

OKLASHINLA: VALIDITY OF THE RORSHACH
COGNITIVE MEDIATION CLUSTER WITH
OKLAHOMA CHOCTAWS

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PREFACE

Huge atrocities have taken place within all Native communities since European exploration (Debo, A., 1973, Foreman, G., 1934, Foreman, G., 1966). For Choctaws, when disagreements occurred a discussion with the differing parties was arranged and if they could not arrive at an agreement, a game of stickball then determined who was in the right (Haag & Willis, 2001). War or death was a last resort. It must have been inconceivable for Choctaws to experience the toll of Western expansion. It is certainly a credit to Native people that their resiliency has allowed for cultures to remain intact. Despite the wake of the Civil Rights and Red Power Movements in the 1960's and 1970's much progress has still not occurred in the macro-levels of power (Huff, D., 1997; Beuf, F., 1977). Institutional power impacts education, politics, and even mental health. There is power in administering psychological assessments.

Standardized personality assessment has largely been a Western psychology construction in the past one hundred years. Power has been granted to these instruments which are typically created by White-Americans with much acceptance. So, it is worth questioning what this research study means. Might modern day psychology still be performing oppressive practices today by dependence on a standardized psychological measurement like the Rorschach Inkblot Test? Is it enough to say that the Rorschach Inkblot Test is not valid with Oklahoma Choctaws? What is psychology's responsibility to the ethnically diverse and "standardized" assessment practices? Might psychology be having difficulties with perception or practicing paternalistic psychology? These are not

new questions and they are answerable but the answers involve time, care, and creativity. Janet Helms (1992) argues that measurements which assess cognitive abilities may only be useful for research purposes. Perhaps, this is the case for personality measurements as well. Most certainly, testing and assessment practices have been rooted in controversy and have selected and screened in the favor of a privileged few. Institutional power has led the forefront of the disenfranchisement of culturally diverse people starting with intelligence testing of immigrants during the early 1900's and has relevance for today (Gould, S., 1981).

Additionally, arguments for institutional power over Native people have taken place since first contact. These movements to take and maintain power were upheld by presidents of the United States. For instance, James Monroe in his first inaugural address to Congress stated, "the hunter state can exist only in the vast uncultivated desert. It yields to the more dense and compact form and greater force of civilized population; and of right it ought to yield, for the earth was given to mankind to support the greatest number of which it is capable, and no tribe or people have a right to withhold from the wants of others more than is necessary for their own support and comfort (The American Presidency Project, 2006)."

Andrew Jackson stated before Congress in 1830, "[removal] will separate the Indians from immediate contact with settlements of whites; free them from the power of the States; enable them to pursue happiness in their own way and under their own rude institutions; will retard the progress of decay, which is lessening their numbers, and perhaps cause them gradually, under the protection of the Government and through the influence of good counsels, to cast off their savage habits and become an interesting,

civilized, and Christian community (The American Presidency Project, 2006).”

Cultural genocide was the result of these presidencies. It is also interesting to compare the writings of Presidents Monroe and Jackson to the early Native Rorschach researchers. In Preston’s study (1964) she referred to her sample as “non-literate”, meaning they didn’t read English. Anthony Wallace (1952) in his study pondered the scientific questions: “What, if any, deviant types of personality are there in this community? Does psychological deviancy correlate closely with neurosis or psychosis? Do the deviants adjust to their society? What personality differences are associated with sex? What are the social role of modal and deviant types? Can personality differences between populations be reliably stated (pg. VII)?” Also, when he found that his sample responded similarly to a White-American sample he had this to say: “the Tuscarora modal type is innately endowed with about the same degree of intelligence as the “average” white man, but is less inclined to have intellectualistic ambitions, and tends to make less use of his innate capacities than the white man does. He has the same abilities but operates at lower efficiency; he lives less by his wits (pg. 71).” Continually, Native people have been viewed with contempt from early policy makers to Rorschach researchers. Psychology, in general, inherits and passes on these beliefs today.

The primary intention of this study was to validate the Cognitive Mediation cluster with Oklahoma Choctaws. Oklahoma Choctaws live throughout the world and it is believed this study will assist therapists with treatment planning. Therapists should approach assessment results with caution. This study was also considered with psychology professors in mind, especially those who teach psychological assessment courses. It is hoped this project will challenge test constructors to set standards of

comparison that are not rigidly bound to one perspective; Western worldview. This is crucial because the overall response styles of Oklahoma Choctaws closely mirror Exner's normative data for schizophrenics. What a travesty it would be if an Oklahoma Choctaw was diagnosed as having schizophrenia when in actuality they possessed a differing worldview.

In the literature review of this study, the topic of having different norms for the culturally diverse is introduced. This is a reasonable and valuable discussion to continue considering the evidence of this study. Most importantly, this study provides insight that interpretation of assessment results should consider cultural context.

CHAPTER I

INTRODUCTION

Often American Indians and mental health professionals working in Native communities are faced with a wide range of emotional, physical, and community problems. Current issues of concern can be depression, alcoholism, suicide, and violence. These are not new or unique problems for Indian communities. Existing social and health programs can often be understaffed and hard-pressed to meet present health demands. For example, Indian Health Services operates at under fifty-two percent of what it truly needs to function in providing the minimal in health care services (Federal Disparity Index Work Group, 2002) and only seven percent of this funding goes toward mental health services (National Indian Health Board, 2002). Such a limited budget leaves little time for development and implementation of mental health programming for Indigenous communities.

The most common mental health complaints from American Indians are likely to be depression and alcoholism (Duran, et.al, 2004; Duclos, et.al., 1998). These presenting problems can be the results of major life problems or stress that is not being adequately addressed by policy makers and current treatment programs. Many assumptions about why problems exist in Native communities and answers to address these multiple problems have usually been made by experts outside Indian communities (Cadieux, A., 2001). These assumptions are not often supported in scholarly materials that have

determined what Native people, themselves, see as main difficulties and sources of distress. In addition, very little attention has been focused in the research literature that states explicitly what American Indians view as a strength about their personal lives and their communities (Duran, B. & Walters, K., 2004). This is important information that could potentially lead to development of mental health programming that is beneficial and specific to the communities where policies and programming are put into practice. Another source of apprehension is the suitability of using standardized psychological and diagnostic tools with Indian people. There are many different social and emotional measurements to choose from and choice depends largely upon cost, theory behind the instrument, and ease of administration, scoring, and interpretation. Currently, measurements are used for selection and screening purposes or clinicians may have questions about a client's barriers to or potential for treatment (Groth-Marnat, G., 2003). Assessments can provide quick, easy answers for researchers, clinicians, and academicians. However, many, if not most, of these psychological instruments have not been validated with specific cultural/racial groups. Hall (2001) warns of "cultural malpractice" by professional psychologists who are poorly trained in issues of diversity. Without culturally competent services, clients may be misdiagnosed, mistreated, or prematurely terminate treatment. Without culturally competent researchers, the development of new knowledge will be limited at best. At worst we can be misled by inaccurate knowledge that has potential for significant negative consequences.

Currently, clinical diagnoses, in many American Indian behavioral health facilities, are achieved by a standard clinical interview, often with the adjunct use of the Rorschach Inkblot Test (RIT), utilizing Exner's Comprehensive System (Berryhill, 2002;

McClanahan, 2002). The RIT has been used with an ample array of cultural groups but mental health professionals have questioned its validity with non-White cultures. Some of the issues consist of the effects of culture; for instance, following directions, language comprehension, differing worldviews, and values (Munroe & Munroe, 1997; Lowery, 1998).

Limited research has been done with the RIT and Indigenous people. Research that exists is mostly outdated by more than three decades and has been conducted by non-psychologists. It seems beneficial to understand the relationship of the RIT with an American Indian population so that appropriate mental health referrals, diagnosis, treatment, and outcomes can be made. This study is specifically concerned with the validity of Exner's cluster of Cognitive Mediation variables as measures of acculturation in an American Indian population. The CM is a cluster of variables that describe how a respondent perceives the form related stimulus features of the inkblots.

According to Exner (2003, pg. 364) the CM cluster identifies a subject's orientation to the translation of the blot. There are two opposite extremes in which an individual can exaggerate their degree of conventionality. These individuals may spot the most pertinent aspects of the inkblot and never stray from the most predictable answers. At the other extreme, individuals can possess severe twists in their discernment of the inkblot, indicating a disregard for the forms of the blot. Both response styles may lead to serious consequences for the assesse and should be considered in the context of the other Rorshach variables and the clinical interview.

There are seven variables within the CM cluster. The first two are considered to be the "cornerstone" variables when investigating mediation or how the inkblot image is

viewed and explained (Exner, 2003, pg. 364). First, Form Appropriate—Extended (XA%), pertains to the percentage of responses that indicate a proper use of form (blot) features; these responses are viewed as positive and work in conjunction with Form Appropriate—Common Areas (WDA %). WDA% is a variable which indicates the percentage of whole and common area responses that involve appropriate use of form. It is typically a higher percentage than XA% and when the two variables are used in combination, can provide more meaningful information about appropriate responses than when used separately.

According to Exner, the next two variables tend to represent a “disregard for, or distortion of, reality” and “they occur in almost every record” (Exner, 2003, pg. 372). Distorted Form (X-%) represents the percentage of responses that disregard more appropriate features of blot contours. When this percentage is high (.15 to .20) and associated with a low amount of responses (14 to 16) the administrator “should not be casual about the dysfunction” (Exner, 2003, pg. 372). White Space Distortion (S-) are responses in which white space has been used and scored negatively because they do not conform to the features of the blot. Typically, S responses are viewed as defiant or the respondent may possess a “sense of individuality” (Exner 2003, pg. 302). When a high proportion of these S responses do not conform to the contours of the blot (high S-), this is often interpreted as representing a distorted perception of reality when expressing one’s sense of individuality.

Popular responses (P), as the name suggests, are considered to be “conventional” responses that do not vary from standard responses (Exner, 2003, pg. 379). Exner arrived at thirteen popular responses with his normative sample of 600 subjects. Normally, less

than four P responses indicate an opposition to offer the most apparent of responses. Also, respondents with greater than eight P responses tend to display more socially acceptable or expected behaviors. Conventional Form ($X + \%$) represents the proportion of ordinary responses generated. High responses, greater than .85, reflect behavior patterns consistent with compliance to social demands. Lastly, the proportion of answers that do not violate appropriate use of the blot contours but do reflect less common ways of translating the stimulus field is scored as Unusual Form ($X_u\%$). A high response, greater than .25, implies a likelihood to be “overly individualistic” and percentages less than .10 suggests some mediational difficulties (Exner, 2003, pg 383). $X + \%$ that falls between .70 and .85 in combination with an $X_u\%$ less than .10 is viewed as a tendency toward “mediational dysfunction” (Exner, 2003, pg. 382).

A question of whether or not a client is psychotic can often come into question. Psychological assessments like the Rorschach can be a valuable instrument to utilize in such cases. The Cognitive Mediation cluster of variables has demonstrated empirical ability in helping to identify psychosis and formal thought disorder in adult samples (Weiner, 1998). However, there have been no research studies examining the validity of the CM cluster with the culturally diverse. What has been revealed is a mixture of studies examining the Rorschach’s utility and scoring differences between White and non-White-American cultures.

In Presley’s et. al (2001) research, Exner’s normative data was matched with African-Americans in regard to age, sex, education, and socio-economic status. He solicited 700 subjects aged nineteen to seventy years old. Significant differences had been found with a lesser cooperative movement (COP) coding for the African-American

sample. The researchers of this study believe that a lower COP frequency suggests that African-Americans do not expect cooperative interactions with others routinely.

In Gowri's (2000) study comparing Asian Indian and European-American protocols slight cultural variations did exist in the responses. This sample was comprised of eighty-four college educated non-patient participants falling into two groups: first generation Asian Indians (n=49) and European Americans (n=35). The researchers found that Asian-Indians did display an ability to simplify their responses.

Bourguignon and Westerkamm-Nett (1955) using Klopfer's Rorschach scoring system with Haitian (n=36), Chamorro (n=30), and Saulteaux (n=102) samples found significant differences between these group samples with popular responses. The data indicated the presence of three types of P responses: (1) Populars that were commonly reported with greater frequency amongst a particular sample. (2) Populars held in common between groups of a similar ethnicity. (3) Populars common to all diverse populations.

The literature suggests that there are differences between culturally diverse groups and Exner's normed sample. However, research specifically examining cultural differences and Rorschach performance is scarce and the meaning attached to these differences is unknown. It makes good sense that an instrument strongly favoring White-American's perceptions will generate differences for cultural groups with differing worldviews, historical experiences, and values. Also, if the assessment administrator is not aware or understanding of cultural differences and interpretative meanings this potentially leads to damaging implications, a diagnosis of pathology, for instance. There are many ways in which diagnostic misinterpretations may occur.

However, the leading concern appears to lie with the lack of representation of diverse groups in the standardization sample for these personality instruments. Helms (1992) stated that the validity of conducting a psychological measurement to a member of a minority group that is not adequately represented in the standardization sample is held suspect. Moreover, if an assessment is administered to such an individual that is not represented in the standardization sample, significant care should be taken in interpreting test results, and any information on group differences should be kept in mind.

In test construction there are generally two approaches taken; emic and etic (Butcher, 1998; Tseng & Streltzer, 1997). The emic approach is developed with specific characteristics of a group of people in consideration. This approach believes that each culture has its own definition of intelligence; therefore, separate intellectual assessment tools need to be developed specifically for that culture (Butcher, 1998). The etic approach on the other hand, takes the view that characteristics of culture are universal and provides comparisons between and across cultures (Butcher, 1998; Tseng & Streltzer, 1997). Most widely used assessments, such as the Minnesota Multiphasic Personality Inventory, Rorschach Inkblot Test, and Wechsler Intelligence Scales are instruments currently available that rely on the etic approach (Davis, V., 1999).

In the argument for an emic approach to test development, Duran and Duran (1995) state that Westernized values such as assessment are not valued or trusted because culturally diverse groups may not be included in the standardization group. Others state that English may be hard to understand or a foreign language to the assessee making the assessment a measure of acculturation or English proficiency instead (Chiriboga, D., 2004; Robbins, 1999). Dana (1998) posits that psychological assessment

may have punitive implications and this warrants separate norms for diverse populations. Currently, instruments that examine personality, neuropsychological functioning, and intelligence are being used by Indian Health Services and other tribal agencies (Berryhill, 2002; McClanahan, 2002; Kraft, 2002).

There appears to be a dearth of information in the research literature on the argument for not providing separate norms for minority people; however, some information does exist. Under the etic approach, it is believed, for example, that intelligence can be measured across cultures. Therefore, separate intelligence instruments do not need to be developed (Butcher, 1998). Also, assessments such as the MMPI-2 are stated to have met rigorous methodological requirements; for instance, an appropriate amount of participants and standardized norms that are based upon U.S. Census figures. The use of rigorous statistical methods leads test developers to conclude that their measurement is “fit” for all cultures in the United States (Butcher, 1985). Others argue that these assessments are a “good indicator of how the minority person functions in the dominant society” (Davis, 1999). Two studies critical to the current study indicate that this argument warrants further discussion and research. Le (2002) found in her highly educated Vietnamese sample of twenty-seven participants that the variables XA% and WDA% were significantly lower than Exner’s normative sample. In Boscan’s (2000) study with one hundred college students in Mexico she found significant differences for four of the variables within the Cognitive Mediation cluster (i.e., X+%, X-%, Xu%, and P). XA% and WDA% were not included in this study and S-% was not significant. These two studies will be discussed in further detail later in the literature review but they are startling because these health samples of people could be misconstrued as suffering

from poor reality testing.

Purpose of the Study

The purpose of the present study was to validate the Cognitive Mediation variables as measures of acculturation in a Native population. More specifically, the concurrent and construct validity of these variables as measures of acculturation in Oklahoma Choctaws was assessed. The concurrent validity of the Cognitive Mediation variables was assessed by correlating this set of variables with a measure of acculturation. The construct validity of these variables was assessed by comparing this sample's scores with the scores of Exner's normative sample. It was thought that significant differences between the normative group and the Oklahoma Choctaw sample, would support the construct validity of the Cognitive Mediation variables as a measure of acculturation.

According to LaFromboise, Trimble, and Mohatt (1990) American Indian acculturation levels consist of traditional, transitional, bicultural, and assimilated. Traditional is defined as "those who generally speak and think in their Native language; they practice only traditional beliefs and values" (p. 641). The transitional level includes Indigenous people who generally speak both their Native language and English, but do not fully accept their cultural heritage or mainstream culture. Bicultural American Indians are those who are accepted by the dominant society and their native affiliation, they know and accept their cultural heritage and that of mainstream society. Lastly, assimilated is defined as "those who are generally accepted by the dominant society; they embrace only mainstream culture" (LaFromboise et. al, 1990, p. 643).

Acculturation is an important assessment consideration but there is no clear determinant of who is "Indian" and who is not. Most cultural identification is determined

on an individual basis. Also, choosing to acculturate into mainstream society is neither a good nor bad thing.

Significance of the Study

This study was concerned with acculturation levels because a person who identifies with his or her culture may display a response style that is different from a person who has assimilated into the dominant culture. It was believed that the responses of Oklahoma Choctaws who had assimilated into the dominant culture would mirror the response style of Exner's normative sample. A different response style may be interpreted as suggesting a greater likelihood of psychopathology, when in fact, none may exist. It is hoped that this study will help clinicians and researchers better understand the meaning of this cluster of variables and will lead to a more accurate diagnoses for Indigenous clients.

Research Questions

The following two research questions were tested.

1. What is the concurrent validity of the Rorschach Cognitive Mediation Variables (XA%, WDA%, X-%, P, X+%, Xu%, & S-) as measures of acculturation in a sample of Oklahoma Choctaws?
2. What is the construct validity of the Rorschach Cognitive Mediation Variables (XA%, WDA%, X-%, P, X+%, Xu%, & S-) as measures of acculturation in a sample of Oklahoma Choctaws?

Research Hypotheses

1. It was hypothesized that there would be a positive relationship between XA%, WDA%, P, and X+% and acculturation scores and an inverse relationship between X-

- %, Xu%, and S-% and acculturation scores for the Choctaw sample.
2. It was hypothesized that the Choctaw sample would have a significantly lower XA%,
 3. WDA%, P, and X+% scores and significantly higher X-%, Xu%, and S-% scores than Exner's normative population.

Assumptions

1. Pow-wows, softball games, church, personal contacts, and community gatherings would elicit participants of all acculturation levels.
2. The culture of American Indian people is vastly different than Exner's normed sample.
3. There are no scoring discrepancies between examiners.
4. All measures used within this study are of at least interval quality.

Limitations

1. The sample sizes are small and the participants were not randomly selected.
2. This study was of an underinvestigated and underdefined population and exploratory in nature.
3. This study was conducted out amongst areas where Oklahoma Choctaws gather. Therefore, the results are only generalizable to these people.

Definitions

Acculturation. The process of "accumulating and incorporating the beliefs of an alternate culture (Mendoza & Martinez, 1981, pg. 71).

American Indian (Sue & Sue, 2003, pg. 312). Indigenous inhabitants of the North

American continent. Congressional legislation has been passed to help identify an

American Indian but tribes can determine their own tribal membership.

Membership can be achieved through the receiving of a Certificate Degree of Indian Blood (CDIB) card. This study will also rely on self-report. The term Native and Indigenous will be utilized synonymously with American Indian.

Cognitive Mediation (Exner, 2003, pg. 364). Perception and translation of the Rorschach Inkblot features. This procedure necessitates negotiation of the stimulus (inkblot) and memories of the respondent in order to accomplish the task set by the examiner's question "what might this be?"

Indian Health Services (Federal Disparity Index Workgroup, 2002). Federal health care program for American Indians and Alaska Natives. Congress has declared that in part of fulfilling its special responsibilities and legal obligation to American Indian people, it will meet the national goal of providing the highest possible health status to Native people.

Oklahoma Choctaw (Debo, A, 1973). A group of Indigenous people that currently reside in the state of Oklahoma. They were originally removed by the government from the southeastern area of the United States. There are distinct bands of Choctaws throughout southeastern states of America and they continue to share linguistic and cultural characteristics.

A. Represents responses of a whole animal form. A reflects a tendency to see what everybody sees, the easy and conventional or can be an indicator for low intelligence.

CF. Represents Color-form responses or responses that are formulated primarily because of the chromatic color features of the blot.

Conventional Form (X +%). Represents the percent of responses in the entire protocol given an ordinary or overelaborated form quality score when using the Exner scoring method. The response is considered appropriate to the contours of the blot, it is based in reality, and is an answer frequently given by others.

Cooperative Movement. Cooperative Movement (COP) is coded for all movement responses involving two or more objects. This interaction is viewed as a positive event.

D. Represents common detail responses. These are responses that reflect the ability to perceive and react to obvious characteristics of the environment. A high emphasis on D may indicate a preoccupation with what is obvious and concrete. A low D may be due to limited ability, lack of drive, or tendency to overlook the simple and obvious.

Distorted Form (X-%). Represents the proportion of answers in which form use is not commensurate with the blot features when using the Exner scoring method. Individuals with a high proportion of these responses have problems with reality testing or tend to view the world quite uniquely. Distorted Form may also indicate difficulties in perception of social situations.

F. Represents responses based exclusively on the form features of the blot when using the Exner scoring method. F responses have commonly been thought of as a tendency to react to formal characteristics, or objective features of a situation, as opposed to the more subjective aspects. Good form reflects accurate thinking. Poor form suggests less accurate thinking.

FC. Represents Form-color response. These are answers that are formulated primarily

because of the chromatic color features of the blot.

Form Appropriate Extended (XA+ %). Represents a proportion of responses in which there is an appropriate use of form features when using the Exner scoring method. XA+% has commonly been attributed to reliable representation of reality testing and provides data concerning perceptual accuracy.

Form Appropriate—Common Areas (WDA%). Concerns the proportion of responses given to W and D areas in which there is an appropriate use of form features. WDA% provides direct information about the appropriate use of form. This value works best in conjunction with XA%.

M. Represents human movement responses. Responses in this manner can reflect a capacity for fantasy, creative mental activity, and good intelligence.

P. Represents responses that occur with a high frequency when using the Exner scoring method. P has commonly been attributed to the ability and tendency to view things from a common or conventional frame of reference.

R. Represents the total number of responses given to the ten Rorschach cards when using the Exner scoring method. A high R has commonly been attributed to productivity and a low R tends to correlate with defensiveness, low intelligence, and depression.

S. Represents the number of white space responses when using the Exner scoring method and S has commonly been attributed to contrariness or creativity.

T. Represents pure texture response. Used for answers in which the shading components of the blot are translated to represent a tactual phenomenon, with no consideration to the form features. Frequent use of T indicates intense and disruptive needs.

Absence of T may suggest extreme affective impoverishment resulting in a person who no longer strives for deep relationships.

Unusual Form Quality (Xu%). Concerns the extent to which the appropriate use of form features has included an uncommon response style. These responses do not necessarily mean the blot has been violated but Xu% responses can indicate an unconventional manner. When the proportion of Xu% responses are too high an individual may be viewed as unwilling to adhere to the standards of convention.

W. Represents the number of whole card responses. W has commonly been thought of as simplistic in quality.

White Space Distortion (S-%). Represents the number of minus answers in which a white space (S) response has been used as part or all of the location. S-% has commonly been attributed to adolescents. A majority of all people will tend to have one or more minus responses. Minus responses are coded because the assessee creates contours that simply do not exist on the blot.

CHAPTER II

REVIEW OF LITERATURE

The primary focus of this study was to examine the validity of the Rorschach Inkblot Test (RIT); specifically, the Cognitive Mediation cluster as it applies to Oklahoma Choctaws. There has been an enormous amount of research available on the RIT but no studies have addressed its' validity with Native people. Exner strongly encourages an awareness of how the assessment originated, advanced, and functions (Exner, 2003). Thus, the beginning focus of this literature review will lie with RCS development, validity studies, and an exploration of the Cognitive Mediation (CM) cluster of variables. Secondly, Rorschach studies focusing specifically on culturally diverse groups and Native people will be presented. In conclusion, historical and cultural characteristics of Oklahoma Choctaws will be introduced in order to have a fuller understanding of their contemporary experiences.

Rorschach Inkblot Test

Exner (2003) provides a detailed historical accounting of the development for the Rorschach Inkblot Test. He states that the Rorschach Inkblot Test was developed in the 1920s by Hermann Rorschach. Rorschach was a young Swiss psychologist who got the idea from a popular European parlor game that involved making inkblots and telling stories about them. He noticed when playing the game with his schizophrenic patients that the ambiguous images they reported were noticeably different from the images he

and his friends reported during their get-togethers. Rorshach then developed his own cards and sought financial backing from several publishing houses. He was unsuccessful in getting the cards patented.

Hermann Rorshach died before he could get his personality measurements standardized (Exner, 2003). He had been rejected by publishing houses and after his untimely death it was quite by chance that his cards were found and became published. However, he started an entire paradigm in psychology called “projective personality measurement”. Projectives are a simple means of asking a person to project an image(s) from some ambiguous stimulus, thereby eliciting their unconscious thoughts, fears, motives, and fantasies. In the case of the Rorshach, the ten inkblot cards are the ambiguous stimuli.

But, there was still no standardized method or system on which to measure the responses accurately. By the 1960’s there were five American Rorshach systems that were based on Rorshach’s work (Exner, 2003) and while everyone agreed that the inkblots were worthwhile to psychology, it was unsure whose system was the best. Finally, in the late 1960’s John Exner and his Rorschach Workshop began to compile all available systems and pulled the data from the differing systems that appeared to be congruent (Exner, 2003). He established a unified scoring system that is still used in clinical settings. Once a system was in place he compiled a sampling of non-clinical participants in which to norm the Rorshach Comprehensive System (RCS).

The normative data for the RCS was last compiled in 2001 (Exner, 2003). Participants consisted of 300 males and 300 females, with 120 subjects living in five areas of the United States; the Northeast, South, Midwest, Southwest, and West. All of

the subjects were volunteers and had no “significant psychiatric history” (Exner, 2003, pg. 190). The mean age for the group is 31.73, 82% of the subjects are White-Americans and American Indians are not represented amongst participants. 53% of the subjects possessed thirteen to fifteen years of education and 5% reported they had attained under twelve years of education. Participants from the upper socioeconomic level consisted of 9% of the data set, 62% of participants came from a middle socioeconomic level, and 29% came from a lower socioeconomic level (Exner, 2003).

The Rorschach has experienced a wealth of change from its original conception. Today, ten symmetrical inkblots are used in the test (Exner, 2003). They are always the same set of cards but each card is demarcated differently; they are given in a specific order, and are supposed to be kept secret from the public to ensure "spontaneous" answers that give clues to people's personalities (Exner, 2003; pg. 47). There are over 170 variables generated by the RCS (Ritzler, 1996). Later, focus of this study will concentrate on seven of these variables; the Cognitive Mediation (CM) cluster. Along with the changes to the Rorschach, the instrument has undergone controversy. This controversy is largely to due its ability to measure what it is purported to measure.

Validity

Substantial research has been published concerning the validity and diagnostic effectiveness of the Rorschach Comprehensive System. These studies have resulted in a mixture of results and conclusions that have yet to be resolved. It is only through thorough understanding of the complexities and richness of the Rorschach that the ensuing controversy will be lessened. Focus will now turn to construct and concurrent validity with the RCS.

Construct Validity

There are many types of test validity, however, the most important type is considered to be construct validity (Heppner, et.al, 1998). Construct validity is concerned with how well the scores of an assessment (i.e., XA%, WDA%, X-%, S-%, P, X+%, Xu%) depict the desired objective rather than some other concept. For example, the Rorshach Cognitive Mediation (CM) cluster is purported to measure a useful depiction of people, like their ability to accurately perceive and respond to cues around them. If this cluster is only an accurate measure of an individuals' English speaking abilities, then it is only useful as an English language competency instrument or a measurement of acculturation, not reality testing.

According to Anastasi (1982) there are three ways to establish construct validity

- 1) The trait or construct definitions are formulated. These are founded on psychological theory, prior research, or field observations.
- 2) Through factor analysis valid test items are pooled or clustered for their suitability to the construct definition.
- 3) Finally, validation and cross-validation of these scores are compared or contrasted against other measurements.

A variety of studies have produced mixed findings on the validity of the Rorshach. Also, an ongoing controversy over Rorshach validity has taken place for more than sixty-five years (Exner, 2003). This controversy has been a conflict of “intuitive versus empirical, clinical versus experimental, European versus American, and holistic versus atomistic” (Harris Jr., J. 1960, pg. 380). Ultimately, Widiger (2001, pg. 374) reduced the argument to “a fundamental dispute”.

In 1994, Dawes described the instrument as “shoddy”, in terms of validity (pg. 123). In response to Dawes, Irving Weiner defended the psychometric soundness of the

Rorshach. He pointedly argued “those who currently believe the Rorshach is an unscientific or unsound test with limited utility have not read the relevant literature of the last 20 years or having read it, they have not grasped its meaning” (Weiner, 1996, pg. 206). Two meta-analytic studies appear to agree with him. In a meta-analytic study investigating the validity of the Rorshach, Parker et. al (1988) examined 411 Rorshach studies gathered from two journals. The variables of the Rorshach that were included in the study were Lambda, Experience Actual, Affective Ratio, Egocentricity Ratio, and summary scores for form level and for chromatic and achromatic color use. The authors found convergent validity of .46 for the MMPI and .41 for the Rorshach. No statistically significant differences between the two calculations were found.

As a follow-up to Parker’s study, Meyer and Archer (2001) conducted a meta-analytic study using Parker’s same data set. Their results produced similar effect size magnitudes (between .25 and .35) when compared with the MMPI and WAIS. Kumar, et. al (2005) assessed the diagnostic efficacy of the Somatic Inkblot Series-I and the Rorshach. The researchers wanted to determine if the instruments were compatible and capable of distinguishing bipolar (n=50) and depressive (n=50) clinical groups. A control group of non-clinical subjects (n=50) was also included. Results indicated that both instruments were successful at distinguishing the bipolar and depressive groups and both instruments were psychometrically compatible. However, many arguments have been made that the Comprehensive System’s most important constellations and clusters have not been cross-validated (Ganellen, 1996; Meyer & Archer, 1993) or do not match similar constructs of other measurements.

Concurrent validity

Dane (1990) stated that concurrent validity “involves comparing a new measure to an existing valid measure (pg. 258)”. These are measurements that are administered at the same time and if correlated it can be said there is a relationship. For the purpose of this study, reality testing abilities between a sample of non-clinical Oklahoma Choctaws and Exner’s normative sample will be measured. Because of the effects of acculturation it is believed that more traditional Choctaws will differ in their Cognitive Mediation scores from less traditional Oklahoma Choctaws. Less traditional Oklahoma Choctaws will tend to mirror Exner’s sample because of their stronger identification with mainstream American society. Theoretically, the Cognitive Mediation cluster should possess concurrent validity or no variance amongst these Oklahoma Choctaws because Exner’s normative sampling data represents an accurate portrayal of the United States population.

Risher (2004) investigated the concurrent validity of the Rorshach’s SCZI and PTI constellations and the Minnesota Multiphasic Personality Inventory’s psychosis indicators (Sc, Sc3, Sc6, and BIZ) with a Russian sample of 180 psychiatric patients. She also included 3 other diagnostic systems: a) Russian traditional, b) Russian Modified Classification of Diseases, and c) the nonmodified ICD-10. She found some support for the Rorshach’s abilities to detect psychosis but little relationship had been found between the Rorshach and all of the diagnostic systems. However, the MMPI scales were significant with each other and the other instruments. Rorher (2000) hypothesized that a relationship between the Rorchach’s aggression (AG) variable could be established with individuals who had committed acts of aggression. She included 43 adolescents in a

violent offender program and found no relationship with AG and the frequency or severity of the aggressive acts. Goldstein (1998) found a similar finding in her study with aggressive fourteen to seventeen year old inpatients and AG.

Siemsen (1999) investigated the concurrent validity of the Rorshach variables (PER and FC, CF, C, Fr + rF, COP, EA, D, DEPI, X-%, egocentricity index, T, AG, V, MOR, and X+%, and RawSum6), MMPI-2 clinical scales, and the Hare Psychopathy Checklist-Revised. She recruited 71 incarcerated subjects and found a significant relationship amongst inmates with a psychopathic response style (n=23) and the Rorshach variable (PER). A significant relationship was also found for this same group and their tendency to be unable to moderate affect ($FC < CF+C$) as well as their peers. However, no significant relationship was found for the following Rorshach variables: Fr + rF, COP, EA, D, DEPI, X-%, and RawSum6. These results suggest that PER and $FC < CF+C$ can help in understanding and describing the traits of psychopathy but it does not indicate psychopathy.

Ideally, it is important to compare the instrument that requires concurrent validity establishment with a similar instrument that has demonstrated good validity. These three aforementioned studies succeeded in this task. However, each study only found significant relationships between the MMPI and the non-Rorshach instrument. No relationship at a level of significance was found for the Rorshach and the other instruments that measured similar constructs.

Cognitive Mediation (CM)

There are seven variables that make up the CM cluster. They are Form Appropriate—Extended (XA%), Form Appropriate—Common Areas (WDA %),

Distorted Form (X-%), White Space Distortion (S-), Popular responses (P), Conventional Form (X + %), and Unusual Form (Xu%). As acknowledged, Exner theorized that the CM cluster distinguishes a subject's ability to respond and communicate what they are viewing amongst the contours of the blot. This response may or may not be consistent with the proportions of the blot. At one extreme, subjects can be so reliably conventional in their responses that they seldom stray from the most popular responses. At the other extreme, individuals can be so distorted in their perception of the blots that they show no regard for the forms of the inkblot. Both of these response styles may lead to serious liabilities for a client and must be considered against the remaining variables of the summary of scores. Seven variables relevant to perception and conventionality are summarized below.

Form Appropriate—Extended (XA%)

After a thorough research review minimal research was found for Form Appropriate—Extended (XA%). Due to the paucity of research available it is believed by the researcher to be important to investigate this variable further. XA% was introduced in 2003 when Exner elected to adapt the Cognitive Mediation cluster in order to enhance the understanding of client mediation. This calculation is achieved by dividing the sum of responses that have a Form Quality coding of F+, Fo, or Fu (“good form fit” responses) by the number of responses (R) in the protocol (Exner, 2003, pg. 154).

F+ consists of answers that would normally be scored “ordinary” but the response has been improved without violating the feature of the response. Fo are responses in which the respondent has communicated form features which are easily identifiable.

These answers are consistently found in 2% of subjects from the data pool when using W and D areas, or by 50 people in the pool who responded to Dd areas. Fu are answers that tend to be uncommon but are seen quickly by an observer. The basic contours have not been violated and are appropriate.

XA% is a calculation of responses that are viewed as positive and work in conjunction with WDA%. XA% represents an individual's responses to the contours of the inkblot. These responses are viewed as conventional because the individual only used the shape of the inkblot to describe what they see. Exner (2001) stated that Form Quality was worth investigating because individuals under stress or experiencing pathology may or may not maintain an accurate perception of reality.

The calculation for XA% is anticipated to be large and similar to WDA% but WDA% will usually have a superior percentage. However, there are situations in which the converse may occur. Interpretations of the pairing will rely on the calculation of each variable and the extent of the difference between the pair. For example, Exner (2003, pg. 369) stated that if XA% is between .78 to .90 and the value for WDA% is equal to or greater than XA%, this is indicative that mediation is "usually appropriate for the situation", or the subject possesses intact reality testing. When XA% is less than .70 and WDA% is less than .85, it suggests that a tendency toward mediational impairment is somewhat pervasive.

For example, Le (2002) included XA% and WDA% in her Vietnamese sample size of 27. She found a significantly low XA% (.65) and a WDA% of .69. The current norm set by Exner for XA% is .92 and WDA% is set at .94 (2001). The calculation in assessing these two reality testing variables would lead one to assume that Le's highly

educated sample exhibited tendencies toward poor reality testing. However, she believed that her student status, her sample's empathy for her dissertation plight, or a cultural factor of wanting to please her may have led to an increase in the number of overall responses and thus affected her results.

Form Appropriate—Common Areas (WDA %)

As with XA% there is also a dearth of literature available on Form Appropriate—Common Areas (WDA%), which was also introduced in 2003. It works in conjunction with XA% and little can be interpreted about form use and reality testing with this variable alone. Calculations can be derived by dividing the sum of W and D responses with a Form Quality response coded with F+, Fo, and Fu by the sum of W and D responses (Exner, 2003). The value is expected to be significant and similar to XA% but WDA% is expected to have the higher value because it concerns itself with answers given to the most “obvious blot areas” (pg. 154). As with XA%, the percentage of WDA% is taken into consideration and then measured against the size of XA%.

Exner states on pg. 371, that a WDA% falling between .65 and .74 is indicative of serious dysfunction and “reality testing will be noticeably effected”. A WDA% lower than .65 suggests “severe” twists in reality testing and can indicate a “psychotic-like process”. The difference between XA% and WDA% leads to a second source of concern with an individual's everyday functioning. A value difference of .10 or more suggests that impairments will be more noticeable in situations where prompts to mediation are less noticeable. A difference less than .10 can indicate a more global dysfunction that occurs regardless of apparent distal cues.

Distorted Form (X-%)

Distorted Form (X-%) symbolize the percentage of responses that explain a distortion with reality testing. Weiner (1986) stated people with numerous minus responses do not accurately perceive the world as most people do and linked many minus responses to schizophrenia. Scoring is derived by dividing the sum of Form Quality responses not commensurate with the blot features (FQx-) by the number of total responses (Exner, 2003). These are very uncommon responses that violate the contours of the inkblot. For examiners, these responses can be very difficult to see, and frequently impossible to locate. Exner's nonpatient sample possessed minus responses, but the occurrence was relatively infrequent in comparison to those of the schizophrenic reference sample. Exner's (2003) nonpatients displayed an X-% mean of .07 and in the schizophrenic sample (Lambda less than 1.0) the X-% mean was .36. For the schizophrenic sample with a Lambda higher than .99 the X-% mean was .38, or over five standard deviations higher than the nonpatient sample.

Exner (2003) stated an X-% between .15 and .20 is usually sufficient to indicate problems in cognitive mediation and the individual is likely to be exhibiting reality testing impairment. Typically, an average number of minus responses is expected to be from one to three. Records with three to four minus responses can yield an X-% mean from .15 to .20. This appears to be consistent with his 1986 study comparing individuals diagnosed with schizophrenia, schizotypal or borderline personality disorders. The eventual findings for the three groups suggested that all had some difficulty in their cognitive mediational functioning. However, the mean X-% for the borderline sample was .13, .18 for the schizotypal group, and .31 for the schizophrenic group. The

schizophrenic sample averaged more than six minus answers in their records.

Archer and Gordon (1988) found a similar response style in their study amongst 134 adolescent inpatients when comparing those who had been diagnosed with schizophrenia against those who had been diagnosed as depressed. Both groups displayed X-% means that would satisfy Exner's indicator of poor cognitive mediation, However, the schizophrenic group displayed a significant mean of .34. Fong-Hartsfield (2000) included in her Rorschach study sexual offenders who had been diagnosed with schizophrenia and committed rape with offenders who had been diagnosed with schizophrenia but had no sexual component in their crime. The schizophrenic rapists displayed a statistically significant X-% mean of .29 and the schizophrenics with non-sexual crimes had a mean of .17. These results are consistent with her hypothesis that schizophrenic rapists have poorer reality testing than their low violence counterparts.

Interestingly, Exner, et. al (1975) studied 25 individuals prior to elective surgery and post-surgery, along with individuals who had experienced considerable physical problems. They found an elevated X-%, when in combination with an Anatomy or X-ray response. The results of all of these studies seem to imply that difficulties in perception and mediation can be detected by X-% and that stressors such as physical health problems can contribute to this variable being heightened.

White Space Distortion (S-%)

White Space Distortion (S-%) are responses that receive a minus form quality and include the use of white space. There are two ways in which an individual can use the white space area on the inkblots. They can use the white space with another area of the lot or provide a response in which only a white space area is utilized. Some white space

(signified as S which is different from S-%) responses are more frequent than others and there are several examples of appropriate white space use in Exner's Workbook (2001). However, interpretative meaning is made by the location of the response (Exner, 2003). For instance, if they occur in the larger areas of the blot (W or D), this is considered to be much more serious than the smaller Dd areas of the blot.

Some individuals may be likely to provide "all minus responses" for only the first two cards of the Rorschach administration (pg. 375). In such situations, they are not likely to repeat this type of test behavior when readministered the assessment. However, Exner hypothesized that some participants may react to the new situation with negativity. When the individual is responding with a negative style he felt there will be more S responses in subsequent answers to the latter cards. Rorschach (1942) believed that S responses were more prevalent in the odd or inflexible person or in a pessimistic, unorganized schizophrenic person. Exner's (2003) potential findings indicate that an S-% higher than .40, pointed to a need for the examiner to consider specific problems in respondent processing or affect. If the mean value of X-% surpassed .20 and S-% is lesser than .40, poor reality testing was more apt to be the source of an individual's difficulties.

Charles Fonda (1960) presented research that found S to be functional, dysfunctional, and an enduring psychological mechanism for the assessed. Ultimately, he felt that people with a high number of White Space responses do interpret the blots differently from the general public and evidenced this same approach in their everyday functioning. At the opposite end of the continuum, he stated a low number of White Space responses are attributable to behavior that is conventional. Exner introduced the White Space Distortion score in 1993. While there is some empirical research

investigating the meaning of \underline{S} , there appears to be a dearth of research on S-%. One study conducted by Cragolino (2001) with 998 inpatient adolescents, ages twelve to seventeen, did include S-% and found it to be effective in distinguishing psychosis from opposition. She concluded her results by stating her sample seemed to display negative behaviors toward psychological assessment rather than displaying more general feelings of anger and negativism.

Popular responses (P)

Popular (P) responses are answers from the individual that use the most distinct and obvious elements of the blots. Rorshach did not mention Popular responses in his body of work, but he did define them as “Vulgar” responses that occurred at least once in every three records (Rorshach & Oberholzer, 1923). “Vulgar” is a translation from his European linguistic influences of Swiss, Russian, and French and interprets as banal or lacking creativity. He stated that “Vulgar” responses were a reflection of the respondent’s ability to identify and react to obvious shapes of blot contours, or see what others see. Eighty years later, this same theory of the Popular response is upheld by systematizers today (Exner, 2003). Schafer (1954) wrote that interpretative knowledge about a subject’s adaptation, connection with reality, and defenses could be learned from their Popular responses.

In 1993, Exner conducted a study with 7500 protocols. This sample consisted of 2,500 nonschizophrenic outpatients, 2500 inpatient nonschizophrenics, and 2,500 nonpatient adults. Response frequencies were then generated through computer tabulations. Those responses that occurred 2,500 times were designated as popular in the comprehensive system. As a result, 13 Populars emerged (Exner, 1993). Exner (2003,

pg. 279) stated that most people tend to give six to eight Popular responses. Any more such responses (10+) can indicate the individual is taking a conventional or “easy route” in their approach or they are being “obsessive”. Protocols with four or less Popular responses tended to reflect an “inability or unwillingness” on the part of the subject to deliver the most obvious answers. Low responses when taken in consideration of the other Cognitive Mediation variables and the presenting problem can also allude to cognitive difficulties, or reveal an exceptional individual who tends to be unconventional.

It appears that stages across the lifespan can also influence the number of Popular responses. Children at five years of age tend to provide five responses and this steadily increases. At ten, they begin to provide an amount equal to nonpatient adults. However, there have been mixed results in studies examining Popular responses and senior adults (Reichlin, 1984). It has been assumed that due to cognitive decline, reluctance to take risks, or unfamiliarity with test-taking that more aged individual’s Popular response productivity will decline. But, a study conducted by Geertsma (1962) revealed high Popular response loadings with normal senior subjects. Additionally, these results were accomplished with a low number of total responses (R).

Conventional Form (X + %)

Exner (2001) stated that Conventional Form (X+%) is the percentage of all the responses that receive a Form Quality coding of F+ or F₀. These are appropriate responses. An X+% mean more than .85 indicates a great degree of conventionality, no matter what the other variable values indicate. It may also suggest a fixation with social conformity that forfeits individuality. X+% can also be a useful measurement of obsessiveness or perfectionistic tendencies (Exner, 2003). Conversely, X+% with a mean

between .55 and .69 and an $X_u\%$ mean of .20 or greater can indicate that the individual tends to make more decisions that disregard social expectations than the general public. This unique individual can display antisocial tendencies or they may be more autonomous in their mediational processes.

An $X+\%$ less than .55 introduces the interpretive importance of considering $X-\%$. When $X-\%$ is greater than .20, a greater tendency of abnormal behavior patterns in mediational dysfunction will probably be observed. Any orientations toward autonomy and individuality should be avoided in the interpretation. But, these calculations are not suggestive of poor reality testing alone just that the subject does not rely on societal expectations or demands to function. These percentages can contribute to understanding the subjects' presenting problem. Exner (2003) has found $X+\%$ to be a reliable variable with high consistency. It is the only variable within the Rorshach Comprehensive System consistently high with nonpatient children. However, empirical studies have indicated that a low $X+\%$ can lead to interpretative errors with vulnerable populations.

In Dadario's (2002) study, she investigated five Rorshach variables that included $X+\%$. The participants were twelve nonverbal learning disabled individuals (with a mean age = 14.88). Significant differences were found between the participants and Exner's normative sample of age-matched children and adolescents. She then compared her group to Exner's adolescent inpatient schizophrenic sample data and found no statistically significant differences. Based upon these results, Dadario felt this could lead to an increase in false positives and stated that improving conceptualizations and interventions with such a vulnerable group should be explored further.

Locke (1999) found in her study comparing nineteen ADHD diagnosed adults

published norms that X+% was found to be statistically significant. Conclusions were drawn that ADHD adults are different in perception and conventionality and they also run the risk of receiving a false interpretation because of X+% differences. However, Smith, et. al (2002) found an increase in X+% in their study of twenty-two, well-adapted transsexuals who had undergone sexual reassignment surgery. Pre-surgery means for X+% was .50 and the post-operative mean was .62. The authors attributed this spike in Conventional Form to a decrease in X-% and Xu% after the surgical procedure. Smith revealed in her limitations, however, that her sample possessed parents who were supportive of their child's surgical procedure. It is this perceived support or results of receiving sexual reassignment surgery that could partially explain the inconsistency of X+% for this sample.

In identifying severe and pervasive mental illnesses, Exner considers X+% to be a valuable consideration that discriminates nonpatients from more seriously disturbed psychiatric groups (Exner, 1993). The mean X-% for nonpatient children and adults tends to be .78. While those with more serious illnesses, like schizophrenia, are apt to display a mean of .40.

Unusual Form (Xu%)

The last variable of the Cognitive Mediation cluster to be explored is Xu%. The calculations are derived by dividing the number of Form Quality responses coded as unusual by the number of responses for the record (Exner, 2003). These appropriate responses tend to occur with low frequency and can be seen quickly by the examiner (Exner, 2001). The Comprehensive System's non-clinical, normative adult sample has a mean of .07, non-clinical sixteen year olds tend to have a mean range of .15, for five year

olds this is likely to be around .21, and the normative schizophrenic sample has a Xu% between .17 and .21.

The range of Xu% responses can either indicate a departure from conventional behavior or a tendency to accommodate to societal expectancies. So, for interpretive purposes the direction of Xu% in relation to X+% provides useful information about the subject's mediating behavior patterns. An X+% falling between .70 and .85 with a Xu% between .10 and .20 reflects a behavior style that is in accordance with societal expectations. An X+% between .55 and .69 combined with an Xu% of .20 or more reveals a person who is likely to disregard social rules. Finally, when X+% is less than .55 and Xu% is greater than .20, it is likely that mediational dysfunction is occurring and reality testing is poor. Three studies specifically examining Xu% were found in the review of the literature.

Rouslin (1997) included Xu% in his Rorschach study of a group of eating disordered women (n=36) and compared them to nonpsychiatric and clinical samples. He did not find any statistically significant differences in their responses as hypothesized. However, Pinto (1999) found a significantly greater amount of Xu% responses in her study of 50 aggressive and non-aggressive adolescent males. Her subjects, aged thirteen through fifteen, had been identified for disruptive behavior and were compared with Exner's normative, non-clinical sample. Her sample had an average number of unusual responses of 8.67 and the Exner sample had a mean of 3.47 unusual responses. Half of all the responses made by Pinto's sample were identified as unusual or distinctive. These results suggest that Xu% is capable of detecting aggressive tendencies amongst adolescent males.

In an effort to explore common characteristics of seven, self-described psychic channelers, Dawson (1997) found an Xu% mean ranging from .26 to .50. The X+% mean for her group ranged from .37 to .67. The results were attributed to her subjects' creativity, abilities to accommodate to regression, and likelihood to be unconventional. However, this small, non-clinical sample could also be prone to diagnostic interpretations indicating antisocial or non-conformist tendencies, and worse, poor reality testing when considering Xu% and X+% alone. When Dawson included their Popular mean responses (over 8), the clinical picture revealed that the channelers were able to respond in a conventional manner.

Rorshach Across Cultures

Opinions vary on the validity of the RCS with diverse populations. Some suggest the Rorshach is valid across cultures (Presley, et. al, 2001, Viglione, D. 1999) and others suggest it is necessary to provide norms across cultures (Giancola, J., 1997; Boscan, D., 2000; and Silva & Campos, 2000). Ritzler (1996) sums it up best by stating “unfortunately, very little research has been done on the Rorshach to test its validity as a method sensitive to multicultural issues (pg. 126).” A literature review examining the validity of the Rorshach with adults of differing ethnicities has revealed the following studies.

In Presley's et. al (2001) research Exner's normative data was matched with African-Americans in regard to age, sex, education and socio-economic status. He solicited 700 subjects aged from nineteen to seventy-years-old. Little significant differences were found on twenty-three dependent variables with exception to a lower frequency of cooperative movement for the African-American sample.

Gowri's (2000) study found that slight cultural variations did exist in Rorschach responses. They researched two groups consisting of first generation Asian Indians (n=49) and European Americans (n=35). Although, there were no significant differences in response productivity, Asian-Indians did display evidence of a slight cultural variation in their ability to simplify their responses.

Bourguignon and Westerkamm-Nett (1955) using Klopfer's scoring systems with Haitian (n=36), Chamorro (n=30), and Saulteaux (n=102) samples found significant differences between samples with popular responses. They found support for three types of P responses: (1) Populars selected with high frequency for a particular sample group. (2) Populars reported with high frequency amongst similar ethnic sample groups. (3) Populars reported with high frequency amongst all cultures.

Singh, et. al (2005) sampled one hundred Asian Indian subjects against Samuel Beck's normative data. Their healthy sample ranged in age from eighteen to fifty years. The authors found not only an inconsistency with their sample's results and those of other Asian Indian studies but statistically significant differences between Beck's normative data. These results were linked to cultural differences.

Boscan (2000) conducted a Rorschach study with one hundred and one students at a university in Mexico. Test directions and administration were given in Spanish. These responses were compared with Exner's normative sample and data compiled from Chile, Spain, and Venezuela. She found that her Mexican and South American samples produced similar results with each other but in comparison to the Exner sample there were significant differences. Mean calculations for four variables relevant to this study revealed large differences ($p=.001$): X+% (Mexican= .46; Exner= .79), X-% (Mexican=

.30; Exner mean= .07), Xu% (Mexican= .21; Exner= .14), and Popular (Mexican= 4.96; Exner= 6.89). XA% and WDA% were not included in the study and S-% was not significant. Boscan noted a small sample size as a limitation, however, she applied conservative statistical applications. These results are striking and present unique challenges to multicultural Rorschach assessment.

Rorschach and Indigenous North Americans

As mentioned, validity of the Rorschach has long been a debate, this debate has extended to its use with the culturally diverse (Moon and Cundick, 1983; and Frank, G., 1992). The Rorschach remains popular despite controversy and is currently used with Native clients. A literature review revealed eight studies on Indigenous people and the Rorschach. However, only one of these studies was conducted in the past three decades. Rorschach validity with Native people is nonexistent and the combined affects of acculturation is not fully understood. These two matters will now be the focus of attention.

Thompson (1951) studied one thousand school-aged children from eleven communities representing three Southwestern tribes. The authors wanted to examine group perception patterns (Erfassungstyp) with the Rorschach and other personality tests. Each tribe displayed distinct ways of responding to the blots with slight variations within each tribe. With the Ta'hono O'Odom responses there was a tendency to see the blots as vague wholes with little symmetry of component parts. Navajos tended to emphasize large, obvious details; however, this ability changed with differing levels of acculturation. Acculturated children were apt to pay more attention to less obvious and unusual details than their less acculturated counterparts. Finally, Hopi's tended to approach problems as

complex, balanced wholes. In comparison to the other two groups the Hopi responses revealed these children were more inclined to concern themselves with more creative perceptions than affective.

She also identified problem solving differences between and within tribes. Findings of her study revealed that traditional Natives tend to focus more on obvious, large, whole responses than their more assimilated counterparts. Although Thompson provided detailed information on Rorshach differences amongst Southwestern American Indian acculturation levels there are several limitations to the study. She is an anthropologist and not a psychologist trained to administer personality measurements and her study was conducted in 1951. Thompson did not reveal statistical or inter-rater reliability computations. However, she voiced the need for Southwestern tribes to have more autonomy in solving their problems “in their own way” (Thompson, 1951, pg 263).

In another study, Kaplan, et. al (1955) attempted to sort Rorshach records from four cultures. The groups consisted of 116 Mormon, Navajo, Zuni, and Spanish-American people; veterans and non-veterans. Two clinicians with Rorshach experience performed the sorting. A third was made with the use of discriminant function analysis. Six protocols were then randomly chosen from the veteran’s Rorshach protocols and paired with an experimenter who had limited knowledge of Zuni and Navajo culture.

Another six protocols were selected that were well-known (subjects knew the sorters) from the Zuni group. In this second grouping the experienced clinician knew and had contact with the Zuni and Navajo culture. Analysis of variance and chi-square tests were employed to generate pair-wise comparisons and a discriminant function analysis. In 48 cultural comparisons there were 13 pairs that met the .05 level of confidence.

Cultural variability was found in 5 Rorshach variables (FC, CF, T/R, FC', and m).

Interestingly, the researcher with little knowledge of Zuni and Navajo culture was unsuccessful in her attempts to sort the protocols according to cultural group. The second experimenter with knowledge was successful in her attempts. She sorted 13 out of 24 Rorshachs correctly, 10.2 hits were the required minimum. This study was conducted by anthropologists, the scoring system is unknown, and the research is fifty years old. Even so, findings concluded that cultural differences could be observed based on group response styles. In addition, examiner familiarity with participants appears to correlate with an increased awareness of Rorshach patterns.

Preston (1964) was interested in using assessments with a group of "non-literate" people (pg. 327). She sampled 140 Alaska Native people with the Rorshach, Thematic Apperception Test, Draw-A-Person Test, and three of the Wechsler-Bellevue Intelligence subscales. Results revealed a low R (Alaska Native mean= 12 responses). Participants displayed a higher rejection rate of the last five cards versus the first five cards. Over 75 percent of the responses contained humans, animals, and anatomy, but not human beings and animals alone. Typically, response styles contained less than two color or movement responses and were form dominated. This study has some strengths and limitations. Tables of results were provided but her method of deriving statistical computations is unknown, and this study is forty one years old. Preston is a trained psychologist.

With an interest in examining Tuscarora Natives, Wallace (1952) sampled 70 adult participants using the Klopfer scoring method. Rorshach variables included in this study were: R, F+%, M: sum C, W, D, d, Dd, S, M, FM, m, k, K, FK F, Fc, c, C', FC, CF, and C. His results indicated that Tuscaroras scored similarly to a White-American

sample. Exceptions were a high W% (71.2% of the responses; mean=9 responses), this was accompanied by a D and d percent of 22.8% and .8%, respectively. The introversion-extroversion balance (1.7:1.3) was equivalent and mean responses for R was slightly under the amount necessary for a valid profile (12.5). This study was limited by reliance on means and standard deviations to explain the variance. Wallace is an anthropologist and this study is fifty three years old. Also, Wallace stated that he “blindly” passed his Rorshach interpretations on to another scorer for “congruence” (pg. 70) but provided no results.

Boyer, et. al (1983) in their longitudinal study examined the Rorshach protocols of three Apache brothers and their parents. The purpose of the study was to explore the test-retest reliability with a Native family over a ten-year period. The family was chosen by random sampling procedures. They were among seven families who had also been chosen for the study. A Rorshach had previously been administered to the young boys and their parents; ten years later they were administered another Rorshach. Findings indicated that shifts in response style did occur. For two brothers, when reaching adolescence, the participants showed moves toward a less optimistic style of dealing with their environment. Another brother displayed that he had moved away from the human environment altogether (H=0).

The consistent characteristic found with the family was a tendency to be passive and an inclination to make responses that “constrict and become dull and unimaginative” (pg. 126). This research is different than the aforementioned studies in that it is revealing one family’s responses to the Rorshach over time. The researchers are a psychiatrist, psychologist, and an anthropologist. The Modified Klopfer and DeVos

Symbolic Affective Scoring systems were used to score the protocols. It was not clear what statistical methods were used for the analysis. Also, there was no stated method of inter-rater reliability. Results were not shared about the other families in this study.

Finally, Dana, et. al (1986) issued a caution and call to field professionals after his Rorschach research with 12 Rosebud Sioux revealed that it is difficult to distinguish protocols even with prior familiarity of the assessee. He presented six judges who lived on the Rosebud Sioux reservation with the protocols of twelve Rosebud Sioux residents. His premise was that “identifiable personality descriptions” would emerge that the six judges could use to distinguish which protocol belonged to whom (pg. 1). Only two judges were successful in this endeavor. He concluded that his instruments (i.e., Rorschach, Millon Clinical Multiaxial Inventory, and 16 Personality Factor) needed to be normed at the local and tribal level and instrument interpretation needed to be made in caution until norms were provided. Dana’s study is unique because it is a replication of a previous sorting study that used White-American judges (with Rorschach experience) with Native Rorschach protocols. His study is limited because the judges in this study were not familiar with personality assessments and may not value such devices.

Acculturation

There are several factors that potentially influence the Rorschach scores of a Native person. For instance, demography characteristics (i.e., socio-economic status, gender, age), values, and history are all possible contributors to a client’s response style (Dillard & Manson, 2000). Another important variable to consider is the impact of acculturation. Atkinson, et. al (1993, pg. 10) define acculturation as “cultural assimilation or the acquisition of the cultural patterns of the core or dominant society”.

From an Indigenous perspective, Choney, et. al (1995) explained acculturation as the extent to which a person assumes and holds onto both dominant culture values and tribal culture values.

According to LaFromboise, Trimble, and Mohatt (1990) American Indian acculturation levels consist of traditional, transitional, bicultural, and assimilated. Traditional is defined as “those who generally speak and think in their native language; they practice only traditional beliefs and values” (p. 641). They include those who generally speak both their Native language and English, but do not fully accept their cultural heritage or mainstream culture as transitional. Bicultural are those who are accepted by the dominant society and their Native affiliation, they know and accept their cultural heritage and that of mainstream society. Lastly, assimilated is defined as “those who are generally accepted by the dominant society; they embrace only mainstream culture” (p. 643).

Although acculturation is an important assessment consideration, there is no clear determinant of who is Native and who is not. Most cultural identification is determined on an individual basis. Also, choosing to acculturate into mainstream society is neither a good nor bad thing. Some studies have included the influence of acculturation upon Native Rorschach responses. In research that investigated the effects of acculturation and the Rorschach, Kaplan (1955) assessed 116 individuals ranging in age from 18 to 40.

Fifty-two veteran and non-veteran participants were Zuni, 20 were Mormon, 20 were Spanish-American, and 24 were Navajo. Veteran status was assumed to be a symbol of those with higher levels of acculturation into the dominant society. Interpreters were made available for non-English speaking participants. Analysis of

variance computations were used on eight Rorschach variables W, F%, A%, M, R, FC, CF, and T/R across all levels. Significant differences were found ($p=.05$) on M and FC between veterans and non-veterans. As hypothesized, R was greater for veterans and the Navajo group displayed fewer M and R responses compared to the Mormon group, but neither observation was at a level of significance. The type of Rorschach scoring system was not mentioned. However, the study had a fair amount of participants ($n = 116$) and the research team consisted of men and women.

Boyer (1988) tested the responses of two separate Apache tribes in the Southwest United States from protocols he collected from 1959-1960. The Mescalero Apaches had undergone a slower acculturation process by being placed on reservations while the Chiricahua Apaches had been placed into captivity. He was interested in describing the effects of acculturation between the similar tribes. Protocols were administered to 26 Mescaleros (average age 66 years) and 22 Chiricahuas (average age 61 years) using the Klopfer method. Significant differences were found on six variables: R ($p=.05$), F ($p=.01$), Fc ($p=.05$), FC ($p=.02$), A ($p=.05$), and D ($p=.10$).

The results indicated that Chiricahuas tended to gravitate more to large details of the blots while the Mescaleros gave more whole card or detail oriented responses. Chiricahuas were apt to view the world in a realistic way while the Mescaleros were likely to deal with the world in a magical manner. The author concluded that Mescaleros had maintained their cultural identity and the Chiricahua response style resembled those of White-Americans. The small sample size is a limitation and may not be generalizable. Also, it is not known what statistical methods were used to calculate the comparisons. Boyer is a psychiatrist. He achieved inter-rater reliability by having his friend Dr. Bruno

Klopfer sort the protocols into their appropriate group.

Oklahoma Choctaws

Indigenous people that were in what was formerly known as Indian Territory before 1889 include the Wichita-Caddo, Comanche, Apache, and Kiowa (Foreman, G., 1933). Opportunistic ventures brought about Oklahoma statehood, land run lotteries, and began the forced removals of tribes from the southeastern part of the United States in the latter 1800's. Tribes that emerged on the early Oklahoma landscape included Choctaws from the Mississippi region (Hyde, G., 1962). They were removed through the process of questionable treaty-making strategies of the United States (Foreman, G., 1966). The tribe exists today along with 39 other tribes (Foreman, G., 1934). The following narrative will respectfully detail some historical events and capture unique characteristics of Oklahoma Choctaws. Many commonalities are shared amongst Native people. However, it should be noted that there are over 500 nations, tribes, bands, villages, and pueblos within the United States. Each of these Native units are distinct.

Although many years have passed since initial European contact, the results of European colonization and encroachment have had lasting consequences in the psychological and physical livelihoods of American Indians (Duran, E. & Duran, B, 1995). Tribes are still treated as conquered nations even though a nation to nation status guarantees sovereignty. Tribal nations must either assimilate, risk mismanagement, or termination (Trimble, 1988). The outcome for some of losing their land base and culture has been unresolved grief, anger, pain, and loneliness which transmits from one generation to the next (Montgomery, et. al, 2000). Cultural loss today is accomplished by business practices, federal policy-making, and education practices such as residential

boarding schools (Dana, 1993). Not only are these acts discouraging, but compared to other American ethnicities, Native people appear to be struggling considerably more (Herring, R., 1994; Vick, Smith, & Iron Rope-Herrera, 1998). Some feel it is these interactions with the majority culture that are being measured on psychological measurements (Trimble, J., 1988; Dana, 1988).

It should also be noted that core strengths and resiliency still exist. Montgomery et. al, (2000) and Long and Nelson (1999) found that the extended family continues to play a major role in the lives of the young. Maintenance of cultural traditions plays a significant role in resiliency and protective factors amongst Native people (Walters, K. & Simoni, J., 2002). Cultural traditions can include and are not limited to: interdependence amongst the core and extended family (Napholz, L., 2000), use of humor (Herring, R. & Meggert, S., 1994), and sharing (Garrett, J. & Garrett, M. 1994). These aforementioned factors also extend to Oklahoma Choctaws.

The term “Mississippian” is used to describe the Indigenous populations that lived along the Mississippi and southeastern corner of the United States, after A.D. 1000 (Haag & Willis, 2001, pg. 242). These tribes included *Chahta* or modern day Choctaws. A popular origin story maintains that Choctaws and Chickasaws had once lived in the East and their leaders were two brothers named Chahta and Chicksa. The brothers led their people on a journey because a holy man had received a vision in which a sacred pole was to be placed in the ground and where the pole leaned the next morning was the direction to head. Wherever the pole stayed upright they were to make a home. However, a disagreement between the brothers caused a split between the people. This journey ultimately ended in the southeastern area of the United States (Kidwell, 1995).

Communities were structured according to three districts and each district possessed their own *miko* or chief. Choctaws are matrilineal and children are born into their mother's *iksa* or clan and could not marry within their clan. The tribe relied on the resources of the land for food and eventually began to trade products with French fur traders. It was common for marriages to take place with the French. The first contact with European explorers is estimated to be during the mid-sixteenth century with explorers like DeSoto, DeLuna, and Pardo (Haag & Willis, 2001). The conquistadors were mostly interested in finding gold for Spain and claiming land. Their initial contact brought little discomfort to Choctaws but subsequent contacts from Europeans introduced new diseases and the population size decreased. Also, Choctaw trade with Europeans began to slowly deteriorate and what had once been viewed as a positive exchange resulted in debt for Choctaws. European-American outcry demanded that land be ceded in exchange for this debt (Kidwell, 1995).

Oklahoma Choctaws were first removed from their homelands during Andrew Jackson's campaign called the Indian Removal Act of 1830 (Debo, A., 1973). Tribes were allotted parcels of land in Oklahoma after the settlers and railroad developers had first received their pick of the choicest land. It was soon realized that oil was also on the allotted lands of the American Indian individuals as well. Profiteers who had begun to inhabit the territory continued the hoarding of allotments in ensuing years through coercive, manipulative, and many times deadly means. Whole, intact families were murdered so that allotments would be granted (Debo, A. 1973). Some of these allotments are still owned by Oklahoma Choctaws today but a vast majority of Oklahoma Choctaws no longer possess the lands of their ancestors.

Today, the districts of the Choctaw Nation of Oklahoma span more than seven million acres. The Nation is located in the southeastern corner of Oklahoma and is divided into twelve political regions. According to the Choctaw Nation website (2005), there are more than 158,774 enrolled members, of which one third live in Oklahoma. A tripartite government is led by the chief, assistant chief, and twelve council members who represent ten and a half districts. There is also a tribal council, tribal court, and tribal police. Since 1978, the tribe's base has risen from 75 employees to over 5,600. The Choctaw Nation is the leading employer of Southeastern Oklahoma. Tribal assets exceed more than \$150 million dollars a year and the tribe produces the highest percentage (13.3) of Native college graduates. Recently, the Choctaw Nation opened a \$22 million hospital, debt free, using its own resources.

The Choctaw Nation of Oklahoma uses gaming dollars to fund programs such as building roads, higher education, Labor Day festival events, cultural activities, Summer Youth employment, senior Choctaw assistance, and more (Bishinik, Jan, 2005). However, budget cuts at the federal level have led to the termination of programs like Adult Education which is now funded by the tribe. They have also been able to expand the scholarship program with an additional \$4 million per year (Bishinik, Mar, 2005). Choctaw language classes are provided free of charge on the Internet in an interactive format and taught in many communities by teachers certified by the tribe. Annual events like the Labor Day Festival at Tuskahoma, Oklahoma are where people can learn traditional Choctaw stories, make native dishes and clothing, or learn Choctaw-specific silver-smithing (Bishinik, Apr, 2005).

The following demographics (i.e., population, age, racial identity, household size,

education level, and income level) for the entire population within the Choctaw Nation boundaries are provided below (U.S. Census, 2000). The region of the Choctaw Nation is largely rural with an estimated population of 224, 471 inhabitants. Females comprise 50.53 percent of the population and males comprise of 49.46 percent. The median age is 37.5 and 74.29 percent of the population is over the age of eighteen. 94.7 percent identify as one race, 75.53 percent identify as White alone, 13.88 percent identify as American Indian alone, and 5.3 percent identify as two or more races.

21.38 percent of households are married, 22.25 percent of households include at least one child. 27.81 percent of households include a person who is sixty five years or older, 12.48 percent of sixty five years or older individuals live alone. The average household has 2.51 members, the average family size is 3.00. Per capita income in 1999 dollars for this area; the state average is 17,646; the national average is 44,389. For the population twenty five years and older within the Choctaw Nation boundaries, 11.11 percent have less than a high school diploma, 70.75 percent have a high school diploma, and 11.79% have a bachelor's degree or higher. The state average is 13.3, 80.6, and 20.3 percent, respectively. The national average is 12.9, 80.4, and 24.4 percent, respectively.

Literature Review Conclusions

A literature review of past Rorschach examinations with American Indians has revealed outdated research. With exception to Preston's tuberculosis sample, most data were derived from non-clinical samples. Much of the research has been conducted by anthropologists probably because of their easy access to the Native communities they were working in at the time. But what training they have received in Rorschach

administration, scoring, and interpretation is often unknown. Statistical analysis methods have not been rigorous, there has been minimal inter-rater reliability, and Rorschach scoring methods have not included Exner's scoring system.

No research has been conducted to assess the validity of the Rorschach with Native people and no such studies have taken place in Oklahoma. To date, there has not been any research conducted with the Rorschach by a Native administrator in Oklahoma. Past research appears to focus on a primitive notion of Native people (Boyer, Boyce, Brawer, Kawai, & Klopfer, 1964; Klopfer, B., & Boyer, L., 1961; and Hallowell, A., 1941). It is sensible to consider the effects of acculturation and modernize our current thoughts and practices about Indigenous people and their response styles on the Rorschach. This is especially important with culturally loaded constructs like language, perception, behavior, and values. The lack of literature supports that Oklahoma Choctaws need to be included in the body of research focusing on the Rorschach's Cognitive Mediation cluster.

CHAPTER III

METHODOLOGY

Participants

This study utilized sixty Oklahoma Choctaw volunteers who signed an informed consent at tribal gatherings of people who self-identified they are Oklahoma Choctaw. Self-identified Oklahoma Choctaws were asked to participate because Rorschach research specifically focusing on this tribe had not occurred. Currently, the Rorschach Inkblot Test is being used in tribal mental health facilities. Solicitation of participants occurred at Native churches, tribe-sponsored activities, tribal offices and businesses. Many Oklahoma Choctaw continue to gather within the Choctaw Nation area to participate in these activities or conduct their business. These events were chosen because it was expected that participants from all representative levels of acculturation, education, socio-economic status, and religious affiliation would be in attendance.

Instruments

The Demographic Sheet. This was used to ascertain age, state of residence, marital status, socio-economic status, religious affiliation, date of administration, blood quantum, and level of education. Results from the demographic sheet provided insight into how the participants function in the mainstream and Oklahoma Choctaw culture.

Native American Acculturation Scale. The Native American Acculturation Scale (NAAS) was developed to assess the areas of cognition, behavior, and attitudes of Native

cultural development along a range from traditional to assimilated orientations. It has been adapted from two acculturation scales; the Acculturation Rating Scale for Mexican-Americans (ARSMA; Cuellar, Harris, & Jasso, 1980) and the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA; Suinn et al., 1992). The ARMSA has established internal reliability with a coefficient alpha of .88 for adult males and females (N = 134) and an alpha of .81 for a clinical sample of adult males and females (N = 88). The SL-ASIA is an adaptation of the ARMSA and has established an alpha coefficient of .88 (N = 82). The NAAS elicits scores along three levels of Native acculturation: Traditional, Bicultural, and Assimilated (NAAS; Garrett, M., 1996).

Traditionals are defined as people who have maintained their cultural heritage. Bicultural people tend to feel comfortable working and living amongst the dominant culture and their traditional culture. Assimilated would represent those people who do not identify with their American Indian heritage and have not maintained any ties to it. The NAAS can be administered individually and was produced at a ninth-grade reading level. The measurement has 20 multiple-choice items that evaluates language (5 items), identity (2 items), friendships (3 items), behaviors (4 items), generational and geographical background (5 items), and attitudes (1 item).

An overall score is attained and divided by 20, this computation represents the individual's level of acculturation on a 1 to 5 point scale. Mean scores of 1.00, indicate low acculturation (or high Native American identity) into White society. A mean score of 3.00 indicates a bicultural orientation and a mean score of 5.00 indicates high acculturation (or high mainstream American identity). This scale was chosen because was believed to capture the varying levels of acculturation that currently exist among

Oklahoma Choctaws.

Garrett (NAAS; Garrett, M., 1996) used the instrument in his study of 139 high school students in North Carolina and found a reliability coefficient of .91. He solicited cut-off scores from area organizations, such as: Indian Health Services, The Native American Research and Training Center, Parent Connection, and the University of North Carolina at Pembroke. Research on this instrument is sparse because it is newly developed but it was used in a study to develop another scale examining core beliefs of Native people. The Core-Belief Scale for American Indians (CBS-AI; Miville, et. al, 2003) was designed and the NAAS was included in the study to explore the relationship of Native participants' core beliefs and their levels of acculturation. Factor analysis results found that participants who demonstrated more traditional ties with an Indigenous culture perceived or encountered higher rates of betrayal and mistrust. Traditional people also possessed higher levels of spiritual beliefs

Rorschach Inkblot Test. This study used the Exner Comprehensive System (2003). Exner presents retest correlations on 25 variables ranging from .23 to .90 after a 3-year period and from .26 to .91 after a 1-year period. Temporal stability was found to be high in the measurement of traits and moderately high in situational variables. The instrument has long been debated, but concurrent and construct validity has been studied for each variable and clusters (Exner, 2003). The Rorschach Inkblot Test was used as the central instrument in this study because it is widely utilized and has questionable validity with culturally diverse people. To date, there have been no studies on Rorschach validity with Oklahoma Natives. Scores on the Rorschach served as dependent variables. Seven Rorschach variables were submitted to statistical tests. These variables include: Form

Appropriate—Extended (XA%), Form Appropriate—Common Areas (WDA %), Distorted Form (X-%), White Space Distortion (S-), Popular responses (P), Conventional Form (X + %), and Unusual Form (Xu%).

The Rorshach Comprehensive System (RCS) was developed in 1974 in response to the increasingly complicated task of determining best use of the Rorshach given the existence of numerous, complex methods of Rorshach analysis. Deciding which system to use has been a source of debate since all five systems have their merits and limitations. It was Exner's goal to develop one consistent, standardized approach to Rorshach administration, coding, and interpretation. Past research findings have found that the RCS possesses interrater reliabilities of .80 to over .90 (Exner, 1993, pg. 138; Weiner, 1998). Validity data with the Comprehensive System has also revealed strong temporal consistency for scoring categories with children and adults. In one investigation, core variables ranging from .70 to over .80 retest stability coefficients were found in nonpatient adults (n=100) reexamined after three years (Exner & Weiner, 1995, pp. 21-27). The Rorshach Inkblot Test is typically administered by a Ph.D level student and such a person tends to have sat in a personality measurement class where they were taught and supervised to a modest level of proficiency.

All Rorshach protocols were scored by the researcher who was an advanced Counseling Psychology doctoral candidate of Oklahoma Choctaw descent. Interrater reliability was achieved with the assistance of another advanced Counseling Psychology graduate student from the same program. Twenty protocols were randomly selected and re-scored by the student assisting the lead researcher. The level of interrater agreement was calculated using percentage of agreement. The Rorshach Inkblot Test has been

utilized by the Choctaw and Cherokee Nations of Oklahoma in their Behavioral and Mental Health facilities; as well as the Eastern Band of Cherokees mental health facilities.

The Rorshach is used as a measurement of personality because of its unique ability to measure unconscious cognition and behavior patterns, for instance, fears, motives, and fantasies. The current project consisted of using the Exner scoring method. Ten cards with standardized ink blots were responded to by participants. Clinical scales on the Rorshach are thought to parallel highly with particular mental disorders, i.e., depression, anxiety, and schizophrenia (Exner, 2003).

Statistical Analysis

In order to assess RCS validity amongst Oklahoma Choctaws, multiple regression analysis was used to explore the relationship between the dependent variables (XA%, WDA%, X-%, S-%, P, X+%, and Xu%) and acculturation levels (traditional, bicultural, and acculturated). The protocols (60) were administered and scored on a computer using statistical software (SPSS). To attain interscorer reliability another examiner randomly scored twenty protocols independently and compared these twenty against the first calculations.

Procedure

Institutional Review Board (IRB) approval for this study was obtained at Oklahoma State University. The sample recruitment procedure took place in southeastern Oklahoma. Prior to gathering research permission from tribal programming directors and leaders was granted to the lead researcher at various gatherings of Oklahoma Choctaws. The lead researcher provided directors and leaders with a summary

of the research and potential benefits. Potential participants were invited by the lead researcher through direct contact to participate at tribal events. This sample consisted of 60 volunteers who self-identified as adult Oklahoma Choctaws.

After the informed consent was received from the participants it was placed in a separate envelope in order to maintain confidentiality. A script read verbatim was then initiated during the individual testing session. Through informed consent participants were informed about the nature of the research, their rights regarding participation, and that they may withdraw from the study at any time. Participants were told their responses to all of the instruments would be held confidentially and would not affect their programming services. The following script was read. "Hello, my name is Deana Williams and I am a doctoral student at Oklahoma State University's Counseling Psychology program. I am doing research on the Rorschach Inkblot Test and Oklahoma Choctaws and would like your helpful participation in this study.

I believe this study will be helpful in producing a fuller understanding of Oklahoma Choctaws and their current emotional, mental, and behavioral experiences and needs. This procedure will take about one hour, it is completely voluntary, and your information will be kept private. At any time you are free to stop participating. Should you feel even slightly distressed I can help give you information about counseling services available to you. You are free to contact me or the Internal Review Board Chair; her name is Sue Jacobs. Thank you for taking the time to participate."

Participants who agreed to be in the study were then administered a packet of materials containing a consent form, demographic sheet, Rorschach Inkblot Test protocol, the Native American Acculturation Scale (NAAS), and available counseling resources.

In order to disburse any variance due to the order of completion packets were counterbalanced. The researcher sat at a table in the vicinity of the event and would solicit participants. Testing took place in a room adjacent to where the tribal event was occurring. All tests were administered individually by the lead researcher. All materials were written and read in English. Referrals to area Indian Health Service and non-Native agencies were made available should any signs of mental distress become known to the lead researcher. The average age for the Oklahoma Choctaw sample was 38.5 and the average amount of education was reported at slightly more than high school level. Average age for the Exner sample is 31.73 and education level is 13.43.

Research Hypotheses

1. It was hypothesized that there would be a positive relationship between XA%, WDA%, P, and X+% and acculturation scores and an inverse relationship between X-%, Xu%, and S- and acculturation scores for the Oklahoma Choctaw sample.
2. It was hypothesized that the Oklahoma Choctaw sample would have significantly lower XA%, WDA%, P, and X+% scores and significantly higher X-%, Xu%, and S- scores than Exner's normative population.

To answer these questions a Pearson correlational analyses was conducted to explore the bivariate relationships among the main study variables.

CHAPTER IV

RESULTS

The purpose of this study was to predict the acculturation scores of Oklahoma Choctaws based on their Cognitive Mediation scores and to examine the differences between Oklahoma Choctaws (N=60) and Exner's Rorschach Comprehensive System sample (N=600) using seven of the Rorschach Inkblot Test variables that comprise the Cognitive Mediation cluster. This chapter reports the regression results (Table 1), correlation matrix for all variables of interest (Table 2), means and standard deviations of the independent variables (Table 3), t-tests (Table 4), and percentage of agreement for inter-rater reliability (Table 5). The null hypothesis and results of the analysis will be presented throughout the course of this chapter with the appropriate research hypothesis.

Research Questions, Associated Hypotheses and Results of Analyses

Research Question 1: What is the relationship between Rorschach Cognitive Mediation variables and acculturation scores?

Research Hypothesis 1: It is hypothesized that there is a positive relationship between XA%, WDA%, P, and X+% and acculturation scores and an inverse relationship between X-%, Xu%, and S-% and acculturation scores for the Choctaw sample.

Null Hypothesis 1: There is no relationship between Cognitive Mediation scores and scores on the Native American Acculturation Scale. In order to test this null hypothesis a multiple regression analysis was conducted with follow-up Pearson Product Moment

Correlations.

Test of Hypothesis 1

It was predicted that there would be a significant relationship between Cognitive Mediation scores on the Rorshach Inkblot Test and scores on the Native American Acculturation Test. More specifically, the hypothesis stated there would be a positive relationship between XA%, WDA%, P, and X+% and acculturation scores and an inverse relationship between X-%, Xu%, and S-% and acculturation scores for the Choctaw sample according to levels of acculturation. In order to test this hypothesis a multiple regression analysis with follow-up Pearson correlations were conducted. As can be seen from Table 1, results concluded that there is no relationship between XA%, WDA%, X-%, S-%, P, X+%, or Xu% and acculturation ($R^2 .05$; $p=.92$). Follow up Pearson correlations were conducted for each variable of the Cognitive Mediation cluster and acculturation scores and as can be seen from Table 2, none of these correlations were significant.

Table 1

Beta Weightings, t values, and Significance Level for Multiple Regression Analysis

Variable	Beta	t	Sig.
Cognitive Mediation			
XA	.04	.14	.89
WDA	.02	.09	.93
X-	-.17	-.52	.61
S-	.18	1.15	.25
P	-.18	-1.07	.29
X+	-.005	-.02	.99
Xu	-.04	-.18	.86

Table 2

Pearson Product Moment Correlation Matrix of Oklahoma Choctaw (N=60)
Acculturation and Cognitive Mediation Scores

	XA	WDA	X-	S-	P	X+	Xu	ACC
XA	1.0							
WDA	.55(**)	1.0						
X-	-.80(**)	-.72(**)	1.0					
S-	-.35(**)	-.11	.37(**)	1.0				
P	.42(**)	.48(**)	-.54(**)	-.13	1.0			
X+	.55(**)	.64(**)	-.76(**)	-.22(*)	.58(**)	1.0		
Xu	.37(**)	.18	-.15	-.03	-.05	-.32(**)	1.0	
ACC	.03	.05	-.04	.12	-.09	.03	.01	1.0

** Correlation is significant at the 0.01 level (1-tailed).

* Correlation is significant at the 0.05 level (1-tailed).

Test of Hypothesis 2

Research Question 2: What is the difference between scores on the Rorschach Cognitive Mediation variables between the Oklahoma Choctaw sample and Exner's normative sample?

Research Hypothesis 2: It is hypothesized that the Choctaw sample will have a significantly lower XA%, WDA%, P, and X+% scores and significantly higher X-%, Xu%, and S-% scores than Exner's normative population.

Null Hypothesis 2: There is no difference between Exner's normative sample and Oklahoma Choctaws in their Cognitive Mediation scores.

In order to test this hypothesis a series of single sample t-tests were conducted comparing the results of the present study to Exner's normative sample for each of the seven variables, which comprise the Cognitive Mediation cluster. Specifically, it was hypothesized that the Oklahoma Choctaw sample would have a significantly lower XA%, WDA%, P, and X+% scores and significantly higher X-%, Xu%, and S-% scores than Exner's normative population. One sample t-tests, as illustrated in Table 3, revealed significant differences amongst all variables except S-% and Xu%. Exner's normative sample possesses a mean of .92 for XA%, the Oklahoma Choctaw mean is .65 ($p < .000$). The standard deviation for the normative sample is .06 and placed the Oklahoma Choctaw mean four standard deviations below the mean. WDA% mean for the normative sample is .94 while the Oklahoma Choctaw mean is .69, four standard deviations below the mean. Frequency distribution for all variables were visually examined and found to be normally distributed. S-% was positively skewed and exhibited a J distribution.

X-% has a normative sample mean of .07; the Choctaw mean is .33 or three standard deviations above the mean. No significant differences were found between the two sample means for S-% and Exner has found this particular variable to be "unreliable or misleading" (2001, pg. 186). A mean of 4.95 for Popularity was found for the Oklahoma Choctaw sample. The Exner sample has a mean of 6.58, making the Choctaw sample one standard deviation below the mean. The Choctaw sample mean for X+% was found to be significant at the $p < .000$ level, the mean was .50 while the Exner sample

mean was .77. The Choctaw sample mean was three standard deviations below the mean. Finally, the Xu% sample mean between Choctaws and the normative sample was not found to be significant. Table 3 illustrates the t-test results

Table 3

Means and Standard Deviations of Choctaw (n=60) and Exner (n=600) Cognitive Mediation Sample Means

Variable	Choctaw		Exner	
	Mean	SD	Mean	SD
XA	.65	.14	.92	.06
WDA	.69	.15	.94	.06
X-	.33	.13	.07	.07
S-	.35	.55	.25	[.56]
P	4.95	1.89	6.58	1.39
X+	.50	.15	.77	.09
Xu	.15	.08	.15	.07

Table 4

Summary Table of T-tests (two-tailed) Between Oklahoma Choctaws (N=60) and Exner (N=600) Cognitive Mediation Sample Means

	t	df	p	mean difference
XA	-15.08	59	.000	-.27
WDA	-13.34	59	.000	-.25
X-	16.09	59	.000	.26
S-	1.42	59	.16	.10
P	-6.68	59	.000	-1.63
X+	-13.93	59	.000	-.27
Xu	.44	59	.66	.005

Inter-rater Reliability

Twenty protocols were randomly selected and re-scored in order to establish percentage of agreement or inter-rater reliability. There has been some debate as to whether the Rorschach possesses enough superiority to attain good percentage of agreement, however, high levels (.82 to .97) have been found (Exner, 2003). The percent of agreements for this study ranged from .92 to .99. Results were achieved by dividing the number of agreements for each variable by the number of total responses (R=376). Table 5 provides the percentage of agreement for Cognitive Mediation variables. Six variables reached the level of significance. One variable, Xu percentage did not reach a level of significance.

Table 5

Percentage of Agreement Between Two Raters for a randomly selected sample of 20 Rorschach Protocols

	# of agreements	# of Responses	% of agreement
Form Quality (FQ)	346	376	.92
Space (S)	371	376	.99
Popular (P)	370	376	.98
Location (W, D, Dd)	370	376	.98

Summary

As previously mentioned, the purpose of this study was to predict the acculturation scores of Oklahoma Choctaws based on their Cognitive Mediation scores and to examine the differences between Oklahoma Choctaws (N=60) and Exner's Rorschach Comprehensive System sample (N=600) using seven of the Rorschach Inkblot Test variables that comprise the Cognitive Mediation cluster. Results indicated that Cognitive Mediation scores do not predict levels of acculturation for Oklahoma Choctaws. Secondly, mean differences for Cognitive Mediation between Oklahoma Choctaws and Exner's normative data were found on five variables. Finally, percentage of agreement between raters was accomplished with all seven variables. These percentages ranged from .92 to .99. A discussion of the findings follows this chapter.

CHAPTER V

DISCUSSION

It was hypothesized that there would be a positive relationship between XA%, WDA%, P, and X+% and Oklahoma Choctaw acculturation scores and an inverse relationship between X-%, Xu%, and S-% and acculturation scores for the Choctaw sample. It was also hypothesized that the Oklahoma Choctaw sample would have significantly lower XA%, WDA%, P, and X+% scores and a significantly higher X-%, Xu%, and S-% scores than Exner's normative sample. Hypothesis 1 produced no significant differences amongst Oklahoma Choctaws based on level of acculturation.

Also, it was hypothesized that there would be a positive relationship between XA%, WDA%, P, and X+% and acculturation scores and an inverse relationship between X-%, Xu%, and S-% and acculturation scores for the Choctaw sample. Significant differences were found on variables X-%, XA%, WDA%, P, and X+% between the Oklahoma Choctaw sample and Exner's normative sample. This is valuable information because the Rorschach Inkblot Test is used within Native behavioral health programs. The results leading from inaccurate measurement conclusions could potentially affect our understanding of Native differences and at worst, impact diagnosis, treatment planning, and even policy decisions. Some reasons can be theorized for the results of this study and will comprise this chapter. Major findings, weaknesses, strengths and implications, directions for future research, summary and conclusions will now be presented.

Major Findings

Hypothesis 1 makes an assertion that the Cognitive Mediation cluster would predict level of acculturation. As mentioned in the literature review, acculturation can best be described as the process of moving or staying within dominant or Native cultural values (Choney, et. al, 1995). LaFromboise, et. al (1990) found four levels of acculturation for Native people. Choney, et. al (1995) identified five levels of acculturation in their study and Garrett and Pichette (2000) identified three levels of acculturation with their Native American Acculturation Scale (NAAS). Those levels were traditional, bicultural, and assimilated. The NAAS was chosen as a measurement of acculturation in this study. It was important to include a measurement of acculturation because behaviors and attitudes can vary amongst Native people.

Furthermore, Native people can often mirror the dominant society in their ways of being (Berry, J., 1994). Several of the studies provided in this study's literature review did find that acculturation was a critical construct to consider and include (Thompson, 1951; Kaplan, 1955; and Boyer, 1988). However, Cognitive mediation scores were not a good predictor of Oklahoma Choctaw acculturation. LaFromboise, et. al (1993) and their "second culture acquisition" research may apply here. They hypothesize that regardless of a person's level of acculturation multiple cultural identities can be competently managed. For instance, an Oklahoma Choctaw who is accustomed to running on "Indian time" can also handle a lifestyle of "punching a timecard".

Hypothesis 2 theorized that there would be differences between Oklahoma Choctaws and Exner's normative sample. Single sample t-tests confirmed that there were significant differences on five out of the seven Cognitive Mediation variables (i.e., XA%,

WDA%, X+%, P, and X-%). Again, these variables are associated with reality testing or seeing what others see. The study produced results that indicate Oklahoma Choctaws possess an alternate response style with the Rorshach. Oftentimes, responses were up to three or four standard deviations removed from the normative data. These differences strongly suggest that culture is interactive with the Rorshach Inkblot Test. In other words, the measurement is not functioning the same across groups when the aspect of culture (i.e., being Oklahoma Choctaw) is introduced.

Because the Rorshach relies on a person's perceptions it makes sense that worldview or differing worldviews would produce such study results. An example of this difference may come from the many stories that were told by participants' in explaining their responses. One such example was from Card VI, a client perceived two hills in a Dd99 area of the card and an unrecognizable person "trying to get to the other side". Typically, people see an animal hide or pelt and it is coded as D1 (large detail) or a whole card response (W). Three participants viewed Card IX as stages of life that one would progress through. These stories were rich in detail. Other such responses from the Oklahoma Choctaw sample would include the use of Native imagery. These images included: ceremonies, feathers, warriors, dancing, and iconic Native animals (i.e., bear, buffalo).

Many participants appeared to view the cards as magical or with reverence and certainly with humor. Many times participants would take cues from the researcher and would place cards down on the table in proper order. Often the cards would be handled as if they were delicate or once a response was made the cards would be presented back to the researcher much like a gift or present. Humorous comments were made that

indicated a participant's response would indicate they were "crazy". For instance, a participant laughed and stated on Card III, "gosh, you're going to think I'm crazy for seeing bowties". There was only one participant who could not complete the packet of materials. Often, participants were eager to take part in the study.

The story of this research study certainly ties into the plethora of historical accounts that report the loss of Mississippi lands and possessions. A loss due to the unfamiliarity with treaty-making or cultural unawareness for Westernized ways. Reality for Choctaws had been a peaceful existence. Possessions were shared throughout the entire community. Lacking in food and shelter was unheard of and would've brought shame on the entire community. These are still characteristics amongst the Oklahoma Choctaw community today, despite the cultural milieu that has taken place. It is logical that the same clash of cultures that occurred for the colonists and Choctaws then would occur on an instrument such as the Rorschach today.

Also, much like the English language played a pivotal role in understanding treaties and policy-making in the 1800's, it is likely that English speaking abilities are continuing to be problematic today. There were several instances in which participants relied on non-verbal communication, such as, a head nod rather than answering yes. Many participants also did not complete full sentences or even spoke in Choctaw when they could not find an English word. Because the lead researcher is Choctaw this was a familiar communication style and easily handled but it is likely to be problematic for non-Choctaw assessors and may even be punitive for the client. Much of the business of the Rorschach is about understanding the task. While it seems simple to the person who has only known the English language it requires more effort for those who are bilingual. The

Choctaw who speaks good English may even present with subtle characteristics, such as, searching for words, exhibiting difficulty in saying words, or completely forgetting what they were intending to say. The requirement to speak English may impact Rorschach responses. But, this response style is an accurate aspect of a Choctaws' constant requirement from the dominant society to adapt or change in order to attend school or maintain employment.

The race of the lead researcher may have also impacted the results of this study. Le (2002) felt that she may have impacted the response styles of her Vietnamese sample. Because she is also Vietnamese, she thought that her sample may be more sympathetic to her plight as a student and gave her responses that were more helpful in nature. It is plausible, that because the lead researcher of this study is of Choctaw descent the Oklahoma Choctaw sample could also have given responses that they would not have given in a situation where the researcher was non-Choctaw or non-Native. Scores for percentage of agreement ranged from .92 to .99 percent. These results are well over the established .80 percent marker for agreement.

Weaknesses

The Oklahoma Choctaw sample size was not large and participants were not randomly selected. This study was conducted amongst areas where Oklahoma Choctaws gathered (i.e., pow-wows, church, Choctaw Nation of Oklahoma complex). Therefore, the results are only generalizable to Oklahoma Choctaws. It is not known how valid the Native American Acculturation Scale is for the Oklahoma Choctaw sample. Further research is warranted to investigate the efficacy of this instrument for any Oklahoma tribe because it has been validated on Eastern Cherokee people only. No control group was

used in this study, the norms were compared with Exner's normative data. Finally, this study was voluntary in nature, it is not known how the participants vary from the Choctaws who chose to not participate.

Strengths

The literature reviewed identified no Rorshach Inkblot Test research with tribes from Oklahoma. So, this study was of an underinvestigated and underdefined population and exploratory in nature. It is also believed that this research will contribute to understanding Oklahoma Choctaws. The study relied on the support of volunteers and they received no compensation for their efforts. The lead researcher was able to go amongst the tribal communities in order to ensure that participants had access to their culture. Inter-rater reliability was achieved through the random selection of test packets. An advanced Counseling Psychology student who had received instruction in administration and interpretation of the Rorshach scored twenty protocols. These protocols were then successfully compared with the lead researcher's protocols for percentage of agreement.

Considerations of Future Research

Therapists, test developers, and faculty may make use of this data. Additionally, replication of this study with other tribes seems warranted. Personality measurement, as a whole, is likely to draw similar or other conclusions. It would be interesting to see the impact of acculturation within other tribes upon a personality measurement. Other Rorshach Inkblot variables, for instance, the Depression Index and its validity could also reveal useful information for clinicians. Yellowhorse-Braveheart and DeBruyn (1998) believe that Native people carry with them a "pervasive sense of pain from what

happened to their ancestors and incomplete mourning of those losses”. This loss could explain other psychological phenomena commonly associated with Native people (i.e., high suicidal, depression, and obesity rates). It is plausible that the Cognitive Mediation cluster or other variables of the Rorschach are measuring constructs associated with being a Native person. The research could even be measuring the culture that resides in southeastern Oklahoma and not just amongst Oklahoma Choctaws. However, the sample responses that were given by participants were Native themed and it is more likely that Oklahoma Choctaws would differ from non-Choctaws in southeastern Oklahoma. This is a question that future research could answer.

Qualitative interviews with Native people and how they have or continue to determine mental illness would provide an understanding of how to provide competent services. Qualitative research may also explain how Native people understand and navigate personality measurements. Richard Adams, Assistant Director for the Choctaw Nation of Oklahoma’s language program stated to the lead researcher that mental illness has always existed but in the past Choctaws believed this is likely to be the result of a curse (2006, personal communication). Curses are rarely mentioned, if ever, in psychology classes. What would be the mode of treatment planning or therapy for a person who believes they have been cursed? Qualitative inquiry could explore comments such as this much further and provide information about the healing process for true mental disorders.

A study comparing clinical samples and non-clinical samples of Native people of the same tribe would be helpful in establishing benchlines for what a significant reality testing profile would look like. The Rorschach Inkblot Test is a useful instrument but is it

ethical to use it with Choctaw people given the results of this study? The results of the Cognitive Mediation normative sample scores and the Choctaw sample scores indicate that this is a good question to consider. If a clinician decided to proceed with the measurement they should do so with extreme caution and include other types of assessment. In addition, the examiner should have extensive knowledge of the culture of the examinee. It is even wiser to ascertain how Choctaws determine if a person is exhibiting poor reality testing.

Conclusion

In conclusion, the results of this study indicate that the Rorshach's Cognitive Mediation cluster was not able to predict Oklahoma Choctaw levels of acculturation. Also, there were significant differences between the Oklahoma Choctaw sample's scores and Exner's normative sample for five of the seven variables of the Cognitive Mediation cluster. The Rorshach is more likely to elicit a response style that is typical of a person with poor reality testing when administered to a non-clinical Oklahoma Choctaw, when in fact this may not be the case. As mentioned in the literature review, Rorshach Inkblot Test validity is a long, continuous debate even when assessing non-Native people. This debate will obviously continue to include the culturally diverse, as well. On a positive note, the Rorshach has many strengths that this flawed study did not investigate. These are also worth considering in our discussions. The most prominent conclusion that can be made from this study is that cultural awareness, knowledge, and skills are crucial in understanding Native people in our Rorshach Inkblot Test procedures.

REFERENCES

- Adams, R. (2006). Personal communication on June 26, 2006.
- Anastasi, A. (1982). *Psychological Testing*. New York: Macmillan.
- Archer, R. & Gordon, R. (1988). MMPI and Rorschach indices of schizophrenic and depressive diagnoses among adolescent inpatients. *Journal of Personality Assessment*, 52, 276-287.
- Atkinson, D., Morten, D., & Sue, G. (1993). *Counseling American minorities*. Madison, WI: Madison & Benchmark.
- Berry, J. W. (1994). Acculturation and psychological adaptation: An overview. In A. M. Bouvy, F. J. R. vander Vijver, P. Boski, & P. Schmitz (Eds.), *Journeys into cross-cultural psychology* (pp. 129-141). Amsterdam, The Netherlands: Swets & Zeitlinger.
- Berryhill, E. (2002). Personal communication.
- Beuf, A. (1977). *Red children in White America*. Oxford, England: U Pennsylvania Press.
- Bishinik (2005).
- Boscan, D. (2000). The Rorschach test: A Mexican sample using the comprehensive system. *Dissertation Abstracts International*, 60(8-B), pp. 4285.
- Bourguignon, E. & Westerman-Nett, E. (1955). Rorschach populars in a sample of Haitian protocols. *Journal of Projective Techniques*, 19, 117-124.
- Boyer, L. (1988). Effects of acculturation on the personality traits of aged Chiricahua and Mescalero Apaches. *British Society for Projective Psychology*, 33, 2-17.

- Boyer, L., Boyce, R., Brawer, F., Kawai, H., & Klopfer, B. (1964). Apache age groups. *Journal of Projective Techniques and Personality Assessment*, 28, 397-402.
- Boyer, L., de Vos, G., & Boyer, R. (1983). A longitudinal study of three Apache brothers as reflected in their Rorshach protocols. *The Journal of Psychoanalytic Anthropology*, 6, 125-161.
- Butcher, J. (1985). *Advances in personality assessment*. Hillsdale, NJ: Laurence Erlbaum Associates.
- Butcher, J., Nezami, E., & Exner, J. (1998). Psychological assessment of people in diverse cultures. In S. Kazarian & D. Evans (Eds.), *Cultural clinical psychology* (pp. 61-105). New York: Oxford University Press.
- Cadieux, A. (2001). Native American mental health expert opinions regarding effective psychotherapy with Native American provided by non-Native Americans. *Dissertation Abstracts International*, 61(10-B), pp. 5553.
- Chiraboga, D. (2004). Some thoughts on the measurement of acculturation among Mexican American elders. *Hispanic Journal of Behavioral Sciences*, 26, 274-292.
- Choney, S., Berryhill-Papke, E., & Robbins, R. (1995). The acculturation of American Indians: Developing frameworks for practice. In J. Ponterotto, J. Casas, L. Suzuki, & C. Alexander (Eds.), *Handbook of multicultural counseling* (pp. 73-92). CA: Sage Publications.
- Cragolino, A. (2001). A confirmatory and exploratory investigation of the ideation and cognitive mediation cluster of the Rorshach comprehensive system. *Dissertation Abstracts International*, 62(4-B), pp. 2051.
- Cuellar, I., Harris, L., & Jasso, R. (1980). An acculturation scale for Mexican American

- normal and clinical populations. *Hispanic Journal of Behavioral Sciences*, 2, 199-217.
- Dadario, B. (2002). The impact of nonverbal learning disability upon cognitive triad variables of Exner's comprehensive scoring system of the Rorschach inkblot technique. *Dissertation Abstracts International*, 62(11-B), pp. 5367.
- Dana, R., Hornby, R., & Hoffmann, T. (1986). *Personality assessment of Rosebud Sioux: A comparison of Rorschach, Millon Clinical Multiaxial Inventory, and 16PF Reports*. East Lansing, MI: National Center for Research on Teacher Learning. (ERIC Document Reproduction Service No. ED300196.
- Dana R. (1993). *Multicultural assessment perspectives for professional psychology*. Needham Heights, MS: Allyn & Bacon.
- Dana, R. (1998). Projective assessment of Latinos in the United States : Current realities, problems, and prospects. *Cultural Diversity & Mental Health*, 4, 165-184.
- Dane, F. (1990). *Research methods*. Pacific Grove, CA: Brooks/Cole Publishing Company.
- Davis, V. (1999). Personal communication. September 28, 1999.
- Dawes, R. (1994). *House of cards: Psychology and psychotherapy built on myth*. New York: Free Press.
- Dawson, A. (1997). A Rorschach study of psychic channelers. *Dissertation Abstracts International*: 58(6-B), pp. 3353.
- Debo, A. (1973). *And still the waters run: The betrayal of the Five Civilized Tribes*. Princeton, New Jersey: Princeton University Press.
- Dillard, D. & Manson, S. (2000). Assessing and treating American Indians and Alaska

- Natives. In: I. Cuellar & F. Panigua (Eds.), *Handbook of multicultural mental health: Assessment and treatment of diverse populations* (pp. 225-248). San Diego, CA: Academic Press.
- Duclos, C., Beals, J., & Novins, D. (1998). Prevalence of common psychiatric disorders among American Indian adolescent detainees. *Journal of the American Academy of Child & Adolescent Psychiatry*, *37*, 866-873.
- Duran, B. & Walters, K. (2004). HIV/AIDS prevention in "Indian Country": Current practice, Indigenist etiology models, and postcolonial approaches to change. *AIDS Education & Prevention*, *16*, 187-201.
- Duran, E., & Duran, B. (1995). *Native American post-colonial psychology*. Albany, New York: University of New York Press.
- Duran, B., Sanders, M., & Skipper, B. (2004). Prevalence and correlates of mental disorders among Native American women in primary care. *American Journal of Public Health*, *94*, 71-77.
- Exner, J. E., Jr. (1974). *The Rorschach: A comprehensive system*. New York: Wiley Interscience.
- Exner, J. E., Jr. (1986). Some Rorschach data comparing schizophrenics with borderline and schizotypal personality disorders. *Journal of Personality Assessment*, *50*, 455-471.
- Exner, J.E., Jr. (1993). *The Rorschach: A comprehensive system*. New York: Wiley Interscience.
- Exner, J.E., Jr. (1993). *The Rorschach: A comprehensive system. Basic foundations*. New York: Wiley.

- Exner, J. E., Jr. (2001). *The Rorschach workbook for the comprehensive system*. Asheville, NC: Rorschach Workshops.
- Exner, J. E., Jr., Armbruster, G., Walker, E., & Cooper, W. (1975). Anticipation of elective surgery as manifest in Rorschach records. Rorschach study No. 213, Unpublished manuscript. Rorschach Workshops, Asheville, NC.
- Exner, J.E., Jr. (2003). *The Rorschach: A comprehensive system*. New Jersey: Wiley.
- Exner, J.E., Jr. & Weiner, I. (1995). *The Rorschach: A comprehensive system. Assessment of children and adolescents*. New York: Wiley.
- Federal Disparity Index Group (2002). 2002 IHCIF: FY 2001 FEHBP disparity index and application of findings to allocate the FY 2002 Indian Health Care Improvement Fund. Retrieved February 19, 2005, from <http://www.ihs.gov/nonmedicalprograms/Inf/IHCIF2002/2002%20IHCIF%20Report.pdf>.
- Fonda, C. (1960). The white-space response. In: M. Rickers-Ovsiankina (Ed.), *Rorschach psychology* (pp. 80-105). New York and London: John Wiley & Son, Incorporated.
- Fong-Hartsfield, R. (2000). A Rorschach study of schizophrenic rapists. *Dissertation Abstracts International: (5-B)*, pp. 2756.
- Foreman, G. (1933). *Advancing the frontier*. Norman, OK: University of Oklahoma Press.
- Foreman, G. (1934). *The Five Civilized Tribes*. Norman, OK: University of Oklahoma Press.
- Foreman, G. (1966). *Indian removal: The emigration of the Five Civilized Tribes of Indians*. Norman, OK: University of Oklahoma Press.
- Frank, G. (1992). The response of African Americans to the Rorschach: A review of the

- research. *Journal of Personality Assessment*, 59, 317-325.
- Ganellen, R. (1996). Exploring MMPI-Rorschach relationships. *Journal of Personality Assessment*, 67, 529-542.
- Garrett, M. (1996). Cultural values and wellness of Native American high school students. *Dissertation Abstracts International*: 57 (5-A), pp 1969.
- Garrett, M. & Garrett, J. (1994). The path of good medicine: Understanding and counseling Native American Indians. *Journal of Multicultural Counseling and Development*, 22, 134-144.
- Garrett, M. & Pichette, E. (2000). Red as an apple: Native American acculturation and counseling with or without reservation. *Journal of Counseling & Development*, 78, 3-13.
- Geertsma, R. (1962). Factor analysis of Rorschach scoring categories for a population of normal subjects. *Journal of Consulting Psychology*, 26, 20-25.
- Giancola, J. (1997). The Rorschach and the Hmong refugee population: A comparative analysis. *Dissertation Abstracts International*: 58(5-B), pp. 2674.
- Goldstein, D. (1998). Rorschach correlates of aggression in an adolescent inpatient sample. *Dissertation Abstracts International*, 58(9-B), pp. 5118.
- Gould, S. (1981). *The Mismeasure of Man*. New York: W. W. Norton.
- Groth-Marnat, G. (2003). *Handbook of psychological assessment*. New York: John Wiley & Sons.
- Gowri, A. (2000). Cultural difference or deficit? Rorschach responses of Asian Indians and European Americans. *Dissertation Abstracts International*, 60(11-B), pp. 5772.
- Haag, M & Willis, H. (2001). *Choctaw language and culture: Chahta anumpa*. University of Oklahoma Press: Norman, OK.

- Hall, C. (2001). Cultural malpractice: The growing obsolescence of psychology with the changing US population. *American Psychologist*, 52, 642-651.
- Hallowell, A. (1941). Acculturation process and personality changes as indicated by the Rorschach technique. *Rorschach Research Exchange*, 6, 42-50.
- Hallowell, A. (1941). The Rorschach test as a tool for investigating cultural variables and individual differences in the study of personality in primitive societies. *Rorschach Research Exchange*, 5, 31-34.
- Harris, J., Jr. (1960). Validity: The search for a constant in a universe of variables. In: M. Rickers-Ovsiankina, *Rorschach psychology*. New York and London: John Wiley & Son.
- Helms, J. (1992). Why is there no study of cultural equivalence in standardized cognitive ability testing? In N. Goldberger & J. Veroff (Eds.), *The cultural and psychology reader*, pp.674-719. New York, NY: New York University Press.
- Herring, R. (1994). Substance use among Native American Indian youth: A selected review of causality. *Journal of Counseling and Development*, 72, 578-584.
- Herring, R. & Meggert, S. (1994). The use of humor as a counselor strategy with Native American Indian children. *Elementary School Guidance & Counseling*, 29, 67-76.
- Huff, D. (1997). *To Live Heroically: Institutional Racism and American Indian Education*. Albany, NY, US: State University of New York Press.
- Hyde, G. (1962). *Indians of the woodlands: From prehistoric times to 1725*. Norman, OK: University of Oklahoma Press.
- Kaplan, B. (1955). Reflections of the acculturation process in the Rorschach test.

- Journal of Projective Techniques*, 19, 30-35.
- Kidwell, C. (1995). *Choctaws and missionaries in Mississippi, 1818-1918*. University of Oklahoma Press: Norman and London.
- Klopfer, B. & Boyer, L. (1961). Notes on the personality structure of a North American Indian Rorschach interpretation. *Journal of Projective Techniques*, 25, 170-178.
- Kraft, J. (2000). Personal communication. July 15, 2000.
- Kumar, D., Kumar, J., & Kumar, R. (2005). Diagnostic indicators on SIS-I and Rorschach among manic and depressive patients. *Journal of Projective Psychology & Mental Health*, 12, 53-60.
- LaFromboise, T.; Coleman, H.L.; Gerton, J. (1993). *Psychological impact of biculturalism : Evidence and theory*. *Psychological Bulletin*, 114, 395-412.
- LaFromboise, T., Trimble, J., & Mohatt, G. (1990). Counseling intervention and American Indian tradition: An integrative approach. *The Counseling Psychologist*, 18, 629-654.
- Le, A. (2002). The Rorschach: A non-patient sample representing the Vietnamese and Vietnamese-American population. *Dissertation Abstracts International*, 63, pp. 1083.
- Locke, S. (1999). Adult attention deficit disorder: Its impact on Rorschach scores. *Dissertation Abstracts International*, 60(2-B), pp. 0850.
- Long, C., & Nelson, K. (1999). Honoring diversity: The reliability, validity, and utility of a scale to measure Native American resiliency. *Journal of Human Behavior in the Social Environment*, 2, 91-107.
- Lowery, C. (1998). American Indian perspectives on addiction and recovery. *Health and Social Work*, 23, 127-135.

- McClanahan, P. (2002). Personal communication.
- Mendoza, R. H. & Martinez, J. L. (1981). The measurement of acculturation. In: A. Baron (Ed.), *Explorations in Chicano psychology* (pp. 71-82). New York: Praeger.
- Meyer, G. & Archer, G. (1993). The hard science of Rorschach research: What do we know and where do we go? *Psychological Assessment, 13*, 486-502.
- Miville, M., Williams, D., Cain, M., Bland, K., Beach, B., De La Rosa, C., & et. al (2003). *Core belief scale: A culturally appropriate scale for American Indians*. Poster presented at Toronto, Canada on August 10, 2003.
- Montgomery, D., Miville, M., Winterowd, C., Jeffries, B., & Baysden, M. (2000). American Indian college students: An exploration in resiliency factors revealed through personal stories. *Cultural Diversity & Ethnic Minority Psychology, 6*, 387-398.
- Moon, T. & Cundick, B. (1983). Shifts and constancies in Rorschach responses as a function of culture and language. *Journal of Personality Assessment, 47*, 345-349.
- Munroe, R. & Munroe, R. (1997). A comparative anthropological perspective. In: J. Berry, Y. Poortinga, & J. Pandey (Eds.), *Handbook of cross-cultural psychology: Theory and method*, pp. 173-203. Boston, MA: Allyn & Bacon.
- Napholz, L. (2000). Balancing multiple roles among a group of urban midlife American Indian working women. *Health care for women international, 21*, 255-266.
- National Indian Health Board (2002). Indian Health Service (IHS) budget—Fiscal Year 2002. Retrieved April 28, 2002, from http://www.nihb.org/budget_ihs.htm.
- Parker, K., Hanson, R., & Hunsley, J. (1988). MMPI, Rorschach, and WAIS: A meta-analytic comparison of reliability, stability, and validity. *Psychological Bulletin, 103*,

367-273.

- Pinto, A. (1999). A Rorschach study of object representations and attachment in male adolescents with disruptive behaviors. *Dissertation Abstracts International*, 59(9-B), pp. 5105.
- Presley, G., Smith, C., Hilsenroth, M., & Exner, J. (2001). Clinical utility of the Rorschach with African Americans. *Journal of Personality Assessment*, 77, 491-507.
- Preston, C. (1964). Psychological testing with Northwest Coast Alaskan Eskimos. *Genetic Psychology Monographs*, 69, 323-419.
- Pyle, Chief Gregory (2005). From the desk of Chief Pyle [Electronic version]. *Bishinik*, September 29, 2005, pg. 1.
- Reichlin, R. (1984). Current perspectives on Rorschach performance among older adults. *Journal of Personality Assessment*, 48, 71-81.
- Risher, J. (2004). Association of Rorschach and MMPI psychosis indicators and schizophrenia spectrum diagnoses in a Russian clinical sample. *Journal of Personality Assessment*, 83, 46-63.
- Ritzler, B. (1996). Multicultural usage of the Rorschach. In: L. Suzuki, P. Meller, & J. Ponterotto (Eds.). *Handbook of Multicultural Assessment*, pp. 237-252. San Francisco: Jossey-Bass Publishers.
- Robbins, R. (1999). Marital satisfaction and Cherokee language fluency. *Dissertation Abstracts International*, 60(5-A), pp. 1464.
- Rorher, J. (2000). Testing for aggression: A concurrent validity study of Carl Gacano and Reid Meloy's aggression scores for the Rorschach test with a forensic population. *Dissertation Abstracts International*, 61(3-B), pp. 1651.

- Rorshach, H. (1942). *Psychodiagnostics, a diagnostic test based on perception*.
(Translated by P. Lemkau and B Kronenburg.). Bern: Huber, 1942.
- Rorshach, H., & Oberholzer, E. (1923). The application of the interpretation of form to psychoanalysis. *Zeitschrift fur die Gesamte Neurologie und Psychiatrie*, 23, 240-274.
- Rouslin, D. (1997). Playing in the inkblots: An application of Winnicottian theory to Rorschach analysis. *Dissertation Abstracts International*, 57(7-B), pp. 4751.
- Schafer, R. (1954). *Psychoanalytic interpretation in Rorshach testing*. New York: Grune & Stratton.
- Siemsen R. (1999). Relationships of Rorschach and MMPI-2 variables to the Hare Psychopathy Checklist-Revised among mentally ill incarcerated felons. *Dissertation Abstracts International*, 60(5-B), pp. 2367.
- Silva, D. & Campos, R. (2000). Some Rorschach variables from a normative study with 10 year old Portuguese children. In: *Rorschachiana: Yearbook of the International Rorschach Society*, pp.110-126. Andronikof-Sanglade, Anne; Ashland, OH, US: Hogrefe & Huber Publishers, 2000.
- Singh, D., Singh, A. & Singh, A.R (2005). Relevance of Beck norms of Rorschach inkblot technique on an Indian population--an exploratory pilot study on normal subjects. *Journal of Projective Psychology & Mental Health*, 12, 49-52.
- Smith, Y., Cohen, L., & Cohen-Kettenis, P., (2002). Postoperative psychological functioning of adolescents transsexuals: A Rorshach study. *Archives of Sexual Behavior*, 31, 255-261.
- Sue, D. & Sue, S. (2003). *Counseling the culturally different: Theory and practice*. New York: Wiley.

- Suinn, R., Ahuna, C., & Khoo, G. (1992). The Suinn-Lew Asian Self-Identity Acculturation Scale: Concurrent and factorial validation. *Education & Psychological Measurement, 52*, 1041-1046.
- Suzuki, L., Meller, P., & Ponterotto, J. (Eds.) (1996). *Handbook of multicultural assessment*, pp. 237-252. San Francisco: Jossey-Bass Publishers.
- The American Presidency Project (2006). Retrieved July 19, 2006
<http://www.presidency.ucsb.edu/>.
- Thompson, L. (1951). Perception patterns in three Indian tribes. *Psychiatry, 14*, 255-263.
- Trimble, J. (1988). Stereotypical images, American Indians, and prejudice. In P. Katz & D. Taylor (Eds.), pp. 181-202. *Eliminating racism: Profiles in controversy*. New York: Plenum.
- Tseng, W. & Streltzer, J. (1997). *Culture and psychopathology: A guide to clinical assessment*. Philadelphia, PA, US: Brunner/Mazel, Incorporated.
- United States Census (2000). www.census.gov. Pulled on September 29, 2005.
- United States Department of Commerce (2000). Pulled on July 12, 2003
www.census.gov.
- Vazquez, L. & Garcia-Vazquez, E. (2003). Teaching multicultural competence in the counseling curriculum. In D. Pope-Davis; B.; Coleman, H. L. K.; Liu, W. M.; Toporek, R. L. (Eds.), pp. 546-561. *Handbook of multicultural competencies in counseling & psychology*. Thousand Oaks, CA, US: Sage Publications, Inc.
- Vick, R., Sr., Smith, L., & Iron Rope-Herrera, C. (1998). The healing circle: An alternative path to alcoholism recovery. *Counseling and Values, 42*, 132-141.

- Viglione, D. (1999). A review of recent research addressing the utility of the Rorshach. *Psychological Assessment*, 11, 251-265.
- Wallace, A. (1952). The modal personality structure of the Tuscarora Indian: As revealed by the Rorshach test. Smithsonian Institution Bureau of American Ethnology, Bulletin 150. Washington, DC: U.S. Government Printing Office.
- Walters, K. & Simoni, J. (2002). Reconceptualizing Native women's health: An 'indiginest' stress-coping model. *American Journal of Public Health*, 92, 520-525.
- Weiner, I. (1986). Conceptual and empirical perspectives on the Rorshach assessment of psychopathology. *Journal of Personality Assessment*, 50, 472-479.
- Weiner, I. (1996). Some observations on the validity of the Rorshach inkblot method. *Psychological Assessment*, 8, 206-213.
- Weiner, I. (1998). *Principles of Rorshach interpretation*. New Jersey: Lawrence Erlbaum Associates, Publishers.
- Widiger, T. (2001). The best and the worst of us? *Clinical Psychology: Science and Practice*, 8, 374-377.

APPENDICES

APPENDIX A INFORMED CONSENT FORM

Hello, my name is Deana Williams. I am Oklahoma Choctaw and an advanced doctoral student at Oklahoma State University. I am inviting you to participate in a study that is designed to study the unique characteristics of sixty Oklahoma Choctaws, for example, cultural identification, beliefs, and influences. These characteristics will be studied along with personality traits, like, temperament, sociability, and problem-solving skills.

I recognize that there are a variety of experiences and customs amongst Oklahoma Choctaw communities. At times, it may appear to you that some of the questions in this study are not specific to Oklahoma Choctaw culture. The study is not intended to be offensive or harmful in any way. By participating in this study you can help provide a better understanding of Oklahoma Choctaws and their psychological health needs.

As you complete procedures you may find that some of the questions are difficult or uncomfortable. Your involvement in this study is voluntary. There will be no penalties should you choose to end your participation in this study at any time. You can also decide to not reply to any question. Although the information in this study is being collected at a location where Oklahoma Choctaws gather, your participation in this study will not affect your services at Indian Health Services or the Choctaw Nation of Oklahoma. No tribal members or employees at this facility will know how you answered the questions in this study.

Your information will be held confidential. Please do not write your name on any part of the questionnaire. The consent form and questionnaire will not be kept together. The questionnaire will be collected in an anonymous envelope to ensure your privacy. Should you feel uncomfortable during or after your participation, a referral to a local Indian Health Services agency or other provider can be made available.

I can be contacted by phone at 405.269.6856 or e-mail at deana.williams@okstate.edu. You may also contact Sue Jacobs, IRB Chair, 202 Whitehurst Hall, Oklahoma State University, Stillwater, Oklahoma, 405.744.5700.

I have read this form and understand what it says. I am 18 years or older and voluntarily agree to participate in this research project.

APPENDIX B: DEMOGRAPHIC SHEET

PAGE 1

SITE: _____

Directions: Please answer each question by filling in the blank, checking the blank, or circling the number that best describes you.

1) How old are you? Age _____

2) Gender: _____ Female _____ Male

3) What Native American Indian tribe (or tribes) are you from? (Please list all)

4) Your degree of Indian blood:

_____ Less than 1/16 _____ 1/16 _____ 1/8 _____ 1/4 _____ 1/2 _____ 3/4 _____ 4/4

5) Where have you lived? (Check all that apply) _____ urban _____ rural _____ reservation (tribal area)

6) How many years of school have you completed?

- _____ a) 1-6 years (elementary school)
- _____ b) 6-12 years (junior high and/or high school)
- _____ c) 12-16 years (Associate/technical School or college)
- _____ d) 17 or more years (graduate school)

7) What is your present occupation? _____

- 8) Are you:
- _____ a) Single
 - _____ b) Partnered/Common Law
 - _____ c) Married
 - _____ d) Separated
 - _____ e) Divorced
 - _____ f) Widowed

9) How many brothers and sisters do you have?

_____ none _____ 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____ 8 or more

10a) How have you been raised in your Indian cultures? (circle one number)

1.....2.....3.....4.....5.....6.....7

traditional
(close ties with tribe)

not Indian
(close ties with dominant culture)

10b) How do other American Indians view you?

1.....2.....3.....4.....5.....6.....7

traditional
(close ties with tribe)

not Indian
(close ties with dominant culture)

10c) How do non-Indians view you?

1.....2.....3.....4.....5.....6.....7

traditional
(close ties with tribe)

not Indian
(close ties with dominant culture)

11) Do you consider yourself to be an...

1.....2.....3.....4.....5.....6.....7

Indian who happens
to be American

American who happens
to be Indian

12) What type of school did you attend? (check all that apply)

___ boarding school ___ public school ___ private school (Catholic or other) ___ BIA school

13) Who raised you during your childhood? (check all that apply)

___ mother and father ___ father only ___ mother only ___ grandparents ___ aunt/uncle
___ other extended family ___ friend ___ other (please specify): _____

APPENDIX C: SCRIPT

“Hello, my name is Deana Williams and I am a doctoral student at Oklahoma State University’s Counseling Psychology program. I am doing research on the Rorschach Inkblot Test and sixty Oklahoma Choctaws and would like your helpful participation in this study. I believe this study will be helpful in producing a fuller understanding of Oklahoma Choctaws and their current emotional, mental, and behavioral experiences and needs. This procedure will take about one hour, it is completely voluntary, and your information will be kept private. At any time you are free to stop participating. Should you feel even slightly distressed I can help give you information about counseling services available to you. You are free to contact me or the Internal Review Board Executive Secretary; her name is Sharon Bacher. Thank you for taking the time to participate.”

APPENDIX-D: NATIVE AMERICAN ACCULTURATION SCALE (NAAS)

Instructions: This questionnaire will collect information about your background and cultural identity. For each item, choose the one answer that best describes you by filling in the blank.

___ 1. What language can you speak?

1. Tribal language only (e.g., Cherokee, Navajo, and Lakota)
2. Mostly tribal language, some English
3. Tribal language and English about equally well (bilingual)
4. Mostly English, some tribal language
5. English only

___ 2. What language do you prefer?

1. Tribal language only (e.g., Cherokee, Navajo, and Lakota)
2. Mostly tribal language, some English
3. Tribal language and English about equally well (bilingual)
4. Mostly English, some tribal language
5. English only

___ 3. How do you identify yourself?

1. Native American
2. Native American and some non-Native American (e.g., White, African American, Latino, and Asian American)
3. Native American and non-Native American (bicultural)
4. Non-Native American and some Native American
5. Non-Native American (e.g., White, African American, Latino, and Asian American)

___ 4. Which identification does (did) your mother use?

1. Native American
2. Native American and some non-Native American (e.g., White, African American, Latino, and Asian American)
3. Native American and non-Native American (bicultural)
4. Non-Native American and some Native American
5. Non-Native American (e.g., White, African American, Latino, and Asian American)

___ 5. Which identification does (did) your father use?

1. Native American
2. Native American and some non-Native American (e.g., White, African American, Latino, and Asian American)
3. Native American and non-Native American (bicultural)
4. Non-Native American and some Native American
5. Non-Native American (e.g., White, African American, Latino, and Asian American)

- ___ 6. What was the ethnic origin of friends you had as a child up to age 6?
1. Only Native Americans
 2. Mostly Native Americans
 3. About equally Native Americans and non-Native Americans
 4. Mostly non-Native Americans (e.g., Whites, African Americans, Latinos, and Asian Americans)
 5. Only non-Native Americans
- ___ 7. What was the ethnic origin of friends you had as a child 6 to 18?
1. Only Native Americans
 2. Mostly Native Americans
 3. About equally Native Americans and non-Native Americans
 4. Mostly non-Native Americans (e.g., Whites, African Americans, Latinos, and Asian Americans)
 5. Only non-Native Americans
- ___ 8. Who do you associate with now in your community?
1. Only Native Americans
 2. Mostly Native Americans
 3. About equally Native Americans and non-Native Americans
 4. Mostly non-Native Americans (e.g., Whites, African Americans, Latinos, and Asian Americans)
 5. Only non-Native Americans
- ___ 9. What music do you prefer?
1. Native American music only (e.g., pow-wow music, traditional flute, contemporary, and chant)
 2. Mostly Native American music
 3. Equally Native American and other music
 4. Mostly other music (e.g., rock, pop, country, and rap)
 5. Other music only
- ___ 10. What movies do you prefer?
1. Native American movies only
 2. Mostly Native American movies
 3. Equally Native American and other movies
 4. Mostly other movies
 5. Other movies only
- ___ 11. Where were you born?
1. Reservation, Native American community
 2. Rural area, Native American community
 3. Urban area, Native American community
 4. Urban or Rural area, near Native American community
 5. Urban or Rural area, away from Native American community

___ 12. Where were you raised?

1. Reservation, Native American community
2. Rural area, Native American community
3. Urban area, Native American community
4. Urban or Rural area, near Native American community
5. Urban or Rural area, away from Native American community

___ 13. What contact have you had with Native American communities?

1. Raised for 1 year or more on the reservation or other Native American community
2. Raised for 1 year or less on the reservation or other Native American community
3. Occasional visits to the reservation or other Native American community
4. Occasional communications with people on reservation or other Native American community
5. No exposure or communications with people on reservation or other Native American community

___ 14. What foods do you prefer?

1. Native American foods only
2. Mostly Native American foods and some other foods
3. About equally Native American foods and other foods
4. Mostly other foods
5. Other foods only

___ 15. In what language do you think?

1. Tribal language only (e.g., Cherokee, Navajo, and Lakota)
2. Mostly tribal language, some English
3. Tribal language and English about equally well (bilingual)
4. Mostly English, some tribal language
5. English only

___ 16. Do you

1. Read only a tribal language (e.g., Cherokee, Navajo, and Lakota)
2. Read a tribal language better than English
3. Read both a tribal language and English about equally well
4. Read English better than a tribal language
5. Read only English

___ 17. Do you

1. Write only a tribal language (e.g., Cherokee, Navajo, Lakota)
2. Write a tribal language better than English
3. Write both a tribal language and English about equally well
4. Write English better than a tribal language
5. Write only English

___ 18. How much pride do you have in Native American culture and heritage?

1. Extremely proud
2. Moderately proud
3. A little pride
4. No pride, but do not feel negative toward group
5. No pride, but do feel negative toward group

___ 19. How would you rate yourself?

1. Very Native American
2. Mostly Native American
3. Bicultural
4. Mostly non-Native American
5. Very non-Native American

___ 20. Do you participate in Native American traditions, ceremonies, occasions, and so on?

1. All of them
2. Most of them
3. Some of them
4. A few of them
5. None at all

APPENDIX E: INTERNAL REVIEW BOARD APPROVAL LETTER

Oklahoma State University Institutional Review Board

Date: Thursday, February 02, 2006
IRB Application No: ED0661
Proposal Title: Oklashinia: Validity of the Cognitive Mediation Cluster with Oklahoma Choctaws
Reviewed and Processed as: Expedited

Status Recommended by Reviewer(s): Approved Protocol Expires: 2/1/2007

Principal Investigator(s)

Deana Williams 1812 Mason St. Durant, OK 74701	Donald Boswell 434 Willard Stillwater, OK 74078
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The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 415 Whitehurst (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,



Sue C. Jacobs, Chair
Institutional Review Board

VITA

Deana Marie Williams

Candidate for the Degree of

Doctor of Philosophy

Thesis: OKLASHINLA: VALIDITY OF THE RORSHACH COGNITIVE
MEDIATION CLUSTER WITH OKLAHOMA CHOCTAWS

Major Field: Educational Psychology

Biographical:

Personal Data: I live in Durant, OK.

Education: Master's in Counseling Psychology
Bachelor's in Psychology

Experience: University of Kansas Counseling and Psychological Services
Oklahoma State University Counseling Services
Stillwater Women's Clinic
OSU Counseling and Counseling Psychology Clinic

Professional Memberships: APA Minority Fellowship Program
American Psychological Association

Name: Deana M. Williams

Date of Degree: December 2006

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: OKLASHINLA: VALIDITY OF THE RORSHACH COGNITIVE
MEDIATION CLUSTER WITH OKLAHOMA CHOCTAWS

Pages in Study: 93

Candidate for the Degree of Doctor of Philosophy

Major Field: Educational Psychology

Scope and Method of Study: The Rorschach Comprehensive System's Cognitive

Mediation cluster was validated on sixty Oklahoma Choctaws. Assessing validity was established in two ways. First, it was hypothesized that Rorschach scores would significantly correlate with scores on the Native American Acculturation Scale. Second, it was hypothesized that Oklahoma Choctaws would score significantly different on the Rorschach scores from Exner's normative sample.

Findings and Conclusions: There were no significant relationships between the Cognitive Mediation variables and scores on the acculturation scale; however, there were significant differences between the Oklahoma Choctaw sample's scores and Exner's normative sample for five of the seven variables of the Cognitive Mediation Cluster. Implications for the assessment of Native people are discussed.

ADVISER'S APPROVAL: Donald Boswell, PhD
