# Replications and Refinements



Under this heading appear summaries of studies which, in 500 words or less, provide useful data substantiating, not substantiating, or refining what we think we know. Additional details concerning the results can be obtained by communicating directly with the investigator or, when indicated, by requesting supplementary material

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## Creativity and Schizotypal Thinking

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A LINK BETWEEN CREATIVITY and a predisposition to schizophrenia has often been postulated, but Kline and Cooper (1985) reported no relationship between psychometric scales of creativity and the personality dimension of psychoticism. Their measure of psychoticism, however, was the P scale of the Eysenck Personality Questionnaire (EPQ; Eysenck & Eysenck, 1976), which has since been discredited (Block, 1977). Within the psychiatric framework for the schizophrenia borderline that has arisen since the publication of the third edition of the American Psychiatric Association's Diagnostic and Statistical Manual (DSM-III), a series of different and conceptually independent borderline conditions have been defined. It now seems that the EPQ P scale may measure a dimension of borderline personality disorder (related to negative schizophrenic symptomology), whereas the diagnostic criteria for schizotypal personality disorder, which include the positive cognitive

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symptoms of schizophrenia (e.g. bizarre thoughts, derealization, and depersonalization) seem more relevant to hypotheses concerning the supposed genius—madness relationship.

The present study replicated the Kline and Cooper (1985) design, but with the additional use of the Rust Inventory of Schizotypal Cognitions (RISC; Rust, 1987, 1988, 1989), a psychometric scale specifically designed to address the positive cognitive symptoms associated with schizotypal personality disorder and acute schizophrenia. The RISC has test—retest reliability of .87, and validity has been demonstrated by the high discrimination between the scores of acute schizophrenic and normal subjects.

The RISC, the EPQ P scale, and the creativity scales of the Comprehensive Ability Battery (Hakstian & Cattell, 1976), which included flexibility of closure, spontaneous flexibility, ideational fluency, word fluency, and originality, were administered to 41 male and 39 female university students (Mage, 21.4 years). The means and standard deviations for measures used in the study conformed closely with those in the test handbooks.

For the RISC, two of the five creativity measures correlated significantly in the predicted direction, and one other approached significance; correlations were .28 (p < .01) for originality, .22 (p < .05) for ideational fluency, .19 (ns) for spontaneous flexibility, .13 (ns) for word fluency and .07 (ns) for flexibility of closure. For the EPQ P scale, only originality showed a significant correlation in the predicted direction (.21, p < .05). Flexibility of closure correlated negatively (-.31, p < .005). The other correlations with the P scale were .06 for spontaneous flexibility, .00 for ideational fluency, and -.16 for word fluency.

The correlation between the RISC and the P scale was .24 (p < .05). This replicates a correlation of .12 found by Rust, Moncada, and Lepage (1988). Although significant, these correlations are small. The  $r^2$  for .24 was .06; thus the variables share only about 6% of common variance. It is clear that the RISC scale and the EPQ P scale, measuring positive and negative schizo-related constructs respectively, are relatively independent.

The negative correlation found between the P scale and the creativity measure of flexibility of closure can most easily be explained by Block's (1977) hypothesis: The distribution of both the flexibility of closure test and the Eysenck and Eysenck's (1976) P scale are heavily skewed in opposite directions, and both tests are subject to bias from random responding that can produce an artifactual negative correlation.

The results show evidence of a link between the originality aspect of creativity and the positive cognitive aspects of schizotypal thinking, as measured by the RISC. Two measures that did not correlate significantly with the RISC were flexibility of closure, a visual pattern recognition task, and word fluency, which was a straightforward anagram test. However, neither of these tests required original responses from the subjects. The correlation of the

RISC with ideational fluency was significant, and with spontaneous flexibility, RISC approached significance. Both these tests require original responses, as does the originality test itself, which correlated significantly with the RISC at the .01 level.

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