

WHAT'S RIGHT WITH THE RORSCHACH?

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In the present article, we discuss the validity and clinical utility of the Rorschach as a measure of intelligence, thought disorder, and other psychological characteristics. We also summarize potential uses of the test in research and psychotherapy. Controversy has surrounded the Rorschach throughout most of its history not because it is worthless, but because it has so often been used for the wrong purposes.

Remarkable qualities have been ascribed to the Rorschach inkblot test ever since the 1940s, when devotees were fond of comparing its supposed penetrating powers to those of an X-ray (Klopfer, 1940). The test is still held forth as a broad-spectrum measure for a multitude of personality traits and psychological ills, including sense of self-worth, depression, inadequate coping, problem solving deficits, and psychopathy (Exner, 2003; Gacono & Meloy, 1994). Prominent Rorschach advocates have also asserted that it can provide helpful information for identifying individuals who have been abused, forecasting criminal recidivism, and predicting the onset of cancer (Meyer et al., 1998; Viglione, 1999; see also Kubiszyn et al., 2000).

Such claims, which far outstrip the scientific evi-

dence, have tended to discredit the Rorschach in the eyes of many research-oriented psychologists. As a consequence, some sectors of psychology regard the test as an unfortunate vestige from the discipline's past, only one step removed from tea leaves and crystal balls. But although such dismissals are understandable, they may be too harsh. More than 50 years of research have confirmed Lee J. Cronbach's (1970) final verdict: that some Rorschach scores, though falling woefully short of the claims made by proponents, nevertheless possess "validity greater than chance" (p. 636). In several articles and a book, *What's Wrong With the Rorschach?* (Wood, Nezworski, Lilienfeld, & Garb, 2003), we have identified the Rorschach's numerous shortcomings. In the present article, we focus on those aspects of the test with genuine merit and suggest ways in which the Rorschach can fruitfully be used in clinical assessment, research, and therapy.

INTELLIGENCE

Albert Binet considered including inkblots in his famous intelligence test (Zubin, Eron, & Schumer, 1965). Although he eventually abandoned the idea, his original intuition turned out to be correct. As research

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has shown, several Rorschach variables are correlated with intelligence test scores (for reviews, see Meyer, 1992; Wood, Krishnamurthy, & Archer, 2003). The highest correlations, which range from .30 to .40, have been found for Developmental Quality and Organizational Activity, scores that measure the degree to which responses synthesize diverse parts of a blot into a unified image. Lambda and the closely related F%, which reflect a tendency to give responses based on color and shading rather than form alone, also appear to correlate above .30 with intelligence test scores. Somewhat lower (.20 to .30) are the correlations for Form Quality, Human Movement responses, and R (the total number of responses given to the blots).

However, the best Rorschach indicator of intelligence is to be found not among these scores but in the vocabulary that the respondent uses to describe the blots (Davis, 1961; Hauser, 1963; Trier, 1958). For example, Thomas Trier of the University of California at Berkeley asked clinicians to read a group of Rorschach protocols and identify the seven most sophisticated words used by each respondent. Then, by consulting a commonly available word book, he estimated the average grade level of these words for each respondent. This simple Rorschach-based estimate of vocabulary level correlated .77 with intelligence test scores.

Although such results demonstrate that Rorschach responses can be used to estimate intelligence, modern standardized intelligence tests are definitely superior for the purpose (Davis, 1961). However, when intelligence testing is impossible, for example with an uncooperative child, inkblots may provide an acceptable substitute. The use of Rorschach-based vocabulary as an index of intelligence has been virtually ignored in the assessment literature since the 1950s, so that standardized procedures and norms are unavailable. With some scientific groundwork, however, the Rorschach might well be put on a solid footing as a rough intelligence measure, to be pulled out of the psychologist's briefcase under pressing circumstances.

PSYCHOTIC CONDITIONS AND THOUGHT DISORDER

There is abundant evidence that two kinds of Rorschach scores are related to psychotic disorders. First, as Hermann Rorschach (1921/1964) noted, the inkblot responses of patients with schizophrenia often exhibit poor form quality (Rieman, 1953; Sherman, 1952; see reviews by Frank, 1990; Goldfried, Stricker, & Weiner, 1971). That is, the images reported by these

patients often do not "fit" the shape of the blots. Form quality is also poor among many patients with bipolar disorder (Frank, 1990).

Second, as David Rapaport and his colleagues (1946) first noted in their famous book *Diagnostic Psychological Testing*, the Rorschach can be used to identify thought disorder, the disorganized cognition and peculiarities of language exhibited by many patients with schizophrenia. Several scoring methods have been developed to measure thought disorder on the Rorschach (for reviews, see Aronow & Reznikoff, 1976; Goldfried et al., 1971; Kleiger, 1999), the most prominent being the Thought Disorder Index (Johnston & Holzman, 1979; Solovay et al., 1986), the TETRAUT of the Logical Rorschach (Wagner, 2001), and the Weighted Sum (WSum6) of the Comprehensive System for the Rorschach (Exner, 2003). The Comprehensive System's Schizophrenia Index (revised recently as the Perceptual Thinking Index) combines scores for thought disorder and form quality (Exner, 2003).

Research has shown that all these scores are related to schizophrenia (Greaves, 2000; Johnston & Holzman, 1979; Jorgensen, Andersen, & Dam, 2000; Kleiger, 1999; Wagner, 1998; 2001). Many patients with schizotypal personality disorder and bipolar disorder in the manic phase also apparently exhibit thought disorder on the Rorschach (Coleman, Levy, Lenzenweger, & Holzman, 1996; Singer & Brabender, 1993).

The Rorschach—particularly the Thought Disorder Index—has proven useful to researchers who examine genetic and familial patterns of schizophrenia (e.g., Knight & Silverstein, 1998; Lenzenweger, 1998). These various scales are also potentially useful in clinical settings, although it is unclear whether Rorschach indices of thought disorder are necessary if a clinician has already had an opportunity to observe a patient's thinking and language during an interview (for example, see Whitehead, 1985).

It is probably necessary to caution readers regarding the thought disorder and form quality indexes of John Exner's (2003) Comprehensive System, currently the most popular method for scoring and interpreting the Rorschach. Exner's indexes (e.g., the SCZI, WSum6, Level 2 scores, and Conventional Form) presently have only limited clinical usefulness because their published norms appear to be seriously in error (Wood, Nezworski, Garb, & Lilienfeld, 2001a, 2001b; see also Shaffer, Erdberg, & Haroian, 1999; but see Exner 2001, Meyer, 2001). Clinicians who rely on the Comprehensive System and its norms are likely to significantly overdiagnose thought disorder and psychotic symptoms.

RORSCHACH SCALES FOR RESEARCH

Several Rorschach scores have repeatedly demonstrated their validity in research. The Elizur Anxiety and Hostility scales, which are based on the emotional content of patients' responses, have a well-demonstrated relationship to anxious and hostile behaviors (Aronow & Reznikoff, 1976; Goldfried et al., 1971). The Rorschach Oral Dependency scale (ROD), based on responses that involve eating, mouths, or other "oral" imagery, appears to be a valid measure of normal variations in dependency (Bornstein, 1996), although it has been less successful as a measure of pathological dependency (Bornstein, Hilsenroth, & Padawer, 2000; see also Garb, Wood, Nezworski, Grove, & Stejskal, 2001).

Rorschach signs identified by Piotrowski (1937) differentiate what used to be called "organic" from "functional" brain disorders (Goldfried et al., 1971). For instance, Piotrowski found that many patients with "organic" brain disorders take a long time to react to the blots and often give repetitious responses. Finally, Klopfer's Rorschach Prognostic Rating Scale (RPRS) has a well-demonstrated relationship to treatment outcomes (Meyer & Handler, 1997). For example, patients who report imagery involving animals or humans in movement receive higher scores on Klopfer's scale and have somewhat better outcomes in psychotherapy.

Despite their respectable performance in research, these Rorschach scores are currently unsuitable for clinical applications. Most important, they lack adequate norms and involve elaborate scoring procedures that many clinicians may find impractical. In addition, some of these scores (e.g., the RPRS and Elizur scales) were validated using administration or scoring procedures from Beck and Klopfer that are now obsolete. Thus, these Rorschach scores are far more attractive as research instruments than as clinical tools.

PSYCHOTHERAPY

Aronow and Reznikoff (1976) have long argued that the Rorschach, though largely a failure as a psychometric test, has considerable value as an adjunct technique in psychotherapy. These authors approach the patient's responses to the blots analogously to dream interpretation, asking the patient "What does this image make you think of?" or "What does it bring to mind?" Such an approach seems compatible with some forms of psychotherapy and merits the attention of future researchers. However, it is worth noting that the effec-

tiveness of the Rorschach as a psychotherapeutic technique has not yet been demonstrated. Furthermore, therapists who use the test to generate symbolic interpretations must beware of the potential influence of confirmation bias (Nisbett & Ross, 1980), and should actively seek evidence that *disconfirms* their Rorschach interpretations, as well as evidence that *confirms* them.

CONCLUSION

Paradoxically, although the Rorschach is held in disrepute by many research psychologists, it has achieved its greatest successes as a research tool. Its value as a measure of thought disorder in schizophrenia research is well accepted. It is also used regularly in research on dependency, and, less often, in studies on hostility and anxiety.

Furthermore, substantial evidence justifies the use of the Rorschach as a clinical measure of intelligence and thought disorder. Although clinicians should normally rely on well-established tests such as the Wechsler Adult Intelligence Scale—Third Edition (Wechsler, 1997) to measure intelligence, and on clinical interviews to assess thought disorder, there may be times when the Rorschach can usefully supplement these "front-line" methods. In addition, the Rorschach may be useful as an exploratory technique in some forms of insight-oriented psychotherapy.

The virtues of the Rorschach are modest but genuine. If, over its long history, the test had been promoted solely for the uses identified here, it probably would have been less popular among psychologists, but also far less controversial. It remains to be seen whether clinical psychologists of the future can learn to accept the limitations of the Rorschach while respecting its strengths. Otherwise, it will continue to be promoted for purposes for which it has no usefulness and will inevitably be a flashpoint for controversy.

REFERENCES

- Aronow, E., & Reznikoff, M. (1976). *Rorschach content interpretation*. New York: Grune & Stratton.
- Bornstein, R. F. (1996). Construct validity of the Rorschach Oral Dependency Scale: 1967–1995. *Psychological Assessment*, 8, 200–205.
- Bornstein, R. F., Hilsenroth, M. J., & Padawer, J. R. (2000). Interpersonal dependency and personality pathology: Variations in Rorschach Oral Dependency scores across Axis II disorders. *Journal of Personality Assessment*, 75, 478–491.

- Coleman, M. J., Levy, D. L., Lenzenweger, M. F., & Holzman, P. S. (1996). Thought disorder, perceptual aberrations, and schizotypy. *Journal of Abnormal Psychology, 105*, 469-473.
- Cronbach, L. J. (1970). *Essentials of psychological testing* (3rd ed.). New York: Harper & Row.
- Davis, H. S. (1961). Judgments of intellectual level from various features of the Rorschach including vocabulary. *Journal of Projective Techniques, 25*, 155-157.
- Exner, J. E. (2001). A comment on "The misperception of psychopathology: Problems with the norms of the Comprehensive System for the Rorschach." *Clinical Psychology: Science and Practice, 8*, 386-388.
- Exner, J. E. (2003). *The Rorschach: A comprehensive system. Basic foundations and principles of interpretation* (4th ed.). New York: Wiley.
- Frank, G. (1990). Research on the clinical usefulness of the Rorschach: 1. The diagnosis of schizophrenia. *Perceptual and Motor Skills, 71*, 573-578.
- Gacono, C. B., & Meloy, J. R. (1994). *The Rorschach assessment of aggressive and psychopathic personalities*. Hillsdale, NJ: Erlbaum.
- Garb, H. N., Wood, J. M., Nezworski, M. T., Grove, W. M., & Stejskal, W. J. (2001). Toward a resolution of the Rorschach controversy. *Psychological Assessment, 13*, 433-448.
- Goldfried, M. R., Stricker, G., & Weiner, I. B. (1971). *Rorschach handbook of clinical and research applications*. Englewood Cliffs, NJ: Prentice-Hall.
- Greaves, A. R. (2000). *A validation of Wagner's Rorschach autism classification system*. Unpublished doctoral dissertation, Forest Institute of Professional Psychology.
- Hauser, R. J. (1963). The validity of the formal and linguistic aspects of the Rorschach in predicting intelligence. (Doctoral dissertation, New York University, 1962). *Dissertation Abstracts International, 24*, 833.
- Johnston, M. H., & Holzman, P. S. (1979). *Assessing schizophrenic thinking*. San Francisco: Jossey-Bass.
- Jorgensen, K., Andersen, T. J., & Dam, H. (2000). The diagnostic efficiency of the Rorschach depression index and the schizophrenia index: A review. *Assessment, 7*, 259-280.
- Khadivi, A., Wetzler, S., & Wilson, A. (1997). Manic indexes on the Rorschach. *Journal of Personality Assessment, 69*, 365-375.
- Kleiger, J. H. (1999). *Disordered thinking and the Rorschach*. Hillsdale, NJ: Analytic Press.
- Klopfer, B. (1940). Personality aspects revealed by the Rorschach method. *Rorschach Research Exchange, 4*, 26-29.
- Knight, R. A., & Silverstein, S. M. (1998). The role of cognitive psychology in guiding research on cognitive deficits in schizophrenia: A process-oriented approach. In M. F. Lenzenweger & R. H. Dworkin (Eds.), *Origins and development of schizophrenia. Advances in experimental psychopathology* (pp. 247-295). Washington, DC: American Psychological Association.
- Kubiszyn, T. W., Meyer, G. J., Finn, S. E., Eyde, L. D., Kay, G. G., Moreland, K. L., et al. (2000). Empirical support for psychological assessment in clinical health care settings. *Professional Psychology: Research and Practice, 31*, 119-130.
- Lenzenweger, M. F. (1998). Schizotypy and schizotypic psychopathology: Mapping an alternative expression of schizophrenia liability. In M. F. Lenzenweger & R. H. Dworkin (Eds.), *Origins and development of schizophrenia. Advances in experimental psychopathology* (pp. 93-295). Washington, DC: American Psychological Association.
- Meyer, G. J. (1992). The Rorschach's factor structure: A contemporary investigation and historical review. *Journal of Personality Assessment, 59*, 117-136.
- Meyer, G. J. (2001). Evidence to correct misperceptions about Rorschach norms. *Clinical Psychology: Science and Practice, 8*, 389-396.
- Meyer, G. J., Finn, S. E., Eyde, L. D., Kay, G. G., Kubiszyn, T. W., Moreland, K. L., et al. (1998). *Benefits and costs of psychological assessment in healthcare delivery: Report of the board of professional affairs psychological assessment work group, Part I*. Washington, D. C.: American Psychological Association.
- Meyer, G. J., & Handler, L. (1997). The ability of the Rorschach to predict subsequent outcome: A meta-analysis of the Rorschach Prognostic Rating Scale. *Journal of Personality Assessment, 69*, 1-38.
- Nisbett, R. E., & Ross, L. (1980). *Human inference: Strategies and shortcomings of social judgment*. Englewood Cliffs, NJ: Prentice-Hall.
- Piotrowski, Z. A. (1937). The Rorschach inkblot method in organic disturbances of the central nervous system. *Journal of Nervous and Mental Disease, 86*, 525-537.
- Rapaport, D., Gill, M., & Schafer, R. (1946). *Diagnostic psychological testing. Vol. II*. Chicago: Year Book Publishers.
- Rieman, G. W. (1953). The effectiveness of Rorschach elements in the discrimination between neurotic and ambulatory schizophrenic subjects. *Journal of Consulting Psychology, 17*, 25-31.
- Rorschach, H. (1964). *Psychodiagnostics*. New York: Grune & Stratton. (Original work published in German in 1921)
- Shaffer, T. W., Erdberg, P., & Haroian, J. (1999). Current non-patient data for the Rorschach, WAIS-R, and MMPI-2. *Journal of Personality Assessment, 73*, 305-316.
- Sherman, M. (1952). A comparison of formal and content factors in the diagnostic testing of schizophrenia. *Genetic Psychology Monographs, 46*, 183-234.
- Singer, H. K., & Brabender, V. (1993). The use of the Rorschach to differentiate unipolar and bipolar disorders. *Journal of Personality Assessment, 60*, 333-345.
- Solovay, M. R., Shenton, M. E., Gasperetti, C., Coleman, M., Kestnbaum, E., Carpenter, J. T., et al. (1986). Scoring

- manual for the Thought Disorder Index. *Schizophrenia Bulletin*, 12, 483-496.
- Trier, T. R. (1958). Vocabulary as a basis for estimating intelligence from the Rorschach. *Journal of Consulting Psychology*, 22, 289-291.
- Viglione, D. J. (1999). A review of recent research addressing the utility of the Rorschach. *Psychological Assessment*, 11, 251-265.
- Wagner, E. E. (1998). TRAUT: A Rorschach index for screening thought disorder. *Journal of Clinical Psychology*, 54, 719-762.
- Wagner, E. E. (2001). *The logical Rorschach*. Los Angeles: Western Psychological Services.
- Wechsler, D. (1997). *WAIS-III: Administration and scoring manual*. San Antonio, TX: Psychological Corporation.
- Whitehead, W. C. (1985). *Clinical decision making on the basis of Rorschach, MMPI, and automated MMPI report data*. Unpublished doctoral dissertation, University of Texas Health Science Center at Dallas.
- Wood, J. M., Krishnamurthy, R., & Archer, R. P. (2003). Three factors of the Comprehensive System for the Rorschach and their relationship to Wechsler IQ scores in an adolescent sample. *Assessment*, 10, 259-265.
- Wood, J. M., Nezworski, M. T., Garb, H. N., & Lilienfeld, S. O. (2001a). The misperception of psychopathology: Problems with the norms of the Comprehensive System for the Rorschach. *Clinical Psychology: Science and Practice*, 8, 350-373.
- Wood, J. M., Nezworski, M. T., Garb, Howard, N., & Lilienfeld, S. O. (2001b) Problems with the norms of the Comprehensive System for the Rorschach: Methodological and conceptual considerations. *Clinical Psychology: Science and Practice*, 8, 397-402.
- Wood, J. M., Nezworski, M. T., Lilienfeld, S. O., & Garb, H. N. (2003). *What's wrong with the Rorschach? Science confronts the controversial inkblot test*. San Francisco: Jossey-Bass.
- Zubin, J., Eron, L. D., & Schumer, F. (1965). *An experimental approach to projective techniques*. New York: John Wiley & Sons.