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UNIVERSITY OF OKLAHOMA
GRADUATE COLLEGE

EXAMINING THE LIFE PERSPECTIVE SCALE: AN INVESTIGATION
OF AN AMERICAN INDIAN ACCULTURATION INSTRUMENT

A Dissertation
SUBMITTED TO THE GRADUATE FACULTY
in partial fulfillment of the requirements for the
degree of
Doctor of Philosophy

By
ELISE M. BERRYHILL
Norman, Oklahoma
1998

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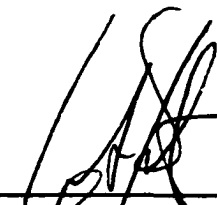
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AN INVESTIGATION OF AN AMERICAN INDIAN
ACCULTURATION INSTRUMENT**


A Dissertation

**APPROVED FOR THE DEPARTMENT
OF EDUCATIONAL PSYCHOLOGY**

BY



Shirley B. Gray
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For the Dean


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Acknowledgments

I would like to first acknowledge the Creator for blessing me with the desire and ability to contribute to the survival and well-being of Indian people. I would also like to acknowledge my ancestors who made great sacrifices for me to be in the present day. I believe it is their strength, perseverance, and endurance that has sustained me through the struggles of completing this work. To my grandmother, Blanche Pakoska Berryhill, my grandfather, Thomas Berryhill, Sr., and my great aunt, Pauline Pakoska Billy, I am deeply grateful. They have taught me invaluable lessons about what it means to be Mvskoke and to be a caring individual. To my parents, Michael Berryhill and JoAnn Skaggs, and my sister, Stephanie Berryhill, I am thankful for quietly understanding and supporting the joyous and painful directions I have taken throughout my life. The triumphs and the tribulations have helped me to remember the importance of balance and of humility. I would also like to express my appreciation to my companion, Jerry Tahsequah, who has partially travelled with me on this arduous journey and taught me unconditional love. I would now like to

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Mvto

(Thank You)

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Abstract

Many social science disciplines have examined the process of socio-cultural change that takes place among ethnic minority persons living in a culturally different environment. While the focus of these studies have been on the changes that occur at a group level, it has been relatively recently that the phenomenon known as acculturation has been investigated at an individual level. Instead of focusing on group adaptations, the individual's behavioral, social, cognitive, and emotional responses to this dynamic process have been the focus of psychological research. The purpose of this study was to investigate the psychometric properties of the Life Perspectives Scale-Form B (LPS-B) which was based on the theory of American Indian acculturation proposed by Choney, Berryhill-Paapke, and Robbins (1995). Specifically, data was collected to determine if the LPS-B reflected the four domains (social, cognitive, affective, and behavioral) of their acculturation theory.

One-hundred sixty nine American Indian participants from 22 different tribes were solicited from the state of Oklahoma. The participants were

patients from four Indian Health clinics. Participants ranged from 16 to 84 years of age. Instruments included a consent form, demographics questionnaire, and the LPS-B. Descriptive statistics, analyses of variance, a principal components analysis, and additional factor analyses with varimax and oblique rotations were performed on the data. Significant socio-cultural indicators of Indian cultural identity included speaking one's traditional language, being raised and living around other Indian people, attending tribal gatherings, possessing higher blood quantum, and acknowledging a commitment to tribal culture. The results of the factor analyses indicated that the items on the LPS-B best support a 2 factor structure, and that this factor structure does not reflect the domains present in the theory of acculturation for American Indians proposed by Choney et al. (1995). Recommendations for future development of an American Indian acculturation scale are provided based on the findings.

**Examining the Life Perspective Scale: The
investigation of an American Indian Acculturation
Instrument**

In order to build a framework to understand the concepts and measurement of acculturation that has been investigated in the current study, a review of the relevant literature on acculturation has been made. The literature review will provide: 1) operational definitions of acculturation and culture, 2) an understanding of acculturation from a broad, anthropological perspective, 3) a discussion of psychological theories of ethnic identity development, acculturation, and their relationship to the broad anthropological or socio-cultural perspective, 4) a brief presentation of the historical events that have shaped the socio-cultural adaptation and ethnic identity of American Indians, 5) a description of studies that have examined the impact of American Indian cultural conflict and acculturation variables on cross-cultural counseling, 6) a description of the American Indian acculturation models and instruments that have emerged from the multicultural psychology literature, and 7) a presentation of the American

Indian acculturation model that was developed by Choney et al. (1995) and the acculturation instrument based on their theory that was the focus of this study.

In order to understand the concepts that have been discussed and investigated in the literature on socio-cultural adaptation, some operational definitions must be provided, particularly in light of the historical transitions that these concepts have undergone as the theories have become more parsimonious. These definitions will also facilitate a better conceptualization of how the current study has defined acculturation for American Indians and attempted to quantify the definition in terms of empirical measurement on the LPS-B.

Definitions of socio-cultural adaptation

Before presenting the operational definitions of socio-cultural adaptation, a definition of culture is needed to provide a reference point from which cultural changes can be understood. Culture has been defined as the expression of language, behavior, customs, knowledge, symbols, ideas, and values which provide people with a particular world view and guidelines for living life (Nobles, 1979). When two cultures make

contact, these are the variables (e.g., language, behavior, customs, etc.) that are impacted by such interaction (Berry & Annis, 1974; Berry, Minde, & Mok, 1987; Casas & Pytluk, 1995; Marin, 1992). Furthermore, operational definitions of socio-cultural adaptation imply that these cultural variables can change. A brief description of the definitions are presented below.

Early terms used to define socio-cultural adaptation have been assimilation, adaptation, and acculturation. These words have been interchangeably used to denote the socialization process that occurs when one culture begins to either voluntarily or involuntarily modify its values in order to accommodate the values of another culture. With regard to the American Indian population, Berry and Annis (1974) defined assimilation as the desire to lose Indian ways and to merge with the larger society. They also contended that assimilation has meant the forced acculturation of a group to fully accept the values of another group. Moreover, adaptation has been defined as the process that occurs when one cultural group modifies its values and customs in order to adopt those

of another group (Choney, 1996). For the past twenty years, the most widely accepted term used to refer to socio-cultural adaptations of ethnic groups has been acculturation. The definition for acculturation has also undergone changes throughout the years. As newer and more complex theories of acculturation began to develop, the operational definition of acculturation began to reflect a more realistic description of the experiences of ethnic groups. Choney et al. (1995) have recently described acculturation for American Indians as the degree to which an individual accepts and adheres to both dominant culture values and tribal culture values. Similar versions of this definition have been established in the current general acculturation models (Berry, et al. 1987; Casas & Pytluk, 1995; Coleman, 1995; LaFromboise, Coleman & Gerton, 1993; Oetting & Beauvais, 1991; Sodowsky, Kwan, & Pannu, 1995).

The Choney et al. (1995) definition stands in contrast to the definition for assimilation provided by Berry and Annis, (1974) which implied that Indian people must voluntarily give up their own cultural values in order to identify with the dominant culture.

This definition, in many ways, reflects a time of awakening for ethnic groups who were politically reacting to historical oppression and inequality. The description of acculturation presented by Choney et al. (1995) seems to reflect the current Zeitgeist where American Indians have more freedom to choose their own cultural lifestyle. In order to work from a contemporary understanding of acculturation, the present study will utilize the Choney et al. (1995) definition of acculturation when discussing individual and group socio-cultural adaptation.

Having established a brief overview of the operational definitions for culture, socio-cultural adaptation and acculturation, it is now important to understand the process of acculturation from the broader, socio-cultural perspective provided by anthropology. One of the criticisms lodged against past and current acculturation models is that they have failed to adequately consider the socio-cultural variables that affect this process (Casas & Pytluk, 1995; Adrados, 1993). Most models have focused on the personal variables that influence acculturation while giving little consideration for the larger impact of

sociological variables. Given the aforementioned historical changes that have affected the definitions of acculturation, it is imperative to address the sociological ramifications of historic events on ethnic groups and individuals in the conceptualization of acculturation. Furthermore, many models have neglected to account for the effect of cross-cultural interactions on acculturation. Although the connections between the psychological and anthropological paradigms of acculturation have not always been successfully established, an attempt to show the importance of this relationship on current models of acculturation will be made in the following section.

The Anthropological Perspective of Acculturation

The study of the socio-cultural adaptations of ethnic groups has been undertaken by anthropologists and social scientists for decades (Smith, 1982). While researchers in psychology have recently begun to consider the process of socio-cultural adaptations, anthropologists have established important theoretical groundwork in this area. Smith (1982) argued that social scientists have needlessly dichotomized the

acculturative process into tradition versus change. In reality, it is the continuity of culture that should be examined. Cultures sustain a durable identity by adapting to changes throughout time. The result is a synthesis of tradition and novel experiences whose product should be the focus of understanding. Thus, continuity, as she defined it, is the ability to adapt under some conditions and persist and self-replicate under others. This type of conceptualization is one that should be used to better understand and identify an ethnic individual's dominant mode of operating within and between cultures. Smith (1982) emphasized the need to examine cultures from a holistic perspective by considering the relationship between both historical and current events as whole rather than treating these temporal concepts as independent entities. If continuity is a product of both tradition and change, then factoring out one or the other skews the reality of socio-cultures. What remains is only a snapshot view, leading to erroneous and simplistic assumptions concerning a single point in time. Examples of inaccurate assumptions that have been made about American Indians are the stereotypes of Indians

being either noble savages or alcoholics. The former stereotype romanticizes Indian people during a time when their traditional lifestyle was uninterrupted by the European culture, while the latter stereotype focuses on one of the most tragic experiences of contemporary Indian life today. Although both pictures are relevant and important to comprehending the continuity of Indian culture, the historical events and changes that lie between these two extremes are ignored. Thus, a simplified view of American Indian culture is the outcome. Smith (1982) suggested a way to avoid this error was to view the continuity of culture as dynamic and at times, revolutionary. The retention and renewal of traditions in the face of external threats to traditional ways of life often necessitates both persistence and adaptation. When traditional cultures are faced with pressures to acculturate, the old traditions that may have been lost are rediscovered and renewed. In the renewal process, old traditions are combined with new elements of the present culture to create a novel tradition. The most critical aspect of continuity is being able to make what was old, new again. Another way to view the

renewal process of old traditions, is to see it as a form of resistance to acculturation. The cultural significance of this notion for American Indians can be observed in the spiritual and political activism of Indian organizations such as the American Indian Movement (AIM), the Native American Church, sobriety movement, and the National Congress of American Indians (NCAI). Medicine (1981) argued that the renewal of traditional ceremonies is a powerful mechanism for American Indian people to resist integration into the majority culture. She described the neo-traditionalist pan Indian movement as an organized reaction to political forces that are threatening the identity and sovereignty of Indian nations. The inter-tribal popularity of participation in the Lakota Sun Dance ceremony is one symbolic example of the current generation's commitment to preservation of traditional Indian culture in a contemporary and hostile world.

Specifically, regarding acculturation, the concept of socio-cultural continuity holds great relevance for American Indians and other ethnic groups because culture is not perceived as a static phenomenon, isolated from and unaffected by environmental

surroundings, but rather processes of acculturation are influenced by the time and space in which they exist (Adrados, 1993; Smith, 1981). Therefore, the concepts of culture, ethnic identity development, and acculturation should all be understood as constructs that are relative to the influence of both contextual/socio-political forces, and intrapsychic forces. Acculturation is also dependent upon the interaction of socio-cultural variables both within and between cultures.

In summary, viewing acculturation from this broader socio-cultural perspective will facilitate a more progressive and complex understanding of this process, thereby, avoiding the simplistic assumptions and stereotypes that have been previously made (Chief, 1940; Dana, 1986; McShane & Plas, 1982; Smith, 1981; Uecker, Boutilier, & Richardson, 1980).

Just as it has been necessary to build a foundation concerning the operational definitions of culture, acculturation, and the relevance of a socio-cultural perspective, an understanding of some theories of ethnic identity development and its relationship to acculturation models is warranted. Working from the

socio-cultural underpinning of acculturation that has been provided, in the next section connections will be made between cross-cultural interactions and the role of ethnic identity development in the acculturation process.

Ethnic Identity Development

The process of acculturation that has been described by both Smith (1982) and Medicine (1981) is congruent with the multicultural psychology literature that also views this process as dynamic and interactive (Adrados, 1993; Berry & Annis, 1974; Berry et al. 1987; Casas & Pytluk, 1995; Helms, 1995; Marin, 1992; Oetting & Beauvais, 1991). Instead of examining group adaptations, however, the focus of current acculturation research has been on the individual's behavioral, social, cognitive, and emotional responses to his/her own culture and to other cultures. These psychological domains of behavioral, social, cognitive, and emotional factors are integral to many of the current ethnic identity and acculturation models.

A recent attempt to address the domains of ethnic identity has been made by Isajiw (1990). Isajiw (1990) explained that ethnic identity is divided into two

dimensions; external and internal, and that these dimensions have varying degrees of salience to individuals. External ethnic identity is a behavioral representation of culture while internal ethnic identity involves cognitive, moral, and affective domains that are variables used to assess an individual's knowledge, beliefs, values, attitudes, and feelings relating to one's own culture. The combination of these two types of identities results in a complex and comprehensive profile of individuals, much like the model of American Indian acculturation posited by Choney et al. (1995) which will be described later. While Isajiw's (1990) model of identity development provides a general overview of the critical dimensions, as well as domains within each dimension that are influenced in the identity development process, he does not articulate the nature and effect of within-culture and between-culture interactions on identity development.

Marin (1992) has elaborated on these aspects of ethnic identity by developing a general model of acculturation that examines the impact of cross-cultural interaction. He described acculturation

as the product of "culture learning" that occurs as a result of contact between the members of two or more groups. Further, this process involves changes in attitudes and behaviors resulting from multicultural interactions brought about by colonialization, invasions, or political forces. He hypothesized that these changes occur at three levels that vary in their depth of internal processing. The first level is described as a superficial process of acculturation. This is where individuals learn and forget the facts that are part of their own cultural history and tradition, and these are instead replaced by historical facts of the new culture in which they are residing. The second or intermediate level in the acculturation process involves behavioral manifestations of the new culture. Behavioral determinants of an individual's acculturation at this level include; language preference and use, ethnicity of friends, neighbors, and co-workers, ethnicity of spouse, names given to children, and preference for ethnic media. Finally, the third or significant level involves changes in an individual's beliefs, values, and norms. Permanent alterations in the individual's worldview and ways of

interacting on a daily basis occur at this level. However, not all cultural values and behaviors change; in fact, Marin (1992) hypothesized that there are some aspects of the culture that remain constant across the generations. For example, among the Latino population, pervasive use of the Spanish language serves as a cultural anchor in the ethnic identity of Latino individuals that greatly moderates the impact of acculturation (Knight, Bernal, Garza, & Cota, 1993). The Latino cultural values that are ultimately retained or modified depend greatly upon social factors such as language, community, family cohesion, generation, immigration experience, and individual personality characteristics (Rogler, Cortes, & Malgady, 1991; Rogler, Malgady, Constantino, & Blumenthal, 1987).

For African Americans, as well as for other ethnic identity models, Helms' (1995) work on the dynamic process of racial identity development has been pivotal. Her model is based on the concept that people of color have adapted in an environment in which there is political inequality and cultural oppression. Consequently, identity is developed in the context of racial discrimination. The development of identity

occurs in the context of a dynamic interaction between cognitive and emotional processes called statuses (formerly called "stages" changed to statuses because of the implication of a static process in the original theory). These statuses include the following:

1. Conformity (Pre-encounter) Status - devaluation of one's own race and full acceptance of the White race.
2. Dissonance (Encounter) Status - confusion concerning own racial group commitment.
3. Immersion/Emersion Status - idealization of one's own race and rejection of the White race. Self-definition is based on own-group commitment and cultural values.
4. Internalization Status - commitment to one's own race while also displaying ability to respond objectively to members of the dominant culture. Internalization of racial attributes with objective social judgements.
5. Integrative Awareness Status - self-expression of both racial identity values and global humanistic values.

Helms (1995) asserts the effective progression through the statuses is dependent upon the ego strength and

maturity of the individual. The concept of status dominance describes the status that governs most of the individual's racial reactions, whereas the concept of accessibility refers to whether the underlying status becomes stronger. Helms (1995) developed a similar model of White racial identity development which is based on the aforementioned statuses. Although the processes are comparable, the developmental issue for Whites is the abandonment of entitlement, while the developmental issue for people of color is overcoming internalized racism.

To lend further support to the relationship between cross-cultural interactions and ethnic identity development posited by Isajiw (1990), Marin (1992), and Helms (1995), Casas, and Pytluk's (1995) theory of acculturation also takes these variables into account. They defined acculturation as socialization into an ethnic group other than one's own. Moreover, the psychological and social modifications that occur in the acculturation process are idiosyncratic to individuals. Some examples of these characteristics include: one's level of enculturation into one's own cultural group, the salience of cross-cultural

interactions, and the actual numerical balance between individuals representing the culture of origin and those who represent the new and larger majority culture. They also emphasized that acculturation is an open-ended process. This process is constantly being affected by the interaction between the culture of origin and the majority culture.

While the research of Isajiw (1990), Marin (1992), and Casas and Pytluk (1995) on ethnic identity development and acculturation concentrates on the changes that take place in the ethnic individual's identity, Berry et al. (1987) described the impact of cross-cultural interactions on both ethnic and White individuals' concepts of identity. Berry et al. (1987) hypothesized that in a monocultural society, the dominant group applies pressure on ethnic groups to assimilate, whereas in a multicultural society, the dominant society exerts less influence and may in fact be influenced to make some cultural changes by the diverse ethnic groups that run parallel to it. Furthermore, ethnic individuals in pluralistic societies may have better mental health than those in monoistic societies because of less pressure to modify

their cultural values. While an ethnic person is attempting to locate him or herself socially and psychologically with respect to the dominant group, members of the dominant social system are also attempting to locate and develop their psychological relatedness to the ethnic person. According to these authors, both the ethnic and nonethnic individuals assess the following: whether or not to accept one another; whether or not to accept or reject members within their own group; whether or not they feel a sense of belonging to their own ethnic group; how nonethnic individuals locate ethnic individuals' interactions; and, whether or not the ethnic individual feels a sense of inter-ethnic relations.

Cross and Fhagen-Smith (1996) assert the relevance of Erik Erikson's identity development model to racial/ethnic identity. Erikson (1968) described four stages of adolescent identity development which result in the integration of personal identity, general personality, and social or group identity. The following stages include:

1. Diffused Identity - involves confusion about one's personal identity.

2. Foreclosed Identity - may involve the premature acceptance of one's identity that is only based on parental teachings.
3. Identity Moratorium - the occurrence of identity crisis which evokes exploration of the self-concept.
4. Achieved Identity - resolution, clarity of thinking, and commitment to a well rounded notion of personal identity.

Cross and Phagen-Smith (1995) compare the Eriksonian stages to Phinney's (1989) ethnic identity development model (EID) for different cultural groups. The EID model is outlined in the following four stages:

1. Diffused Identity - no exploration of ethnic identity and no understanding of these issues.
2. Foreclosed Identity - acceptance of ethnic identity based on parental values without exploration.
3. Moratorium Identity - exploration of ethnic identity precipitated by an ethnic identity crisis.
4. Achieved Identity - integration and achievement of a complex self-concept and worldview as a result of ethnic identity exploration.

In summary, ethnic identity is a process in which the ethnic person is constantly assessing the fit

between the self and the different social systems in the environment. Moreover, ethnic identity is influenced by the same socialization processes that all people experience (Erikson, 1968), as well as by the cross-cultural interactions that occur as an ethnic minority individual (Cross & Fhagen-Smith, 1996; Phinney, 1989), and the unique characteristics of each individual (Berry et al. 1987; Isajiw, 1990; Sadowsky et al. 1995). Because ethnic identity is integrally related to the self concept of the individual, the quality of the sociological "fit" between the two cultures has been suggested to be a precursor to an ethnic individual's adaptive or maladaptive responses to the dominant culture (Berry & Annis, 1974). The label that has been used to describe an ethnic individual's maladaptive response to the dominant culture has been termed acculturation stress (Berry & Annis, 1974). Within the past ten years, acculturation stress has received significant attention in the research literature. The destructive outcomes of anomic depression, substance abuse, cultural alienation, and mental illness have been attributed to the inability of individuals to safely navigate through

the stressful transition of acculturation (Berlin, 1987; Berry & Annis, 1974; Duran, Guillory, & Tingley, 1992; Oetting & Beauvais, 1991; Price, 1975; Terrell, 1993; Weibel-Orlando & Long, 1984; Yates, 1987). Berry and Annis (1974) were the first to introduce the concept of acculturation stress. They contended that the development of psychological stress for many ethnic individuals is a function of acculturative influences. Their theory is based on an ecological/cultural/behavioral model of acculturation and included the following components: ecology, traditional culture, traditional behavioral, contact culture, and acculturated behavior. They empirically tested their model on Indian communities (Tsimshian, Carrier, Cree) in three eco-cultural settings; in each setting, one community was relatively traditional and one relatively acculturated. A nonNative comparison group was also selected. The results supported their hypothesis that high acculturative stress is linked to a sense of rejecting the dominant culture and to low desire for positive interactions with the dominant society, versus acculturative stress arising from a desire to retain Indian ways. The set of positive relationships between

stress, marginality, and rejection supported this conjecture. Therefore, they hypothesized that research explore the possibility that high levels of acculturative stress are associated with questions of socio-political relationships with the larger society and not with the question of maintaining Indian ways. The high level of identification with tribal Indian culture across all three samples suggested that psychological discomfort and subsequent acculturation stress may be attributed to Indians' inability to adequately relate to the nonNative world around them. Furthermore, support for the hypothesis that individuals who were highly sensitive to their environment would be more susceptible to acculturation stress was found.

In summary, acculturative stress was found to be related to cultural and behavioral discontinuities encountered during acculturation at the community level (i.e., as a group some traditional peoples were more prepared for the process than others). At the individual level, acculturative stress was related to psychological differentiation (i.e., some individuals are more susceptible to external acculturative

pressures than others).

The research on acculturation stress has been important in highlighting the negative impacts of cultural oppression. To date, most of the American Indian mental health research has focused on the ramifications of cultural alienation and acculturation stress. While the prevalence of acculturative stress based on substance abuse, mental illness, and sociological ills plaguing Indian people has been well-documented, this one-sided view of Indian culture and experiences has neglected the strengths, competence, and adaptability that have also been prevalent for this racial group (LaFromboise & Rowe, 1983). Recently, multicultural research has begun to balance this one sided view by examining acculturation from a health model perspective rather than from a deficits model (Choney et al. 1995; Coleman, 1995; LaFromboise, et al. 1993; Oetting & Beauvais, 1991). Those researchers have been able to emphasize the positive aspects of cultural continuity resulting in a more comprehensive and progressive view of acculturation. Moreover, research that focuses on the adaptive qualities of individuals who are effectively

managing acculturation is another step towards gaining a more accurate understanding of Indian people.

For American Indian and Mexican American adolescents, Oetting and Beauvais (1991) have led the way in providing a positive perspective of acculturation by introducing their orthogonal cultural identification theory to explain the relationship between cultural identification, attitudes, behaviors, and substance use of ethnic adolescents. Their theory held many of the same assumptions about cross-cultural interactions that were discussed in the ethnic identity models developed by Berry, et al. (1987), Isajiw, (1990), Marin (1992), and Casas and Pytluk (1995). The assumptions that identity is shaped by the interactions with members of one's own cultural group and members of other cultural groups, and that individuals negotiate their position in two or more cultures based on those interactions are tenets of the model proposed by Oetting and Beauvais (1991). Instead of trying to only establish a link between acculturation stress and maladaptive responses, Oetting and Beauvais (1991) also explored the possibility that American Indian and Mexican American adolescents had bicultural competence

skills that they could use to cope with their varying levels of cultural identification with their own culture and other cultures. Oetting and Beauvais (1991) theorized that certain combinations of cultural identification can exist. Individuals can be very bicultural, unicultural, high identification with one culture and medium identification with another, or low identification with either culture. Identification with one culture is orthogonal or independent of identification to another culture. Instead of the traditional model which has two cultures on opposite ends of the continuum, cultural identification dimensions are at right angles to each other in the Oetting and Beauvais (1991). The lack of identification with any culture is at the origin of the right angles. In order to assess orthogonal cultural identification, the authors developed a basic four-item measure. The four items include: (1) Do you live in the (Native-American, Hispanic-American, White-American) way of life? (2) Will you be a success in the (Native-American, Hispanic-American, White-American) way of life? (3) Does your family live in the (Native-American, Hispanic-American,

White-American) way of life? (4) Is your family a success in the (Native-American, Hispanic-American, White-American) way of life? They report an internal consistency reliability in the high .80s for these four items. In addition, strong correlations were found between the four-item measure and other Indian culture related items that included: Does your family teach you about Indian ways (.74)? Do you take part in Indian religious ceremonies (.73) ? Does your family take part in Indian activities and events (.67) ? Strong correlations were found between cultural identification and friendships with White youth, family caring, self-esteem, school adjustment, and drug use. The orthogonal cultural identification theory provides a conceptualization of acculturation from an adaption perspective and, in fact, suggests that ethnic youth are capable of demonstrating bicultural competence. Furthermore, the theory constructed and tested by Oetting and Beauvais (1990) lends some support to the generalizeability of ethnic identity models to American Indian and Mexican American youth. Unfortunately, the orthogonal cultural Identification theory does not address the complex nature of the acculturation process

that has been suggested by the ethnic identity and acculturation models previously discussed (Berry, et al. 1987; Casas and Pytluk, 1995; Isajiw, 1990; Marin, 1992). Specifically, there is no attempt to identify which domains (i.e., cognitive, behavioral, emotional, social, spiritual) an individual may be operationalizing when identifying with one culture or another. This attempt is necessary in order to provide a better explanation of the complex internal processes which underlie acculturation for American Indians.

One adaptive model which does incorporate the cognitive, behavioral, emotional, and social domains of acculturation has been proposed by Coleman (1995). He has described the process of acculturation as a coping mechanism for cross-cultural contact. When an individual is confronted with a new culture, the individual must acquire a behavioral episode schema in order to learn the culture and manage the stress related to this learning process. If the behavioral episode schema is successful in allowing the individual to achieve certain goals in that particular cultural context then it can be deemed effective. However, if the strategy is ineffective then the individual will

suffer from acculturative stress symptoms such as depression, anxiety, school failure, or employment difficulties. Similarly, LaFromboise et al. (1993) suggested that the term second culture acquisition can be applied to the change process that occurs when an individual comes into contact with another cultural group and when acculturation is actually the outcome of such contact. In this process, the individual may relinquish most of the values, beliefs, and behaviors of the culture of origin in order to achieve certain goals within a new culture. Despite, undergoing this change process, the individual may never be fully accepted as a member of the new culture. Furthermore, the effectiveness of their coping strategies will determine how well their acculturation stress and goal achievement is managed. Furthermore, Coleman (1995) delineated six coping strategies based on LaFromboise et al. (1993). These include: a monocultural strategy, an acculturation strategy, an alternation strategy, an integration strategy, a segregation strategy, and a fusion strategy. The monocultural strategy is used by an individual who desires to relinquish membership in the culture of origin in order

to become a full member of the second culture or who does not perceive that cultural differences exist. The acculturation strategy that is used by someone who seeks to achieve goals within the second culture while realizing that full membership in that culture will never occur. Negative acculturative experiences, however, would likely not deter this individual from becoming socially involved with the second culture because competence in this culture is highly valued for survival. The third strategy is a balanced attempt at becoming competent in two or more cultures. An individual using the alternation strategy will have more realistic and positive views of both their culture of origin and the majority culture, beliefs that one can be biculturally competent and successfully manage acculturation stress, have social support networks in both groups, and engage in effective communication with people from both groups. The integration strategy places equal focus on maintaining the culture of origin and developing second culture competence. It is structured around a multicultural ideal and mutual acceptance between groups. Individuals using the segregation strategy hold a preference for their

culture of origin based on the perception that their culture is superior to the second culture and that there is insurmountable incompatibility between the two groups. The fusion strategy is used by individuals who seek to develop a new culture from a culturally diverse group of people.

The previously discussed ethnic identity and acculturation models are connected through a single process that is dependent upon social interactions both within and between cultures. Ethnic individuals receive information about who they are in relation to their own culture and other cultures by assessing the sociological fit of the two. Some models of acculturation have indicated that if the fit is inadequate, cultural conflicts may occur leading to maladaptive responses or acculturative stress reactions (i.e., alcoholism, anomic depression, cultural alienation, mental illness (Berlin, 1987; Berry & Annis, 1974; Duran, et al. 1992; Oetting & Beauvais, 1987; Price, 1975; Terrell, 1993; Weibel-Orlando & Long, 1984; Yates, 1987). Other parsimonious models of acculturation and ethnic identity have moved away from the assumption that acculturation stress is a

likely outcome when ethnic individuals are faced with cultural change (Berry et al. 1987; Casas & Pytluk, 1995; Choney et al., 1995; Coleman, 1995; Isajiw, 1990; LaFromboise et al., 1993; Marin, 1992). As researchers have adapted their models to account for the socio-cultural variables as well as personal variables, a more complete picture of ethnic individuals and American Indians has been obtained. Cultural continuity can be observed in the behavioral, social, cognitive, and affective domains of individuals who are able to competently maintain their ethnic identity and function in the context of different cultural environments.

The unique historical experiences of American Indians, Asian Americans, African Americans, Latino Americans, and other ethnic groups has influenced theoretical assumptions about acculturation for these groups. While it has been necessary to establish a general acculturation framework for ethnic groups, it is now necessary to establish the unique factors that have shaped theories of acculturation for American Indians.

Historical Influences on American Indian Acculturation

Unlike immigrant groups, American Indians have held a special history and legal relationship with the United States government which has been based on federal treaties and law. This unique relationship recognizes tribes as sovereign nations with the power to develop a wide range of services including mental health care through the Indian Self-Determination and Education Assistance Act of 1975 (PL 93-638, (LaFromboise, 1998; Medicine, 1982; Trimble, 1990)). However, Indian nations have recently attained this level of political and legal independence. Throughout history, Indian people have struggled to maintain cultural identity under the government sanctioned efforts to exterminate, remove, and assimilate Indian peoples. These efforts have included racial genocide, removal and relocation, boarding schools, missionary schools, and forced adoption of Indian children into White families (Berryhill-Paapke & Johnson, 1994; Choney et al. 1995; Debo, 1940/1986; Duran et al. 1992; Kemppainen, 1995; Ford, 1983; Richardson, 1981; Snipp, 1989; Yates, 1987). The physical appearance, language, traditions, customs, spiritual beliefs, and cultural

values of Indian people were forbidden in order to be effectively replaced by White values and ways of living. Perhaps no other group in the United States has endured such institutional forces to assimilate. The fact that American Indians, as indigenous peoples, have experienced over 200 years of cultural denigration in their homelands, is staggering. While some groups of Asian Americans, Latinos, and other immigrants have chosen (to some degree) to adapt their indigenous beliefs and values in order to survive in the dominant society, (geographically different from their indigenous lands), American Indians have been forced to change in order to survive in their indigenous lands, the cornerstone of their existence for thousands of years. This distinction between voluntary and involuntary acculturation, forced and subtle acculturative pressures, immigration experience, and connection to one's homelands, has had different effects on ethnic groups, and in this case, it holds particular salience for American Indian acculturation (Attneave, 1982; Casas & Pytluk, 1995; LaFromboise, 1998; Trimble, Fleming, Beauvais, & Jumper-Thurman, 1996). This would be analogous to the United States

being politically overtaken by another country and its citizens forced to adopt foreign language, beliefs, values, and ways of living. Not only would the effect be traumatic, but it would also take hundreds of years of assimilation and acculturation for United States citizens to reach a state of socio-cultural and psychological equilibrium. Similarly, Indian people are still trying to recover from the historic trauma and oppression of this experience. It stands to reason that the intergenerational impact of forced acculturation will have an impact on psychological adjustment (Dauphinais, 1993; Duran et al. 1992; Trimble et al. 1996). On the other hand, American Indians have survived these experiences with many cultural traditions, intact. The ability to focus on a balance between the strengths and weaknesses of Indian people has been a challenge to psychologists. Moreover, how psychologists have addressed these issues with their Indian clientele has been under scrutiny because of the tendency for Western psychotherapy to overlook the importance of these historical events and cultural values of American Indians (Bennett, BigFoot, & Thurman, 1989; Bennett & BigFoot-Sipes, 1991;

Berryhill-Paapke & Johnson, 1995; Flores, 1984; Sue & Sue, 1991). Some of the ramifications of ignoring the cultural values of American Indian clients have been investigated by researchers in cross-cultural therapy. Specifically, the effects of variables such as counselor ethnicity, counseling style, cultural similarity, and cultural values disparity between counselor and client have been examined. The relationship of these variables to acculturation has not been adequately accounted for in these studies even though there is theoretical support for determining the acculturative status of Indian peoples. The following section will provide a brief overview of the findings of some of these pertinent studies and discuss the importance of determining the acculturation of Indian clients.

Cultural Values in Therapy

In the review of the literature, thus far, the significance of cross-cultural interactions in the development of ethnic identity and acculturation has been established. The influence of unique historical, socio-cultural, and psychological factors on the ethnic identity and acculturative status of ethnic groups has

been discussed and the rationale made that these differences require (to some degree) adjustments in the general models in order to be relevant for a particular group. For American Indians, the historical forced assimilation and denigration of Indigenous cultures has wrought problems in psychological adjustment (acculturative stress). Although acculturative stress does occur, it is not imminent, because of the different coping strategies and levels of bicultural competence among Indian people (Coleman, 1995; LaFromboise, et al. 1993; Trimble et al. 1996). It is likely that an individual, who does not have an adequate level of bicultural competence to resolve crosscultural conflicts or coping skills to manage other standard psychological issues, will require therapy (Coleman, 1995). This becomes a concern for the therapist who is faced with an Indian client in the crosscultural context of therapy. Traditional Western psychotherapy has been criticized for ignoring the cultural characteristics of Indian clients by applying irrelevant therapeutic strategies and inadvertently imposing cultural values in crosscultural therapy. The effects of variables such as counselor ethnicity,

counseling style, cultural similarity, and cultural values disparity between counselor and client have been examined. Researchers and clinicians have hypothesized that the cultural values disparity that often occurs between American Indian clients and their therapists may be one reason why American Indian clients underutilize mental health services and have high attrition rates in therapy (Bennett et al. 1989; Bennett et al. 1991; Berryhill-Paapke & Johnson, 1995; Flores, 1984; LaFromboise, Trimble, & Mohatt, 1990; Trimble, 1990; Trimble et al. 1996). In fact, some research has indicated that once therapy is initiated, American Indian clients, when compared to their nonIndian counterparts, are twice as likely to drop out of therapy after the first session (Sue, Allen, & Conway, 1981). Although it has been empirically established that cultural values and acculturation are important variables to consider in the process of crosscultural therapy, the effect of these variables is still unclear given contradictory findings. Some research supports the hypothesis that traditional cultural values would affect American Indian adult clients' preference for counselor, while other studies

have failed to find support for this hypothesis (Dauphinais, Dauphinais, & Rowe, 1981; Haviland, Horswill, O'Connell, & Dynneson, 1983; LaFromboise, Dauphinais, & Rowe, 1980; LaFromboise & Dixon, 1981). In a study by Dauphinais et al (1981), that examined preference for ethnicity, they found that Native American high school students perceived a Native American counselor as more effective than a non-Native American counselor. In addition, their study found that a directive style of counseling was preferred over a nondirective one. Haviland et al. (1983) found that Native American college students have a distinct preference for a Native American counselor. In contrast, another study found that Indian students' see trustworthiness and cultural sensitivity as being more important in a counselor than cultural similarity (LaFromboise & Dixon, 1981). Likewise, LaFromboise et al. (1980) found that trust and cultural awareness, and a directive approach displayed by the counselor was preferred over counselor ethnicity.

The trend has been one of inconsistent findings in the research on Indian students' preference for counselor ethnicity. Some findings lend support for

the importance of ethnic and cultural values similarity, others indicate that the therapists' attributes of trustworthiness, respect, empathy, cultural sensitivity, and expertness are more important. However, some conclusions can be drawn from the different findings. It appears that American Indian students prefer counselors who display the basic relational elements of counseling (i.e., trustworthiness and rapport, empathy, respect, cultural sensitivity, and acceptance) and who have a directive, "expert" quality to their counseling style (Trimble et al. 1996). Unfortunately, the drawback of these studies are that many of the findings are based on samples of American Indian students and minimal effort was made to adequately measure the acculturative level of the students. Therefore, generalizations of these findings to other tribal populations and age groups is limited. This has not been an easy goal to achieve because there are no empirically validated and reliable measures of acculturation for American Indians. Despite this fact, many acculturation instruments have been developed for individual use in studies that examined related variables. Many of these

acculturation instruments are not theory-driven. Moreover, the psychometric properties of most of these instruments are unknown. Subsequently, it is difficult to draw clear conclusions from the studies who have utilized these instruments to measure acculturation for American Indians.

The next section will provide a critical review of previously developed, American Indian acculturation models and instruments by comparing them to general theories on acculturation and identity, examining their psychometric properties, and discussing their strengths and weaknesses.

American Indian Acculturation Measures

Many of the earlier American Indian acculturation instruments are not theory-driven, suffer from poor test construction, and lack reliability and validity data. Only a handful of instruments appear to be based on a comprehensive model of acculturation and even fewer have undergone investigation of its psychometric properties.

One of the earliest instruments, developed by Chief (1940) was a 40-item scale that measured the degree of assimilation of 100 female Indian high school

students in Kansas. Two comparison groups of 50 female Indian students were selected from Haskell Institute (an Indian boarding school) and an integrated high school in the same community. The students were matched on blood quantum, but differed in levels of I.Q. as measured by the Group Intelligence Test, Higher Form A. Chief's (1940) knowledge of tribal culture was based on her experiences with Sioux Indians in South Dakota, Gros Ventre and Assiniboine Indians on the Ft. Belknap Reservation in Northern Montana, and Indian students at Haskell Institute. According to Chief (1940), there had been no prior attempt to quantitatively measure assimilation. She described assimilation as "a process of social interaction and reciprocal accommodation whereby one group, by participating in and sharing the culture of another group, becomes identified with that group in a common philosophy of life and therefore a common cultural heritage" (P. 20). The major elements of the assimilation process which were assessed in her scale included; attitudes, beliefs, sentiments, preferences, customs, social distance, participation, food, and external appearance. Based on these major elements,

the 40 items measured both general and specific attitudes towards assimilation, white versus Indian language, funerals, marriages, dress, tracing ancestry, traditional cultural participation, and material culture in the home. She attempted to construct an instrument that would have cross-tribal generalizeability. Degree of assimilation was placed on a five-point scale ranging from white assimilation to full Indian assimilation. The scoring system of the scale involved the following set of numbers which were substituted for 1, 2, 3, 4, and 5, respectively; 10-full assimilation, 7-relatively high white assimilation, 5-assimilation mid-way between white and Indian culture, 3-relatively high Indian assimilation, and 0-full Indian assimilation. Content validation was established by having four experts (one of whom was an American Indian) on American Indian assimilation, with both sociological and psychological perspectives, critically review the items. Construct validation of her scale was not reported. Test-retest reliability, after a two week interval was $r=.91$ for the 50 students in the community high school group. No test-retest reliability for the 50 Indian boarding schools students

was reported.

Chief's (1940) work may be one of the first attempts to quantify the assimilation process for American Indians and has provided a reference point to indicate the progression of acculturation theories and instruments. It also reflects the dominant majority model of acculturation at that time; a uni-dimensional process of moving away from tribal culture towards the majority culture (Oetting & Beauvais, 1991). The limitations of this instrument include the following: lack of a bi-dimensional and contextual theory of acculturation (as we now understand it), limited content validity, no test-retest reliability on the comparison groups of Indian boarding school students, and limited ability to establish construct validity because the statistical application of factor analysis was still developing at that time (Bartholomew, 1995).

Another early acculturation instrument that has item content similar to the instrument developed by Chief (1940), is the Sociocultural Field Schedule (McFee, 1968). In contrast to Chief's (1940) study, McFee (1968) concluded with a sophisticated model of acculturation indicative of contemporary bicultural

competence models. The Sociocultural Field Schedule measured levels of acculturation among the members of the Blackfeet Indian tribe of Northern Montana by placing individuals on a uni-dimensional continuum of acculturation (movement towards the majority culture). The tribe was divided into two sub-groups; white-oriented and Indian-oriented. Blood quantum was not an important factor. More emphasis was placed on assessing factors such as aspirations, values, goals, and behaviors. Items included demographic information, political/social affiliations, spiritual/cultural involvement, language, family/marital status, and living conditions and were administered to participants using an interview format. Individuals were placed on an acculturation continuum ranging from those who showed 100 percent Indian characteristics to those who showed 100 percent White characteristics. Individual data points were scatter plotted on the X and Y axes to reflect the percentages of Indian and White orientation. No reliability and validity data were reported for the instrument. McFee (1968) concluded that it is incorrect to assess American Indians on a uni-dimensional continuum of acculturation that assumes

complete loss of culture will occur. Instead, he suggested that individual American Indian models of acculturation should explain the dynamic process of bicultural competence, that American Indian individuals are capable of successfully holding roles in both cultures. He suggested that future individual acculturation instruments for American Indians measure categories of acculturation based on the bi-cultural contexts that Indian people experience. These findings have established important groundwork for the current models of acculturation and identity because of his progressive and adaptive view of acculturation as a cross-culturally interactive process. (Berry et al. 1987; Choney et al. 1995; Coleman, 1995; LaFromboise et al. 1993).

As the knowledge base on American Indian acculturative experiences, acculturative stress, and cultural conflicts continued to expand, researchers began to examine the impact of acculturative problems on the following variables: academic difficulties, learning styles, and substance abuse. Unlike the McFee (1968) study, these subsequent studies did not seek to advance American Indian acculturation theories.

Instead, acculturation was a variable of secondary interest to other variables (learning style, substance abuse).

One such study explored the relationship between learning difficulties and acculturative status of Indian children. McShane and Plas (1982) examined the performance patterns of 142 American Indian children across all subtests of the WISC, WISC-R, and WPPSI using the Bannatyne recategorization scheme. They hypothesized that Indian children would display a pattern of performance that is different from normal and learning disabled children, and that recategorization of their Wechsler scores would exhibit this pattern. Specifically, this general pattern would show the following sequence: Spatial > Sequential > Conceptual and Acquired Knowledge. In addition, this significant pattern would hold for the traditional groups, but not for the Anglo-acculturated groups. The Traditional Experience Scale (TES) was developed for the study to assess the acculturation of the Indian mothers. This scale measured fluency in traditional language and participation in Indian ceremonies. Significant differences were found between the

performances of children who had mothers identified as acculturated and mothers identified as traditional. The traditional children evidenced the predicted pattern of recategorized Wechsler subtest performance. McShane and Plas (1982) asserted that traditional heritage is one factor that influences the intellectual style of Indian children. No reliability and validity measures were reported for their instrument.

Their study is representative of the "one shot" measure of acculturation that, unfortunately, has become the norm over the years. It is neither based on a theory, nor established with psychometric properties. Moreover, the finding that traditionally oriented Indian children display a different Wechsler pattern than "normal" and learning disabled children, could have been confounded by socioeconomic (SES) factors, because of the questionable ability of the TES to reliably and validly measure acculturative status and the lack of control for level of SES. Their study resulted in highlighting the difficulties of Indian people to succeed in the majority culture (deficits model), with the potential to unintentionally perpetuate the stereotype that all traditional Indian

children will display a differential intellectual style. Unfortunately, broad conclusions have been made about Indian peoples in many of these types of studies on acculturation. However, a more detrimental impact of this trend is described in the following study on acculturation.

One of the most controversial of the deficits model of American Indian acculturation instruments links substance abuse with traditionality (Uecker et al. 1980). The Richardson Indian Culturalization Test measured Indianness with 25 items that included the following: Indian customs, beliefs, language, eating, and drinking habits. Test development and construction was based solely on one of the author's experience with Sioux male alcoholic inpatients. Uecker et al. (1980) compared Sioux male inpatients' MMPI scores with their scores on the Richardson Indian Culturalization Test. Content validity was not established and no construct validity was reported for the instrument. Test-retest reliability for 14 out of the 40 Indian alcoholic participants was .75 ($p < .05$). In a critical review of the instrument, Walker, Cohen, and Walker (1980) identified the following weaknesses: 1) the instrument

was poorly named and constructed with no empirical reliability and validity, 2) it could not be a valid measure of Sioux Indianness since a representative sample of Sioux people was not obtained, 3) an instrument normed on a group of male Sioux alcoholic inpatients could not be generalized to other tribes as the name of the test suggested, and most importantly 4) the test perpetuates negative stereotypes of American Indians by relating high scores of Indianness to clinically significant scores of psychopathology on the MMPI. Given the history of cultural oppression of American Indians, this instrument is an example of deficits model research that could have politically and socially damaging consequences for Indian people.

Another study, although without the damaging implications of Uecker et al. (1980), is based on an acculturative stress or deficits model (Wingert & Fifield, 1985). They attempted to measure the contribution of the acculturation variable in its explanation of substance abuse within a culture. Their study compared the characteristics of American Indian inhalant users with those of American Indian nonusers by measuring traditional characteristics of American

Indians with their Native American Rating Scale. This instrument was developed for their study to assess the extent to which an individual's life experiences correspond to the areas that are thought to reflect the "traditional" Native American way of life. They hypothesized that nonusers would have higher scores on means of traditional characteristics as measured by their acculturation scale. These higher scores would reflect a stronger sense of identity with their Native American culture. No reliability and validity measures were reported for this instrument that has many of the flaws identified with previous instruments.

Fortunately, more recent American Indian acculturation models have attempted to explain the complexity, adaptability, and multi-leveled aspect of the acculturative process that is neglected by Chief (1940), McShane and Plas (1982), Uecker et al. (1980) and Wingert et al. (1985). Furthermore, they are similar to McFee's (1968) continuum and bicultural competence model of acculturation. However, these models tend to have both deficits and adaptive views of the acculturative process. While Indian people are recognized as having some level of bi-cultural

competence, the occurrence of acculturative stress is suggested to be high.

One study, that reflects a continuum of acculturation and bi-cultural competence model reflective of the earlier study by McFee (1968), developed an instrument to measure the extent to which an individual's predominant lifestyle and behavior reflected major elements of traditional tribal culture and the majority culture (Zitzow & Estes, 1981). Their Heritage Consistency Scale was an 18-item checklist to which the individual responds either yes or no. Their acculturation scale items are based on Sioux Indian traditions, and appeared to be relevant for similar reservation tribes. Their scale was also used to determine the limited bi-cultural competence of individuals who are heritage consistent, implying that identification with one's traditional culture means less ability to function in the majority culture (deficits model). As is the case with many of the previous American Indian acculturation instruments, there are no reliability and validity measures reported for this instrument. They do not articulate an underlying theory for their instrument.

A more complex model of acculturation expanding upon the work by McFee (1968) and Zitzow and Estes (1981), is one developed by Sidney Stone Brown (1982). Her Native World View Pre-Self-Actualization Conflicts Chart classified the process of acculturation in four main domains or "generations." However, her acculturation model primarily focused on the inevitable occurrence of acculturation stress. Conflicts occur in any combination of the four domains:

spiritual/religion, social/recreation, training/education, and family/self. The cultural orientation of the individual may fall into one of four generations:

1. First - the individual lives closely to the traditional values of the tribe.
2. Second - the individual maintains traditions, but also includes contemporary values.
3. Third - the individual chooses to live a contemporary life, but still has access to the traditional.
4. Fourth - the individual is totally removed from traditional people or lifestyle through choice or through circumstances beyond their control.

Ryan and Ryan (1989) further enhanced Brown's (1982) acculturative model by providing a more explanatory process of acculturation that occurs in the following five levels:

1. Traditional - a person in this level lives by the "old-time" traditions and values. They speak and think in their Native language.

2. Transitional - a person who is in the transitional level of acculturation speaks a combination of the Native language and English, but doesn't yet fully accept the culture and values of the dominant society.

3. Marginal - this person does not know the traditional way of life and does not identify with his or her own tribal group or the majority culture.

According to Ryan and Ryan (1989), it is on this level in which the largest proportion of American Indians are located and in which significant problems may occur.

4. Assimilated - an assimilated person embraces and accepts the beliefs and values of the majority culture rather than those of the traditional culture.

5. Transcendental - this person knows and accepts tribal culture, but is also accepted by the majority culture. He or she is able to move between traditional

and majority culture with no problems.

While the instruments developed by Zitzow and Estes (1981), Brown (1982), and Ryan and Ryan (1989) allowed for more crosscultural role flexibility, it neither articulated the complexity of crosscultural interactions nor addressed the contextual nature of bi-cultural competence. Specifically, it appeared to explain the process of identification with Indian culture and not identification with the majority culture. It also assumed that most Indian people are marginalized, resulting in acculturative stress. Again, their model is a combination of both deficits and adaptive views of acculturation. A major drawback is that no validity and reliability data have been established for these instruments.

One of the most current instruments designed to measure American Indian cultural values was explored in Hobson's (1994) dissertation study on the relationship between cultural values and persistence among Comanche college students. Hobson (1994) modified the Cultural Values Survey (Trimble, 1976) for use in her dissertation. The Cultural Values Survey is based on Trimble's (1976) work on value orientation and

counselor preference among American Indians which identified values that represented American Indian culture. His study produced seven sub-scales: Kindness, Honesty, Self-control, Social Skills, Social Responsibility, Religiousness, Reciprocity, and Independence. In addition, findings from a factor analysis of the seven scales of social values revealed two factor dimensions. The first factor accounted for 79.2 percent of the variance while the second factor accounted for 20.8 percent. The first dimension contained the Kindness (.65), Honesty, Self-control, Social skills, Social Responsibility, and Reciprocity scales. Independence was loaded on the second dimension. He concluded that the sub-scales were identifying common values and subsequently, judged them to be valid indicators of cultural values for American Indians. Torralba-Hobson's study made a minor adjustment to the survey by adding the cultural values of Family and "Indian" to the sub-scales. Thus, the final sub-scales used for her dissertation were Kindness, Reciprocity, Social Skills, Religion/spirituality, Honesty, Independence, Social Responsibility, Family and Indian. Kindness items

assessed the value of generosity and consideration for others. Reciprocity items referred to mutual shareability. Social Skills items assessed the value of appropriate behavior within the context of one's own community. Honesty items involved truthful and honest behavior. Religion/spirituality items referred to one's belief system. Independence items described autonomous behaviors. Social responsibility items reflected accountability to others. Family items involved emotional and behavioral investment in one's own family. Indian items referred to participation in cultural and traditional activities. The sub-scales values were measured by a score on the Cultural Values Survey. The items contained six alternatives which were presented on Likert scale ranging from 1 (very good thing to do) to 6 (very bad thing to do). Although reliability measures have not been established, it does appear to have some construct validity. Furthermore, her study attempted to identify adaptive aspects of cultural identification, an encouraging direction in American Indian acculturation research.

A discussion of American Indian acculturation

theorized by Choney et al. (1995) will be provided in the following section. The explanations for the assumptions, and acculturative levels and domains of the model will be made.

Choney, Berryhill and Robbins (1995) Theory of
Acculturation

Many of the acculturation models previously presented assumed either a uni-dimensional or deficits approach to measuring the construct of acculturation. Either an Indian person suffered incredible stress during this process marked by alcoholism and emotional problems, or completely gave up those values that distinguished him or her as being Indian. Moreover, movement from the indigenous culture to the majority culture was unavoidable. In response to the trend in uni-dimensional American Indian acculturation models, Choney et al. (1995) developed a theory that identified positive aspects of the acculturative process. The assumption that Indian people adjust to cope with different environmental demands, and that acculturation can be measured using a health model, underlies the theory of acculturation developed by Choney et al. (1995). In their model, attributes that constitute

being Indian are measured. Choney et al. (1995) decided that their model would allow flexibility in individual responses to both majority (White) and tribal culture values, norms, and attitudes across cognitive, behavioral, social, and affective domains. Choney et al. (1995) hypothesized that the majority (White) culture encircles American Indian ways of living, but within its perimeters each individual responds to their Indian culture based on five levels: Traditional, Transitional, Bi-cultural, Acculturated, and Marginal (or Detached). These five levels of Indian identity are explained as follows:

1. Traditional - this individual speaks little or no English, knows and understands tribal customs (cognitive) with little or no knowledge and understanding of White customs. He or she participates in traditional social activities, knows and acts in ways considered tribally appropriate, embraces traditional religious practices including those Christian practices modified to include traditional aspects of worship. The individual chooses to live in environments removed from White cultural influences.
2. Transitional - for the transitional individual,

English is a second language. He or she knows and understands tribal customs with accompanying limited knowledge of White culture. The individual participates in traditional social activities, knows and acts in ways considered tribally appropriate, and embraces traditional religious practices including those Christian practices modified to include traditional aspects of worship. He or she may live in a multicultural community.

3. Bicultural - a bi-cultural individual is proficient in English and has some proficiency in Native language. He or she knows and understands both Indian and White customs, participates in both traditional and White social activities, knows and acts in tribally appropriate ways when called upon and can also act in appropriate ways in the larger White society. The individual may or may not embrace traditional or Christian religious practices and may live in a multicultural community.

4. Acculturated - the individual has no knowledge of Native language. He or she understands White culture with little or no knowledge of tribal customs, does not participate in traditional social activities, does not

know tribally appropriate behaviors, and does not know or embrace traditional religious practices. He or she chooses to live apart from the Indian community with no interaction.

5. Marginal (or Detached) - this individual feels no attachment to either culture in any way. He or she does not become involved in social, spiritual, or knowledge-based activities of either culture.

Within each level of responses are natural ways of coping that Indians develop according to the contextual influences and demands of their environment. In general, the assumptions of the model include the following: 1) there are attributional strengths that can be identified within each level of Indianness, 2) these attributes can function as coping skills to be called upon in any given situation, 3) because the levels are not value laden, no one level of Indianness is preferred or superior to another, and 4) acculturation stress is not inevitable, although it can and does occur. Based on these assumptions, a Life Perspective Scale (LPS) was derived. LPS items were developed based on Choney et al. (1995) theory of acculturation, Ryan and Ryan's (1989) levels of

acculturation, and tribal values identified by a previous study by Kemppanien, Choney, & Kemppanien, (1994). In addition, previously developed acculturation instruments were reviewed and compared with the LPS. A small group of "nonexpert" American Indian individuals were informally asked to complete the first draft of the LPS and provide feedback on the face validity of the items. In its initial form, the LPS contained 15 stimulus statements each with four to six items (70 items overall) that measure acculturative statuses on four subscales; cognitive, behavioral, social, and affective. These subscales were reflective of the four domains. Responses to each item were recorded on a five-point Likert scale with anchors of 1 = Strongly Disagree and 5 = Strongly Agree. Items were designed to reflect one of the five levels described above. Data for the preliminary form of this scale was gathered through a study conducted by Berryhill (1994) examined the relationship between acculturation, family of origin experience, and love styles of American Indians. A principal components factor analysis and factor analysis with varimax rotation was performed.

Further, initial investigation revealed problems resulting from the format of the instrument. It seemed that some respondents were unclear about the ways in which they were to respond and instead of responding to each item associated with a particular stimulus statement, they simply selected a single item per statement and rated it. Based on these results and observations, items were deleted, revised, or rewritten, new items introduced, and the format of the instrument was changed. The revised form of the LPS, now called the LPS-B, contains 51 items to which participants respond on a 5-point Likert scale. Instructions were rewritten to increase their clarity and now ask participants to rate how often a particular statement represents something he or she may think, feel, or do. Anchors for the Likert scale were changed and now range from 1 = Never to 5 = Most of the time.

In conclusion, given the available conceptual and empirical evidence covered in this review, there appears to be sufficient support for the need to develop a valid and reliable acculturation instrument to empirically test the adaptation models of American

Indian acculturation. Specifically, the model of American Indian acculturation theorized by Choney et al. (1995) appears to reflect previously developed adaptation and bi-cultural competence models of general acculturation and ethnic identity. Given the dearth of valid and reliable acculturation measures, establishing psychometric properties for an American Indian acculturation instrument is an important endeavor. Furthermore, such an instrument can have tremendous theoretical and clinical implications for the development, delivery, and utilization of mental health services for American Indian clientele. First, it would more adequately test the models that are in existence, and advance the direction of research in this area. Second, the knowledge that is gained could aide psychologists in their assessment of the acculturative statuses of their Indian clients leading to the development of therapeutic approaches that are more congruent with their clients ethnic identification and cultural values. Third, modifications in the delivery of mental health services to Indian people will likely increase their utilization of those services.

The purpose of the current study was to explore the psychometric properties of the LPS-B, an American Indian acculturation instrument with four subscales based on the personological domains (Cognitive, Behavioral, Social, Affective) proposed by Choney et al. (1995).

Method

Participants

The sample consisted of a total of 169 American Indians who volunteered to participate in the study. The participants were patients and employees solicited from four Indian Health Clinics in the state of Oklahoma. In return for their participation, each individual received a raffle ticket for a chance to win \$50 in a raffle drawing. Forty-two of the participants were males (25%) and 127 were females (75%). Their ages ranged from 16 years to 84 years ($M=41.33$, $SD=14.37$). Fifty-four percent of the participants were married, 23% were divorced, and 24% were single. The educational level of the participants ranged from 5 years to 19 years of schooling ($M=12.32$, $SD=2.18$).

Participants identified themselves as belonging to one of 22 tribes in Oklahoma that were represented in

the sample. A large proportion of the sample was represented by two tribes located in the northeastern region of Oklahoma. Ninety-seven percent of the participants identified themselves as enrolled tribal members (e.g., individuals who have documented their membership with the tribe). Twenty-three percent reported possessing a Certificate of Degree of Indian Blood card, a federal document verifying Indian blood quantum, while 3% had a tribal membership card, and 74% had both. The average degree of Indian blood quantum reported by the participants was 60% ($M=58.98$, $SD=36.46$).

There were 89% of the participants whose primary language was English and 11% whose primary language was a tribal language. One percent of the participants reported being community raised as a child on a reservation, 26% in the city, 39% in a small town, and 34% in a rural area. Forty-one percent reported being raised as a child largely among other Indians, while 59% were raised largely among nonIndians. Those who reported currently living on a reservation totalled 1.2%, as compared with those in the city (48%), in a small town (30%), and those living in a rural area

(21%). Twenty-three percent reported currently living among mostly Indians, while 77% reported living among mostly nonIndians. Thirty-four percent of the participants stated that it was difficult for them to attend tribal gatherings because of where they lived, while 66% stated that it was not difficult for them to attend tribal gatherings. When participants were asked about their level of involvement in both nonIndian and Indian cultures, 15% reported a strong involvement with only their tribal culture, 24% reported strong involvement with the nonIndian culture, 25% reported strong involvement with both cultures, and 36% reported weak involvement with both cultures.

Measures

All participants were administered a research protocol consisting of an informed consent form, a demographic form, and the Life Perspectives Scale-Form B (LPS-B).

Informed consent consisted of briefly describing to the participants (in written form) the purpose of the study, the right to withdraw from participation at any time without any negative consequences, the right to confidentiality of responses, and the voluntary

nature of the study. Participants were also given information on how to contact the researcher if they had any questions about the study.

The demographics data form consisted of questions that gathered information about participants' age, sex, primary language, educational level, marital status, childhood and current community environments, proximity to Indian and non-Indian community members, access to tribal gatherings, tribal identity, tribal membership status, degree of Indian blood, and cultural involvement with tribal and white cultures.

Life Perspectives Scale-Revised (LPS-B).

The LPS-B (Choney et al. 1995) contains 51 items to which participants respond on a 5 point Likert scale. Participants are asked to rate how often a particular statement represents something he or she may think, feel, or do. Anchors for the Likert scale range from 1 = "Never" to 5 = "Most of the time." The four subscales (Cognitive, Behavioral, Affective, Social) of the LPS-B reflect the domains of the American Indian acculturation theory by Choney et al. (1995). There are 15 items in the Cognitive subscale (score range 1-75), 11 items in the Behavioral subscale (score range

1-55), 12 items in the Affective subscale (score range 1-60) and 13 items in the Social subscale (score range 1-65). Level of acculturation is determined by both total LPS-B scores as well as with scores from each of the four domains. Higher total or subscale scores on the LPS-B indicate a more traditional (less acculturated) status. See Appendix C for a copy of the LPS-B and scoring criteria.

Procedure

Phone contacts were made with the four Oklahoma Indian Health clinic administrators. Follow up letters were sent to the Health Service Administrators requesting permission to utilize their clinics for the study. A brief written and oral description of the study, and opportunities to volunteer for participation in the study were announced. A detailed explanation of the purpose and benefits of the study, what was to be expected of participants, and anticipated outcomes of the research were provided to the clinic administrators. The administrators provided letters of approval to conduct research at each site.

Results

Association of demographic variables to LPS-B scores

Correlational analyses were conducted on continuous variables of interest to assess their inter-relationship and to determine their effect on LPS-B scores. The continuous variables examined included: age, educational level, blood quantum, and total LPS score. Correlations among these four variables were low to moderate in magnitude, and higher blood quantum was most highly positively correlated with higher LPS-B total score ($r=.39$, $p<.01$), with a higher LPS-B score meaning subjects may be less acculturated. Age was also positively correlated with LPS-B total scores ($r=.22$, $p<.01$), however, educational level appeared to have no significant relationship to LPS-B total scores ($r=.01$).

Preliminary Analyses

In order to determine if particular demographic variables significantly affected participants' responses on the LPS-B, preliminary analyses examining the variables of gender and marital status were performed. Two one-way analyses of variance (ANOVAs) were performed, as opposed to a 2×2 , due to

disproportionality in cell distribution with the latter design. Neither the one way ANOVA for marital status [$F(2, 166) = 1.46, p = .235$] nor gender [$F(1, 167) = .000, p = .997$] were significant at .05. Therefore, it was decided that these variables did not have a significant confounding effect on the participants' responses to the LPS-B.

Additional analyses of variance were computed on other demographic variables that were expected to affect degree of acculturation. The total LPS-B score was the dependent measure in these analyses and the independent variables were; individuals who were raised among mostly Non-Indians vs. Indians (RAISE); individuals who live among mostly Non-Indians vs. Indians (LIVE); individuals who primarily speak their traditional language vs. English language (LANG); the strength of individuals' identification with tribal and White cultures (CULT); and individuals who possessed either a Certificate of Degree of Indian Blood Card (CDIB) or tribal membership card vs. those who had both (CARD).

Because the primary points of interest in these analyses were any possible main effects on LPS-B total

scores produced by these variables separately, interaction effects (although potentially existing) were not examined. To control for Type 1 error, an experiment-wise alpha rate of .001 was used for all seven analyses. ANOVA results indicated that significant differences were found in total LPS-B scores for RAISE [$F(1,167) = 20.45, p < .001$], LIVE [$F(1,167) = 12.94, p < .001$], and LANG [$F(1,167) = 13.83, p < .001$], with those being raised around Indians, currently living around Indians, and primarily speaking a tribal language possessing higher mean LPS-B scores (likely being less acculturated). Because of the small number of individuals who had only a tribal card ($N=5$), the three categories of CARD (CDIB card/tribal card/both cards) were collapsed into 2 categories (having either card vs. having both cards). The results of the ANOVA on this variable approached significance [$F(1,167) = 5.38, p < .02$], but did not seem to significantly affect total LPS scores.

In addition, the mean LPS total scores for each of the four categories of cultural involvement were found to be significantly different [$F(3,165) = 13.87, p < .001$]. In order to determine how these four groups

differed, post hoc analyses (Scheffe) were computed. These post-hoc results indicated that individuals who endorsed a strong involvement with tribal culture (either alone or in conjunction with strong involvement with white culture) had higher LPS total scores (were less acculturated) than those having weaker involvement with tribal culture.

Due to the disproportional numbers of people reporting not being enrolled as a tribal member (3% of the sample), this variable was not analyzed with ANOVA as concerns for severe disproportionality in cell sizes arose. Given the small number of individuals who reported being raised and currently living in various geographic locations (e.g., reservation, rural, urban) these variables were collapsed into 2 categories (city vs. rural). The results of the ANOVAs on city raised vs. rural raised was not significant [$F(1,167) = 3.97, p < .05$]. The results of the ANOVA on city live vs. rural live also was not significant [$F(1,167) = 2.56, p < .112$].

Descriptive and Reliability

Characteristics of the LPS-B

Means and standard deviations were computed for

all items on the LPS-B and are shown in Table 1. Cronbach alpha coefficients and inter-item correlations were calculated for the full LPS-B scale and its four subscales; Cognitive, Behavioral , Affective, and Social. The overall Cronbach alpha for the 51 items on the LPS-B was .85. The inter-item correlations for the full scale ranged from .00 to .66. The overall mean for the 51 items was 3.13 and the overall standard deviation was .36. The overall mean and standard deviation of the full scale score for the LPS-B was 157.87 and 20.55, respectively. The full scale score for the LPS-B ranged from a minimum of 99.00 to a maximum of 216.00.

Insert Table 1 about here.

The descriptives, Cronbach alpha coefficients, and inter-item correlations for the LPS-B subscales are reported in the following paragraphs. The mean and standard deviation for the Social subscale was 3.19 and .56, respectively. The Social subscale score ranged from a minimum of 1.92 to a maximum of 4.46. The Cronbach alpha coefficient for this scale was .70. The

inter-item correlations ranged from .00 to .60.

The mean and standard deviation for the Behavioral subscale was 3.31 and .55, respectively. The Behavioral subscale score ranged from a minimum of 1.83 to a maximum of 4.50. The Cronbach alpha coefficient for this scale was .60. The inter-item correlations ranged from .00 to .57.

The mean and standard deviation for the Affective subscale was 3.43 and .45, respectively. The Affective subscale score ranged from a minimum of 2.00 to a maximum of 4.54. The Cronbach alpha coefficient for this scale was .53. The inter-item correlations ranged from .00 to .48.

The mean and standard deviation for the Cognitive subscale was 2.62 and .50, respectively. The Cognitive subscale score ranged from a minimum of 1.62 to a maximum of 4.23. The Cronbach alpha coefficient for this scale was .58. The inter-item correlations ranged from .00 to .66.

All of the subscales were positively correlated with both themselves and the total LPS-B score ($p < .01$, two-tailed). Intercorrelations among the subscales were moderate in magnitude, ranging from $r = .44$ to

$r=.65$. Subscale correlations with the total LPS-B score were also moderate in magnitude, ranging from $r=.50$ to $r=.65$ at a significance level of $p<.01$.

Factor Analyses

Prior to conducting the factor analysis, criteria recommended by Tinsley and Tinsley (1987) were reviewed to determine the extent to which factor analysis was an appropriate analysis to use with the current data. Tinsley and Tinsley (1987) asserted that in factor analysis procedures it is important to evaluate: 1) the composition of the data matrix, 2) the sample size, 3) measures of association, 4) the independence of the items, 5) and the actual significance of the data matrix. Several of these criteria were able to be evaluated for the current data set. Regarding the data matrix, it is entirely composed of data coming from one source; the Life Perspectives Scale-B. All of the participants were administered all of the items that would be subjected to factor analyses. Regarding the sample size, although not as large as the general rule suggested by Tinsley and Tinsley (1987) of 5 to 10 subjects for every variable, the current sample may be an acceptable size based on research conducted by

Arrindell and van der Ende (1985). They investigated the stability of factors as a function of the ratio of number of subjects to number of variables for principal-components analysis. They administered the 76-item Fear Survey Schedule to a sample of 1,104 respondents and tested the stability of factor solutions based on ratios of 1.3, 2.6, 3.9, 6.6, and 14.5 respondents per item (equating to N sizes of; 100, 200, 300, 500, and 1,104, respectively). In addition, they administered the 20-item Fear Questionnaire to 960 respondents and investigated the same ratios as well as ratios of 19.8 and 48 respondents per item. Neither the observations-to-variables ratio nor an absolute number of observations were found to have any significant effect on factor stability. A ratio of 1.3 respondents per item yielded a stable factor solution on the 76-item questionnaire, and a total sample of 78 respondents or a ratio of 3.9 respondents per item yielded satisfactory factor stability on the 20-item Fear Questionnaire. Furthermore, Tinsley and Tinsley (1987) indicate that obtaining large numbers of subjects is less important than increasing the precision of the factor analysis by including

sufficient numbers of variables to measure each factor that theoretically would be expected to appear from the analysis. The LPS-B contains 15 items for the Cognitive subscale, 12 items for the Affective subscale, 13 items for the Social subscale, and 11 items for the Behavioral subscale, numbers of items that could reasonably be argued to be sufficient for the purpose of increasing the precision of measuring each domain.

Pearson product-moment correlations were computed on the data to measure profile similarity or the relationship of the subscales to one another. Based on that data, there would appear to be no a priori or excessive empirical dependency in the measurement of the domains that would artificially increase their correlations because the LPS-B was developed to yield four separate subscale scores, no subscales shared common items, and no scales were ipsative in nature. Also, because forced factor subtest scores were not to be analyzed, (the entire 51 bank of items would be included in an exploratory principal components analysis) measures of profile association regarding the separate domains were not deemed necessary. Having

evaluated the current data according to Tinsley and Tinsely's (1987) criteria, it was decided that exploratory factor analyses would be an appropriate statistical procedure to employ. Table 2 contains the matrix for the four factors.

Insert Table 2 about here.

The author was interested in looking at a maximum of four factors as this reflects the four domains present in Choney et al. (1995) theory. The data was first subjected to a principal components factor analysis. Kaiser's rule, Cattell's scree test, and the results of the principal components analysis were three criteria used to distinguish the significance of the four factor extracted. Factors with eigenvalues of at least 1.0 and factor item loadings with an absolute value of .30 or better (Tinsley & Tinsley, 1987) were determined to be important to consider. However, because the Kaiser rule can be too liberal in allowing extraneous factors to contribute to the percentage of variance accounted for by the overall factor structure (several potential factors yielded eigenvalues > 1), it

was not considered to be the most parsimonious method used to determine the significance of the observed factor structure. Therefore, Cattell's scree test was used as a second criterion. The scree plot indicated that no more than three factors were needed to adequately explain the greatest amount of variance in the data. The results of the principal components analysis ultimately provided support for only two interpretable factors, as shown in Table 3.

Insert Table 3 about here.

The principal components analyses extracted four factors accounting for 34.4% of the total variance. The first factor had an eigenvalue of 8.89 and accounted for 17.4% of the total variance. The second factor had an eigenvalue of 3.39 and accounted for 6.7% of the variance. The third factor had an eigenvalue of 2.97 and accounted for 5.8% of the variance. The fourth factor had an eigenvalue of 2.26 and accounted for 4.4% of the variance. This four-factor extraction procedure was then applied using varimax and oblique rotations to explore differential structures and

interpretations (Tinsley & Tinsley, 1987). Both the varimax and oblique rotations yielded a similar factor structure as the principal components analysis with the two factors accounting for the highest amount of variance possessing similar item distribution and weights.

In summary, the principal components analysis indicated that Factors one and two were the most interpretable factors out of the four factor structure, and they accounted for 24 % of the total variance.

Because the resultant factors do not have item distribution similar to the a priori LPS subscales, the factor analysis does not support the domains suggested by the Choney et al. (1995) theory. After evaluating the items that significantly loaded on Factors 1 and 2, these factors were labeled "Indian identity" and "nonIndian identity" factors, respectively. It is speculated that the second factor measures a construct inversely related to that being measured by the first factor. That is, Factor 1 measures a desire for identification with Indian culture and Factor 2 measures the lack of desire for identification with Indian culture (vs. a desire for identification with

the majority culture). The Indian identity factor contains items that tap behaviors, thoughts, feelings, and values that are reflective of an individual's strong connection to Indian culture. This factor included the following items that had high loading weights: Item 23 - "It is important to raise my children to be Indian (.73); " Item 32 - "I am happiest when I am with Indian people (.72); " Item 41 - "I take part in Indian religious ceremonies (.72); " and, Item 18 - "I prefer to attend only Indian social events (.69)." The nonIndian identity factor appears to measure the extent to which individuals do not desire to identify with those behaviors, activities, thoughts, feelings, and values that are important to Indian culture. Examples of the items that loaded highly on this factor include: Item 46 - "I am happiest when I am around nonIndian people (.62); " Item 14 - "I prefer to have only nonIndian friends (.52); " Item 48 - "I would prefer to live in nonIndian communities (.49); and, Item 22 - "I feel more comfortable around nonIndian people (.40)."

The remaining two factors had few items that loaded uniquely and heavily on them, rendering them

difficult to interpret. Therefore, given that these remaining factors account for little variance and have no item content reflecting a clear construct, they were not added.

Discussion

The purpose of the study was to explore the psychometric properties of the LPS-B, an acculturation instrument for American Indians based on the four domains of the Choney et al.(1995) theory. Their model proposed that acculturation for American Indians is a multidimensional process with five levels of acculturative status (traditional, transitional, bicultural, acculturated, and marginal or detached) in four personological domains (cognitive, social, affective, and behavioral). Their model is congruent with the general acculturation and ethnic identity models for other ethnic individuals.

The factor analyses of the LPS-B resulted in a two factor structure that did not reflect the four domains of cognitive, social, affective, and behavioral from Choney et al. (1995). Instead, the two factors appeared to reflect general aspects of acculturation. These factors accounted for a marginal amount of the

variance in the scores. Regarding the reliability of the instrument, the Cronbach alpha coefficients were moderate in magnitude suggesting that the items on the four subscales are not as internally consistent as they might need be in order to measure their respective domains. In terms of the inter-relationship of items and subscales on the LPS-B, the subscale correlations were moderate in magnitude suggesting that these subscales while associated, might not be measuring the same constructs. However, the results of the factor analysis and absence of extensive content validity for items on individual subscales make this assertion difficult. Overall, the LPS-B appears to be psychometrically weak as both a general measure of acculturation and as a multidimensional measure of the four domains based on Choney et al. (1995). However, given the relationship of the item content of the LPS-B to established conceptual and empirical literature in acculturation, the instrument may still be measuring some aspects of acculturation.

While the acculturation theory by Choney et al. (1995) posited that acculturation is a multidimensional process that can be measured by their five

acculturative status levels in four personological domains, the LPS-B appears to be a unidimensional measure of identification with Indian culture rather than a general measure of acculturation as proposed by Choney et al. (1995). As has been established in the literature on acculturation and ethnic identity, acculturation encompasses both identification with the culture of origin and with the majority culture (Berry et al. 1987; Isajiw, 1990; Casas & Pytluk, 1995; Sadowsky et al. 1995). In this respect, Factors One and Two appear to be measuring a dimension of participants' identification with Indian culture. The findings that individuals who were raised as a child around other Indians, live among other Indian people, primarily speak the traditional language, and had strong identification with their tribal culture had higher LPS-B scores (less acculturated), lend support to Factors One and Two measuring a dimension of participants' identification with Indian culture. These aspects of Indian identification are also congruent with the socio-cultural variables that have been established by the acculturation and ethnic identity literature as indicators of cultural identity

(i.e., being raised and living around members of your culture, having strong ties to family culture, speaking your traditional language, preferring to socialize with members of your own culture; (Marin, 1992). In addition, these aspects of Indian culture and values have been found to be commonly held across tribes in the United States, as well as in Oklahoma (e.g., respect for age, harmony with nature, generosity and sharing, cooperation, community vs. Individual orientation, spirituality, extended family involvement (Bennett, 1993; Heinrich, Corbine, & Thomas, 1990; Hobson, 1994; Kemppainen, 1995; Richardson, 1981; Trimble, 1976). The LPS-B does not appear to measure the other aspect of acculturation; identification with the majority culture.

The findings from the correlation analyses on age, educational level, and blood quantum suggested that age and educational level had little bearing on LPS-B scores while blood quantum had some relationship to LPS-B scores. Given the fact that the 53% of the participants were younger (between 16 and 41 years of age) and 48% of participants had an educational level between fifth and twelfth grade, the low amount of

variance that was accounted for by these variables in LPS-B total scores could be attributed to the restriction in the range of age and educational level. Regarding the significance of blood quantum, these findings suggest that higher blood quantum may be associated with a lower level of acculturation. However, inferences regarding genetic-based variables such as blood quantum must be made with great caution. This is especially true for the current study as the nature of the relationship between genetic and environmental racial/ethnic characteristics is not well known. In addition, the significant differences found in total LPS-B scores for RAISE, LIVE, LANG, and CULT suggested that those being raised around Indians, currently living around Indians, primarily speaking a tribal language, and endorsing a strong involvement with tribal culture were less acculturated. These results are supported by the acculturation and ethnic identity literature which identifies these variables as significant socio-cultural indicators of acculturation (Marin, 1992). Whether or not individuals had a CDIB card or tribal card vs both, were raised around Indians, and currently live around Indians did not have

any significant affect on their acculturative status.

With regard to LPS-B as a measure of some aspects of acculturation involving identification with values that are perhaps common to various tribes, the fact that these significant findings have been garnered with a sample of 22 Indian tribes in Oklahoma who participated in the study also lends additional support to the LPS-B being a global measure of acculturative elements, primarily those elements that are reflective of Indian identification.

Limitations

The study has a number of methodological limitations. The generalizeability of the present findings to the broad population of American Indians is limited by the small, nonrandomized sample of American Indians who completed the measures. In addition, the 22 Indian tribes were not equally represented in the study. Therefore, the findings may be at best cautiously generalized to two Northeast Oklahoma tribes that were most prevalent in the sample. In addition, the sample consisted of employees and patients at the four health clinics and were solicited to participate in the study. The unique characteristics (i.e.,

physical and mental health problems) of the sample may have biased the results.

There are several limitations that have decreased the internal validity of the study, as well. First, is the lack of extensive content validation of the items on the LPS-B subscales to ensure that the domains measured were inclusive and validly tapping the constructs across tribes. Although the LPS-B was given to a number of different American Indian tribal members for critical review, without experts' ratings of the items selected to measure the four domains, there is no way to empirically support the representativeness of the items associated with each domain. Additionally, while the instrument appears to measure some elements of acculturation, these elements assess only one dimension of acculturation for American Indians; identification with Indian culture. There is sufficient evidence in the literature to suggest that acculturation is a bi-dimensional process involving identification with both the culture of origin and the majority culture (Berry & Annis, 1974; Berry et al. 1987; Casas & Pytluk, 1995; Coleman, 1993; Isajiw, 1990; LaFromboise et al. 1992; Sadowsky et al. 1995).

In order to address both dimensions, the LPS-B could have included more items to assess the participants' level of identification with the majority culture. Measurement of both dimensions would be more compatible with the current models of acculturation. However, this still would not adequately address the multidimensional aspects of the acculturation theory by Choney et al. (1995). More items that assess the five levels or dimensions (traditional, transitional, bi-cultural, acculturated, and marginal) of their theory would be needed. Another important addition to the content of items would be to include more items that measure cultural attitudes and values that are cognitive (vs. behavioral) as attitudinal cultural values are also indicators of acculturative status (Heinrich, Corbine, & Thomas, 1990; Hobson, 1994; Kemppainen, 1995; Marin, 1992; Richardson, 1981; Trimble, 1976).

Regarding concurrent validity, because no psychometrically sound acculturation instrument for American Indians has been developed, comparison between the LPS-B and a criterion measure was not possible. The construct validity of the instrument was

essentially determined by the factor analysis only, and these findings showed marginal to moderate support, at best, for the Choney, et al. (1995) domains. While some elements of acculturation are being tapped by the LPS-B, the overall validity of the instrument itself needs to be strengthened. Also, no test-retest reliability data was obtained on the instrument, leaving issues concerning reliability uncertain.

Research and Practical Implications

The most important finding of the study is that the LPS-B seems to be measuring some indicators of acculturative status that are associated with desire or lack of desire to identify with Indian culture. These cultural indicators are similar to those that have been identified by previous theories of acculturation and ethnic identity for Latino and Asian individuals (Casas & Pytluk, 1995; Rogler, Cortes, & Malgady, 1991; Rogler, Malgady, Constantino, & Blumenthal, 1987; Sadowsky et al. 1995). Although some researchers have argued against being able to adequately construct a general measure of acculturation for American Indians and other groups, the preliminary findings of this LPS-B are indicating that the possibility exists. This

is particularly intriguing in light of the number of weaknesses that are present in the instrument. By utilizing information gathered from the findings (strengths) and from the weaknesses in the LPS-B, the current version of the instrument may provide a starting point to improve upon the future development of American Indian acculturation measures. Moreover, the accomplishment of developing a viable measure will bring researchers and clinicians one step closer to validating the complex models of acculturation that make conceptual and anecdotal sense, but are still in need of rigorous empirical validation (Choney et al. 1995; Coleman, 1993; LaFromboise et al. 1993). Additionally, the conceptualization of the acculturation process for American Indians and other groups as multidimensional, multifaceted, and contextually-based can either be modified or more fully tested as valid instruments are developed to assess the adequacy of models. While the point has been conveyed that a general measure of acculturation is needed, measurements of acculturation for specific tribes are equally vital. While many tribes might share common cultural values (as observed in the current findings)

there are distinct differences between tribes resulting from their unique historical, geographical, sociological, and psychological experiences that have directly impacted upon their acculturative processes (Trimble, 1990). Some support for this notion has been provided by Casas and Pytluk (1995). They contend that although many acculturation models have been developed to generalize across racial/ethnic groups, there exists a need to develop separate measures for use with distinct racial/ethnic groups. They argue that the values these models hold are (a) the models can help counselors avoid responding to the culturally different client from a stereotypic perspective by bringing to the fore within-group differences; (b) the implementation of the models has potential psychodiagnostic value and (c) the models give emphasis and credence to the historical and sociopolitical influences that shape racial/ethnic minority identity.

Practical implications include that the clinical application of a valid and reliable measure of American Indian acculturation could aide tribal health programs in understanding the socio-cultural makeup,

acculturative status, and mental health needs of their tribal population. For example, a valid measurement of the bi-dimensional nature and personological domains of acculturation may suggest for American Indian clientele that they hold differentially bicultural or acculturated statuses across the various cognitive, social affective or behavioral domains. In this case, where indicated, therapy and community programs should incorporate traditional aspects of Indian culture(s) to address all of the psychological needs of individuals as an adjunct to standard Western psychotherapy techniques. If a group is assessed to be traditional in most all of the domains (cognitive, social, affective, behavioral), then interventions would be traditionally based, perhaps utilizing traditional healers and approaches and including Western psychotherapy only as an adjunctive part of treatment (Attneave, 1982; Dufrene & Coleman, 1994; Lee & Armstrong, 1995; Garrett & Garrett, 1994; LaFromboise et al. 1990; Thomason, 1991). These are examples of the kinds of information that a valid and reliable measure of acculturation could contribute to not only tribal agencies and programs, but also to the field of

acculturation research. In Casas and Pytluk's (1995) review of acculturation models, they criticize the dominant majority model, the transitional model, and the alienation model which have resulted in supporting the racist attitude that minority cultures must assimilate to the dominant culture in order to be healthy. Furthermore, they recommend that future acculturation theories must move beyond unidimensional models as well as assumptions that individual scores on acculturation scales should hold identical interpretations. They also pose some very intriguing questions: "Do groups acculturate willingly, or do they feel compelled to acculturate? Is there a sociopsychological difference between those who do so willingly and those who feel compelled to do so? Is there a difference between what the two groups are willing to give up vis-a-vis their original culture (p.174)?" All of these issues could be pursued in future research. Based on the findings of the study, some recommendations for the future development of acculturation instruments will be made in the following section.

Recommendations for Future Research

Future instrument development should begin by further establishing the content validity of items that are selected for inclusion in a revised form of the LPS-B or any new instrument. A group of expert raters with substantial background in the field of American Indian acculturation research should be selected to determine if the items are representative of variables that have been empirically substantiated to measure acculturative status. Furthermore, inter-rater reliability should be calculated on judgements of item content validity. Given the findings of this study, those items under factors three and four which do not account for significant amounts of the variance in LPS-B scores can likely be dropped from the instrument. In addition, items that had the highest weights on factors one and two can be retained and others added to enhance future versions of the LPS-B. In order for the instrument to comprehensively measure other dimensions of acculturation, items that tap desire to identify with the majority culture could be added to the LPS-B. Because the American Indian acculturation literature and the findings of the study indicate that many tribes

adhere to similar overarching cultural norms and values (Bennett, 1993; Heinrich, Corbine, & Thomas, 1990; Hobson, 1994; Kemppainen, 1995; Richardson, 1981; Trimble, 1976), additional items that measure the cultural values, beliefs, and attitudes shared by Indian people could also be added to the instrument. Equally important is the need to establish reliability data (test-retest reliability) on the LPS-B. This would lend additional strength to the psychometric properties of the instrument. In order to adequately determine the generalizeability of the instrument, a large sample size (following the recommendations provided by Tinsley and Tinsley, 1989) of American Indians with a wide range of demographic representation (age, educational level) is needed.

A summary of the purpose of the study, major findings, limitations of the study, and recommendations for future research will be provided in the next section.

Summary

The purpose of the study was to explore the psychometric properties of the LPS-B, an American Indian acculturation instrument with four subscales

based on the personological domains (cognitive, behavioral, social, affective) proposed by Choney et al. (1995). While the multicultural research in psychology has provided substantial anecdotal and conceptual evidence for the bi-dimensional nature and personological domains of acculturation and ethnic identity development, there is a paucity of theory-driven and empirically validated acculturation instruments. Most of the American Indian acculturation instruments that exist were developed for studies that were only interested in examining acculturation as a secondary variable to other variable(s) of interest. Because many of these instruments have not been empirically validated prior to their use, their psychometric properties are unknown. The LPS-B was developed to address the lack of a theory-driven acculturation instrument for American Indians and to explore its psychometric properties. The significant findings of this study indicated the LPS-B has a two factor structure that did not reflect the multidimensional levels of acculturation (traditional, transitional, bi-cultural, acculturated, and marginal) and four domains of cognitive, social, affective, and

behavioral from Choney et al. (1995), but do appear to reflect some aspects of acculturation. Factors One and Two seem to be measuring a dimension of participants' identification with Indian culture. The findings that individuals who were raised as a child around other Indians, live among other Indian people, primarily speak the traditional language, and had strong identification with their tribal culture had higher LPS-B scores (less acculturated), lend support to Factors One and Two measuring a dimension of participants' identification with Indian culture. These aspects of Indian identification are also congruent with the socio-cultural variables that have been established by the acculturation and ethnic identity literature as indicators of cultural identity and are relevant to tribes in many states, including Oklahoma (Bennett, 1993; Heinrich et al. 1990; Hobson, 1994; Kemppainen, 1995; Marin, 1990; Richardson, 1981; Trimble, 1976).

The limitations of the study included a lack of extensive content validation of the items on the LPS-B subscales, limited generalizeability, lack of items to measure identification with the majority culture and

multidimensional levels of acculturation (Choney et al., 1995), low variance accounted for by the obtained LPS-B factors and the inability to establish concurrent validity and test-retest reliability.

Recommendations for future development of an acculturation instrument include the following: 1) establishment of further content validity of items with inter-rater reliability before inclusion into the scale, 2) omission of items under factors Three and Four that did not account for significant amounts of the variance in LPS-B scores, 3) retention of items that had the highest weights on factors One and Two and Addition of items that measure desire to affiliate with the majority culture and cultural values, 4) establishment of test-retest reliability on the LPS-B, and 5) adequate sample sizes of American Indians to increase the generalizeability of the instrument.

Years of discussion on acculturative and ethnic identity processes have contributed to a better understanding of the socio-cultural variables that impact the psychological functioning of American Indian individuals. Yet, the need for a psychometrically valid and reliable American Indian acculturation

instrument is still unfulfilled. The establishment of such an instrument would have tremendous theoretical and clinical implications for the development, delivery, and utilization of mental health services for American Indian clientele. First, it would more adequately test the models that are in existence, and advance the direction of research in this area. Second, the knowledge that is gained could aide psychologists in their assessment of the acculturative statuses of their Indian clients leading to the development of therapeutic approaches that are more congruent with their clients ethnic identification and cultural values. Third, modifications in the delivery of mental health services to Indian people will likely increase their utilization of those services.

The responsibility for facilitating these changes lies in the hands of Indian and nonIndian researchers and psychologists who are beginning to understand the tremendous struggles that Indian people have had to overcome in order to maintain cultural continuity.

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Table 1

Means and standard deviations for the 51 items of the LPS-B

Item	Mean	SD
LPS1	1.95	1.41
LPS2	2.72	1.24
LPS3	3.15	1.29
LPS4	2.85	1.02
LPS5	4.10	1.07
LPS6	3.04	1.31
LPS7	2.20	1.19
LPS8	3.34	1.39
LPS9	3.89	1.45
LPS10	2.39	1.18
LPS11	2.69	1.43
LPS12	4.46	.90
LPS13	3.85	1.28
LPS14	1.52	.80
LPS15	3.82	1.12
LPS16	2.44	1.36
LPS17	3.32	1.38
LPS18	2.43	1.34

(table continues)

Item	Mean	SD
LPS19	3.01	1.53
LPS20	4.19	.96
LPS21	2.44	1.15
LPS22	2.15	1.31
LPS23	3.49	1.37
LPS24	3.43	1.20
LPS25	4.41	.88
LPS26	4.41	.94
LPS27	3.38	1.18
LPS28	4.73	.61
LPS29	2.27	1.18
LPS30	2.21	1.22
LPS31	2.09	1.42
LPS32	3.11	1.28
LPS33	3.03	1.20
LPS34	4.73	.59
LPS35	3.22	1.32
LPS36	4.15	.99
LPS37	2.96	1.07
LPS38	3.83	1.23

(table continues)

Item	Mean	SD
LPS39	2.60	1.59
LPS40	2.21	1.10
LPS41	2.31	1.48
LPS42	3.10	1.27
LPS43	3.69	1.35
LPS44	2.26	1.24
LPS45	4.57	.89
LPS46	2.02	1.08
LPS47	3.05	1.20
LPS48	2.34	1.24
LPS49	2.85	1.21
LPS50	1.57	1.20
LPS51	3.85	1.59

Table 2

Factor Correlation Matrix of the LPS-B

	Factor 1	Factor 2	Factor 3	Factor 4
Factor 1	1.00			
Factor 2	.05	1.00		
Factor 3	.18	-.03	1.00	
Factor 4	.14	-.09	.11	1.0

Factor	Eigenvalue	Percent of Variance
1	8.89	17.4
2	3.39	6.7
3	2.97	5.8
4	2.26	4.4

Table 3

**Results of the Principal Components Factor Analysis of
the Revised Form of the LPS-B**

Item	Factors			
	1	2	3	4
LPSB 23	.73	-	-	-
LPSB 32	.72	-	-	-
LPSB 41	.72	-	-	-
LPSB 11	.70	-	-	-
LPSB 18	.69	-	-	-
LPSB 19	.68	-	-	-
LPSB 16	.67	-	-	-
LPSB 13	.65	-.31	-	-
LPSB 2	.60	-	-	-
LPSB 17	.59	-	-	-
LPSB 8	.58	-	-	-
LPSB 1	.58	-	-.35	.37
LPSB 39	.58	-	-	-
LPSB 47	.53	-	-	-
LPSB 7	.52	-	-	-
LPSB 50	.49	-	-.33	.54
LPSB 26	.47	-	.39	-
LPSB 6	.42	-	-	-

(table continues)

LPSB 40	.42	.41	-	-
LPSB 44	-.42	.33	-	-
LPSB 15	.37	-	.48	-
LPSB 27	.35	.33	-	-
LPSB 10	.32	.30	-	-
LPSB 9	-.31	-	.45	-.31
LPSB 28	.31	-	.41	-
LPSB 46	-	.62	-	-
LPSB 14	-	.52	-	-
LPSB 48	-	.49	.30	-
LPSB 21	-	.47	-	-
LPSB 22	-	.40	-	-
LPSB 37	-	.40	-	-
LPSB 30	-	.33	-	-
LPSB 4	-	.31	-	.40
LPSB 36	-	-	.49	-
LPSB 34	-	-	.40	-
LPSB 51	-	-	.37	-.37
LPSB 38	-	-	.36	.36
LPSB 35	-	-	.33	-
LPSB 25	-	-	.30	-
LPSB 5	-	-	-	.38
LPSB 42	-	-	-	.45

Appendix A
Prospectus
Dissertation Proposal

**Examining the Life Perspective Scale: An investigation
of an American Indian acculturation instrument.**

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**Examining the Life Perspective Scale:
The investigation of an American Indian
Acculturation Instrument**

The study of sociocultural influences on tribal cultures has been undertaken by anthropologists and other social scientists for decades (Smith, 1982). While few researchers in the field of psychology have included sociocultural aspects of acculturation in their exploration of this process, the field of anthropology has established important theoretical groundwork from this global perspective. Before gaining an understanding of acculturation as psychological phenomenon, it is imperative to first understand this process from the sociocultural perspective that anthropology has afforded us.

Discussing the acculturation phenomenon based on an anthropological paradigm, Smith (1982) argues that social scientists have dichotomized this process into tradition versus change while in reality it is the continuity of culture that should be examined.

Continuity is that synthesis within which tradition is persistent viability through adaptation and change is the novel manifestation of a durable

identity. Once we reject the concept that these are separate, distinct, and opposing processes, we will move closer towards our fundamental goal of understanding the dynamics of sociocultural systems (p.135).

Thus, continuity, as she defines the construct, is the ability to adapt under some conditions and persist and self-replicate under others. These are the conditions which should be delineated in an attempt to identify "tradition" or "innovation" as the dominant mode of operating for individuals. Furthermore, Smith (1982) emphasizes the need to examine cultures from a holistic perspective by considering the relationship between historical and current events as whole rather than as independent entities.

In other words, continuity actually manifests both tradition and change at all times, but sociocultures may skew the cognitive orientation of their members to isolate certain conditions, thus factoring out one or the other manifestation (p.127).

She contends that researchers are guilty of the same mistake when they arrive at erroneous conclusions by taking a snapshot view of sociocultures. Smith

(1982) attempts to avoid this error by viewing continuity of cultures as dynamic and at times, revolutionary. She posits that the retention and renewal of "traditions" in the face of external threats to traditional ways of life leads to change or adaptation. When traditional cultures are faced with pressures to acculturate, the old traditions that may have been lost are rediscovered and renewed. In the renewal process, old traditions are combined with new elements of the present culture to create a novel tradition.

This manifestation of continuity is a major factor in sociocultural perpetuation, for renewal is a (perhaps the) critical aspect of continuity. As we are reminded by etymological research, to renew is "to make new, again: what is now" (Skeat's Etymological Dictionary). Thus, somewhat paradoxically, it is only by making new what has been carried over from the past that we have a present with a future (p.134).

Smith's (1982) perception of the process of sociocultural continuity or acculturation is one that can be aptly applied to the investigation of many ethnic groups because researchers should view the

process as an interactive one. The cultural relevance of this theory as it is applied to American Indians is demonstrated in Medicine's (1981) argument that the renewal of traditional ceremonies is a powerful mechanism for American Indian people to resist integration.

It is certain that the world-views of most American native peoples, the bounded and culturally-defined universe of belief systems and indigenous value orientations are critical for the maintenance of basic philosophical systems which are reflected in personal lifestyles. These often form the bases for resistance to integration (p. 277).

She describes the neo-traditionalist pan Indian movement as an organized reaction to political forces that are threatening the identity and sovereignty of Indian nations. The intertribal popularity of participation in the Lakota Sun Dance ceremony, she contends, is symbolic of the current's generations commitment to preservation of traditional Indian culture in a contemporary and hostile world.

Examining the ritual (Sun Dance) in a contemporary framework, it appears as a mechanism for mediation

of individual identity and absorption into the larger society. It also heralds a means of intensifying and guaranteeing cultural continuity in face of perceived repression, reaction to social "problems" engendered by living within dual societies, and as an access to enhanced ethnic identity. Finally, the revitalization of a native belief system appears to be emerging as an essential to the establishment of a required ethical system and as a means of strengthening Indian identity in contemporary Indian life in the United States (277).

While the process of sociocultural changes of ethnic groups has been the primary focus of anthropology and sociology, it has been relatively recently that the discipline of psychology has joined this undertaking. Instead of focusing on group adaptations, the individual's behavioral, social, cognitive, and emotional responses to this dynamic process have been the focus of psychological research. Historically, terms such as assimilation, adaptation, and acculturation have been used interchangeably to describe the socialization process that occurs when one

culture begins to either voluntarily or involuntarily modify its values in order to accommodate the values of another culture. With regard to American Indians, Berry and Annis (1974) define assimilation as the desire to lose Indian ways and to merge with the larger society. They also contend that it has meant the forced acculturation of a group to fully accept the values of another group. Furthermore, adaptation has been defined as the process that occurs when one cultural group modifies its values and customs in order to adopt those of another group. For the past twenty years, the most widely accepted term used to refer to sociocultural change for ethnic groups has been acculturation. Choney et al. (1995) have most recently described acculturation for American Indians as the degree to which an individual accepts and adheres to both dominant culture values and tribal culture values.

Other theorists have provided their own definitions and models of acculturation for various ethnic groups. Marin (1992) defines a general acculturative experience which can be applied to a variety of populations as the product of culture learning that occurs as a result of contact between the

members of two or more groups. Furthermore, this process involves changes in attitudes and behaviors resulting from multicultural interactions brought about by colonialization, invasions, or political forces. He hypothesizes that these changes occur at three levels which vary in their depth of internal processing. The first level is described as a superficial process of acculturation. The individual learns and forgets the facts that are part of one's cultural history and tradition. The cultural facts of one's own culture are replaced by historical facts of the new culture in which one is residing. The second or intermediate level in the acculturation process involves behavioral manifestations of the new culture. Behavioral determinants of the individual's acculturation at this level include; language preference and use, ethnicity of friends, neighbors, and co-workers, ethnicity of spouse, names given to children, and preference for ethnic media. Finally, the third or significant level involves changes in an individual's beliefs, values, and norms. Permanent alterations in the individual's worldview and ways of interacting on a daily basis occur at this level. However, not all cultural values

and behaviors change, in fact, he hypothesizes that there are some aspects of the culture that remain constant across the generations. Among the Hispanic population, pervasive use of the Spanish language serves as a cultural anchor in the ethnic identity of Hispanic individuals which greatly moderates the impact of acculturation (Knight, Bernal, Garza, & Cota, 1993).

The cultural values that are retained and those that are modified depend greatly on social factors such as language, community, family, generation, immigration experience, and individual personality characteristics (Casas & Pytluk, 1995). The theory of acculturation as defined by Casas and Pytluk (1995) take these variables into account. They define acculturation as socialization into an ethnic group other than one's own. Furthermore, the psychological and social modifications that occur in the acculturation process are dependent on individual characteristics. Some examples of individual characteristics include one's level of enculturation into one's own cultural group, the saliency of one's crosscultural interactions, and the actual numerical balance between individuals representing the culture of origin and those who

represent the new and larger majority culture. They also place a sociocultural emphasis on acculturation being an open-ended process.

The interactive process of acculturation has been further explained in Berry, Kim, Minde, and Mok's (1987) analysis of its impact on both ethnic and nonethnic individuals.

Berry et al. (1987) stated that in a monocultural society, the dominant group applies pressure on ethnic groups to assimilate, whereas in a multicultural society, the dominant society exerts less influence and may in fact be influenced to make some cultural changes by the diverse ethnic groups that run parallel to it. Berry et al. (1987) asserted that as a result, ethnic individuals in pluralistic societies may have better mental health than those in monistic societies. While an ethnic person is attempting to locate him-or herself socially and psychologically with respect to the dominant group, members of the dominant social system are also attempting to locate and develop their psychological relatedness to the ethnic person.

(a) the ethnic person accepts or rejects the dominant group; (b) the members of the dominant social system

show acceptance or rejection of the ethnic person; (c) the members of the person's ethnic group show acceptance or rejection of the ethnic person; (d) the ethnic person experiences a sense of belonging to his or her ethnic group; and (e) the ethnic person perceives how the members of the dominant group locate him or her in interethnic relations.

Many researchers have taken an interest in the stressful experience that the acculturation process places on the ethnic individuals. Berry and Annis (1974) introduced the concept of acculturation stress and described their ecological-cultural-behavioral model of acculturation and the development of psychological stresses as a function of acculturative influences. The model includes an ecology component, traditional culture component, traditional behavioral component, contact culture component, and an acculturated behavior component. The ecology component considers human organisms in interaction with their habitat; in pursuing primary needs in specific physical environments, certain "economic possibilities" are open, and these range from hunting and gathering to agriculture and animal husbandry. This dimension is

related to one of "demographic distribution:" low food accumulating hunters and gatherers typically have low population density and small settlement units and are migratory, while high food accumulating agriculturalists typically have higher population density and larger settlement units and are sedentary. In the traditional culture component, the former usually shows a low level of sociocultural stratification, while the latter experiences higher levels of stratification. Emphases in socialization practices in the former are usually upon achievement, self-reliance, and independence, while in the latter they are upon responsibility and obedience, or compliance. The traditional behavior component is limited to those behaviors theoretically linked to the concept of "psychological differentiation", and involves behavior in the perceptual, cognitive, social, and affective domains. The link between the behavioral component and the eco-cultural dimension is provided by the consistent finding that socialization emphases upon achievement and independence foster the attainment of psychological differentiation, while those upon obedience and compliance inhibit differentiation. At

the acculturation level concerns are focused on the acculturative influences which bear upon traditional peoples. In particular, the extent of urbanization, Western-style education, and wage employment, as well as the pressures to change to these activities, are considered in the model. In the contact culture component we are interested in the settlement patterns and population densities which develop, the new sociocultural strata which become differentiated, the social controls which are imposed, and the changes in socialization practices which emerge. And finally, in the acculturated behavior component the interest in shifts in levels of behavior which were apparent prior to or during early stages of culture contact, and in the acculturative stress behaviors which emerge in response to the acculturative influences and new elements in the contact culture. In essence, the model is a way of conceptualizing behavioral variation across eco-cultural settings. As such, it was considered a useful way to approach a reformulation of the global propositions regarding acculturation and mental health. "The model provides a set of predictions about the kinds and levels of traditional behaviors which will

develop as a function of ecological and traditional cultural factors. The model also provides a set of predictions about the variations in acculturated behaviors (including acculturative stress behaviors) which may exist in differing eco-cultural settings." The basic hypothesis is that acculturative stress varies as a function of the traditional culture and behaviors which characterize a community, and as a function of the acculturative influences which impinge upon that community. That is, acculturative stress is dependent upon features brought to the acculturation arena by both parties in the process. At the community level, acculturative stress will be greater in communities where there is a greater cultural and behavioral disparity between the two groups, and where there is stronger pressure placed upon the traditional community to become acculturated. The psychological distress is hypothesized to be a function of the length of the journey and the insistence that the journey be undertaken. At the individual level, acculturative stress will be greater for persons who are less psychologically differentiated; that is, individuals who are less independent of events in their milieu will

be more susceptible to changes due to acculturative influences, and hence will exhibit greater acculturative stress. Tested the model on Indian communities (Tsimshian, Carrier, Cree) in three eco-cultural settings; in each setting, one community was relatively traditional and one relatively acculturated. A nonnative comparison group was also selected. Within each Indian cultural group, two samples were drawn from communities which appeared to differ in degree of European contact and acculturation; a single non-Indian sample was drawn from a community which represents an Anglo-Celtic farming village life style. The findings suggested the hypothesis that high acculturative stress is associated with a low desire for positive relations with the larger society (the factor common to these two attitude scales) and not with a desire to retain Indian ways. The set of positive relationships between stress, marginality, and rejection tends to support this conjecture. They hypothesized that high levels of acculturative stress are associated with questions of sociopolitical relationships with the larger society and not with the question of maintaining Indian ways.

Although the research on acculturation stress has

been important in helping us to understand the tremendous barriers and negative impacts of oppression on minorities, at the same time, the adaptive qualities of individuals going through this experience has only recently been of interest to researchers in this field. Fortunately, those researchers have been able to highlight some positive aspects of acculturation and of cultural continuity that have become the more progressive view of acculturation.

Coleman (1995) explains the process of acculturation as a coping mechanism for crosscultural contact. He contends that when an individual is confronted with a new culture, the individual must acquire a behavioral episode schema in order to learn the culture and manage the stress related to this learning process. If the behavioral episode schema is successful in allowing the individual to achieve certain goals in that particular cultural context then it can be deemed effective. However, if the strategy is ineffective then the individual will suffer from acculturative stress symptoms such as depression, anxiety, school failure, or employment difficulties. Similarly, LaFromboise, Coleman, and Gerton (1993)

suggest that the term second culture acquisition can be applied to the change process that occurs when an individual comes into contact with another cultural group and that acculturation is actually the outcome of such contact. In this process, the individual may relinquish most of the values, beliefs, and behaviors of the culture of origin in order to achieve certain goals within a new culture. Despite, undergoing this change process, the individual is never fully accepted as a member of the new culture. Furthermore, the effectiveness of the coping strategy will determine how well acculturation stress and goal achievement is managed. Thus, the ability of the individual to cope with cultural diversity will determine the individual's need for therapy and the quality of the therapeutic alliance since it is very likely that the individual will use this same coping strategy in the therapeutic milieu (Coleman, 1995). Further, Coleman (1995) delineated six coping strategies based on LaFromboise et al. (1993). These include; a monocultural strategy, an acculturation strategy, an alternation strategy, an integration strategy, a segregation strategy, and a fusion strategy. The

monocultural strategy is used by an individual who desires to relinquish membership in the culture of origin in order to become a full member of the second culture or who does not perceive that cultural differences exist. A very different strategy is the acculturation strategy which is used by someone who seeks to achieve goals within the second culture while realizing that full membership in that culture will never occur. Negative acculturative experiences, however, does not deter this individual from becoming socially involved with the second culture because competence is highly valued. The third strategy is a balanced attempt at becoming competent in two or more cultures. An individual using the alternation strategy will have more realistic and positive views of the culture of origin and the second culture, beliefs that one can be biculturally competent and successfully manage acculturation stress, social support networks in both groups, and effective communication with people from both groups. The integration strategy places equal focus on maintaining the culture of origin and developing second culture competence. It is structured around a multicultural ideal and mutual acceptance

between groups. Individuals using the segregation strategy holds a preference for their culture of origin based on the perception that their culture is superior to the second culture and that there is insurmountable incompatibility between the two groups. The fusion strategy is used by individuals who seek to develop a new culture from a culturally diverse group of people.

Another adaptive health perspective model of acculturation has been espoused by Oetting and Beauvais (1991) who developed a cultural identification theory that better explains the relationship between cultural identification, minority adolescent attitudes, behaviors, and substance use. Their model theorizes that any combination of cultural identification can exist. Individuals can be very bicultural, unicultural, high identification with one culture and medium identification with another, or low identification with either culture. Identification with one culture is orthogonal or independent of identification to another culture. Instead of the traditional model which has two cultures on opposite ends of the continuum, cultural identification dimensions are at right angles to each other. The lack

of identification with any culture is at the origin of the right angles. Although this theory of acculturation is a much more culturally adaptive model, it does not further delineate the multidimensional nature of this process. In other words, there is no attempt to specify which dimensions (i.e., cognitive, behavioral, emotional, social, spiritual) an individual may be operationalizing when identifying with one culture or another.

One more recent attempt to operationally define the acculturation process has involved a comprehensive and multidimensional explanation of ethnic identity (Isajiw, 1990). Isajiw (1990) explained that ethnic identity is divided into two dimensions; external and internal, and that these dimensions have varying degrees of identification. According to his definition, external ethnic identity are behavioral representations of culture while, internal ethnic identity involves cognitive, moral, and affective domains which are variables used to assess an individual's knowledge, beliefs, values, attitudes, and feelings attached to one's own culture. The combination of these two types of identities results in

a more complex and comprehensive profile of acculturation much like Choney et al.'s (1995) model of acculturation which will be thoroughly described in the current study.

Ethnic identity, therefore, is a process in which the ethnic person is constantly assessing the fit between the self and the different social systems in the environment (Sodowsky, Kwan, & Pannu, 1995). Ethnic identity is an important part of the self-concept, whose development is influenced by the normative socialization processes that affect all persons in general, and by the intergroup phenomena resulting from the minority status of the ethnic individual. Can have its own uniqueness relative to each individual that is a part of an ethnic group, and one should not expect it to be the same for all members of an ethnic group. Ethnic Identity is defined and formulated not only by own cultural environment but also by both the dominant cultural group with which it is in contact and the nature of ethnic group/dominant group interaction (Berry et al. 1987).

In Adrados (1992) review of the theoretical framework underlying acculturation scales, he argues

that many of the previous and current theories suffer from several important areas of weakness. The most significant deficit, he contends, lies in acculturation theorists neglect of multidisciplinary research on acculturation. He posits that global sociocultural variables have been ignored in acculturation measures. The trend has been to only focus on the psychological impact of acculturation on the individual rather than considering the dynamic interaction between competing cultures. By looking only at the psychological aspect of acculturation, most theorists have highlighted a maladaptive and unidimensional view of the experience:

Its narrow focus zeroes in on a quasi-mechanistic and unilinear process of replacement of one culture with another without attending to the eventual involvement of the minority group in the active promotion of its culture of origin (p.69). He contends that social influences of the culture of origin can be as powerful and stabilizing a factor as the social influences of the competing culture. Adrados (1992) describes several social structural influences that are not accounted for by most acculturation theories. One such

influence is defined as personalized relationships. An example he provides is the important role that family relationships play in the acculturation process. The value of familismo across generations for Latino individuals is an example of such a powerful influence which may serve as an anchor in the traditional culture.

Another social influence he introduces is the notion of time-space. Time-space accounts for both the history of the culture of origin and current diverse ecological systems that affect it. He argues that the past, present, and future should be considered when examining the individual's roles in both the culture of origin and the second culture. Another concept is naturalistic or real life context. In other words, the degree to which the culture of origin is influential in the individual's frame of reference even though the individual may be immersed in a different culture. Underlying this concept is bicultural competence or the ability of a group to choose affiliation with both the culture of origin and the foreign culture.

Holland and Switzerland demonstrated the ability of second-generation youth to selectively and

ideologically (i.e., according to contingent convenience) choose among different group identities both in family life and in the larger society (p.70).

Finally, he discusses that importance of measuring both mental and behavioral representations of the endogenous and exogenous influences of acculturation.

In Casas and Pytluk's (1995) review of acculturation models, they criticized the dominant majority model, the transitional model, and the alienation model which have resulted in supporting the racist attitude that minority cultures must assimilate to the dominant culture in order to be healthy. Further, they recommend that future acculturation theories must move beyond unidimensional models as well as assumptions that individual scores on acculturation scales should hold identical interpretations. They also pose some very intriguing questions: Do groups acculturate willingly, or do they feel compelled to acculturate? Is there a sociopsychological difference between those who do so willingly and those who feel compelled to do so? Is there a difference between what the two groups are willing to give up vis-a-vis their original culture

(p.174)?

Another aspect of acculturation that Casas et al. (1995) suggest has not been given adequate consideration, is the interactional process that leads to changes in both groups in contact. Additionally, they contended that although many acculturation models have been developed to generalize across racial/ethnic groups, there exists a need to develop separate measures for use with distinct racial/ethnic groups. They argued that the value these models hold is that the (a) the models can help counselors avoid responding to the culturally different client from a stereotypic perspective by bringing to the fore within-group differences; (b) the implementation of the models has potential psychodiagnostic value and (c) the models give emphasis and credence to the historical and sociopolitical influences that shape racial/ethnic minority identity.

Cultural Conflicts in Therapy

When both client and therapist experience deficits in their coping strategies, cultural conflicts can arise in therapy. Researchers and clinicians have hypothesized that the resulting cultural values

disparity that sometimes occurs may be one reason why American Indian people underutilize mental health services and have high attrition rates in therapy (Bennett & BigFoot-Sipes, 1991; Berryhill-Paapke & Johnson, 1995; Coleman, 1993; Flores, 1984). In fact, some research has indicated that once therapy is initiated, American Indian clients, when compared to their nonIndian counterparts, are twice as likely to dropout of therapy after the first session (Sue, Allen, & Conway, 1981).

Although it has been empirically established that cultural values and acculturation are important variables to consider in the process of crosscultural therapy, the effect of these variables is still unclear given the inconclusive findings of studies which examined the impact of cultural values on the client's preference for counselor and the counseling process (Choney et al., 1995). Some research supports the hypothesis that traditional cultural values would affect American Indian adult clients' preference for counselor while other studies have failed to find support for this hypothesis (Dauphinais, Dauphinais, & Rowe, 1981; Haviland, Horswill, O'Connell, & Dynneson,

1983; LaFromboise, Dauphinais, & Rowe, 1980; LaFromboise & Dixon, 1981). In a study by Dauphinais et al. (1981), it was found that Native American high school students perceived a Native American counselor as more effective than a non-Native American counselor. Haviland et al. (1983) also found that Native American college students have a distinct preference for a Native American counselor. In contrast, another study found that Indian students' see trustworthiness and cultural sensitivity as being more important in a counselor than cultural similarity (LaFromboise & Dixon, 1981). Likewise, LaFromboise et al. (1980) found that trust and cultural awareness displayed by the counselor was preferred over counselor ethnicity. The trend has been one of inconsistent findings in the research on Indian students' preference for counselor ethnicity. However, when the variable of acculturation is carefully considered in these studies, it suggests that Indian people who are less acculturated tend to underutilize services and to demonstrate higher attrition rates than more acculturated Indians (Choney et al. 1995). Indian people who are more connected to their culture may also prefer counselors with similar

attitudes and values, less involved may prefer counselors with more education than themselves.

Acculturative Measures

Many of the acculturation scales that have been developed suffer from poor test construction and lack good reliability and validity data. There are only a handful of acculturation instruments which appear to be thoughtfully constructed and even fewer that have established some reliability and validity data.

One of the earliest scales was developed by Chief (1940) who constructed a 40-item scale that measured the degree of assimilation of Indian girls who were matched for blood quantum at Haskell Institute and white high schools. Knowledge of tribal culture was based on her experiences with Sioux Indians in South Dakota, Gros Ventre and Assiniboine Indians on the Ft. Belknap Reservation in Northern Montana, and Indian students at Haskell Institute. According to Chief (1940), there had been no prior attempt to quantitatively measure assimilation. She described assimilation as "a process of social interaction and reciprocal accommodation whereby one group, by participating in and sharing the culture of another

group, becomes identified with that group in a common philosophy of life and therefore a common cultural heritage" (P. 20). The major elements of the assimilation process which were assessed in her scale included; attitudes, beliefs, sentiments, preferences, customs, social distance, participation, and external appearance. The assimilation scale based the 40 items on these major elements which included attitudes towards assimilation, white versus Indian language, funerals, marriages, dress, tracing ancestry, traditional cultural participation, and material culture in the home. She attempted to construct crosstribal items which would be relevant to a variety of different tribes. Degree of assimilation was placed on a five point scale ranging from white assimilation to full Indian assimilation. The scoring system of the scale involved the following set of numbers which were substituted for 1, 2, 3, 4, and 5; 10-full assimilation, 7-relatively high white assimilation, 5-assimilation mid-way between white and Indian culture, 3-relatively high Indian assimilation, and 0-full Indian assimilation. Content validation was established by having various authorities on American

Indians critically review the scale. There were no statistical tests for validity performed on the scale. Test-retest reliability results after a two week interval were .91 for the 50 community high school subjects. Chief's (1940) work may be one of the first attempts to quantify the process of assimilation and certainly contributed to the early body of research in this area.

Another early acculturation instrument reflects item content similar to Chief (1940). McFee (1968) constructed the Sociocultural Field Schedule to measure levels of acculturation among the members of the Blackfeet Indian tribe of Northern Montana. The tribe was divided into two sub-groups; white-oriented and Indian-oriented. Blood quantum was of little importance. More emphasis was placed on assessing factors such as aspirations, values, goals, and behaviors. The Sociocultural Field items include demographic information, political/social affiliations, spiritual/cultural involvement, language, family/marital status, and living conditions.

As the knowledge base on American Indian cross counseling issues continued to expand, awareness of

high attrition rates for American Indian clients and poor clinical outcomes also emerged. This caused researchers to take a closer look at the impact of acculturation on several important areas; academic difficulties, learning styles, substance abuse, and the counseling process in general.

One study explored the relationship between learning difficulties and the acculturation process among Indian children. McShane and Plas (1982) examined the performance patterns of 142 American Indian children across all subtests of the WISC, WISC-R, and WPPSI using the Bannatyne recategorization scheme. The authors' general hypothesis was that Indian children would display a different pattern of performance than do normal or learning disabled children and that recategorization of their Wechsler scores would exhibit this pattern. Specifically, they hypothesized that this general pattern would display Spatial scores that would be significantly greater than Sequential scores, which would also be greater than scores on Conceptual and Acquired Knowledge, resulting in the following sequence:

Spatial > Sequential > Conceptual and Acquired

Knowledge. In addition, this significant pattern would hold for the traditional groups but not for the Anglo-acculturated groups. Finally, the frequency of the pattern for Indian children would be greater than that expected by chance. A sample of 142 American Indian children ranging in age from 4 1/2 to 16 years included three main groups; children who were experiencing educational problems, children who had otitis media hearing problems, and children who were being screened for "giftedness." Children were assigned to the "traditional" group if they exhibited a nine-point or greater discrepancy between Verbal and Performance scores while the remaining children were assigned to the "acculturated" group. The Traditional Experience Scale (TES) developed by McShane (McShane & Plas, 1982) was used to assess the acculturation of the mothers of children with otitis media. The acculturation scale measures fluency in traditional language and participation in Indian ceremonies.

Another more recent acculturation model attempted to address the complexity and multileveled aspect of the acculturative process that McShane and Plas (1982) ignored in their instrument. Ryan and Ryan (1989)

described the process of acculturation as occurring in five levels:

1. Traditional - A person in this level lives by the "old-time" traditions and values. They speak and think in their Native language.

2. Transitional - A person who is in the transitional level of acculturation speaks a combination of the Native language and English, but doesn't yet fully accept the culture and values of the dominant society.

3. Marginal - This person does not know the traditional way of life and does not identify with his or her own tribal group or the majority culture.

According to Ryan and Ryan (1989), it is on this level in which the largest proportion of American Indians are located and in which significant problems may occur.

4. Assimilated - An assimilated person embraces and accepts the beliefs and values of the majority culture rather than those of the traditional culture.

5. Transcendental - This person knows and accepts tribal culture, but is also accepted by the majority culture. He or she is able to move between traditional and majority culture with no problems.

Similar to Ryan and Ryan's (1989) bicultural

acculturation schema, Sidney Stone Brown developed the Native World View Pre-Self-Actualization Conflicts Chart which classifies the process of acculturation in four main domains or "generations." However, her acculturation model focused on the inevitable occurrence of acculturation stress. Conflicts may occur in any combination of the four domains; spiritual/religion, social/recreation, training/education, family/self. The cultural orientation of the individual may fall into one of four generations:

1. First - The individual lives closely to the traditional values of the tribe.
2. Second - The individual maintains traditions, but also includes contemporary values.
3. Third - The individual chooses to live a contemporary life, but still has access to the traditional.
4. Fourth - The individual is totally removed from traditional people or lifestyle through choice or through circumstances beyond their control.

By assessing individuals with both Ryan and Ryan's (1989) and Brown's models of acculturation, counselors

working with American Indians can identify cultural conflicts in specific levels and domains to include as goals in therapy that require resolution.

Another study developed an acculturation instrument to measure the extent to which an individual's predominant lifestyle and behavior reflects major elements of his or her traditional tribal culture. This acculturation scale based on a continuum concept of heritage consistency was developed by Zitzow and Estes (1981). The Heritage Consistency Scale is an 18-item checklist that assesses the degree to which an individual's lifestyle reflects the lifestyle of his or her tribal culture. Their acculturation scale appears to be based on Sioux Indian traditions, but, according to the authors, may somewhat generalize to other tribes who live on reservations.

Other studies attempted to measure the contribution of the acculturation variable in it's explanation of substance abuse within a culture (Wingert & Fifield, 1985; Oetting & Beauvais, 1990; Uecker, Boutilier, & Richardson, 1980). Research conducted by Wingert and Fifield (1985) compared the characteristics of Native American inhalant users with

those of Native American nonusers. In order to measure traditional Native American characteristics, they developed the Native American Rating Scale. This acculturation model assesses the extent to which an individual's life experiences correspond to the areas that are thought to reflect the "traditional" Native American way of life. They hypothesized that nonusers would have higher scores on means of traditional characteristics as measured by their acculturation scale. These higher scores would reflect a stronger sense of identity with their Native American culture. However, no statistically significant differences were found among group means.

One of the more controversial, deficit models of acculturation scales which links substance abuse with traditionality is the Richardson Indian Culturalization Test. It assessed Indianness in a study conducted by Uecker et al. (1980). This scale is a 25-item multiple choice questionnaire which includes items that concern identification with Indian customs, beliefs, language, eating, and drinking habits. Test development and construction was based solely on one of the author's experience with Sioux male alcoholic inpatients.

Uecker et al. (1980) compared Sioux male inpatients' MMPI scores with their scores on the Richardson Indian Culturalization Test. Several criticisms were made about the study and the construction of the acculturation instrument. In a critical review of the study, Walker, Cohen, and Walker (1980) argued that the instrument was poorly named and constructed with no empirical reliability and validity. Moreover, it cannot even be a valid measure of Sioux Indianness since a representative sample of Sioux people weren't obtained. An instrument normed on a group of male Sioux alcoholic inpatients cannot be generalized to other tribes as the name of the test suggests. Even more important is the tests perpetuation of negative stereotypes of American Indians by relating high scores of Indianness to clinically significant scores of psychopathology on the MMPI.

In a study exploring the cultural values and persistence among Comanche college students, Hobson (1994) discovered four variables that were significant in predicting persistence in college: Indian and reciprocity sub-scales on the Cultural Value Survey (Trimble, 1976) and, income and Mother's education.

The hypothesis that cultural values were positively related to attainment of a college degree was not supported in her study. However, she indicated that participants in her study provided evidence that they were adapting to the white culture while maintaining their cultural values. She further postulated that Comanche students experience a culture conflict within the university that requires "compartmentalizing" cultural values. She contends that one set of values are used for the purposes of coping in the educational environment and a different set of values is used when the student are in their family and tribal environments.

The Cultural Values Survey developed by Torralba-Hobson (1994) for the purposes of completing her doctoral dissertation in which she used the survey to determine the relationship with persistence and cultural values among Comanche college students. She based her survey on Trimble's (1976) work on value orientation and counselor preference among American Indians which identified values that represented American Indian culture. His study produced seven subscales: kindness, honesty, self-control, social

skills, social responsibility, religiousness, reciprocity, and independence. The survey was administered to 791 American Indians in five different regions of the United States. Results of his study displayed a tight fit for the five groups in the eight sub-scales of values. In addition, findings from a factor analysis of the seven scales of social values revealed two factor dimensions. The first factor accounted for 79.2% of the variance while the second factor accounted for 20.8%. The first dimension contained the Kindness (.65), Honesty, Self-control, Social skills, Social Responsibility, and Reciprocity scales. Independence was loaded on the second dimension. He concluded that the sub-scales were identifying common values and subsequently, judged them to be valid indicators of cultural values for American Indians. Torralba-Hobson's study made a minor adjustment to the survey by adding the cultural values of Family and "Indian" to the sub-scales. Thus, the final sub-scales used for her dissertation were Kindness, Reciprocity, Social Skills, Religion/Spirituality, Honesty, Independence, Social Responsibility, Family and Indian. Kindness items

assessed the value of generosity and consideration for others. Reciprocity items referred to mutual shareability. Social Skills items assessed the value of appropriate behavior within the context of one's own community. Honesty items involved truthful and honest behavior. Religious/Spirituality items referred to one's belief system. Independence items described autonomous behaviors. Social responsibility items reflected accountability to others. Family items involved emotional and behavioral investment in one's own family. Indian items referred to participation in cultural and traditional activities. The sub-scales values were measured by a score on the Cultural Values Survey. The items contained six alternatives which were presented in Likert type scale ranging from 1 (very good thing to do) to 6 (very bad thing to do). Although the Cultural Values Survey lacks reliability data, it does appear to have face validity. Efforts will be made to establish reliability data on the survey.

Choney, Berryhill and Robbins (1995) Theory of Acculturation

Many of the acculturation models previously

presented assumed a deficits model approach to measuring the construct of acculturation. Either an Indian person suffered incredible stress during this process marked by alcoholism and emotional problems, or completely gave up those values that distinguished him or her as being Indian. Moreover, movement from the indigenous culture to the majority culture was unavoidable. In opposition to this trend in acculturation models, Choney, et al. (1995) developed a theory that seeks to identify positive aspects of the acculturation process. The assumption that Indian people adjust to cope with different environmental demands, and that acculturation can be measured using a health model underlies the theory of acculturation developed by Choney et al. (1995). In their model of acculturation the attributes that constitute being Indian or level of Indianness is the construct being measured. Since most previous models have been bicultural, placing the individual on a continuum between Indian and white culture, they decided that their model would allow flexibility in individual responses to both white and traditional values, norms, and attitudes across cognitive, behavioral, social, and

affective/spiritual domains. They hypothesize that the majority (white) culture encircles American Indian ways of living but within its perimeters each individual responds to their Indian culture based on five levels: fully traditional, marginally traditional, bicultural, acculturated, and marginal. The following is a brief description of each level:

1. Fully traditional - This individual speaks little or no English, knows and understands tribal customs (cognitive) with little or no knowledge and understanding of White customs. He or she participates in traditional social activities, knows and acts in ways considered tribally appropriate, embraces traditional religious practices including those Christian practices modified to include traditional aspects of worship. The individual chooses to live in environments removed from White cultural influences.
2. Transitional - For the transitional individual, English is a second language. He or she knows and understands tribal customs with accompanying limited knowledge of White culture. The individual participates in traditional social activities, knows and acts in ways considered tribally appropriate, and

embraces traditional religious practices including those Christian practices modified to include traditional aspects of worship. He or she may live in a multicultural community.

3. Bicultural - A bicultural individual is proficient in English and has some proficiency in Native language. He or she knows and understands both Indian and White customs, participates in both traditional and White social activities, knows and acts in tribally appropriate ways when called upon and can also act in appropriate ways in the larger White society. The individual may or may not embrace traditional or Christian religious practices and may live in a multicultural community.

4. Acculturated - The individual has no knowledge of Native language. He or she understands White culture with little or no knowledge of tribal customs, does not participate in traditional social activities, does not know tribally appropriate behaviors and does not know or embrace traditional religious practices. He or she chooses to live apart from the Indian community with no interaction.

5. Marginal - This individual feels no attachment to

either culture in any way. He or she does not become involved in social, spiritual, or knowledge based activities of either culture. Within each level of responses are natural ways of coping that Indians develop according to the influences and demands of their environment and the context with which they are found. In general, the assumptions of the Choney et al. (1995) theory stated that there are attributional strengths that can be identified within each level of Indianness. These attributes can function as coping skills to be called upon in any given situation. Since the levels are not value laden, no one level of Indianness is preferred or superior to another. Acculturation stress is not inevitable, although it can and does occur. Based on these assumptions, a Life Perspective Scale (LPS) was derived. LPS items were developed based on Choney et al. (1995) theory of acculturation, Ryan and Ryan's (1987) levels of acculturation, and tribal values identified by a previous study by Kemppanien, Choney, & Kemppanien, (1994). In addition, previously developed acculturation instruments were reviewed to determine if the instrument was consistent with the authors' model

and if any items included in the instrument might be modified, revised, or rewritten to be consistent with the model. The authors and various other American Indians were asked to complete the first draft of the LPS and provide feedback on the content validity of the items. It contained 15 statements with four to six items per statement which measure acculturative status on the four different domains; cognitive, behavioral, social, and affective/spiritual. Responses to each item are recorded on a Likert scale ranging from 1 = Strongly agree and 5 = Strongly disagree. A preliminary form of the LPS was utilized in a study to measure acculturative status in relationship to family of origin experiences and love style. Initial validity data was gathered on the LPS.

In its initial form, the LPS contained 15 stimulus statements each with between four and six items (70 items overall) to which individuals were asked to respond on a five-point Likert scale with anchors of 1 = Strongly Disagree and 5 = Strongly Agree. Items were designed to reflect one of the five levels described above. Prior to its first use, this preliminary form of the LPS was critically evaluated by American Indian

individuals who provided feedback on face and content validity of scale items. Other validity data for the preliminary form of this scale was gathered through a study conducted by the author which examined the relationship between acculturation, family of origin experience, and love styles of American Indians. A principal components factor analysis was conducted on the data indicating a two factor structure.

Further, initial investigation revealed problems resulting from the format of the instrument. It seemed that some respondents were unclear about the ways in which they were to respond and instead of responding to each item associated with a particular stimulus statement, they simply selected a single item per statement and rated it. Based on these results and observations, items were deleted, revised, or rewritten, new items introduced, and the format of the instrument was changed. The revised form of the LPS contains 51 free-standing items to which participants respond on a Likert scale. Instructions were rewritten to increase their clarity and now ask participants to rate how often a particular statement represents something he or she may think, feel, or do. Anchors

for the Likert scale were changed and now range from 1 = Never to 5 = Most of the time.

was utilized and current validity data was obtained.

Love styles research

The author conducted a study which examined the relationship between acculturative status, family of origin experience and love style by utilizing the Life Perspectives Scale, Family of Origin Scale, and Love Attitudes Scale. Data was also obtained on the Life Perspectives Scale, the acculturation scale used to measure acculturative status was based on Choney et al.'s (1995) acculturation model. This preliminary scale was administered to 201 subjects who belonged to both Oklahoma tribes and tribes from other states. A principal components factor analysis and factor analysis with varimax rotation was performed.

The complexity that is inherent in the acculturation process has made it difficult to adequately define and measure this phenomenon. Therefore the question regarding the effect that acculturation has had on the therapy of American Indians is a complex one that requires a better answer than we have been able to presently formulate. Given

that one's culture invariably shapes one's beliefs, behaviors, cognitions, and emotions, it is vitally important to consider this impact among an American Indian population. It is also imperative that a reliable and valid means of measuring acculturation be established in order to directly answer this question. The purpose of the proposed study was to establish a research instrument which more accurately and consistently measures the acculturation of American Indians. Previous acculturation research instruments have at worst, perpetuated negative racial stereotypes and at best, provided a psychometrically unstable and unidimensional analysis of Indian people. In the past, research has only exposed the surface of the acculturation iceberg. Specifically, this study will examine LPS-B. One implication for the proposed research is the reduction in negative stereotyping of American Indian populations. Another implication is measurement of the complexity of acculturation by producing a unique profile for American Indians. Finally, establishment of empirical support for the psychometric properties of an acculturation instrument would also be a step forward in this area of research.

In general, examining the impact of acculturation on American Indians will give clinicians more knowledge about personal variables which impact the process of crosscultural therapy. Although there is substantial anecdotal support for the need to sensitize Western psychotherapy to the cultural values of its American Indian clients, minimal methodologically sound empirical support currently exists. The present study addresses this need by laying down the foundation for a valid measure of acculturation. Accomplishing this research goal will provide more empirical support for the anecdotal voice of crosscultural research and provide a better understanding of the acculturative process for American Indians. Increased utilization and retention of American Indian clients in therapy is the clinical goal.

Method

Participants

The nonrandomized sample will consist of a selection of a total of 169 American Indians who volunteer to participate in the study. The participants will be patients and employees solicited from the Muscogee (Creek) Nation Health system and the

Oklahoma City Indian Clinic. There will be four research sites in the Muscogee (Creek) Nation Health system which will include the Sapulpa Indian Health Clinic, Eufaula Indian Health Clinic, Okmulgee Indian Health Clinic, and Behavioral Health Services. The Oklahoma City Indian Clinic will be the only large urban site in the study. In return for their participation, each individual will receive a raffle ticket with a chance to win \$50 in a raffle drawing.

Measures

All participants will be administered a research protocol consisting of an informed consent form, a form designed to obtain sociocultural demographic information, and the Life Perspectives Scale-Revised. Informed Consent Form. The informed consent form will briefly describe the purpose of the study, the right to withdraw from participation at any time without any negative consequences, the right to confidentiality of responses, and the voluntary nature of the study. Participants will also be given information on how to contact the researcher if they have any questions about the study.

Demographics Data Form. The Demographics Data Form

will consist of questions which will gather information about the participant's age, sex, primary language, educational level, marital status, childhood community, current community, proximity to Indian and non-Indian community members, access to tribal gatherings, tribal identity, tribal membership status, degree of Indian blood, and cultural involvement with tribal and white cultures.

Life Perspectives Scale-Revised (Choney, Robbins, and Berryhill-Paapke, 1995). The revised form of the LPS contains 51 free-standing items to which participants respond on a Likert scale. Instructions were rewritten to increase their clarity and now ask participants to rate how often a particular statement represents something he or she may think, feel, or do. Anchors for the Likert scale were changed and now range from 1 = Never to 5 = Most of the time.

Procedure

Phone contacts will be made with the Oklahoma City Indian Clinic Director, a board member of the clinic, and the Muscogee (Creek) Nation Health Administration Director. Follow up letters will be sent to the Health Service Administrators requesting permission to utilize

their clinics for the study. A brief written and oral description of the study and opportunities to volunteer for participation in the study will be announced. A detailed explanation of the purpose of the study, what is to be expected of participants, and anticipated outcomes of the research will be provided. The practical usefulness of the results of the study will also be explained to the agencies and participants as it may provide valuable information about the acculturative statuses of their Indian population leading to modifications in the delivery of health services. For example, it may be assessed that for one group of American Indians or tribe, there are many who hold a cognitively bicultural or acculturated status, but also hold a spiritually and emotionally traditional status. In this case, therapy and community programs should incorporate traditional aspects of the culture(s) to address the spiritual and emotional needs of the group as an adjunct to standard Western psychotherapy techniques. If one group is assessed to be traditional in most all of the domains (cognitive, social, emotional, behavioral) then interventions will be traditionally based, utilizing more traditional

healers and approaches and including Western psychotherapy only as an adjunct. This is the opposite of what is recommended in the previous scenario. These are examples of the kinds of information that may have practical use for tribal agencies who participate.

Data Analysis

Frequencies, means, and standard deviations will be computed for demographic information so as to better describe participants in the study. Preliminary analyses will include 3 one-way Analyses of Variance (ANOVA) with a Familywise Multiple Comparison Procedure set at a significance level of .016. These analyses will be used to compare gender, language, and childhood community group differences. Similar to the analysis used in the preliminary study, data will be subjected to a principal components factor analysis with varimax and oblique rotations (Tinsley & Tinsley, 1987). Items will be considered consistent with an underlying factor if Eigenvalues of at least 1.0 are found and factor loadings reach an absolute value of .30 or better (Davis, 1987). Further, Catell's scree plot will be another criterion used to determine the most appropriate factor solution.

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Table 1

Results of the Principal Components Factor Analysis of
the LPS-Preliminary Form

Item	Factors			
	1	2	3	4
LPS49	.60	-.42	-	-
LPS60	.60	-	-	-
LPS69	.60	-.30	-	-
LPS48	.60	-	-	-
LPS64	.57	-	-	-
LPS50	.56	-	-	-
LPS68	.56	-	-	-
LPS27	.54	-	-	-
LPS59	.53	.46	-	-
LPS30	.53	-	-	-
LPS45	.51	-	-	-
LPS32	.47	-	-	-
LPS67	.46	-	-	-
LPS5	.43	-	-	-.39
LPS24	.41	-	-	-
LPS62	.41	.72	-	-
LPS61	.49	.67	-	-
LPS63	.50	.63	-	-
LPS47	-	.37	-	-
LPS57	-	-.54	-	-
LPS16	-	-	.81	-
LPS21	-	-	.78	-
LPS17	-	-	.41	-
LPS22	-	-	.38	-
LPS15	-	-	-	.64
LPS7	-	-	-	.53
LPS20	-	-	-	.51
LPS8	-.31	-	-	.39
LPS6	.38	-	-	-.47

Appendix B

INSTITUTIONAL REVIEW BOARD APPLICATION FOR APPROVAL OF THE USE OF HUMAN SUBJECTS IN AN INVESTIGATION CONDUCTED ON THE NORMAN CAMPUS AND/OR BY UNIVERSITY OF OKLAHOMA FACULTY, STAFF OR STUDENTS

PART I - APPLICATION FORM

1. Principal Investigator:

Name: Elise Berryhill

Department: Department of Educational Psychology - Counseling Psychology Doctoral Program

Campus Phone No.: 325-5974

If you are a student, provide the following information:

Daytime Phone No. (If different from above): (505) 271-5226

Mailing Address: 5800 Eubank Blvd., NE, Apt. 3402

Albuquerque, NM 87111

Faculty Sponsor: Sandra Choney, Ph.D.

Sponsor's Phone No.: 325-5974

Co-Principal Investigator(s):

Signatures:

Principal Investigator:

Co-Principal Investigator:

Faculty Sponsor (if student research project):

2. Project Title: Examining the Life Perspective Scale: An Investigation of an American Indian Acculturation Instrument.

3. Project Time Period: From 1/97 to 8/97

4. Previous Institutional Review Board - Norman Campus Approval:
Yes (2/95)

5. Are you requesting funding support for this project?
Yes - Sponsor: Sandra Choney, Ph.D.

6. Description of Human Subjects

Age Range: 18 and older

Gender: Both male and female

Number of Subjects: approx. 200-300

No special qualifications

Source of subjects and selection criteria: American Indian participants who are 18 and older will be selected from tribal mental health agencies, social agencies, educational organizations, and/or tribal events.

No protected groups will be included in this study.

PART II - DESCRIPTION OF THE STUDY

A. Purpose/Objectives

The purpose of the proposed study is to establish a multidimensional research instrument which more accurately and consistently measures the acculturation of American Indians. The implications for continued research include a reduction in negative stereotyping of American Indian populations, measurement of the complexity of acculturation by producing a unique profile for American Indians, and establishment of empirical support for the psychometric properties of an acculturation instrument. Furthermore, it will give clinicians more knowledge about the personal variables which necessitate cultural modifications of mental health services.

B. Research Protocol

The Life Perspectives Scale-Revised (LPS-R) is a 41-item acculturation scale which will be administered to American Indian male and female adults who are 18 and older. Participants will be recruited from social agencies, tribal mental health agencies, educational organizations, and tribal events. It will be explained that their participation is voluntary. They will be asked to complete an informed consent document, a standard demographic form, and the LPS-R which will take no longer than 20 minutes to complete, overall. It will be explained that the LPS-R is a questionnaire that asks the participants to rate their view of themselves.

C. Confidentiality

Participants will be informed that their participation is completely confidential and that they will not be asked to provide their name or other identifying information on any of the forms. Furthermore, they will be told that information about individual participants will not be shared with the agency through which they are recruited and that only group information will be reported. The data will be stored in locked cabinets of the sponsor's office, Dr. Sandra Choney. Any identifiable data will be destroyed when it is no longer needed and any

publications or presentations will not identify individual participants.d

D. Subject Benefit/Risk

The potential benefit to the participant is that the information obtained will help to decrease negative stereotypes of American Indians, as well as potentially improve the cultural sensitivity and quality of mental health services. There are no potential risks to the participant. Should the participant feel some discomfort by filling out the questionnaire he or she may discuss this with the investigator and discontinue his or her participation, if needed.



The University of Oklahoma

OFFICE OF RESEARCH ADMINISTRATION

September 9, 1997

Ms. Elise Berryhill
5800 Eubank Blvd, NE #3402
Albuquerque, NM 87111

Dear Ms. Berryhill:

Your research proposal, "Examining the Life Perspective Scale: An Investigation of an American Indian Acculturation Instrument," has been reviewed by Dr. E. Laurette Taylor, Chair of the Institutional Review Board, and found to be exempt from the requirements for full board review and approval under the regulations of the University of Oklahoma-Norman Campus Policies and Procedures for the Protection of Human Subjects in Research Activities.

Should you wish to deviate from the described protocol, you must notify me and obtain prior approval from the Board for the changes. If the research is to extend beyond twelve months, you must contact this office, in writing, noting any changes or revisions in the protocol and/or informed consent form, and request an extension of this ruling.

If you have any questions, please contact me.

Sincerely yours,

A handwritten signature in cursive script, reading "Karen M. Petry".

Karen M. Petry
Administrative Officer
Institutional Review Board

KMP:pw
97-069

cc: Dr. E. Laurette Taylor, Chair, IRB
Dr. Sandra Choney, Faculty Sponsor, Education/Educational Psychology

Appendix C

AGREEMENT TO PARTICIPATE University of Oklahoma, Norman Campus

Title of Project: American Indian Life Perspectives

Researchers: Elise M. Berryhill
Department of Educational Psychology
820 Van Vleet Oval, Rm. 321
Norman, Oklahoma 73019
(405) 325-5974

This study, "American Indian Life Perspectives," is being conducted by Ms. Elise Berryhill at the Department of Educational Psychology, University of Oklahoma, Norman Campus. If you choose to participate you will be required to complete a survey form requesting some personal information and a questionnaire that asks you to rate your views of yourself. These forms will take you less than 20 minutes to finish and present NO RISK to your health or well-being. Sometimes, however, simply responding to questions such as those asked in this study may cause you to feel uncomfortable. If this should occur, you are invited to contact Ms. Berryhill to discuss your feelings.

Your participation in the study is completely confidential. That is, you will not be asked to provide your name or other identifying information on either of the research forms (survey or questionnaire). Information about individual participants will not be shared with the agency through which you are recruited. Further, only group information will be reported.

Your participation is voluntary. You may decline to participate or quit at any time without penalty or loss of benefits to which you are otherwise entitled. However, your full participation is encouraged as the information you provide has the potential to increase the quality and kind of counseling/therapy available (a possible benefit to you) as well as the knowledge base within the field of counseling psychology (a larger benefit to society).

Thank you in advance for your help with this important project. If you have questions about the study, please contact one of the researchers at the number listed above.

I AGREE TO PARTICIPATE

Signature

Date

Packet no. _____

CONFIDENTIAL INFORMATION

Please answer as honestly as possible the following questions about yourself. The answers you provide will be completely confidential. That is, no one except the researchers will have access to what you have said and your name is not required.

Personal Information:

How old are you? _____ Are you male or female? (Circle which applies to you).

What language did you first learn to speak? _____

What is the highest grade you completed in school? _____

Are you married? _____ Divorced? _____ Single? _____

Where were you raised? (Circle all that apply): "Rez" City Small town In the country

Were you raised around mostly Indians or nonIndians? _____

Where do you live now? (Circle one): "Rez" City Small town In the country

Do you live around mostly Indians or nonIndians? _____

Is it difficult to attend tribal gatherings because of where you live? Yes or No

Tribal Affiliation:

What tribe(s) do you belong to? _____

Are you an enrolled member of your Tribe? Yes or No

Do you have a Certificate of Indian Blood Card (CDIB), a tribal membership card, or both? (Circle those that apply).

What is your degree of Indian blood? _____

_____ Strong involvement with Tribal culture and weak involvement with White culture.

_____ Strong involvement with White culture, weak involvement with Tribal culture.

_____ Strong involvement with both Tribal culture and White culture.

_____ Weak involvement with both Tribal and White culture.

Life Perspectives Scale - Revised

Read each statement then rate how often it sounds like something you do, think, feel, or believe by circling one of the numbers to the left.

Never	Hardly ever	Sometimes	Often	Most of the time	
1	2	3	4	5	I speak my Native language when I'm around others who speak it.
1	2	3	4	5	Others see me as having knowledge of tribal history.
1	2	3	4	5	I prefer to work from a picture or detailed drawing when putting things together.
1	2	3	4	5	Indian people seem to think differently than I do.
1	2	3	4	5	I believe in something more than what is here today.
1	2	3	4	5	I like to work on Indian arts and handicrafts.
1	2	3	4	5	I prefer to have only Indian friends.
1	2	3	4	5	As an Indian person, I believe people see that I try to learn from grandparents and other Indian elders.
1	2	3	4	5	I have trouble speaking any of my Native language.
1	2	3	4	5	Non- Indian people talk too fast.
1	2	3	4	5	I believe I show that I have knowledge about clan/band relationships.
1	2	3	4	5	I value my extended family.
1	2	3	4	5	It is important to me to help other Indian people see that they can keep traditional ways and still do okay in the world.
1	2	3	4	5	I prefer to have only nonIndian friends.
1	2	3	4	5	I like to attend Indian arts and crafts shows.
1	2	3	4	5	I laugh at things or tell jokes that only other Indian people laugh at.
1	2	3	4	5	I like to try to learn the "old ways" of doing certain crafts.
1	2	3	4	5	I prefer to attend only Indian social events.
1	2	3	4	5	I feel better when I attend Indian church.
1	2	3	4	5	When people talk they should get straight to the point.
1	2	3	4	5	Indian people should speak slowly.
1	2	3	4	5	I feel more comfortable around nonIndian people.
1	2	3	4	5	It is important that I raise my children to be "Indian."
1	2	3	4	5	I prefer to work in groups to solve problems.
1	2	3	4	5	When people speak to each other about important things, they should speak as equals.

	Never	Hardly ever	Sometimes	Often	Most of the time	
1	2	3	4	5		I think Indian people should learn their Native language.
1	2	3	4	5		Non-Indian people speak more from their heads and not their hearts.
1	2	3	4	5		It is important that our Indian traditions are kept alive.
1	2	3	4	5		I choose only Indian people to be my close friends.
1	2	3	4	5		It is important that Indian people change the old traditions so they can do better in the world.
1	2	3	4	5		When I feel bad, I go to see the medic: a man/woman or Indian doctor first.
1	2	3	4	5		I am happiest when I am with Indian people.
1	2	3	4	5		People should not show their feelings to everybody.
1	2	3	4	5		Everyone should respect nature and all living things.
1	2	3	4	5		I like to be seen as a leader and an important person.
1	2	3	4	5		Indian people should be involved in their tribe's politics.
1	2	3	4	5		I feel most comfortable when I am alone.
1	2	3	4	5		I consider myself to be an individual first and a tribal member second.
1	2	3	4	5		I have lived in Indian communities.
1	2	3	4	5		I'm not really comfortable around nonIndian people.
1	2	3	4	5		I take part in Indian religious ceremonies.
1	2	3	4	5		When I get together with my friends, the group is mostly non-Indian..
1	2	3	4	5		I was taught both White and Indian values.
1	2	3	4	5		I don't feel like I belong in the Indian world.
1	2	3	4	5		I feel proud of my Indian heritage.
1	2	3	4	5		I am happiest when I am around nonIndian people.
1	2	3	4	5		NonIndian people seem to think differently than I do.
1	2	3	4	5		I would prefer to live in nonIndian communities.
1	2	3	4	5		To win arguments I speak loudly and strongly.
1	2	3	4	5		When I talk to the Creator I talk in my Native language
1	2	3	4	5		When I talk to the Creator I talk in a language other than my Native language.

**Life Perspectives Scale
Preliminary Form B
Scoring Routine**

This 51 item scale has 4 subscales designed to measure acculturative status in each of the four domain suggested by Choney, Berryhill-Paapke, & Robbins (1995). These domains are identified as cognitive, affective/spiritual, social/environmental, and behavioral.

Domain	Items	No. of items
Cognitive	1,2,3,4,9,10,20,21,24,26,47 50,51	13
Affective/Spiritual	5,16,27,28,31,32,33,34 41,43,44,45,46	13
Social/Environmental	7,11,12,14,18,19,22,23,25 29,37,40,42	13
Behavioral	6,8,13,15,17,30,35,36,38 39,48,49	12
Reverse Score:	9,14,20,22,30,35,37,38,42 43,44,46,48,49,51	

Sum the scores for each item in the subscale and divide by the number of items in the particular subscale. This provides an average acculturation score for that domain. The scores can be converted to types by using the following:

- 4.6 - 5.0 = Traditional
- 3.6 - 4.5 = Transitional
- 2.6 - 3.5 = Mixed Perspective or Bicultural
- 1.6 - 2.5 = Acculturated
- 1.0 - 1.5 = Marginal or Detached