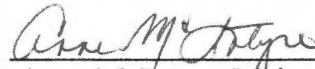


To the Graduate Council:

I am submitting herewith a dissertation written by Elisabeth D. Scherpenisse entitled "The Other-Directed Adolescent: Associated Personality Processes as Measured by the Rorschach." I have examined the final paper copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the Doctor of Philosophy, with a major in Psychology.



Anne McIntyre, Major Professor

We have read this dissertation
and recommend its acceptance:



Accepted for the Council:



Vice Chancellor and Dean of
Graduate Studies

Thesis
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THE OTHER-DIRECTED ADOLESCENT:
ASSOCIATED PERSONALITY PROCESSES
AS MEASURED BY THE RORSCHACH

A Dissertation

Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Elisabeth D. Scherpenisse

December 2005

DEDICATION

This dissertation is dedicated to my parents, Mel and Carol Scherpenisse. They inspire me to aim high and always encourage me to do my best. Without their love and support, this dissertation and all my academic achievements would not have been possible.

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ABSTRACT

Other-Directedness examines the extent to which a person sees his or her contemporaries as a source or guide for how to behave in a given situation. It has been linked with both adjustment difficulties and difficulties in interpersonal functioning. The purpose of this study was to examine underlying personality processes using the Rorschach in the late adolescent, college population and the hypotheses were three-fold. It was hypothesized that highly Other-Directed adolescents would have fewer psychological resources for coping with stress as indicated by a low Adjusted D score. It was hypothesized that highly Other-Directed adolescents would have less effective attitudes concerning interpersonal behaviors, as evidenced by more Poor Human Responses than Good Human Responses. It was hypothesized that highly Other-Directed adolescents would display greater dependency needs for closeness and approval through greater total Texture responses.

Self-report and Rorschach data was collected from 77 undergraduate men and woman. The data was analyzed nonparametrically given the non-normal distribution of the Rorschach scores. Results did not support any of the hypotheses. Discussion is given to methodological issues, such as limited variance or appropriateness of certain Rorschach variables in a non-patient sample. Further discussion is given to conceptual issues and alternative models.

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CHAPTER I

INTRODUCTION

Other-Directedness has recently become a variable of interest as a potential vulnerability characteristic in the late adolescent, college-aged population. The budding research in this area has linked Other-Directedness with difficulties in both the arena of individual adjustment and distress and of social and interpersonal functioning. This provides a glimpse at some of the patterns associated with Other-Directedness, yet to truly understand what makes this construct potentially psychologically problematic in adolescence, (or the absence of it psychologically healthy), we need to begin to examine the underlying or internal personality processes and dynamics associated with this construct.

Other-Directedness

The construct of Other-Directedness as measured by Collins, Martin, Ashmore and Ross (1973) explores potential control ideologies a person has regarding his or her behavior, or beliefs about external influences. Drawing from Reisman, Glazer, and Denney's 1950 book *The Lonely Crowd: A Study of the Changing American Culture*, which discusses how individuals come to adhere to society's prescribed norms, Collins et al. (1973) describe the Other-Directed person as one whose contemporaries are the source

of direction for behavior. The Other-Directed person possesses a strong motivation for social approval, and looks more to external cues as a guide for how to act in a given situation. In the scale Collins et al. (1973) created, strong agreement with the items in this scale reflects that this desire to conform to others' expectations is excessive, e.g. "I live *too much* by other people's standards" (italics added, p. 478). Other-Direction, however, is not a sense of helplessness. It also differs from locus of control and a sense of self-efficacy in that the former reflects more the control one feels over outcomes and the latter reflects a sense of competence.

Few studies have examined Other-Directedness as developed by Collins et al. (1973), but research conducted on it has found high Other-Directedness in adolescence linked with undesirable circumstances. In 1978, Fitzpatrick found that adolescent females who were more Other-Directed had lower mathematical achievement scores compared to less Other-Directed females. Additionally, a more traditional view of women's roles was associated with lower achievement. Fitzpatrick (1978) suggests that more Other-Directed females who simultaneously hold traditional views of female career roles are more susceptible to society's negative affect toward female success, and therefore perform more poorly. This implies that Other-Directedness may dispose adolescents to certain vulnerabilities in their social atmosphere. Being more Other-Directed as an adolescent may be linked to being more sensitive to stressful environmental factors, such as negative societal attitudes about female success. In a more recent study, McIntyre, Heron, McIntyre, Burton and Engler (2003) found high Other-Directedness related to more symptoms of adjustment problems. Conversely, they

found low Other-Directedness may be a resilience characteristic for college students facing stressors linked with college life. The results of these two studies suggest a possibility that highly Other-Directed adolescents may have some trouble managing stress in their lives. Fitzpatrick (1978) suggests Other-Directedness may leave adolescent females more vulnerable to the impact of negative or stressful societal attitudes, and McIntyre et al. (2003) suggests it contributes to experiencing greater adjustment difficulties in college. It might be that as an adolescent, being particularly attuned or sensitive to one's environment socially also leaves one more sensitive to stressful situations. Further, what appears to be excessive attention and effort put into maintaining awareness of external standards or guides for social behavior may come at the cost of developing more stable and effective internal resources for coping with stress.

Some studies have also examined social and interpersonal development factors in relation to Other-Directedness. High Other-Directedness in a college group has been linked to developmental delays in the adolescent task of maturely re-negotiating family ties to become an adult member of society, i.e. the second separation-individuation task (Engler & McIntyre, unpublished manuscript). Highly Other-Directed adolescents were found to simultaneously experience more anxiety about becoming engulfed in relationships and more anxiety about being separated from others, a finding that speaks to the delicate balance an adolescent must establish between separateness and relatedness. To explore whether highly Other-Directed adolescents would reflect enmeshment with adults in reporting perceived social support, Engler, McIntyre, and Scherpenisse (2001) examined differences in cited sources of social support in adolescents classified as high,

moderately high, moderately low, and low Other-Directed adolescents. No differences were found in proportion of adult support, which could include parents, teachers, coaches, etc., versus peer support. However, the high Other-Directed group did report a larger proportion of specifically family versus friend support. Highly Other-Directed adolescents perceived a significant share of their support to come from family members. Scherpenisse, McIntyre, and Engler (unpublished manuscript) looked more closely into the role of perceived parent support for the Other-Directed adolescent. They found that higher Other-Directedness related to worse adjustment and lower Other-Directedness related to better adjustment among college-aged, late adolescents only when a higher proportion of perceived parent support was present. The authors suggest several hypotheses for such a finding regarding the highly Other-Directed adolescent, including difficulties negotiating social network changes in the college setting or a less effective quality of felt parental support to facilitate smooth adjustment.

The research thus far suggests two different areas in which the highly Other-Directed adolescent may experience difficulties: managing stress and relating to others. In order to better understand the internal processes that play into the Other-Directed behavioral orientation, and better understand why its presence is linked with vulnerability and its absence potentially linked with resilience, we need to examine related personality factors. To avoid response bias and impression management issues often salient with self-reports, and to assess underlying and perhaps unconscious personality factors, a projective technique will be utilized. The Rorschach Inkblot Method is a commonly used method for investigating personality factors for both clinical and research purposes. As a

projective measure, it reflects the internal processes that generate behaviors (Exner, 2003). By minimizing environmental influences, it evokes a variety of psychological resources for examination (Perry, McDougall, & Viglione, 1995). The Rorschach allows us to quantify implicit psychological processes not easily accessed through self-report (Bornstein, 2001). Therefore, given that the aim of this study is to examine underlying personality processes or dynamics that may be associated with being highly Other-Directed, it is an ideal technique to use.

Rorschach and Managing Stress

As discussed, Other-Directedness may be linked with fewer psychological coping resources for managing stress. Several variables on the Rorschach examine controls and stress tolerance. Exner (2003) defines psychological resource as the collective of cognitive capabilities, including the way in which feelings are identified and utilized. Further, he describes resource as directly related to control over behavior, regardless of whether those behaviors are productive or adaptive. *Adjusted D* is the most direct, single index of ability to maintain control under stressful or demanding situations (Exner, 2003). It relates to available resources and stress tolerance while taking into account situational demands. It is one of the most broadly based, dependable and interpretively meaningful calculated scores (Weiner, 1998). It derives from two components, Experience Actual, *EA*, which provides an index of available psychological resources, and Experienced Stimulation, *es*, which measures current stimulus demands. These components are

formed by all the determinants coded in the Exner Comprehensive System except reflections and dimensionality based on form. These include color, achromatic color movement, texture, vista, and diffuse shading. An Adjusted D (Adj D) value of +1 or higher indicates sturdy stress tolerance. A value of 0 indicates less mature personality organization that creates difficulties coping with daily demands. A value of -1 indicates a state of chronic stimulus overload with less ability for stress tolerance. A value of < -1 indicates a high vulnerability to loss of control and disorganization in the face of stress.

The *Adj D* variable has been used in research as a measure of stress tolerance and control (e.g. Greenway and Milne, 2001). Studies have found increases in Adj D scores in brief and short-term treatment (Exner & Adronikof-Sanglade, 1992) due to decreases in *es*, i.e. less felt situational stress (Weiner & Exner, 1991 cited in Exner, 2003) and due to increases in *EA*, i.e. development of more available resources (Beck, 1960, cited in Exner, 2003; Exner, 1974, cited in Exner, 2003).

Weiner (1998) points out that sufficient resources for managing stress in daily living allows individuals to minimize subjectively felt distress and contributes to a sense of comfort and satisfaction. As noted, high Other-Directedness has been linked with more adjustment difficulties (McIntyre, et al., 2003), or more felt distress. Highly Other-Directed adolescents may possess less psychological resources for managing stress in relation to the presenting stresses and demands, both internal and external, connected with college life. We would expect, then, lower Adj D scores to be related to higher Other-Directedness.

Rorschach and Relating to Others

Other-Directedness may be linked with more difficulties in social relations. In the Rorschach, measures of interpersonal perception and behavior are varied requiring a more conceptually specific approach for choosing the appropriate scores. In college, the people physically available for support changes, e.g. high school friends may be far away; professors are now more present. It was speculated in Scherpenisse et al. (under review) that the highly Other-Directed college student might find this transition challenging and difficult, particularly for those who perceive the majority of their support coming from their parents. It was further speculated that these adolescents are less effective in negotiating this change and may be less able to adapt. Significant social network changes, such as those experienced in college, require the ability to adapt interpersonal behaviors to the situation. Though Other-Directedness indicates a strong desire for social approval and a propensity to alter one's behavior to fit the present situation, it does not indicate that these maneuvers are successful, effective or socially satisfying. Being able to alter behavior to fit the situation at hand is necessary to effectively adapt; however, perhaps an excessive degree of this is actually counterproductive. It may be that highly Other-Directed adolescents, although attempting to fit in to their social circumstances, are actually less able to successfully do so.

The Good Human Response (GHR) and Poor Human Response (PHR) were developed to tap interpersonal adaptiveness. They are applied to Rorschach responses

containing any human or human-related percepts. The GHR has been found to correlate with interpersonal histories that are typically considered effective and adaptive, whereas the PHR correlates with patterns of interpersonal behavior that are ineffective or maladaptive (Exner, 2003). Developed originally as part of a new index of ego impairment (EII), the GHR:PHR ratio emerged as a strong measure accounting for a large amount of the variance in predicting response to medication treatment in a sample of depressed patients (Perry & Viglione, 1991). The EII was further validated on a sample of schizophrenics (Perry, Viglione & Braff, 1992), and found to have high test-retest reliability over a 5 year period (Perry, McDougall & Viglione, 1995). As Berg, Packer, and Nunno (1993) point out, perceptions of humans on the Rorschach have been most frequently correlated with an individual's object relations. GHR and PHR scores translate dimensions of the human perceptions associated with interpersonal relatedness and object relations development into reliably scored and normatively based Comprehensive System (CS) variables (Burns & Viglione, 1996). The scores take into account accuracy, popularity, whole versus part, benevolent or cooperative intent versus malevolent or aggressive intent, and realistic versus distorted aspects of the percept (Burns & Viglione, 1996). The GHR:PHR ratio, then called the Human Experience Variable (HEV), was tested on a non-patient sample and found to make a unique contribution in predicting the quality of interpersonal relatedness over and above demographics, thought disturbance variables, and non-human experience variables in the Rorschach. It was also shown that the GHR to PHR ratio is related to the quality of interpersonal functioning as measured by a significant other's ratings of actual

interpersonal behavior and attitudes, such as interpersonal awareness or integrity (Burns & Viglione, 1996). Greater GHR scores than PHR indicates that an individual engages in more adaptive interpersonal behaviors, while greater PHR than GHR scores indicates less adaptive interpersonal behaviors. We would expect greater PHR than GHR scores to be related to higher Other-Directedness.

Another interpersonal issue that may play into Other-Directedness in adolescence has to do with attitude or orientation toward others. As noted by Collins et al. (1973), strong agreement with the Other-Directed items indicates that the desire to conform is excessive. A look at some of the items, for example, “I change my opinion (or that way I do things) in order to please someone else,” indicates the extent to which this person strives to gain acceptance and approval. The focus of the items is on pleasing or impressing others, fearing others negative opinions, and acting in ways to be liked. Although these attitudes are not necessarily unhealthy – indeed, a certain amount is necessary to satisfactorily co-exist and interact with others – the excessiveness indicated in strong agreement with these attitudes evokes a picture of social neediness, over-dependence on others for self-worth, and perhaps even a sense of inferiority. As noted, some research has found higher Other-Directed adolescents have more separation-anxiety in certain domains (Engler & McIntyre, unpublished manuscript). Thus it may be the case that the highly Other-Directed adolescent feels highly dependent on others or has unfulfilled needs for approval and closeness.

On the Rorschach, the Texture (*T*) response is associated with needs for closeness and a person’s openness to intimate emotional relations (Exner, 2003). The *T* variable,

based on responses with tactual impression created by the shading features of the blot, has been used in studies examining interpersonal relatedness (Hilsenroth, Handler, Toman, & Padawer, 1995; Gacono, Meloy & Berg, 1992). It is a trichotomized variable (Exner, 2003). If *SumT* equals 1, the person likely acknowledges and expresses needs for closeness in ways similar to others. If *SumT* equals 0, the person may be more emotionally conservative than expected in their close interpersonal relationships. If *SumT* is greater than 1, the person may experience strong unfulfilled needs for closeness either provoked by recent emotional loss or by a more persistent state of longing and loneliness. These are people who “want close emotional relations with others but are at a loss about how best to achieve them” (p. 495, Exner, 2003), which could describe a highly Other-Directed adolescent. We would expect greater Sum T scores to be related to high Other-Directedness.

Hypotheses

The hypotheses of this study are three-fold. (1) It is expected that highly Other-Directed adolescents have fewer psychological resources for coping with stress. It is hypothesized that $\text{Adj } D \leq 0$ will be related to higher Other-Directedness. (2) It is expected that highly Other-Directed adolescents have less effective attitudes concerning interpersonal behaviors. It is hypothesized that $\text{PHR} > \text{GHR}$ will be related to higher Other-Directedness. (3) It is expected that highly Other-Directed adolescents have greater dependency needs for closeness and approval. It is hypothesized that $\text{Sum } T > 1$ will be related to higher Other-Directedness.

CHAPTER II

METHODS

Participants

Participants were 77 undergraduate men and women enrolled in Psychology 110 (Introduction) courses during the Fall of 2003 and Spring of 2004. They received extra credit in their courses for their voluntary participation. They were between the ages of 18 and 24 in order to examine only the late adolescent population. Three additional volunteers were excluded from the analyses, one for being beyond the age range, one due to language difficulties, and one due to an insufficient number of Rorschach responses. The 26 men and 51 women obtained in the sample had mean ages of 19.7 and 18.9 years old respectively. The sample was 83% European-American.

Measures

Other-Directedness. The Other-Directedness scale, a subscale of the Personal Behavior Inventory (PBI; Collins et al., 1973), consists of 10 items and measures the sense of one's behavior being directed by perceptions of others' expectations. Responses are coded on a 5-point Likert scale ranging from 1 'strongly agree' to 5 'strongly disagree,' with low scores on the scale reflecting a greater sense of Other-Directedness.

In previous studies this scale has achieved only moderate internal reliability. Further, in their discussion of the Other-Directed items, Collins et al. (1973) pointed out that whereas the first seven items reflect the sense of other people as guides for behavior and motivation for social approval, the last three items identify “a lack of control over the specific content (not goals) of one’s own behavior” (p. 480). In their principal components factor analysis, these three items loaded lower than the rest. In this sample, the Other-Directedness scale had internal reliability of .73. Further analysis revealed that removing one of the last three items (“I have trouble taking orders because they often conflict with my own inclinations”) improved the alpha to .77. This modified scale was used in further analyses to more reliably assess the construct of Other-Directedness.

Coping Resources And Interpersonal Attitudes. The Rorschach Inkblot Test is a widely utilized measure in research and clinical practice in the assessment of personality. The Adj D variable (i.e. measure of stress tolerance and control) was used to assess psychological resources and abilities for coping with stress taking into account situational demands. The SumT determinant (i.e. sum of all texture responses), with $T > 1$, was used to assess need for closeness and dependence on others. The Good Human Response (GHR) to Poor Human Response (PHR) ratio was used to assess adaptiveness of interpersonal behaviors. The norms in the Exner Comprehensive System used for this study are based on a non-patient sample of adults 18 and older, thus making them relevant to the current sample unselected for patient status.

Inter-Rater Reliability

To obtain inter-rater reliability in Rorschach scoring, three advanced students in clinical psychology compared their scoring of practice protocols. To achieve maximum reliability, practice protocols were scored independently and then evaluated in scoring meetings. Over the course of seven practice protocols and intermittent meetings, a list of Exner-based scoring rules were agreed upon for scoring difficult situations. Using Weiner's (1991) recommendation, when at least 80% agreement was reached consistently on all nine of the Exner scoring categories, the study protocols were scored. Twenty research protocols were selected at random and scored by all three raters. Kappa's were calculated for each of the ten major Exner scoring categories (i.e. location, location number, developmental quality (DQ), determinant, form quality (FQ), pairs, content, populars, special scores, and z-scores). The three scorers obtained a kappa of greater than .70 in each category (see Table 1).

Table 1
Inter-Rater Reliability Statistics

Category	Kappa	ASE	Z-Value	P-Value
Location	.77	.01	38.5	.00
Location #	.78	.02	32.8	.00
DQ	.80	.04	22.9	.00
Determinants	.75	.02	37.2	.00
FQ	.76	.02	33.2	.00
Pairs	.85	.04	21.1	.00
Content	.78	.01	53.9	.00
Popular	.86	.05	18.7	.00
Z-Score	.77	.02	41.6	.00
Special Scores	.71	.06	11.7	.00

CHAPTER III

RESULTS

Normality of Data

Given the approach taken to conceptualize the proposed relationships between Other-Directedness and each Rorschach variable, the three independent variables were categorized as either present or absent. Criterion for the presence of fewer psychological coping resources was an Adjusted D score of zero or less ($\text{Adj D} \leq 0$). Criterion for the presence of lower quality of interpersonal attitudes was giving more Poor than Good Human Responses ($\text{PHR} > \text{GHR}$). Criterion for the presence of greater dependency needs was giving a total of more than one texture response ($\text{SumT} > 1$). Normative tables for the Comprehensive System (Exner, 2003) designate variables with unusual distributions; Sum T is one of these variables. In this sample, in addition to Sum T, the Adj D and PHR variables were found to have non-normal distributions as shown in Table 2. By dividing the skewness statistic for each measure by its standard error, a z-score was obtained to determine to what extent the distributions deviated from normality (Tabachnick & Fidell, 1996). Adj D, Sum T, PHR, and the modified Other-Directedness scale were all found to be more than 2 standard deviations from the mean, i.e. significantly skewed (see Table 2).

Table 2
Descriptive Statistics of Data Normality

	Mean	SD	Range	Skewness	Std. Error of Skewness	z-score
<i>R</i>	23	8.94	41	1.299	.274	4.74
Other-Directedness	32.83	5.34	32	-.746	.272	-2.827
Adj D	-.44	1.12	6	-.904	.274	-3.29
Sum T	.31	.57	3	2.119	.274	7.73
PHR	3.13	2.67	18	2.622	.274	9.57
GHR	3.45	1.91	9	.458	.274	1.67

Although only mildly, negatively skewed, a linear transformation was performed on the Other-Directedness scale to reduce skewness while retaining the range and variance of the measure. The Rorschach variables, however, were left non-normal because conceptually, transforming them would distort the meaning of the values. Although the GHR distribution was normal, the PHR distribution was not. As described, the ratio of GHR:PHR was categorized as present ($GHR < PHR$) or absent ($GHR > PHR$) and considered nonparametric. For all hypotheses, then the non-parametric equivalent of the t-test, the Mann-Whitney U test, was performed.

Inspection of Rorschach Response Productivity

There has been some debate in the literature on the effects of response productivity or total number of responses (R) on validity coefficients in Rorschach research. Although the participant must give a minimum of 14 total responses for valid Exner scoring, there is no maximum number of responses, thus leaving the total number of responses (R) relatively variable. The research on this issue is inconclusive, however, and the issue has yet to be resolved. Some researchers have noted the effects of R in Rorschach research and recommended that it be taken into consideration in statistical analyses (e.g. Wagner, Young & Wagner, 1992). In 1970, Kalter and Marsden discussed these confounding relations and methods for controlling them. In order to determine whether the total number of responses needs to be controlled for, they recommended subtracting the Rorschach variable of interest (X) from the total number of responses (R). This creates a distribution of R -minus- X scores where R is not partially determined by the Rorschach variable being analyzed. In other words, they suggest partialing the Rorschach variable out of the total number of responses. The partialled R (i.e. R -minus- X) is then correlated with the Rorschach variable (X) and the non-Rorschach variable of interest (Y), or in other words all dependent and independent variables. If both produce significant relationships, then Kalter and Marsden recommend correcting for the effect of R . Other researchers, however, have cautioned about using some sort of statistical control for R unless the effects are marked (Weiner, 1995). Kinder (1992) argues that although methods, such as partialing or covariance, “may be appropriate under certain conditions, each can lead to erroneous results when used indiscriminately” (p. 254).

Kinder (1992) and Exner (1992) suggest carefully reviewing the *extent* to which R influences the data, not simply whether it reaches statistical significance. Exner (1992) recommends calculating the amount of variance R explains in its relationship with a given Rorschach variable. If the correlation accounts for more than 10% of the variance, then he suggests a stronger consideration of dropping it from the analyses in that sample. Exner (1992) argues that in the Comprehensive System, while difference in variance of R may exist between groups, the decision to control for R should be based on sound logic about the conceptual issues being addressed in the analyses. When data are nonparametric, the recommendation is that controlling techniques for R not be performed (Exner, 1992). Given that many Rorschach variables have very few data points, (e.g. Sum T), partialling or normalizing distorts the results of the analysis (Exner, 1992).

Given the above literature, in this study the influence of R was considered. In correlation matrices R was not related to Other-Directedness. It was, however, related to all the Rorschach variables. (See Table 3)

The correlation of Adj D, Sum T, and GHR with R are significant although weak; the relationships account for only about 10% of the variance of R . Additionally, Adj D and Sum T are not normally distributed. Controlling for R , then, is likely to distort the results. Although PHR is not normally distributed in this sample, it was further explored for outliers possibly affecting this relationship because of the extremely high correlation, and unlike Adj D and Sum T, it maintains a larger range and variance where removal of outliers might make more sense. Further exploration revealed a Rorschach protocol with an R of 54 and a PHR of 18. The next highest number of Poor Human Responses in the

Table 3**Intercorrelation Matrix of Other-Directedness and Rorschach Variables**

	<i>R</i>	OD	Adj D	Sum T	GHR	PHR
<i>R</i>	--	.021	.267*	.285*	.345**	.600**
OD	--	--	.158	.103	.015	.112
Adj D	--	--	--	-.547	-.003	.156
Sum T	--	--	--	--	.329**	.060
GHR	--	--	--	--	--	.135
PHR	--	--	--	--	--	--

*correlation significant at 0.05 level (2-tailed)

**correlation significant at 0.01 level (2-tailed)

sample was 9. However, after selecting this case out, the correlation between the two remained still relatively high ($r = .488$, $n = 76$, $p < .001$). Additionally, PHR remained positively skewed. Since the GHR and PHR scores were to be evaluated in the context of a ratio analyzed nonparametrically, and removal of this extreme case did not reduce skewness or the confounding relationship of *R*, it was decided not to correct for response productivity in this analysis either.

Table 4

Correlations of Demographics with Independent and Dependent Variables

	Other-Directedness	Adj D	Sum T	PHR	GHR
Age	-.00	-.09	-.11	.16	.03
Gender	.07	.21	-.06	-.03	-.08
Ethnicity	-.15	-.01	-.16	-.15	.06

Demographics

All the independent and dependent variables were correlated with age, gender, and ethnicity to determine if there are any significant relationships present (see Table 4). Spearmans rho correlations were conducted for Adj D, Sum T, and PHR. There were no significant relationships between the demographic variables and those of interest.

Hypotheses Testing

The Mann-Whitney U, a non-parametric t-test, revealed no relationships between Other-Directedness and Adj D, Sum T, or GHR:PHR (see Table 5).

Table 5
Comparison of Other-Directedness Means Between Groups
Based on Rorschach Scores

	N	Mean Rank	Mann-Whitney U	Wilcoxon W	Z	Asymp Sig
Adj D						
Adj D>0	7	46.71	177.000	2523.000	-1.111	.267
Adj D≤0	68	37.10				
Sum T						
Sum T≤1	73	37.66	48.000	2749.000	-.822	.411
Sum T>1	2	50.50				
GHR:PHR						
GHR>PHR	46	36.33	590.000	1671.000	-.838	.402
PHR>GHR	29	40.66				

Exploratory Analyses

Exploratory analysis also was done on high Other-Directedness (top quartile) and on low Other-Directedness (bottom quartile), because it is often extreme groups that carry the weight in a correlation. If differences are expected, they are most likely to be found in the highest and lowest groups. Chi-Squares were calculated for these extreme groups of Other-Directedness and the three Rorschach variables to measure proportionality of groupings. None of the Chi-squares, however, demonstrated

significant non-proportions comparing Other-Directedness groups with Adj D ($\chi^2 = .038$, $df = 1$, $p > .05$), Sum T ($\chi^2 = 1.237$, $df = 1$, $p > .05$), or GHR:PHR ($\chi^2 = .259$, $df = 1$, $p > .05$). It is notable, too, that for Adj D and Sum T, 50% of the cells in the Chi-square had an expected count of less than five rendering the analyses less valid. Fisher's exact test statistics for these two variables also indicated a lack of association with the extreme Other-Directed groups (Adj D 2-sided exact significance = 1.0; Sum T 2-sided exact significance = .455)

One of the disadvantages to dichotomizing variables and doing t-tests is that much variability is lost, thereby leaving the statistic less sensitive to the data. Two of the Rorschach variables, Adj D and Sum T, have by their nature very restricted range. The GHR:PHR, on the other hand, is based on two continuous variables with greater variance. It is possible that Other-Directedness could be moderately related to either PHR or GHR without categorizing the ratio of the two. For exploratory purposes, a Pearson correlation was calculated between Other-Directedness and GHR, and a Spearman correlation was calculated between Other-Directedness and PHR. Neither was related to Other-Directedness measured as a continuous variable, (GHR, $r = .015$, $p = .901$, $n = 76$; PHR, $\rho = .043$, $p = .713$, $n = 76$).

CHAPTER IV

DISCUSSION

In this study, it was predicted that participants reporting high Other-Directedness would be more likely to have Adj D scores of 0 or less, indicating fewer psychological resources for coping with stress. It was predicted that these participants would be more likely to have greater Poor than Good Human Responses, indicating less adaptive attitudes concerning interpersonal adaptiveness. It was also predicted that these participants would have Sum T scores (i.e. total number of texture responses) higher than 1, indicating greater dependency needs for closeness and approval. However, although the relationships were in the predicted directions, they were not significant, thus, the data in this sample did not support the hypotheses.

The most obvious interpretation of these findings is that Other-Directedness bears no relation to coping resources, interpersonal adaptiveness, nor dependency needs as measured by these Rorschach variables. It may be that the relationship between Other-Directedness and adjustment problems is not explained by fewer psychological coping resources, but a matter of a propensity to more readily endorse adjustment symptoms or a lower set of criteria for endorsing them. Although it has been suggested that highly Other-Directed adolescents experience more difficulties relating to others, it could be the case that they do have the ability to effectively adapt to interpersonal situations, but that they are not satisfied with the results. They could have the skills or capacity but not use them consistently. Further, for interpersonal adaptiveness, there are multiple Rorschach

variables which could tap interpersonal dynamics, for e.g. cooperative or aggressive responses. Perhaps the PHR and GHR variables do not capture the potential interpersonal dynamics of Other-Directedness. Regarding the hypothesis concerning Other-Directedness and unfulfilled dependency needs, in this sample the Sum T score is greater than 1 in only 2 cases. This is hardly enough data points to detect a relationship between Sum T and Other-Directedness should one exist.

We cannot definitively rule out that these internal personality processes or characteristics are associated with Other-Directedness in general, just as measured by this projective technique with these particular variables. It could be that if they were measured via self-report, correlations would be successfully demonstrated. However, this would be a measure of personality factors the participant is aware of and willing to endorse, whereas the goal of this study was to explore the potentially unconscious personality dynamics which underlie behaviors.

The extremely low number of participants with a Sum T score greater than 1 raises the possibility that some Rorschach scores may not be relevant to differences found in samples unselected for patient status, such as the one used in this study. Despite the fact that the Sum T variable is expected to have a restricted range in the population, it may be that it is only relevant in research geared toward differences in patient samples where the more frequent occurrence of “troubled” scores, (i.e. $\text{Sum T} > 1$), is expected. Both of the studies cited in this article using Sum T were conducted with patient samples. Although in this sample the Sum T variable represents a more extreme case of restricted variance possibly related to patient status, this phenomenon may be occurring to a lesser extent with the other Rorschach variables.

Limited variability in the independent variable could be a relevant factor in the lack of significant relationships. In this sample, the mean Other-Directedness total score was approximately 32 and the standard deviation approximately 5 points. Possible total scores on the scale range from 9 to 45, with 9 representing most Other-Directed and 45 the least. Most of the participants in this sample had total scores in the range of 27 to 38, which means most people were endorsing on average an answer of 3 or 4 on the 5-point Likert scale. This is a relatively limited variance for detecting differences related to Other-Directedness. Perhaps a greater range of Other-Directedness with more very high Other-Directed and very low Other-Directed participants would demonstrate significant differences.

The fact that this study utilizes different methods for data collection – both self-report and projective test techniques – can be seen as both a strength and a weakness. It has the advantage of a multimethod approach, which prevents response bias. This avoids the problem of common method bias that can contribute to statistically artifactual relationships. As a result, any relationships found are less equivocal. At the same time, without shared method bias, relationships are statistically more difficult to demonstrate, particularly with the Rorschach. As Bornstein (2001) points out, Rorschach and self-report scores should only be expected to correlate modestly with each other because they are designed to assess different things. It could be argued that with a higher N the relationships might have been demonstrated. However, with a high enough N, many relationships can be demonstrated significant. Even if by increasing the N the relationships were successfully demonstrated, they might be too small to be considered clinically or practically meaningful. Further Fazio and Olson (2003) argue from the

social psychology literature that the correspondence between explicit and implicit measures depends on various factors, such as the motivation and opportunity the participant has to deliberate about the explicit measure. In other words, relationships between implicit and explicit measures (e.g. Rorschach and self-report) are often complex.

In addition to these statistical and methodological issues, it may be that the hypothesized linear model between Other-Directedness and these Rorschach scores does not capture the potential relationships. The fact that the Adjusted D score was not related to Other-Directedness does not rule out the possibility that high Other-Directedness may be associated with fewer internal coping resources. There might be an interactive effect, for example, where the particular combination of being highly Other-Directed and having fewer coping resources contributes to significantly greater adjustment difficulties. Some of the research suggests that the difficulties highly Other-Directed adolescents may deal with internally are quite complex. For instance, Engler and McIntyre (unpublished manuscript) found these adolescents experienced anxiety simultaneously about engulfment in relationships and separation from others, which on the surface are two apparently contradictory feelings. Difficulties and internal conflicts around relating to others may be best captured by a combination of Rorschach variables rather than single scores. Future research using the Rorschach to examine Other-Directedness should take into account the possibility of alternative curvilinear models better explaining the data.

Additionally, attention in further research should be paid to Exner's indices which require multiple scores to be elevated or to be low to indicate a potentially problematic situation. For example, the Coping Deficit Index (CDI), which takes into account various

single scores related to coping resources and stress tolerance, might be better suited to capture issues highly Other-Directed adolescents have with adjustment than the Adjusted D score alone. Further, Other-Directedness and difficulties with adjustment and interpersonal functioning might be better understood in the context of the individual's environmental circumstances. For instance, those adolescents who are comfortably living at home or with friends to whom they can easily adjust their behavior may not experience tension around dependency issues because their social and emotional needs are being met. A limitation of this study was that while the sample was predominantly freshman and sophomores still negotiating the new challenges of college life, it did not ascertain contextual factors associated with this. For example, it is not known whether they recently moved to an unfamiliar setting or had to make many new friends. Both situations might provoke highly Other-Directed adolescents to experience interpersonal insecurity. Additionally, Other-Directedness and associated personality factors might be understood in tandem with issues of self-consciousness and self-awareness, (e.g. Buss & Scheier, 1976), given the high level of awareness and motivation for approval the highly Other-Directed individual appears to have.

In approaching Rorschach research, authors have stressed the importance of offering a strong rationale for the measures chosen. This conceptual approach validates significantly more inferences than an empirical approach, where random measures are examined (Atkinson, Quarrington, Alp, and Cyr, 1986). This study aimed to take a strongly conceptual approach based on previous research in order to maximize the validity of the study. Therefore, although the results were not significant, the confidence in the results is greater.

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Erlbaum Associates.

VITA

Elisabeth Danielle Scherpenisse was born in Midland, MI on November 26, 1977. She was raised there until the age of 6, at which time she moved to Spring Lake, MI. She went to elementary school at St. John's Lutheran School and Walden Green Montessori School. She went to Grand Haven Christian School for junior high school and then graduated from Western Michigan Christian High School in 1995. From there she attended Calvin College in Grand Rapids, MI where she earned a B.A. in psychology with an additional major in philosophy, graduating with honors in 1999. After taking a year off to work and travel, Elisabeth entered the University of Tennessee's graduate program in Clinical Psychology. She is currently completing her internship at the Institute of Living in Hartford, CT.

