd (1991a) found evidence of socioemotional adjustment problems, including depression and suicidality, among some early college entrants. Lupkowski, Whitmore, and Ramsay (1992) observed a drop in self-esteem after the first semester of the accelerants' college education. The authors noted that the students' drop in self-esteem might be due to the fact that academic achievements might not have come to them as easily as they had previously. In addition, when comparing themselves with other advanced students, early college entrants' image of themselves in the academic arena may diminish. There has also been concern that early college entrants' social adjustment may suffer. Janos et al. (1988) found that early college entrants in their first and second years of college prefer to interact with other early college entrants, and had limited friendships with regular college students. However, after the third year, the accelerants expanded their friendships to include their older classmates.

Accelerants were administered the Rorschach during their first month of college as part of a longitudinal study of the psychological adjustment of early college entrants. Previous reports have documented the incidence of emotional problems among some of the students (Cornell et al., 1991b), as well as described the overall growth and improvement in personality adjustment over the course of their first year in the program (Cornell et al., 1991a). No published studies have reported on the Rorschach performance of these subjects. Because many of these girls' Rorschach protocols were laden with unusual responses and many signs and scores
conventionally assumed to indicate psychopathology, a separate analysis was undertaken to investigate the concurrent validity of their Rorschach profiles.

Rather than examine each individual Rorschach score and carry out numerous, potentially redundant correlations, we focused on three special indices of the Comprehensive System (Exner, 1993) that combine scores into empirically defensible measures of psychopathology. We chose the Schizophrenia Index to investigate whether it would discriminate disordered from creative thinking. Our rationale for using the Depression Index and CDI is based on the reports of adjustment problems and depression among some early college entrants.

Rorschach indices were compared to two standard measures of adjustment, the CPI (Gough, 1987) and the Self-Perception Profile for Adolescents (Harter, 1985). We reasoned that if the Rorschach indices were indicative of psychopathology among these girls, then they should be positively correlated with non-Rorschach adjustment measures; but on the other hand, if the Rorschach indices reflected their creative and independent thinking, the correlations should be absent or even in the opposite direction. In addition, we investigated the relation between a modified Adaptive Regression scale (Holt, 1977) and scores on the Rorschach special indices, hypothesizing that any significant correlations between the special indices and the adjustment criterion measures would be mediated by adaptive regression.

METHOD

Participants

The accelerant group consisted of 43 female students enrolled in an early college entrance program at a small, private, liberal arts college. Participant age ranged from 12 to 17 years ($M = 14$ years). Students were selected for this program based on a college admissions application, review of achievement scores and grades, and both parent and child interviews. The program emphasized selection of young women who seemed highly motivated, creative, and independent thinkers as well as academically qualified to accelerate their education.

The accelerants were compared to a control group of 19 girls enrolled in gifted classes at a local public high school. Although the girls in the control group were of high intelligence and had been placed in gifted programs, they lived at home and had not attempted to pursue early college entrance. Participant age ranged from 13 to 15 years ($M = 14$ years).

Students were administered the Wechsler Intelligence Scale for Children–Revised (WISC–R), the Rorschach Inkblot Test, the CPI, and the SPPA on the same day during their first month in the early college entrance program. Accelerants' full score intelligence quotients, measured by the WISC–R, ranged from 115 to 155, with a mean IQ of 133. Nonaccelerants' IQ scores ranged from 112 to 139, with a mean IQ of 124.
Rorschach Inkblot Test. Three Rorschach measures of adjustment were used, the Schizophrenia Index, the Depression Index, and the CDI, based on Exner's 1993 criteria. Two graduate students trained in the Exner system scored these three variables independently on 20 protocols and obtained intraclass correlations (Shrout & Fleiss, 1979) of .85 for the Schizophrenia Index, .79 for the Depression Index, and .90 for the CDI.

Holt's (1977) Adaptive Regression Index is derived from the defense-demand score (DD) and defense-effectiveness score (DE). The DD score is based on a 6-point rating scale that measures the degree to which a response demands for some defensive measure to be undertaken in order for it to adhere to socially acceptable standards. The DE score for each response is a rating that considers form level, defense scores, and affective expression for the response. In this study, Holt's scoring procedure was modified to simplify interpretation of results. The DD and DE scores were determined using Holt's scoring system, but to obtain the overall score reflecting adaptive regression, the sum DE score was subtracted from, rather than multiplied by, the DD score. Lower scores on this index (in which the difference between defense demand and effectiveness of defense is slight) indicate adaptive regression. Higher scores (signifying that primary process responses are not defended successfully) indicate maladjustment. Two graduate students scored the adaptive regression variable independently on 20 protocols and obtained a Pearson product-moment correlation of .85.

CPI. The CPI is a 540-item self-report instrument that includes 18 subscales and three structural scales (Gough, 1987). Because conducting analyses using this many outcome variables would increase the likelihood of obtaining some significant results by chance, three factor scales were computed: the Emotional Adjustment Index, the Social Adjustment Index, and the Autonomous Thinking Index. These CPI indices were based on equations from Nichols and Schnell's (1963) factor analytic study. In addition, the 58-item "Self-Realization" structural scale was used. Persons scoring high on the Self-Realization scale are considered to be fulfilled, optimistic, mature, able to cope with the stresses of life, and free of neurotic trends and conflicts (Gough, 1987).

SPPA. The SPPA, developed by Harter (1985), is a 36-item self-report questionnaire that contains nine subscales corresponding to different domains of self-concept. Two selected for use in this study were Social Acceptance and Global Self-Worth.

RESULTS

T tests analyzing mean differences between accelerants and nonaccelerants on specific Rorschach indices, CPI scales, and SPPA scales are reported in Table 1.
TABLE 1
Comparisons of Accelerated and Nonaccelerated High-Ability Girls

<table>
<thead>
<tr>
<th></th>
<th>Accelerants&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Nonaccelerants&lt;sup&gt;b&lt;/sup&gt;</th>
<th>t test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Rorschach index</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>2.49</td>
<td>1.47</td>
<td>1.90</td>
</tr>
<tr>
<td>Depression</td>
<td>4.40</td>
<td>1.26</td>
<td>3.63</td>
</tr>
<tr>
<td>Coping deficit</td>
<td>2.49</td>
<td>1.03</td>
<td>2.58</td>
</tr>
<tr>
<td>CPI scale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Adjustment</td>
<td>131.17</td>
<td>28.75</td>
<td>129.73</td>
</tr>
<tr>
<td>Social Adjustment</td>
<td>81.35</td>
<td>13.90</td>
<td>82.95</td>
</tr>
<tr>
<td>Autonomous Thinking</td>
<td>24.03</td>
<td>3.84</td>
<td>22.01</td>
</tr>
<tr>
<td>Self-concept scale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Self-worth</td>
<td>14.88</td>
<td>3.54</td>
<td>15.53</td>
</tr>
<tr>
<td>Social Competence</td>
<td>15.17</td>
<td>3.23</td>
<td>16.26</td>
</tr>
</tbody>
</table>

<sup>a</sup>n = 43. <sup>b</sup>n = 19.
<sup>*</sup>p < .05.

Of the eight t tests conducted, there were four significant group differences. The accelerants scored higher on Schizophrenia, t(60) = 1.71, p < .05. Depression, t(60) = 2.06, p < .05, and Autonomous Thinking, t(59) = 1.84, p < .05; but lower than the nonaccelerant controls on Social Self-Concept, t(59) = -1.95, p < .05. Accelerants had significantly higher IQ scores on the WISC–R than nonaccelerants, t(60) = 3.54, p < .001. When analyses of covariance were conducted, controlling for IQ and age, the differences in these variables remained significant.

Rorschach scores were correlated with CPI and SPPA scores separately by group (see Table 2). Accelerants' Schizophrenia Index scores were correlated positively with all the outcome measures of adjustment. Accelerants who scored high on Depression showed low scores on CPI Emotional Adjustment.

A different pattern of correlations emerged for the nonaccelerants. In contrast to the accelerants, the majority of the nonaccelerants' Rorschach indices were not related to CPI and SPPA variables. Only one correlation was significant: Nonaccelerants who scored high on Schizophrenia were lower on Autonomous Thinking. R-to-z transformations were conducted to evaluate differences in correlations between the groups. All significant group differences were for correlations involving the Schizophrenia Index.

A comparison of the number and percentage of accelerants versus nonaccelerants who scored a 4 or higher on the Schizophrenia Index was conducted by chi-square analysis. The association between group status and elevated schizophrenia scores was significant, $\chi^2(1, N = 62) = 3.94, p < .05$, with accelerants showing significantly more elevated scores than nonaccelerants. Fourteen of the 43 acceler-
TABLE 2
Comparisons of Correlations of Rorschach Indices With California Psychological Inventory Composite Scales and Self-Concept Subscales Among Accelerants and Nonaccelerants

<table>
<thead>
<tr>
<th>Rorschach Indices</th>
<th>Schizophrenia</th>
<th></th>
<th></th>
<th>Depression</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Accelerants (r)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Nonaccelerants (r)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Group Comparison (z)</td>
<td>Accelerants (r)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Nonaccelerants (r)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Group Comparison (z)</td>
</tr>
<tr>
<td>CPI scales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjustment</td>
<td>.31*</td>
<td>-.16</td>
<td>1.56</td>
<td>-.27*</td>
<td>.03</td>
<td>-.82</td>
</tr>
<tr>
<td>Social</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjustment</td>
<td>.34*</td>
<td>-.23</td>
<td>2.03*</td>
<td>.08</td>
<td>-.19</td>
<td>-.29</td>
</tr>
<tr>
<td>Autonomous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thinking</td>
<td>.27*</td>
<td>-.42*</td>
<td>2.27*</td>
<td>.18</td>
<td>.25</td>
<td>-.76</td>
</tr>
<tr>
<td>Self-Realization</td>
<td>.38*</td>
<td>-.28</td>
<td>2.21*</td>
<td>-.21</td>
<td>.06</td>
<td>-.12</td>
</tr>
<tr>
<td>Self-concept scales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>.28*</td>
<td>-.19</td>
<td>1.43</td>
<td>.03</td>
<td>.01</td>
<td>.13</td>
</tr>
<tr>
<td>General</td>
<td>.27*</td>
<td>-.27</td>
<td>1.79*</td>
<td>-.09</td>
<td>.04</td>
<td>-.13</td>
</tr>
</tbody>
</table>

Note. Correlations compared by Fisher r to z transformations.
<sup>a</sup>n = 43, <sup>b</sup>n = 19.
ants (34%) scored in the elevated range (scores of 4 or higher). In contrast, only two of the 19 nonaccelerants (10%) had a Schizophrenia score of 4, and none had a score of 5.

The criteria that make up the Schizophrenia Index were examined for both groups, and are presented in Table 3. Form quality was low for both groups, and both groups showed a heightened occurrence of “minus” responses outnumbering ordinary or unusual responses. In contrast, both groups showed relatively low WSS scores and only one of the 61 participants fulfilled the criteria of giving more than one Level 2 response and one or more FABCOM responses. The association between group status and the $M -> 1$ or $X -> \% > 0.40$ criterion was significant, $\chi^2 (1, N = 62) = 4.01, p < .05$. Eighteen of the accelerants (42%), compared with 3 of the nonaccelerants (16%), met this criteria.

Further analyses were conducted to better understand the positive relations between Schizophrenia and the measures of adjustment. First, partial correlations were performed for all variables, controlling for the effects of age, IQ, and response productivity. When the effects of response productivity were partialled out of previously significant correlations between the Rorschach and adjustment variables, only the correlation between Schizophrenia and Social Adjustment became insignificant, $r(62) = .24, p > .05$. Controlling for age and IQ did not result in any changes in the pattern of significant correlations between Rorschach and adjustment variables.

Next, it was hypothesized that adaptive regression might help explain the relations between Rorschach and adjustment indices. The Adaptive Regression Index (AR) was significantly related to Schizophrenia, $r(62) = .44, p < .01$; higher scores on AR were indicative of maladjustment. To test the theory that otherwise well-adjusted participants scored high on Schizophrenia because of their creative

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Accelerants&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Nonaccelerants&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>$(X -&gt; % &lt; .61) \text{ and } (S -&gt; % &lt; .41)$ or $(X -&gt; % &lt; .50)$</td>
<td>38 (88%)</td>
<td>16 (84%)</td>
</tr>
<tr>
<td>$X -&gt; % &gt; .29$</td>
<td>18 (42%)</td>
<td>5 (26%)</td>
</tr>
<tr>
<td>$(FQ -&gt; = FQu)$ or $(FQ -&gt; &gt; FQu + FQ+)$</td>
<td>27 (63%)</td>
<td>10 (53%)</td>
</tr>
<tr>
<td>$(Sum \text{ level 2 Sp. Sc.} &gt; 1)$ and $(FAB2 &gt; 0)$</td>
<td>1 (2%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>$(Raw \text{ sum of 6 Sp. Sc.} &gt; 6)$ or $(Weighted \text{ sum of 6} &gt; 17)$</td>
<td>8 (19%)</td>
<td>2 (11%)</td>
</tr>
<tr>
<td>$(M -&gt; 1)$ or $(X -&gt; % &gt; 0.40)$</td>
<td>18 (42%)</td>
<td>3 (16%)</td>
</tr>
</tbody>
</table>

<sup>a</sup>$n = 43$. <sup>b</sup>$n = 19$. 
TABLE 4
Partial Correlations of Rorschach Indices With Adjustment Measures

<table>
<thead>
<tr>
<th>Rorschach Indices</th>
<th>Schizophrenia</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Accelerants&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Nonaccelerants&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>CPI scales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Adjustment</td>
<td>.30&lt;sup&gt;*&lt;/sup&gt;</td>
<td>-.15</td>
</tr>
<tr>
<td>Social Adjustment</td>
<td>.18</td>
<td>-.22</td>
</tr>
<tr>
<td>Autonomous Thinking</td>
<td>.14</td>
<td>-.42&lt;sup&gt;*&lt;/sup&gt;</td>
</tr>
<tr>
<td>Self-Realization</td>
<td>.32&lt;sup&gt;*&lt;/sup&gt;</td>
<td>-.28</td>
</tr>
<tr>
<td>Self-concept scales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>.29&lt;sup&gt;*&lt;/sup&gt;</td>
<td>-.19</td>
</tr>
<tr>
<td>General</td>
<td>.27&lt;sup&gt;*&lt;/sup&gt;</td>
<td>-.27</td>
</tr>
</tbody>
</table>

<sup>a</sup>n = 43. <sup>b</sup>n = 19.
<sup>*</sup>p < .05.

Use of adaptive regression, partial correlations were conducted, controlling for the effects of adaptive regression. These results are found in Table 4. There was no longer a significant relation between Schizophrenia and either Social Adjustment or Autonomous Thinking. The correlations between Schizophrenia and Emotional Adjustment, Self-Realization, Social Competence, and General Self-Worth remained significant. The previously insignificant relations between Depression and both Autonomous Thinking and Self-Realization became significant when controlling for adaptive regression.

DISCUSSION

The early college entrants in this sample scored unusually high on the Rorschach Schizophrenia Index. Fourteen of the 43 accelerants (compared to only 2 of the 19 nonaccelerants) scored either a 4 or a 5 on the Schizophrenia Index. These results are remarkable considering Exner's (1990) norms for 12- to 16-year-olds, in which none of his 585 participants obtained Schizophrenia scores in the elevated range.

Paradoxically, the Schizophrenia Index was positively correlated with all six outcome variables. Thus, accelerants who were high on the Rorschach index indicating thought disorder tended to be more emotionally mature, socially competent, independent, and flexible, optimistic and fulfilled, and positive in their perceptions of self-worth.

The six criteria that make up the Schizophrenia Index were examined individually. Eighty-seven percent of the entire sample gave a low percentage of good form responses, suggesting that this criterion of the Schizophrenia Index should be
interpreted with particular caution when clinicians are assessing high-ability subjects. In contrast, just one participant gave more than one Level 2 response. Level 2 scores are assigned to seriously bizarre responses, and are considered to indicate severely dissociative and illogical thinking. In light of these results, this criterion, recently added to the Comprehensive System, might be particularly important to consider in judging whether Rorschach responses indicate creativity or pathology.

Accelerants also showed higher scores on the Depression Index than nonaccelerants. Elevated Depression scores reflect a preponderance of shading, achromatic color, and form dimension responses. The ability to utilize dimension, depth, and shading in perceiving the cards might also be an indication of creativity. Alternatively, the elevated depression scores could signify higher levels of depression in accelerated students. Cornell et al. (1991b), in a study of socioemotional adjustment in this same sample of early college entrants, found that over half were reported by staff as experiencing noteworthy depression. In addition, the accelerants showed lower scores on Social Self-Concept than did the nonaccelerants. These results are consistent with Lupkowski et al.'s (1992) findings that early college entrants experienced a significant drop in self-esteem upon entrance to college.

The Depression Index was negatively related to the CPI emotional adjustment index, supporting the more conventional hypothesis that indicators of maladjustment on the Rorschach would be related to other indicators of maladjustment. Accelerants who were more depressed according to the Rorschach also showed signs of less healthy emotional adjustment according to the CPI.

High-Ability Adolescents' Use of Adaptive Regression

When accelerants high on adaptive regression respond their unusual, primary process responses logically, adaptively, and in a socially acceptable manner, the shared variance between Schizophrenia and both Social Adjustment and Autonomous Thinking can be attributed to adaptive regression. However, Schizophrenia is still correlated positively with several other outcome variables of adjustment. These results offer only partial support for the hypothesis that a creative thinking style accounts for the correlations between Schizophrenia and adjustment.

When Holt’s (1970) adaptive regression system was applied, several of the seemingly disordered subjects, according to the Rorschach, gave responses that were logically defended in an adaptive style and reflected their creative and imaginative orientation to the task. One high-ability subject, who scored high on Exner’s Schizophrenia Index, gave a response to Card VIII that contained primary process, unusual form, and several special scores, yet reflected her creative thinking style: “A demon in the shape of a boar, rising up into a forest from Hades’ Underground, taking two souls with him.” According to Holt (1970), reference to cultural context (e.g., “Hades’ Underground”) is one way subjects successfully defend primary process in their responses.
Some high-ability subjects gave responses that would qualify as Special Scores according to Exner’s system, but did not necessarily indicate disordered thinking. For example, one subject’s FABCOM response of “little bugs having a party” can be interpreted as creative and imaginative, rather than a break in reality testing. Thus, the Exner Schizophrenia Index, and its components, must be examined closely to determine if they reflect psychopathology or adaptive regression in high-ability adolescents.

In conclusion, the Schizophrenia Index must be interpreted with caution when applied to early college entrants and perhaps to other groups of highly capable but unconventional subjects. Such subjects may be motivated to produce original or unusual responses. As one accelerant remarked, “I could say a bat, but everyone sees a bat, so I won’t.”

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REFERENCES


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