
Rorschach Interpersonal Cluster Variables Distinguish Dependent From Nondependent Patients

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ABSTRACT - This study examined whether Rorschach variables on Exner's (1993) Interpersonal Cluster (IC) distinguish dependent psychiatric patients from nondependent psychiatric controls. Dependent patients exhibited significantly greater social interest and activity than did nondependent control patients on several IC variables. These findings support Bornstein's (1993, 1995) view of dependent persons as active seekers and maintainers of nurturant, supportive relationships. In addition, because these two groups were differentiated by variables in Exner's IC, the study provides evidence for the validity of the cluster as measures of social interest and interpersonal style.

Key Words: Rorschach, Interpersonal Cluster, Oral Dependency, Assessment

Research confirms that -- contrary to clinical lore -- dependent individuals are not passive recipients of others' care and affection. In fact, dependent persons show considerable skill and

perseverance in actively seeking out and maintaining relationships with potential caregivers (Bornstein, 1993, 1995). Although dependency is characterized by a perception of oneself as weak and ineffectual, coupled with the belief that other people are comparatively powerful and potent (Bornstein, 1993; Pincus & Gurtman, 1995), studies show that dependent people can be quite active when cultivating

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relationships with figures of authority. When they believe that a figure of authority wants them to be cooperative and compliant, dependent people behave passively. However, when they believe that a figure of authority wants them to appear competent, dependent people become competitive and assertive. This context-based variability in behavior reflects the dependent person's perceptions of which responses are most likely to strengthen key relationships over the long term (see Bornstein, 1995, 1996a for a review of studies in this area).

Evidence for context-driven active dependency comes from several lines of research. For example, Bornstein, Masling, and Poynton (1987) found that dependent college students held fast to a previously-stated opinion to obtain the support of the experimenter, rather than changing their opinion to please a peer. Subsequent studies (e.g., Bornstein, Riggs, Hill, & Calabrese, 1996) replicated and extended these initial results. Along similar lines, Bornstein and Kennedy (1994) found that dependent college students enhanced their academic performance by taking the initiative in seeking help from professors and advisors.

Other studies confirm that dependent individuals actively cultivate and maintain ties to figures of authority in treatment and testing situations. For example, Greenberg and Bornstein (1989) found that dependent psychiatric inpatients remained in treatment twice as long as non-dependent inpatients who were matched for diagnosis. Along slightly different lines, Juni (1981) found that dependent college students were more likely than non-dependent students to request feedback on their performance on a series of psychological tests, in part because the act of

requesting feedback would minimize the anxiety of evaluation by an authority figure.

Continued exploration of the interpersonal perceptions and social motives of dependent individuals will be important in testing hypotheses regarding the inter- and intrapersonal dynamics of dependency and in developing and refining treatment techniques for use with dependent patients. Some researchers have argued that—given dependent persons' limited insight into the cognitive biases that underlie their support as well as their nurturance-seeking tendencies—this issue may be best addressed by examining the links between dependency scores and projective indices of social interest (see Blatt & Ford, 1994; Bornstein, 2002; Masling, 1986). Exner (1993) suggested that Rorschach variables from the Interpersonal Cluster (IC) represent basic social "needs, attitudes, sets, and coping styles" (p. 522). As updated in the most recent edition of the Comprehensive System (Exner, 2002), these variables include the following: COP, AG, GHR:PHR, a:p, Food, Sum of Texture responses, Sum of all human contents, pure H, PER, Isolation Index, CDI, HVI, M with pairs, and FM with pairs. A detailed discussion of these variables as measures of interpersonal functioning is provided by Weiner (1998).

This study examined whether the variables in the Comprehensive System's IC can distinguish dependent from nondependent psychiatric inpatients. Because dependent individuals actively cultivate relationships with potential nurturers and caregivers, we hypothesized that scores on Rorschach

variables from the IC would differentiate dependent individuals from their nondependent counterparts in ways consistent with the internal dynamics of dependent persons. Thus, these analyses provide important preliminary information regarding the validity of the IC variable as a measure of social interest and interpersonal relatedness¹.

Method

Participant Selection Procedure

Data were collected from a database of over 400 patients who had undergone psychological testing at a large, northeastern university hospital. These records spanned more than 20 years, and included data from different Rorschach scoring systems. All records were selected for group assignment by the first author, who was unaware of Rorschach Comprehensive System (CS) data at that time. Individuals were selected according to a predetermined protocol: First, to create groups of patients high or low in dependency, individuals in the top and bottom 20% of Rorschach Oral Dependency (ROD; Masling, Rabie, & Blondheim, 1967) scores were selected. This left 178 potential patients eligible for inclusion (i.e. 89 individuals per group). ROD scores were derived from each patient's Rorschach protocol, with a response being defined as oral dependent if it fell into any of the following categories: (a) food and

drinks; (b) food sources; (c) food objects; (d) food providers; (e) passive food receivers; (f) food organs; (g) supplicants; (h) nurturers; (i) gifts and gift-givers; (j) good luck symbols; (k) oral activity; (l) passivity and helplessness; (m) pregnancy and reproductive anatomy; and (n) negations of oral percepts (e.g., "not pregnant," "man with no mouth"). One point was assigned for each oral dependent Rorschach response, and to control for response productivity, ROD scores were based on the proportion of oral dependent responses (i.e., the number of oral dependent responses divided by R). Detailed reviews of the construct validity of ROD scores as a measure of implicit dependency needs are provided by Bornstein (1996b) and Masling (1986).

Next, patients were excluded if there was evidence in the testing or patient records of any of the following criteria: a) psychosis or chronic problems in reality testing (e.g., multiple hospitalizations for psychotic episodes); b) organicity; or c) the patient was being evaluated for gender reassignment surgery. These three criteria accounted for the exclusion of over 60% of the 178 eligible patients.

Patients were also excluded if they had been hospitalized more than once for a depression, or if their Rorschach record had any Vista responses, or more than one achromatic color response. These criteria were applied because of the confounding effect of depression on self-reports of dependency. Both dependency and depression are associated with feelings of helplessness, weakness, and low self-esteem (Bornstein, 1992; Masling,

1. HVI was not included in our analyses because the necessary z-scores could not be calculated due to the absence of location sheets in the archival database. Additionally, we did not evaluate protocols for Exner's IC Food response variable, since food responses are scored as part of the ROD Scale (Masling et al., 1967), and, therefore, would not be statistically independent.

1986). Moreover, high levels of interpersonal dependency and chronic depression have both been associated with loneliness, social isolation, and withdrawal from social interaction (Bornstein, 1993, 1996a; Fisher & Greenberg, 1996). Studies indicate that high levels of dependency may predispose individuals to the onset of depression (O'Neill & Bornstein, 1991), and changes in depression levels are linked with predictable variations in both objective (Hirschfeld, Klerman, Clayton, & Keller, 1983), and projective (Bornstein, Bowers & Bonner, 1996) dependency test scores. As such, we excluded individuals with evidence of depression in order to assess the effects of dependency on salient Rorschach indices without the confounding influence of depressive affect.

Finally, some patients were excluded because their testing records included only a non-Exner Rorschach scoring sheet², and the actual protocol was not available for rescoring. Thus, 12 patients were assigned to each group, for a total of 24 participants (12 dependent, 12 nondependent).

Rorschach Scoring Reliability

Because all but one of the protocols in this sample had been scored using the Beck system, all protocols were rescored by three independent raters (SKH, CK, PQS) according to Comprehensive System guidelines (Exner, 1993). Since location sheets were not available, location and developmental quality scores were not assigned. Rorschach protocols were

scored for oral dependent content by the second author, who was unaware of all other information regarding individual participants.

To determine reliability in ROD scoring, a random sample of 20 protocols was rescored by the third author, who was also unaware of all information regarding individual participants and unaware of the other rater's scores. The two raters agreed on the scoring of 382 out of 397 percepts (96%). A Pearson correlation coefficient computed between the two sets of scores was .92, while the kappa coefficient (Spitzer, Cohen, Fliess, & Endicott, 1967) for these ratings was .81. Six of the 24 protocols (25%) were selected for IC reliability analysis. Each protocol was rescored by one rater who did not originally score the protocol. Following the recommendations of Exner, Kinder, and Curtiss (1995), reliabilities were computed and tallied as mean percentages of agreement across categories within a scoring dimension. The following results were obtained: Determinants (87%; 76/87); Content (84%; 89/115); Pairs (87%, 67/77); Popular (94%; 68/72); and Special Scores (77%; 34/44).

Results

The mean ROD score in the dependent patient sample was .26 ($SD=.07$), and their mean age was 40.7 ($SD=3.3$) years. The group included 5 men and 7 women; six were married and the rest were either divorced or unmarried. The mean ROD score for members of the nondependent psychiatric sample was .04 ($SD=.07$), and their mean age was 35.6 ($SD=3.3$) years. This sample included 3 men and 9 women; seven

2. Original scoring followed the guidelines of the Beck-Freedman System (Freedman, 1961); scoring of determinants and contents in this system parallel Exner's (1993) procedures.

Table 1
Means, Standard Deviations, and Significance of Rorschach Variables

Variable	Dependents	Psychiatric Controls	<i>t</i>	<i>p</i>	<i>r^{es}</i>
COP*	0.83 (.83)	0.00 (0.0)	-3.46	.004	.59
AG	1.08 (1.31)	0.44 (1.01)	-1.21	.12	.25
Isolation Index	0.08 (0.08)	0.16 (0.11)	2.10	.02	.02
H	2.42 (1.68)	1.42 (1.62)	-1.48	.07	.30
T	0.17 (0.39)	0.20 (0.42)	0.19	.42	.04
PER	0.50 (1.00)	0.22 (0.67)	-0.72	.003	.15
CDI	2.67 (1.37)	3.22 (1.39)	0.91	.18	.19
Active	5.58 (3.78)	3.22 (3.46)	-1.47	.08	.30
Passive	2.83 (2.04)	1.11 (1.36)	-2.19	.02	.42
Sum all human	5.67 (3.65)	2.92 (3.55)	-1.87	.04	.37
M with pairs*	2.00 (1.48)	0.50 (0.71)	-3.12	.003	.55
FM with pairs	1.83 (2.41)	0.50 (0.53)	-1.87	.04	.37
GHR	2.42 (2.68)	4.67 (3.22)	-1.86	.04	.37
PHR*	0.42 (1.00)	1.83 (1.53)	-2.69	.01	.54

* Indicates that when these means are computed as a percentage or *R*, the mean remains statistically significant. All reported *t*-tests are one-tailed. *r^{es}* is the effect size computed by the method suggested by Rosnow, Rosenthal, and Rubin (2000). In this case, *r^{es}* is the point-biserial correlation between group membership status (dependent, nondependent) and the corresponding Interpersonal Cluster Variable.

were married and the rest were divorced or unmarried.

Table 1 presents means and standard deviations for the IC variables of dependent patients and nondependent psychiatric controls. The mean number of responses (*R*) for dependent patients was 21.67 (*SD*=12.59), while the mean for controls was 16.42 (*SD*=4.76). These means did not differ significantly (*t* = -1.35, *NS*).

Most group comparisons were analyzed using independent-samples *t*-tests. How-

ever, four variables (*R*, *M* with pairs, *FM* with pairs, and *COP*) did not have statistically homogenous variance as detected by Levene's test. Thus, these variables were compared using nonparametric techniques. In addition, because Exner (1993) found that in most samples, texture (*T*) is not normally distributed, the group difference for this variable was analyzed using nonparametric statistical procedures. There were no significant

differences between dependent and nondependent patients on the following variables: T ($U = 58.00, p = .92$); R ($U = 60.50, p = .51$); and FM with pairs ($U = 42.5, p = .25$). However, there were significant differences on the following variables: M with pairs ($U = 20.5, p = .007$) and COP ($U = 22.5, p = .023$).

As seen in Table 1, nine Interpersonal cluster variables significantly differentiated dependent patients from psychiatric controls: COP, Isolation Index, PER, passive movement, the sum of all human content, the sums of all human and animal movement with pairs, GHR, and PHR. However, because of the relatively low number of participants and the large variance in the number of responses provided by the dependent group, these scores were also computed as a percentage of R. When these means were subsequently evaluated, three remained significant: COP ($t = 2.98, p = .008$), M with pairs ($t = 1.28, p = .033$), and PHR ($t = -3.03, p = .006$). We also computed effect sizes for the IC variables in our study. As the right column of Table 1 shows, these effect sizes ranged from small (Isolation Index = .04) to large (COP = .59; M with pairs = .55), with the average effect size of an IC variable being .32.

Discussion

These findings suggest that dependent and nondependent patients may be distinguished by nine of the fourteen IC variables assessed in this study. Also, the mean effects size of these findings is notable (.32), given the relatively small number of individuals included in the study. Therefore, this study appears to support the validity of the IC cluster as a measure of social interest and interpersonal style.

Our findings are consistent with Bornstein's (1993, 1995) framework, which conceptualizes dependency as an active coping style wherein relationships with potential caregivers are sought in order to obtain support and nurturance (see also Pincus & Gurtman, 1995, for a discussion of this issue). The present results also enhance our understanding of the underlying dynamics of interpersonal dependency in several ways.

First, dependent patients had a significantly greater number of COP than did nondependent controls. Even when controlling for response productivity, the mean percentages differed significantly (6% for dependent patients vs. 0% for nondependent patients). These results suggest that dependent patients are likely to show greater interest in cooperative activities than their nondependent counterparts, and are consistent with past research on dependency which found that dependent individuals typically adopt strategies designed to curry favor with figures of authority in academic, medical, and psychiatric settings (Bornstein et al., 1987, 1996a; Kagan & Mussen, 1956; Masling, Weiss, & Rothschild, 1968; O'Neill & Bornstein, 1990; Poldrugo & Forti, 1988).

Second, dependent patients had a significantly lower Isolation Index score than did nondependent patients. Moreover, dependent patients' score on this variable was 1.5 standard deviations below the normative mean of Exner's (2002) nonpatient sample. Clearly, dependent patients value social contact and interaction to a greater degree than do their nondependent counterparts. They also show

interest in behaving in a positive, cooperative fashion with others, and prefer social interaction over social isolation.

Third, dependent patients produced significantly more human and animal movement responses with pairs than the nondependent patients, suggesting that they experience greater psychic demands for interpersonal relatedness. However, dependent patients also reported more humanoid, part humanoid, and part human responses than did nondependent patients (as measured in the sum of all human content), suggesting that dependent patients tend to relate to--and identify with--others in a distorted, selective, incomplete, or constricted manner (Weiner, 1998). It may be that, despite taking an active stance and interest in interpersonal relationships, dependent individuals seek out others to have their needs for nurturance met, but do not perceive others as capable of gratifying these needs completely. Accordingly, they may not experience their relationships as fully meeting their need for support. In addition, these results suggest that, while dependent persons are preoccupied with obtaining nurturance and support, they may not provide reciprocal support and care for others (see Bornstein, 1995, 1997).

Although this study enhanced our understanding of the inter- and intrapersonal dynamics of interpersonal dependency, it also had three limitations that warrant discussion. The primary limitation of this study was the small sample size. Although individuals were selected from among a sample of over 400, few patients met the strict inclusion criteria for this study. On the positive side, use of such stringent selection criteria minimized the potentially confounding effect of extraneous variables (e.g., mood) on ROD and

CS scores. Despite this limitation, the obtained effects were generally in the expected direction and supported the hypotheses of interest. Moreover, the mean effect size for the IC variables was of moderate magnitude, suggesting that these findings would be robust in larger samples. Nonetheless, future research on this topic should increase sample size to maximize statistical power.

A second limitation of this investigation concerns the criteria used to divide patients into dependent and nondependent groups. Because ROD and CS scores are all derived from the same projective test data, one might argue that common method variance accounts for some of the observed results. In this context, it is important to note that while ROD scoring is entirely content-based, IC scores are based largely on structural aspects of the percept. In this respect, score variability attributable to shared assessment method is less problematic than it first appears--and less problematic than in many studies wherein self-report personality scores are compared to questionnaire- or interview-based pathology scores. Future research might address this issue by using another method of assessing dependency (e.g. the Relationship Profile Test; Bornstein, Geiselman, Eisenhart & Languirand, in press) and relate these findings to IC variables.

A final limitation of the present study involves the generalizability of these results. It is difficult to know the degree to which the present findings would apply to patients with a dependent personality disorder (DPD) diagnosis or to dependent persons in the non-

clinical population. Although research has demonstrated that individuals with high ROD scores exhibit myriad dependent behaviors and attitudes (Bornstein, 1996a), no patients in the present sample received a formal DPD diagnosis. In a sense, this is not surprising. Research indicates that the association between ROD scores and DPD diagnoses is only modest, in part because the DPD symptom criteria assess self-attributed dependency needs, while the ROD scale assesses implicit dependency needs (Bornstein, 1997, 1998). In this respect, our findings reaffirm the importance of considering carefully the assessment/selection criteria used when interpreting empirical studies of dependent personality traits.

In conclusion, our findings support Bornstein's (1993, 1995) model of dependency as a personality style associated with active, persistent, and skilled seeking of care from others. On the other hand, our data also suggest that dependent people perceive others selectively, perhaps as not capable of fully gratifying their need for nurturance and support. These results are consistent with earlier speculations that dependent persons have had inadequate nurturance from primary caregivers in childhood and carry that perception forward into present-day relationships (Freud, 1905/1953, Bowlby, 1969; Kohut, 1971). Further research is needed to determine if the dependent person's perceptual set does indeed result in repetition of past relationship patterns, (as Freud and others have suggested), with the end result being an ongoing -- but futile -- search for gratification from others.

References

- Blatt, S. J., & Ford, R. Q. (1994). *Therapeutic change*. NY: Plenum Press.
- Bornstein, R. F. (1992). The dependent personality: Developmental, social, and clinical perspectives. *Psychological Bulletin*, 112, 3-23.
- Bornstein, R. F. (1993). *The dependent personality*. New York: Guilford.
- Bornstein, R. F. (1995). Active dependency. *Journal of Nervous and Mental Disease*, 183, 64-77.
- Bornstein, R. F. (1996a). Beyond orality: Toward an object relations/interactionist reconceptualization of the etiology and dynamics of dependency. *Psychoanalytic Psychology*, 13, 177-203.
- Bornstein, R. F. (1996b). Construct validity of the Rorschach Oral Dependency Scale, 1967-1995. *Psychological Assessment*, 8, 200-205.
- Bornstein, R. F. (1997). Long-term reliability of Interpersonal Dependency Inventory scores in college students. *Assessment*, 4, 359-364.
- Bornstein, R. F. (1998). Implicit and self-attributed dependency strivings: Differential relationships to laboratory and field measures of help seeking. *Journal of Personality and Social Psychology*, 75, 778-787.
- Bornstein, R. F. (2002). A process dissociation approach to objective-projective test score interrelationships. *Journal of Personality Assessment*, 78, 47-68.
- Bornstein, R. F., Bowers, K., & Bonner, S. (1996). Relationships of objective and projective dependency scores to sex role orientation in college student participants. *Journal of Personality Assessment*, 66, 555-568.
- Bornstein, R. F., Geiselman, K. J., Eisenhart, E. A., & Languirand, M. A. (in press). Construct validity of the Relationship Profile Test: Links with attachment, identity, relatedness, and affect. *Assessment*.
- Bornstein, R. F., & Kennedy, T. D. (1994). Interpersonal dependency and academic performance. *Journal of Personality Disorders*, 8, 240-248.
- Bornstein, R. F., Masling, J. M., & Poynton, F. G. (1987). Orality as a factor in interpersonal yielding. *Psychoanalytic Psychology*, 4, 161-170.
- Bornstein, R. F., Riggs, J. M., Hill, E. L., & Calabrese, C. (1996). Activity, passivity, self-denigration, and self-promotion: Toward an interactionist

- model of interpersonal dependency. *Journal of Personality*, 64, 637-673.
- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.
- Exner, J. E., Jr. (1993). *The Rorschach: A comprehensive system. Volume 1: Basic Foundations* (3rd Ed.). New York, NY: Wiley.
- Exner, J. E., Jr. (2002). *The Rorschach: A comprehensive system. Volume 1: Basic Foundations* (4th Ed.). New York, NY: Wiley.
- Exner, J. E., Kinder, B. N., & Curtiss, G. (1995). Reviewing basic design features. In J. E. Exner (Ed.), *Issues and methods in Rorschach research* (pp. 145-158). Mahwah, NJ: Erlbaum.
- Fisher, S., & Greenberg, R. P. (1996). *Freud scientifically reappraised*. New York, NY: John Wiley & Sons.
- Freedman, H. (1961). *Rorschach scoring manual*. Unpublished document. Syracuse VA Hospital, Syracuse, NY.
- Freud, S. (1905/1953). *Three essays on the theory of sexuality*. Standard Edition, Vol. 7, pp. 125-143. London: Hogarth.
- Greenberg, R. P., & Bornstein, R. F. (1989). Length of psychiatric hospitalization and oral dependency. *Journal of Personality Disorders*, 3, 199-204.
- Hirschfeld, R. M. A., Klerman, G. L., Clayton, P. J., Keller, M. B., McDonald-Scott, P., & Larkin, B. H. (1983). Assessing personality: Effects of the depressive state on trait measurement. *American Journal of Psychiatry*, 140, 695-699.
- Juni, S. (1981). Maintaining anonymity vs. requesting feedback as a function of oral dependency. *Perceptual and Motor Skills*, 52, 239-242.
- Kagan, J., & Mussen, P. (1956). Dependency themes on the TAT and group conformity. *Journal of Consulting Psychology*, 20, 29-32.
- Kohut, H. (1971). *The analysis of the self: A systematic approach to psychoanalytic treatment of narcissistic personality disorders*. New York: International Universities Press.
- Masling, J. M. (1986). Orality, pathology, and interpersonal behavior. In J. M. Masling (Ed.), *Empirical studies of psychoanalytic theories* (Vol. 2, pp. 73-106). Hillsdale, NJ: Erlbaum.
- Masling, J. M., Rabie, L., & Blondheim, S. H. (1967). Obesity, level of aspiration, and Rorschach and TAT measure of oral dependence. *Journal of Consulting Psychology*, 31, 233-239.
- Masling, J. M., Weiss, L., & Rotschild, B. (1968). Relationships of oral imagery to yielding behavior and birth order. *Journal of Consulting and Clinical Psychology*, 32, 89-91.
- O'Neill, R. M., & Bornstein, R. F. (1990). Oral dependence and gender: Factors in help-seeking response set and self-reported psychopathology in psychiatric inpatients. *Journal of Personality Assessment*, 55, 28-40.
- O'Neill, R. M., & Bornstein, R. F. (1991). Orality and depression in psychiatric inpatients. *Journal of Personality Disorders*, 5, 1-7.
- Pincus, A. L., & Gurtman, M. B. (1995). The three facets of interpersonal dependency: Structural analyses of self-report dependency measures. *Journal of Personality and Social Psychology*, 69, 744-758.
- Poldrugo, F., & Forti, B. (1988). Personality disorders and alcoholism treatment outcome. *Drug and Alcohol Dependence*, 21, 171-176.
- Rosnow, R. L., Rosenthal, R., & Rubin, D. B. (2000). Contrasts and correlations in effect size estimation. *Psychological Science*, 11, 446-453.
- Spitzer, R. L., Cohen, J., Fliess, J. L., & Endicott, J. (1967). Quantification of agreement in psychiatric diagnosis. *Archives of General Psychiatry*, 17, 83-87.
- Weiner, I. B. (1998). *Principles of Rorschach interpretation*. Mahwah, NJ: Erlbaum.