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The Relationship Between Ethnic Identity, Self-Esteem, Emotional Well-Being and Depression Among Lakota/Dakota Sioux Adolescents

Susan M. Pittenger
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THE RELATIONSHIP BETWEEN ETHNIC IDENTITY,
SELF-ESTEEM, EMOTIONAL WELL-BEING AND DEPRESSION
AMONG LAKOTA/DAKOTA SIOUX ADOLESCENTS

by

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A Dissertation Submitted to the Faculties of

The College of William and Mary
Eastern Virginia Medical School
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Old Dominion University

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December 1998

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ABSTRACT

THE RELATIONSHIP BETWEEN ETHNIC IDENTITY, SELF-ESTEEM, EMOTIONAL WELL-BEING AND DEPRESSION AMONG LAKOTA/DAKOTA SIOUX ADOLESCENTS

Susan M. Pittenger
Virginia Consortium For Clinical Psychology, 1998
Director: Dr. Janis Sanchez, Old Dominion University

Despite conceptual support linking ethnic identity and psychological adjustment among Native Americans, empirical research examining this relationship remains limited. In light of recent developments in the area of ethnic identity research, including alternative conceptual models, improved methodologies, and more sophisticated measures, this study examined the relationship between ethnic identity, self-esteem, emotional well-being, and depression among Native American reservation youth.

The relationship between the predictor variables of American Indian ethnic identity, White-American identity and bicultural identity, and the criterion measures of self-esteem, emotional well-being, and depression were examined for 137 Lakota/Dakota Sioux reservation youth. Participants completed surveys including the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992) and the Acculturation Questionnaire-Adolescent Version (AQA; Doerner, 1995) as well as demographic information and measures of psychological health.

Findings from a series of hierarchical multiple regression analyses indicated that American Indian ethnic identification, White American identification, as well as the
interaction of these scores, did not significantly contribute to the variance for any of the criterion variables above that accounted for by age and gender. For the MEIM and OGA, the MEIM accounted for a significant amount of variance for both the criterion variables of self-esteem and emotional well-being, but did not significantly contribute any unique variance for depression. The OGA, or the interaction term (MEIM X OGA), did not significantly contributed any unique variance for any of the criterion variables.

Results support adequate psychometric properties for both measures of ethnic identity with Lakota/Dakota Sioux youth. Ethnic identity appears to be a multifaceted construct. The results support the complex relationship between age, gender and ethnic identity, in contributing to the psychological adjustment for American Indian youth. Sample and methodological limitations of the current study, as well as implications and directions for future research are discussed. Finally, considerations regarding measures of psychological functioning as well as the unique challenges of cross-cultural research are reviewed.
In Loving Memory of

Alexis Geraldine LaRoche

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A deep appreciation is also extended to my committee members; each one of you, and your unique contributions, served to enhance this project. A special thanks to Dr. Janis Sanchez, my dissertation director, for helping me to become a more sensitive and culturally competent researcher and clinician; I have realized tremendous growth. I would also like to express my gratitude to Barbara Winstead for her incisive comments and expedient feedback, her belief in my competency to see this through, and, perhaps most importantly, her unfailing warmth, support and encouragement. I would like to express my appreciation to Dr. Larry Ventis and Dr. J. D. Ball for serving on my committee; their guidance and feedback were critical in helping this project take shape. Finally, I thank Dr. Judith Dubas for reviewing and providing feedback on the initial research proposal.
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CHAPTER I

INTRODUCTION

ETHNIC IDENTITY RESEARCH

Within the last several decades, interest in cultural diversity and multicultural issues has flourished (Loo, Fong, & Iwamasa, 1988). As a result, ethnicity is becoming an increasingly important topic among social researchers (Phinney, 1996). Critical issues regarding ethnicity and ethnic identity research, particularly their relationship to psychological functioning, have been the focus of a number of articles (e.g., Helms, 1989; Phinney, 1990, 1996; Trimble, 1990-91, 1995; Zuckerman, 1990).

A major concern in ethnic research relates to the operationalization of ethnic terms such as ethnicity, ethnic groups, ethnic identification, and ethnic identity (e.g., Trimble, 1990-91, 1995; Weinreich, 1988). In a comprehensive review of the literature on ethnic identity among adolescents and adults, Phinney (1990) reported that among the 70 studies investigated, two-thirds failed to provide an explicit definition of this construct. One frequently cited problem in ethnic research is the use of ethnic categories and labels, especially checklists requiring endorsement of a single alternative (e.g., Phinney, 1990; Trimble, 1990-91). Such techniques have been widely criticized for failing to account for the subjective meaning a respondent assigns to an ethnic category (Phinney, 1990; Trimble, 1995) and obscuring within-group variations (Trimble 1990-91; Zuckerman, 1990). This procedure is especially problematic for individuals of mixed racial ancestry (Hall, 1992; Hutnik, 1991; Root, 1992)

The Publication manual of the American Psychological Association (4th ed.) was used in the preparation of this document.
In response to these concerns, Trimble (1990-91) cautions against the use of “ethnic glosses” or generalized categories used to classify individuals by ethnic group. He argues that the use of such “glosses” serves to minimize important differences in ethnic identity by ignoring the sociocultural diversity and rich cultural heritage of a group. Such an approach creates very sensitive methodological problems. For example, these “glosses” tend to violate certain assumptions of external validity and may contribute to gross misrepresentations of findings as well as the perpetuation of stereotypes. In contrast to the use of categorical descriptions, the study of “ethnic identity” focuses on how group members understand and interpret their ethnicity. Such an approach serves to emphasize the subjective meaning as well as the extent to which issues of group identity are salient. Thus, because the methodological bias inherent in the use of “ethnic glosses” may obfuscate rather than clarify the issue under investigation, Trimble (1995) asserts that “ethnic identity has the most relevance and value for social and behavioral scientists” (p. 13).

Classification by ethnic group is particularly problematic among Native American populations (Trimble & Medicine, 1993). There are over 500 American Indian tribes recognized by the United States Bureau of Indian Affairs (e.g., Manson & Trimble, 1982; Thomason, 1991). Not only does each of these tribes possess their own unique traditions, social organizations, and patterns of behavior (e.g., LaFromboise & Low, 1989), but differences between tribal groups may be greater than cross-cultural differences (Tefft, 1967). In light of the disparities between tribes, the construct of ethnic identity represents an important and viable alternative to the use of “ethnic glosses” for Native American peoples (Moran, Fleming, Somervell, & Manson, 1994).
Another significant trend in the field of multiethnic research includes advances in the conceptualization and measurement of ethnic identity. Recent bidimensional models of ethnic identity have challenged the assumptions of earlier linear models of culture acquisition, acknowledging that it is conceivable for an individual to know and understand more than one culture (e.g., LaFromboise, Coleman & Gerton, 1993; Oetting & Beauvais, 1990-91). These models emphasize that identification with any culture is essentially independent (or orthogonal) of identification with any other culture. As such, an increase in identification with one cultural group does not require an absence or reduction of identification with another. Further, measures assessing the constructs of cultural and ethnic identity according to these models have recently emerged (e.g., Kohatsu and Richardson, 1996; Oetting & Beauvais, 1990-91; Phinney, 1992).

Despite considerable recognition of the high incidence of mental health problems among Native American youth (e.g., Blum, Harmon, Harris, Bergeisen, & Resnick, 1992; McShane, 1988; Office of Technology Assessment [OTA], 1990), little research has focused systematically on the development of Native American children and adolescents (LaFromboise & Low, 1989; Shore, 1993). In a comprehensive review of the literature focusing on Native American youth, McShane (1988) highlighted the need for research to examine the relationship between identity development and mental health, as well as associated sociocultural influences. Specifically, McShane (1988) stressed:

the primary omission of past research efforts has been in the area of determining how American Indian children and adolescents experience the process of psychosocial survival, growth and the development of competencies for meeting the demands of minority and majority cultures. A significant portion of this
omission lies in exploring the relative influence of socialization agents and the reciprocal impact of transactions between the Indian child/adolescents and these influences (p. 105).

Greater initiatives in multicultural research may provide a foundation to assist minority youth in establishing an integrated identity within the larger more complex society (Ponterroto & Casas, 1991). Specifically, research in early psychosocial development, especially the formation of self-concept and identity, may serve as a keystone in understanding competence and long-term mental health for minority youth (Gibbs & Huang, 1989; Spencer & Markstrom-Adams, 1990). In light of the paucity of empirical research examining ethnic identity in general (e.g., Kohatsu and Richardson, 1996), and especially among Native Americans (e.g., Moran, et al., 1994; Phinney, 1990), the present study explored the construct of ethnic identity and its psychological correlates among Lakota/Dakota Sioux Native American youth.

This current study represents an empirical investigation of the relationship between ethnic identity and psychological adjustment among Native American reservation youth. Of primary interest was the relationship between ethnic identity, as measured by the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992) and the Acculturation Questionnaire-Adolescent version (AQA; Doerner, 1995), and psychological adjustment, as measured by separate scales of self-esteem, emotional well-being, and depression among Lakota/Dakota Sioux adolescents. The relative influence of American Indian and White American ethnic identity as predictors of self-esteem, emotional well-being, and depression among Lakota/Dakota Sioux adolescents was examined. The relationship between pertinent demographic variables and measures of ethnic identity and
psychological adjustment was also studied. Finally, psychometric considerations of the
two measures of ethnic identity are reported. Both internal reliability and construct
validity of these measures of ethnic identity, as well as cross-validation results examining
the similarities and differences of the MEIM (Phinney, 1992) and the AQA (Doerner,
1995) when used with Lakota/Dakota Sioux youth, are presented.

Methodological Considerations and Relevant Terminology

With regard to ethnic research, many terms are inaccurately defined, mistakenly
interchanged, or a source of debate (e.g., Carter, 1995). Recently, the importance of the
clarification of terms in this type of research has been emphasized (e.g., Okazaki and Sue,
1995). Consequently, this section is intended to (a) review some general terms related to
ethnic identity research; (b) summarize the definitions of terms as they are used in the
current research project; and (c) highlight some areas of difficulty in defining and
examining ethnicity as a variable.

First, and perhaps foremost, use of the terms Native American and American Indian
have remained a source of controversy (e.g., Sue & Sue, 1990; Trimble & Medicine,
1993); there are many varied thoughts, feelings, and preferences regarding these terms.
For example, some contend that the term “Indian” is a misnomer, noting that it was
derived from the belief that Columbus had landed in the “East Indies.” Still others
connect the term “Indian” with “Los Indios” meaning “of God” and prefer its use. Others
emphasize that the term “Native American” may also be problematic as it is often used in
an over-inclusive manner. Therefore, with respect for these diverse views, in this
document both terms will be used interchangeably to refer to those people indigenous to
the continental United States.
Next, terms specific to ethnic research are reviewed. According to Shibutani and Kwan (1965), an ethnic group has been defined as “those who conceive of themselves as alike by virtue of their common ancestry, real or fictitious, and who are so regarded by others.” Rotheram and Phinney (1987) emphasize, however, that “ethnicity” is more than ancestry, race, religion, or nationality; it patterns our thinking, feelings, and behaviors in both obvious and subtle ways (see also McGoldrick, Pearce, & Giordano, 1982). Ethnicity encompasses group patterns of values, social customs, perceptions, behavioral roles, language usage, and rules of interaction that members share (Ogbu, 1988).

In this study, the term “ethnic identity” has been employed in a broader, more inclusive sense than racial identity and will encompass the constructs of both cultural and racial identity (Atkinson, Morten & Sue, 1993; Gibbs & Huang, 1989; Phinney, 1996). While the concept of “race” refers to specific physical traits, and “ethnicity” connotes cultural group membership and group patterns, “ethnic identity” denotes the individual’s acquisition of group patterns. (For a contrasting view, see Carter, 1995.) Further, consistent with Phinney and Rotheram (1987a), ethnic identity will refer to “one’s sense of belonging to an ethnic group and the part of one’s thinking, perceptions, feelings, and behavior that is due to ethnic group membership” (p. 13).

Ethnic identity research is concerned with how individuals understand and interpret their own ethnicity (Phinney, 1996). In addition to pronounced individual and developmental differences, there is considerable variation across cultures and environments (Phinney, 1993b). Many researchers emphasize that ethnic identity development is a lifelong process (Smith, 1991; Trimble, 1995), which may be best understood within a transactional model of development (LaFromboise, et al., 1993).
Such transactional models (e.g., Sameroff & Chandler, 1975) stress the interdependent nature of relationships between the person and environment across time and provide a useful framework for appreciating the impact of historical, cultural and individual differences. As such, ethnic identity cannot be viewed apart from sociocultural influences; ethnic identity is inherently intertwined with one’s experiences and relationships. Ethnic identity development is a dynamic process influenced by a myriad of factors such as social contexts, family interactions, geographic location, and developmental stages (e.g., Phinney, 1996; Trimble, 1995).

According to Phinney (1991), “ethnic identity is a multidimensional construct involving ethnic feelings, attitudes, knowledge, and behaviors” (p. 193); it is "an individual's sense of self as a member of an ethnic group and the attitudes and behaviors associated with that sense” (p. 36; Phinney & Rotheram, 1987a). Smith (1991) maintains that ethnic identity is a very salient part of an individual’s overall identity development, providing the individual with a sense of belongingness and a sense of historical continuity. Weinreich (1987) emphasizes that “the meaning and experience of ethnic identity will vary from one group to another” (p. 309). The following section will examine ethnic identity and its relation to mental health among Native American peoples.

Native American Ethnic Identity

For Native American children, historical injustices, poverty, oppression, and political and economic disempowerment have bequeathed a legacy of risk for chemical dependence, academic underachievement, and mental health problems (Beiser & Attneave, 1982; Berlin, 1987a; LaFromboise & Low, 1989). Considerable research has focused on the significant mental health problems among Native American adolescents.
(e.g., Blum, et al., 1992; McShane, 1988; OTA, 1990). For example, in a review of Native American mental health research, McShane (1988) illuminated the serious problems confronting Native American youth. McShane identified the following trends, which have also been supported in subsequent studies: (a) Native Americans appear to be at higher risk for mental disorders than most racial/ethnic groups in the United States (see also Blum, et al, 1992; OTA, 1990); (b) the suicide rate among Native American youth is approximately three times higher than among all United States' youth and is the second major cause of death in Native American adolescents (see also May, 1987; OTA, 1990); and (c) Native American youth indicate earlier patterns, and greater rates, of substance abuse compared to other youth in the United States (see also Beauvais, Oetting, & Edwards, 1985; Manson, Tatum, & Dinges, 1982). McShane (1988) posits that among Native American youth, identity development is directly related to self-esteem, and indirectly related to mental health issues.

There is some evidence to suggest that the high incidence of mental health problems among Native Americans may be related to ethnic/cultural identity. Berlin (1987b), in a review of the literature on suicide among Native American adolescents, identified a failure to adhere to traditional ways of living as one factor characterizing tribes with high suicide rates. He noted that a common finding among Southwestern Indian tribes (e.g., May, 1987; Shore & Manson, 1981) is that more traditional tribes, those with more stable religious traditions, clans, and extended families, evidenced fewer mental health problems and lower incidents of suicide. Conversely, less traditional tribes, those confronted with pressures to acculturate and tribal conflict about maintaining traditional ways of living, realized greater mental health problems and higher rates of suicide. Consistent with these
findings, higher rates of alcoholism have been found among Native American tribes who have lost their traditional ways (e.g., Berlin, 1986; 1987a).

The dislocation of many Native American tribes and pueblos, as well as factors such as poverty, hopelessness, and the influence of materialism from the dominant society, have resulted in the mitigation of the importance of tradition and culture in the everyday life of Native Americans (Berlin, 1987a, 1987b; Trimble, 1981). The intergenerational significance of these influences is reflected in a statement by Berlin (1987a), who asserted that:

The impact of Anglo society...with its attempt to destroy Native American cultures, has engendered profound loss of adult Native American role identity to alcoholism, drug abuse, and depression, leading to an inability to nurture infants and small children and also to increased child abuse. The resulting depressed adolescents use alcohol, drugs, and inhalants to escape what they perceive to be a hopeless world (p. 299).

Additional support for the relationship between cultural identity and psychological adjustment may be inferred from adoption and boarding school studies. Unger (1977) compiled a collection of essays examining the destruction of American Indian families. Although lacking in rigorous methodological sophistication, these papers offer critical insights into the impact of cultural disorientation and disempowerment for American Indian children. For example, Mindell and Gurwitt (1977) reported higher rates of serious mental illness and suicide among Native American adolescents adopted by White families than among their counterparts on the reservation. Similarly, Berlin (1978), reported Native American adolescents adopted by White families were twice as likely to
commit suicide during their teen years as Native American adolescents raised in their own families. A number of studies have documented high levels of depression, antisocial behaviors, and poor self-image (e.g., Berlin, 1986, 1987a; McShane, 1988), as well as greater levels of alcohol abuse (Dick, Manson & Beals, 1993; May, 1982) among adolescents in boarding schools.

Disproportionately high dropout rates, low graduation rates, and academic underachievement, have also been linked to ethnic identity development. For example, academic declines in evidence by the fourth grade have been attributed to the exposure to negative stereotypes as the children begin to identify themselves as “Indians” (Red Horse, 1982). Interestingly, this phenomenon, often referred to as the “cross-over effect” in Native American education (e.g., Brown, 1979; Bryde, 1970; McShane, 1983), appears to emerge in concert with the development of ethnic constancy (see Aboud, 1987; Aboud & Skerry, 1983; 1984). By seventh and eighth grade, as identity issues become more salient, further declines, coupled with a sense of rejection, depression, and alienation are frequently evidenced (Bryde, 1970). Similarly, other researchers (e.g., Garrett, 1995; Luftig, 1983; Sanders, 1987) have attributed academic underachievement to an increasing sense of alienation emerging from the struggles related to conflicts of Native American cultural values and the mainstream culture.

On the other hand, maintaining a traditional perspective and a strong identification with Native American culture has been associated with success in school and other areas of life (LaFromboise, Trimble, & Mohatt, 1990) and is believed to be fundamental to bicultural competence (LaFromboise, et al., 1993). LaFromboise and her colleagues have demonstrated the effectiveness of skills training in bicultural competence (e.g.,
LaFromboise & Rowe, 1983) and have asserted that being “grounded in one’s culture” serves as a coping mechanism for bicultural competence (LaFromboise, et al., 1993). These authors assert that because bicultural competence stems from a healthy identity, achieved identity in one’s native culture is a prerequisite to bicultural effectiveness. In essence, the discontinuity between Indian and non-Indian cultures is likely to be less disruptive to those whose own personal identity is strongly rooted in their own culture (Garrett, 1995; LaFromboise, et al., 1993).

The importance of cultural identity for Native Americans has its roots in centuries of attempted conquests. Since contact with Anglo-Europeans, Native Americans have encountered many attempts to eradicate their cultures, values, and way of life (e.g., Debo, 1970). Many of the difficulties of Native Americans, both historically and currently, may be attributable to centuries of paternalistic federal control and culture-hostile policies (Snipp, 1995). Many Native Americans have feared that identification with non-Indian culture would result in loss of identification with Indian culture (Fleming, 1992). Nevertheless, despite numerous governmental efforts aimed toward integration and cultural genocide of Native Americans, they remain the least assimilated of all ethnic groups in the United States (e.g., Gibbs & Huang, 1989; Trimble & Medicine, 1993).

In summary, many researchers (e.g., Berlin, 1986, 1987a) have postulated that the disruption of traditions and its impact on ethnic socialization has had an adverse impact on the mental health of Native American peoples. Hence, to understand the importance of ethnic identity among the current generation of Native American adolescents, it is necessary to be aware, at least to some degree, of the many attempts to obliterate Native Americans’ cultural identity (e.g., Dana, 1993). The following section is intended to
provide an outline of relevant historical considerations. Subsequently, conceptual models of ethnic identity and related empirical research will be presented.

**Historical Considerations**

A brief historical overview of the general experiences of Native American societies will be presented. It is hoped that a synopsis of the historical context, especially attempts at assimilation, as well as the current struggles of Native American peoples, will provide a greater understanding of the importance of cultural or ethnic identity among today’s Native American youth. Tafoya and Del Vecchio (1996) eloquently articulate:

> It is important for tribal people to remember the problems of the present, including loss of our traditional lands and means of economic survival, alcoholism, suicide, depression, anxiety, post-traumatic stress, and many other forms of mental health problems that attack the well-being of minority ethnic/cultural groups in the United States, are both directly and indirectly the result of a devastating and traumatic history. The history includes the destruction of traditional ways of economical survival, destruction of our nuclear and extended family systems, rape, mutilation, and overt and covert genocide. These atrocities form the backbone of our loss and have deprived Native American people of our languages, values, beliefs, and traditions—in short, our cultural and ethnic identities (p. 47).

Since contact with Anglo-Europeans, Native Americans have experienced many adversities. One of the earliest influences was the transmission of diseases such as smallpox and cholera. These epidemics, attributed to the influx of non-native settlers, resulted in significant loss of human life, as well as accompanying disruption of economic,
religious, political and social structures (Swinomish Tribal Community, 1991). It has been estimated that at one point the Native American population may have been 10 million (LaFromboise & Low, 1989). Currently, the Native American population is estimated to be slightly less than 2 million (U.S. Bureau of Census, 1992).

Another major disruption to Native American ways of existence was the advancement of treaties. Native American societies had no conceptualization of the significance of treaties; many tribal groups had no concept of ownership or property (Debo, 1970). Lipinski (1989) points out that owning the land was unimaginable, much as owning the sun would be today. A strong belief in the sacredness of the land, mother earth, coupled with the absence of a construct for property, may shed some light on the signing of these treaties; it is highly probable that many treaties were signed without an understanding of their provisions. By 1887, even the promised sanctity of reservation treaties was violated with the passage of the General Allotment Act, also known as the Dawes Act. This Act stipulated that the reservations be parceled into individually owned tracts of land; each family head was allotted 160 acres, and a single person allotted 80 acres. At this point, unclaimed land, labeled as “surplus,” was often sold to non-natives. Additionally, many Native Americans were persuaded to sell or lease their land to others for very low prices.

Toward the end of this allotment period, evidence of political concern for the plight of Native Americans emerged. The Federal Government commissioned a study of conditions on Indian Reservations. The Merriam Report, released in 1928, illuminated the rampant poverty and failing health of many Native American societies. As a result, the Indian Reorganization Act of 1934 was passed. With the passage of this Act, there
was a restoration of tribal authority over the disposition of tribal property. This enabled tribal authorities to retain legal counsel and mandated that tribes be allowed to negotiate with local, state, and federal government's, options that had not been previously available to tribes or Native American individuals (Debo, 1970). In the ensuing period, many tribes began to incorporate, organize self-government, and compose their own constitutions. However, this interval for reviving tribal governments was a relatively brief one.

During the 1950s, in response to the Hoover Commission’s recommendation for “full and complete integration of Indians into American society,” the federal government attempted to repeal many special federal protections and responsibilities assigned to Native American peoples. This “Termination Period” was marked by three main events: (a) Termination of tribes deemed “unnecessary” by the Federal Government; (b) transfer of Federal responsibility and jurisdiction to State Governments; and (c) the enactment of the Relocation Act of 1952 (Utter, 1993). Consequently, more than 100 tribes were terminated and approximately 12,000 individual American Indians lost their tribal affiliations. This process of “forced assimilation” served as a profound disruption for Native American societies. Thousands of Native Americans were lured by the promise of jobs and training opportunities, coupled with guidance that blending into the “melting pot” was best for them and their children. This urban migration (also known as the “relocation program”) proved problematic; strong differences in values, customs and religious practices prevented “successful” assimilation (Choney, Berryhill-Paapke, & Robbins, 1995; Gibbs & Huang, 1989; Trimble & Medicine, 1993).

Renewed attention to the economic development of tribal communities was evidenced in the late 1950s, and during the 1960s federal initiatives were once again
focused toward tribal sovereignty. Nonetheless, economic disadvantage, possibly attributable to long-standing confusion regarding management and ownership of tribal resources, prevailed (Swinomish Tribal Community, 1991). In 1975, the passage of Public Law 93-638, the “Indian Self-Determination and Education Assistance Act,” vigorously enacted policies which promoted tribal control over resources and service programs (Fleming, 1992). Despite some improvement in conditions for many Native Americans, at least from a legal perspective, many Native Americans continue to harbor a deep and profound mistrust for federal and local governments (Swinomish Tribal Community, 1991).

Perhaps the most serious violation imposed upon Native American societies has been the disruption of the extended family stemming from the boarding school era and the high number of children removed from their homes by social services (e.g., Unger, 1977). Historically, there have been tremendous disparities between out-of-home placement rates for American Indian children when compared to non-Indian children (e.g., Yates, 1987). Further, because most treaty agreements included provisions for the education of Native American youth, many children were removed from their homes to attend boarding schools where Native American language and tradition were forbidden. Byler (1977) attributes the separation of American Indian children from their family as a major source of cultural disorientation and sense of powerlessness. For example, among the Lakota/Dakota Sioux, the tiyospaye or extended family was of primary value; the removal of their children endangered the traditional Lakota family structure.

In summary, the Bureau of Indian Affairs (BIA) in the 19th and first half of the 20th centuries operated under the bias that American Indian children should abandon their...
culture and assimilate to Anglo-European ideals and customs (see Debo, 1970). In addition to forcibly separating children from their families and tribes, attempted acculturation of Native American children was evidenced by punishment of cultural practices and languages, mandated uniforms and haircuts, and required participation in Christian religious practices (Swinomish Tribal Community, 1991). The detrimental effects of these boarding schools have been intergenerational, impacting those who attended as well as those whose parents or grandparents attended (Dauphinais, 1993; McBeth, 1983).

As a result of the boarding school system, several generations of Native Americans were raised without family ties (Tafoya & Del Vecchio, 1996). Parental nurturance was replaced by forced assimilation and accompanying harsh discipline, as well as frequent physical, emotional, and sexual abuse. Consequently, many Native Americans experienced delays in social and emotional development, as well as mental health problems such as post-traumatic stress disorder, alcoholism, and depression (Berlin, 1982, 1987a; Debo, 1970; Yates, 1987). Further, many parents did not have the opportunity to learn cultural practices or critical aspects of parenting. Those who did retain understanding of cultural traditions and tribal languages often feared to teach their own children due to the harsh punishments they had experienced (personal communication, Mary Left Hand Bull, June 16, 1997).

No doubt, the difficulties imposed upon Native American societies have had considerable influence on the functioning of Native American individuals and families. The passage of the Indian Child Welfare Act in 1978 began to address this long-standing problem, enabling tribes to exercise jurisdiction over the welfare of their children.
Another significant injustice related to governmental control over religious practices; many traditional American Indian spiritual/religious activities and healing practices had been outlawed in the late 1800s (Swinomish Tribal Community, 1991). The American Indian Religious Freedom Act recognized the government’s obligation to maintain tribal cultural existence. This Act, enacted by Congress in 1978, directed that federal agencies ensure that their policies do not interfere with free exercise of Native religions. This declared that traditional religious ceremonies could be practiced and offered the same protection offered by all religions under the Constitution.

Despite the relative enlightenment of the last several decades, Native Americans still experience oppression and prejudicial attitudes. Native American youth must still contend with the values of traditional Eurocentric school curriculums (Indian Nations at Risk Task Force, 1991) which conflict with the preferences of Native American children for less verbally-oriented more cooperative learning (Dana, 1993). Such cultural discontinuity has been implicated in the relatively low number of high school graduates among Native American youth (e.g., Badwound & Tierney, 1988; Reyhner, 1992b).

This cursory review is intended to accent the impact of forced assimilation and attempted genocide on American Indian societies. However, given that there are 517 federally-recognized native entities in the United States and 365 state-recognized tribes (LaFromboise & Low, 1989), and that more than 200 distinct tribal languages are still spoken (Fleming, 1992), it is impossible to gauge the full impact on specific tribes. Although many aspects of European contact varied with specific tribes, collectively these contacts have included elements of “conquering,” forced assimilation, and attempted genocide through displacement, relocation, isolation, the removal of children and...
consequent obliteration of family structure, and continuous mistreatment (Dana, 1993; Trimble, 1988).

Fleming (1992) asserted, “Given the active attempts to exterminate them or remove them from their traditional lands, relocation policies, extreme poverty, deployment of their young people to boarding schools, and the introduction of drugs and alcohol, the resiliency of many tribes is remarkable” (p. 150). Similarly, Dana (1993) noted that Native American peoples possess “a core of world-view characteristics” that has sustained many Native American societies through past and present adverse conditions (p. 79).

Notwithstanding the diversity of Native American societies, there is acknowledgment of specific commonalities that preserve their unique identity and separate them from the dominant society (e.g., Bryde, 1971, 1972; Dana, 1993; DuBray, 1985; Herring, 1989; Wise and Miller, 1983). For example, in describing the considerable similarity regarding core beliefs of self, world, and others (i.e., world-view characteristics) among Native American tribes, Dana (1993) asserted that Native Americans, in comparison with other cultural groups in this country, may demonstrate the greatest homogeneity of beliefs (p. 79). The endurance of these constructs has been attributed to the strength of the historic identities and the importance of maintaining integrity of cultural identity (Bryde, 1971, 1972; Dana, 1993; Debo, 1970; Swinomish Tribal Community, 1991).

Bryde (1971) compiled information regarding major discrepancies between American Indian and non-Indian values. Based primarily on interviews with the Siouan bands in North and South Dakota, the following contrasts were outlined:

1. Present oriented versus future oriented.
2. Lack of time consciousness versus time consciousness.

3. Generosity and sharing versus personal acquisitiveness and material achievement.

4. Respect for age versus emphasis on youth.

5. Cooperation versus competition.

6. Harmony with nature versus conquest over nature.

More recently, Herring (1989) has outlined the most important commonalities of Native American views to include: (a) a harmonious universe in which every object and being has sacred life; (b) humans as being part of, not superior to, nature; (c) nature as being sacred; (d) the rights and dignity of the individual; and (e) leadership being (issued) on outstanding ability and earned respect. Similarly, Wise and Miller (1983) identify primary concepts such as: (a) sharing and generosity; (b) cooperation; felt to be related to a belief in a harmonious coexistence; (c) noninterference; based on respect of the rights of others; (d) time orientation, with a predominant focus on the present moment; and (e) an extended family orientation, emphasizing shared responsibilities for the welfare of the entire family.

Wise and Miller (1983) accentuated the integration of these “common features” of Native American cultures in the following excerpt:

In summary, Indian people place interpersonal relationships over the individual and have a holistic view of the world. Indians value others by who they are, rather than by what they have acquired. Their holistic view of life is in conflict with the dominant society, which views the world atomistically, separating the whole into parts such as health, religion, family and occupation (p.348).
These core beliefs and values have, no doubt, played a critical role in the identity of the American Indian people.

MODELS OF ETHNIC IDENTITY

During the last several decades a number of models dealing with racial/ethnic/cultural identity have been proposed for both dominant (e.g., Helms, 1985, 1990; Ponterotto, 1991) and minority ethnic identity (e.g., Atkinson, Morten, & Sue, 1989b; Cross 1971, 1991; Helms, 1990). Minority ethnic identity models emphasize differences in ethnic socialization related to a shared history of oppression, power balances, and lack of economic opportunities (Trimble, 1995). For ethnic minorities of color, identity formation includes the development of an understanding and acceptance of one’s own group in the context of lower status and prestige as well as the presence of stereotypes and racism within the larger macrosystem (e.g., Phinney, 1996).

In addition to specific models for minority groups such as those explicit to identity development of African-Americans (e.g., Cross, 1971, 1991), Latinos/Latinas (e.g., Felix-Ortiz, Newcomb, & Myers, 1994; Ruiz, 1990), Asian-Americans (Kim, 1981), several general models, such as the Minority Identity Development Model (Atkinson, Morten, & Sue, 1989b), have been proposed. Further, models specific to biracial identity development (e.g., Poston, 1990) have emerged recently.

The distinction between general versus specific perspectives, also referred to as etic versus emic differences, is particularly useful in multicultural research (see Dana, 1993) and may be helpful to review. An emic perspective is culture-specific; it examines behavior from within a culture and acknowledges that individuals from ethnically diverse groups need to be understood from within their own particular culture. As such an emic
approach requires sensitivity to the worldview of a culture and to how this worldview affects individual lives. On the other hand, an etic perspective emphasizes universals among individuals, typically examining and comparing cultures from an outside position. Traditionally, the field of psychology has employed an etic approach (Trimble & Medicine, 1993).

Phinney (1990) notes that research on ethnic identity has focused on three theoretical frameworks: (a) identity formation; (b) social identity; and (c) acculturation. This section will review these theoretical frameworks of ethnic identity development, including an overview of ego identity formation in adolescence. Subsequently, a review of the relevant empirical literature related to ethnic identity, especially the relationship between minority ethnic identity and psychological adjustment, will be presented.

Ego Identity Models

Erik Erikson (1964, 1968) formulated a psychosocial theory of lifespan development which emphasized the importance of historical relativity and group identity in ego identity formation. According to Erikson, the core developmental task of adolescence is achieving a sense of identity; this state of achieved identity results from a period of exploration and experimentation, typically during one's teen years. In conjunction with increasing cognitive development, the adolescent is confronted with more complex information about who they are and where they belong. Erikson submitted that during this stage, the adolescent experiences a normative crisis as he or she strives to achieve a strong and stable sense of self.

According to Erikson's theory, identity is achieved during adolescence through a process of crisis (exploration of alternatives) and commitment (a decision reflecting a
personal investment). Erikson (1968) asserted that one’s sense of identity is synthesized from a number of different social identities such as gender, family role, cultural background, and role in society. He noted that “True identity depends on the support which the young [person] receives from their collective sense of identity which social groups assign to [them]: [their] class, [their] nationality, [their] culture” (p.93, 1964).

James Marcia (1966, 1980) extended Erikson’s model of ego identity development by identifying four distinct identity statuses related to the process of crisis and commitment. Consistent with Erikson, Marcia maintained that in the process of forming an adult identity each individual undergoes a crisis derived from childhood identity development. Thus, an achieved identity requires the adolescent to explore different options and experiment with different possibilities prior to making decisions and commitments about personal beliefs, values, and goals.

According to Marcia (1980), an adolescent who has not experienced an identity crisis, engaged in exploration, or made commitments in various areas of their life, is considered to be in the first identity status, that of Identity Diffusion. Marcia’s second identity status, Foreclosed Identity, is used to describe an adolescent who makes an identity commitment based on external childhood influences, often based on the values of primary caretakers, in the absence of an identity crisis or exploration period.

Marcia’s third identity status is termed Moratorium and denotes an adolescent in the process of exploring and experimenting with various options, but who has not yet committed to specific aspects of identity. Essentially, an identity crisis and an active identity search characterize this status. Finally, the status of Achieved Identity, represents
the outcome of this period of crisis, exploration, and experimentation; the individual at this point has made a commitment regarding what to believe and what to become.

A number of conceptual models describing ethnic identity development among various minority ethnic groups (e.g., Arce, 1981; Cross, 1978; Kim, 1981), have been predicated on the process of ego identity formation (Phinney, 1990). These models share many commonalties (see Phinney, 1989), including an emphasis on the dynamic nature and contextual influences of ethnic identity development. This section will detail Phinney’s model, as it is unique for its specific focus on ethnic identity development among minority adolescents (Phinney, 1989).

Since the late 1980’s, Phinney and her colleagues have been examining the topic of ethnic identity, particularly the development of ethnic and bicultural identity among adolescents (Phinney, 1996). Based on Erikson’s (1968) theory of ego identity formation and Marcia’s (1980) conceptualization of ego identity statuses, Phinney (1989, 1990) has developed a model specific to ethnic identity development. Hence, Phinney’s model maintains that ethnic identity formation, consistent with other types of identity formation, is contingent upon a process of exploration. A questioning of pre-existing ethnic attitudes and a concurrent searching into the past and present experiences of one’s own ethnic group and its relations with others marks this process. Ideally, this exploration results in the development of a secure, positive sense of one’s identity as a member of an ethnic group, and is coupled with an acceptance of other groups.

Specifically, Phinney (1993a) proposed the process of ethnic identity development is a progression through three separate stages ranging from: (a) Unexamined ethnic identity
(Diffusion/Foreclosure); (b) Ethnic identity search (Moratorium); and (c) Ethnic identity achievement (Achieved).

In Phinney's model (1993a), stage one, unexamined ethnic identity, is comparable to Marcia's diffusion and foreclosure ego identity statuses, and is marked by the lack of exploration of one's ethnicity. This initial stage, typically during young adolescence, represents a period when the concept of ethnicity receives little importance or thought. Ethnic issues have not been consciously examined and remain a vague construct for the individual. The adolescent at this stage appears naïve about and/or uninterested in racial and ethnic issues. Depending on messages internalized through ethnic socialization, (i.e., parental views, images and stereotypes from the larger society), children may enter this stage with positive, negative, or mixed feelings about their ethnicity.

Stage two, ethnic identity search, is similar to Marcia's moratorium ego identity status, representing a transition to an increased focus on a search for meaning related to race and ethnicity. This stage is marked by a search for greater information regarding one's own ethnic group. Exploration based on experience and/or the developmental influence of ego identity leads to a greater desire to search for an understanding of history, traditions, and current plight of their group. This stage of moratorium or exploration represents a period when ethnicity is highly salient, and attitudes towards one's group are typically highly positive, often ethnocentric.

During this period of exploration individuals are inclined to seek out knowledge about their culture and the history of their group within the larger society. Growing awareness of racism, discrimination, and social injustices is often accompanied by feelings of anger and hostility toward the dominant group. Atkinson, et al. (1993) noted that
greater empathy for other minority groups who have also been oppressed often emerges during this stage.

Phinney’s third and final stage, ethnic identity achievement, parallels Marcia’s achieved ego identity status, and is distinguished by the individual’s deeper understanding and appreciation of his or her ethnicity. This stage of achieved ethnic identity is characterized by a secure sense of group membership. Individuals at this level feel secure in their own identity and generally hold a positive but realistic view of their ethnic group. In other words, the individual has an internal representation of what his or her ethnicity is or means.

At this stage, ethnicity may or may not be salient. The intensity of earlier emotions has dissipated; the individual is no longer angry with majority group members. Resolution of these feelings may be manifested in a variety of behaviors. Interpersonal relationship preferences may include integration or separatism, often based on beliefs regarding the needs for self-sufficiency within their own community. Other choices may be contingent upon the pursuit of common social goals.

Consistent with earlier research supporting a link between ego identity and effective psychological functioning (e.g., Waterman, 1984), Phinney and her colleagues assert that, "for minority youth, ethnicity is an essential component of the identity process, and the development of an ethnic identity is essential to a healthy personality" (p. 54, Phinney, Lochner, & Murphy, 1990). Further, these authors suggest that adolescents who do not actively engage in exploration related to their minority status, nor achieve a secure sense of identity to provide meaning and self-direction in an ethnically pluralistic society, are likely to be at greater risk for poor self-concept or identity disorders. Thus, a major tenet
of their research is that “a commitment to an ethnic identity is an important component of self-concept of minority youth and a factor that mediates the relation between minority status and adjustment” (p. 54, Phinney, Lochner, & Murphy, 1990).

Phinney (1996) emphasizes the importance of exploring ethnic identity in relation to “how group members themselves understand and interpret their own ethnicity” (p. 143). For minority adolescents, Phinney, et al. (1990) identify two basic conflicts (sources of stress) emerging from their status as minority youth that need to be resolved: (a) the existence of ignorance, stereotyping and prejudice towards themselves and their group; and (b) the existence of two different sets of values and norms, those of their own group and those of the majority. Further, Phinney and colleagues (Phinney, et al., 1990) demarcate four methods of adaptation employed by minority youth to cope with ethnic identity conflicts: (a) alienation or marginalization; (b) assimilation; (c) withdrawal or separation; and (d) integration or biculturalism. Each of these methods of coping results in specific behavioral and psychological responses that impact the overall functioning of these youth. Thus, the experiences of minority adolescents, or ethnic socialization, are a critical aspect of minority identity development.

Social Identity Models

Ethnic identity within a social identity framework stems from early works by Lewin (1948). Lewin posited that individuals need to have a firm sense of group identification to maintain a sense of well-being. This premise served as a catalyst for the social identity theory of Tajfel and Turner (1979, 1985); this theory maintains that simply being a member of a group provides individuals with a sense of belonging and this sense of belonging promotes a positive self-concept. More specifically, Tajfel (1981) states that
social identity is "that part of an individual's self concept which derives from knowledge of his membership in a social group (or groups) together with the value and emotional significance attached to that membership" (p. 255). Further, Tajfel (1978) has asserted that minority ethnic groups present a special case of group identity, and that members of low-status groups will seek to improve their status in a variety of ways.

Several methods of minority adaptation have been identified. One option may include seeking to leave the group by "passing" as members of the dominant society. Commonly referred to in scientific research as assimilation, a popular colloquialism is that of "selling out." Further, derogatory terms such as "apple," "banana," or "oreo," indicating the person is "white on the inside," have often been used to describe these individuals (LaFromboise, et al., 1993). An alternative resolution is the development of pride in one's ethnic group (Cross, 1978). An example would include challenging characteristics deemed "inferior" by the majority group and reframing these in the context of the "distinctiveness" of one's group (Hutnik, 1985; Tajfel, 1978).

Consistent with social identity theory, Phinney (1989) has stated that after one has understood how one will be ethnically grouped from a societal perspective, one must then try to understand: (a) what it means to be a part of that group; and (b) the impact their ethnicity has on them. As such, Phinney (1991) proposed that a social self-identification is prerequisite to a fully developed ethnic identity. Thus, it follows that identification of one's self as an ethnic minority member is a precursor to the influences it may hold for that individual.

Maldonado (1975) notes that for most "physical" minorities, or those who can be physically identified as belonging to a minority group, their ethnic status is likely to have a
significant impact on most of their interactions regardless of the attention paid or value
given by the individual. That is, even if they do not view themselves as a minority many
people of color may be perceived as such by the society at large. Thus these individuals
are susceptible to prejudices and stereotypes even though they may not identify
themselves as belonging to a particularly group. These experiences of acceptance and
rejection are likely to have a significant impact on their self-concept.

In today's society, ethnic minority group members experience clear differences
associated with their group membership (e.g., lower educational and occupational
attainment). Tajfel (1978) has also suggested that belonging to a decreed ethnic minority
group can produce psychological conflict. In other words, ethnic minority individuals
have to choose between accepting the "negative views of society towards their group or
rejecting them in search of their own identity" (Phinney, 1989, p. 34). The research of
Phinney and her colleagues (e.g., Phinney & Chavira 1992) focuses on the importance
that the conflict between accepting or rejecting the negative evaluation of the group has
for adolescents as they develop their own sense of identity. Social identity theories place
a greater emphasis on the macrosocietal influences of ethnic identity development. These
theories are concerned with the impact of conflictual attitudes, values, and behaviors on
minority group members within a dominant society and the feasibility or desirability of
biculturalism.

**Acculturation Models or Process Models of Cultural Adaptation**

Olmedo (1979) suggested that acculturation is "one of the more elusive, albeit
ubiquitous, constructs in the behavioral sciences" (p. 1061). Similarly, Keefe (1980)
noted that "acculturation is one of those terms all social scientists use although few can
agree upon its meaning” (p. 85). Although the terms ethnic identity and acculturation are often transposed, Phinney (1990) submits that ethnic identity is actually an aspect of acculturation. The concept of acculturation, broadly defined, refers to changes in the cultural attitudes, values, and behaviors that stem from on-going contact between two distinct cultures (Berry, Trimble, & Olmedo, 1986). Thus, the primary level of concern is the group as opposed to the individual; the focus is on how the minority group relates to the dominant group. On the other hand, ethnic identity is concerned with how individuals relate to their own group as a subgroup of the larger society (Phinney, 1990).

Nonetheless, the relationship between acculturation and ethnic identity is frequently intertwined and warrants review. For example, Berry (1980) differentiated between acculturation which occurs at the level of the population, frequently involving shifts in politics, economics, and social structures, and “psychological acculturation,” the process of acculturation which occurs at the level of the individual. He noted that “psychological acculturation” is typically reflected in behavior and involves the individual’s values, attitudes, and sense of identity. Oetting and Beauvais (1990-91) further distinguished between content and process theories of acculturation. Content theories focus on specific culture-linked behaviors, attitudes, or beliefs, while process theories focus on the “general types of changes that occur in cultural transitions” (p. 656). Oetting and Beauvais (1990-91) have submitted that process theories are generalizable and can be applied readily to diverse cultural groups, while content theories are useful only when applied to circumscribed interactions and then only with specific groups.

Process models of cultural adaptation have focused on the types of changes that typically occur whenever cultures interact. Early models of cultural adaptation
emphasized the process of acculturation; the primary concern tended to be what occurs when individuals from a minority culture have had to adjust to interactions with the majority. As such, an implicit assumption of these models was that "movement toward the majority culture must and will take place" (p. 660, Oetting & Beauvais, 1990-91). These traditional models of cultural adaptation have maintained that acculturation is linear and unidimensional, and that identification with another culture would result in the loss of identification with one's primary culture (Oetting & Beauvais, 1990-91).

The recent emergence of models of secondary cultural acquisition which emphasize independent (or orthogonal) identification with more than one culture (LaFromboise, et al., 1993; Oetting & Beauvais, 1990-91), represents an important paradigm shift (see Kuhn, 1970). These models, such as the orthogonal cultural identification theory, are considered a valuable contribution to this field of study, especially among Native American peoples (Fleming, 1992). A brief review of the history of these current models of cultural acquisition, as well as an overview of earlier models of acculturation, may provide a greater appreciation for the significance of this development.

Berry (1980) proposed a conceptual framework differentiating four varieties of "psychological acculturation" based upon how an individual resolves two basic issues: (a) Whether maintenance of relationships with other groups is valued, and (b) whether maintenance of cultural identity and characteristics is valued. This model highlights four possible outcomes for dealing with minority ethnic group membership. Integration or biculturalism is indicative of strong identification with both groups. This orientation may evolve when the individual desires and seeks to maintain relationships with other groups while also maintaining their native cultural identity. An exclusive identification with the
majority culture, or *assimilation*, occurs when maintenance of relationships with other
groups is valued while cultural heritage is not. On the other hand, identification with only
one's native ethnic group is termed *separation*. This results when the individual desires
to maintain cultural identity and characteristics but does not appear to desire relationships
with other groups. Lastly, *marginalization* results when neither culture appears to be
valued by the individual, thus denoting an absence of identification with either group.
Berry (1980) underscored that many of the individual's personal psychological
characteristics will also influence this process of adaptation.

Similarly, Oetting and Beauvais (1990-91) have developed a model of cultural
identification which they have titled the *orthogonal cultural identification theory*. The
main premise of this theory is that dimensions of cultural identification are independent
of, or are orthogonal to, one another, such that an increase in identification with one
cultural group does not require an absence or reduction of identification with another
group. Oetting (1993) defined cultural identification as:

Cultural identification, a personality trait, is a persistent, long-term underlying
characteristic that organizes cognitions, emotions, and behaviors. Those with
high identification with a culture perceive themselves as adapted or adjusted to
that culture. They see themselves as involved in the culture and as capable and
competent within it. The person with high cultural identification is more likely to
see events from the perspective of that culture, will make evaluative judgments
about people and events that are based on cultural beliefs and values, will choose
behaviors that are culturally congruent, and will be successful in cultural activities
(p. 33).
Prior to describing this alternative model, Oetting and Beauvais (1990-91) reviewed existing process models of cultural adaptation which have been elaborated in the acculturation literature. The first, termed the *dominant majority models*, were very prominent in the early part of this century. Based on ethnocentric beliefs of the dominant culture, these models emphasized the process of assimilation, advancing the majority culture as superior while the minority culture was viewed to be inferior. For example, Oetting and Beauvais (1990-91) underscored an intent of the Bureau of Indian Affairs (BIA) to “transfer the loyalty of Indian children from Indian heroes to heroes like George Washington and Abraham Lincoln” (p. 160). Failure to adapt to the majority was viewed as evidence of inadequacy and weakness. Oetting and Beauvais (1990-91) noted that despite considerable advances, the residual impact of these models is still evidenced.

The second model described by Oetting and Beauvais (1990-91), *the transitional model*, maintains the importance of acceptance of the minority culture and attributes problems to difficulties encountered while moving from one culture to another. Thus, movement to the majority culture is still emphasized and considered inevitable. This model also emphasizes the concept of marginality. It is believed that the individual at some time will be “between” two cultures, thereby losing the strength provided by the “lost” culture. Consequently, the person will not have access to the strength of the other culture until they have become assimilated. This state of marginality is assumed to be invariably and unavoidably related to stress.

The third model, the *alienation model*, incorporates the concept of cultural anomie, or alienation from both cultures. Here again is the assumption that movement is
inevitable; successful transition is contingent upon the individual’s ability to achieve the goals valued by the majority society. Those who do not succeed will become alienated.

*Multidimensional models* resemble the above models in their emphasis on the process of transition; however, the process of transition is divided into several dimensions such as “language” and “loyalty.” Thus, a minority individual may have adapted or changed completely to a majority value along one or more dimensions while retaining certain other dimensions of value to his or her minority cultural group. However, individuals are still placed somewhere “between” cultures.

The above models, collectively considered “deficit models,” (see LaFromboise, et al., 1993), are based on the assumption that living in two cultures is psychologically undesirable. More specifically, these models suggest that the complexity of negotiating two cultures leads to “acculturative stress,” identity confusion and psychological distress. These models have also been criticized for overtly and covertly supporting prejudicial attitudes toward minority group members (p. 172, Casas & Pytluk, 1995). In contrast, the models outlined below not only acknowledge the capacities of individuals to know and understand more than one culture, they further assert that biculturalism may be beneficial and related to higher levels of psychological health (e.g., LaFromboise, et al., 1993).

*Bicultural, or transcultural, models* allow that it is not essential to forfeit one culture for another; an individual can maintain a high level of involvement in more than one culture. For example, LaFromboise and her colleagues proposed a *Model of Bicultural Competence* which underscores the dynamic and interdependent relationship between a person and their environment. LaFromboise, et al. (1993), posit a relationship between
identity development, both ego identity and cultural identity, and bicultural competence. These authors hypothesize that the strength or weakness of identity, as well as one's groundedness to their culture, will impact the individual's ability to acquire bicultural competence.

While such models account for bicultural flexibility, they generally do not account for either low cultural identification or a possible continuum of identification with either culture. As such, Oetting and Beauvais (1990-91), have criticized these models for failing to account for the presence of levels and subtypes of bicultural identification.

Considering this shortcoming, Oetting and Beauvais (1990-91) proposed the orthogonal cultural identification model. The main premise of this model is that identification with any culture is essentially independent of identification with any other culture. In this model, the dimensions of cultural identification are considered to be located at right angles to one another, rather than being placed at opposite ends of a hypothetical continuum. The origin of the angle represents a lack of identification with any culture, a state they term, "cultural anomie or cultural alienation" (p. 662). Oetting and Beauvais (1990-91) summarize the utility of this theory:

The change from the previous models may appear to be minor, but the differences are profound. All of the other models place limits on what patterns of cultural identification and on what adaptations to change are possible. The orthogonal identification model indicates that any pattern, any combination of cultural identification, can exist and that any movement or change is possible. There can be highly bicultural people, unicultural identification, high identification with one
culture and medium identification with another, or even low identification with
either culture (p. 662).

To summarize, these last two models, also known as alternation models (see
LaFromboise, et al., 1993), assume that dimensions of cultural identification are
independent of, or are orthogonal to, one another, such that an increase in identification
with one cultural group does not require an absence or reduction of identification with
another group. Consistent with the notion that an individual can independently express
identification, or lack of identification with, more than one culture, LaFromboise and
colleagues (LaFromboise, et al., 1993) resolved that “there is a way of being bicultural
without suffering negative psychological outcomes, assimilating, or retreating from
contact with the majority cultures” (p. 407-408).

Despite commonalities between the models proposed by LaFromboise and her
colleagues (LaFromboise, et al., 1993) and Oetting and Beauvais (1990-91), a major
divergence is evident with regard to the interpretation of type of cultural identification
and psychological adaptation. Specifically, Oetting and Beauvais (1990-91), based on
research with Native American youth, found high cultural identification, regardless of the
type of identification, to be positively correlated with self-esteem. They concluded that
“identification with either the minority or the majority culture is a source of personal and
social strength” (p. 655). LaFromboise and colleagues, on the other hand, contend that
“in addition to a strong and stable sense of personal identity, another affective element of
bicultural competence is the ability to develop and maintain positive attitudes towards
one’s culture of origin and the second culture in which he or she is attempting to acquire
competence” (p. 408). These researchers profess that identification with one’s culture of
origin is related to psychological well being, and an early and critical aspect of bicultural effectiveness.

As such, a critical difference in these two models is the emphasis placed on the maintenance of identification with one’s culture of origin; while Oetting and Beauvais (1990-91) assert that identification with *either* culture is critical, LaFromboise and colleagues (1993) maintain that identification with *both* one’s culture of origin and the second culture is essential to psychological adjustment (emphasis added). Hence, a core disparity is the relative influence of attachment with one’s culture of origin.

This section has provided an overview of the theoretical frameworks related to ethnic identity among minority youth. It is important to note that there is considerable overlap among these frameworks (Phinney, 1990), and each may provide a valuable contribution to understanding the multifaceted nature of ethnic identity. In the next section, relevant empirical research will be reviewed.

**RELATION OF ETHNIC IDENTITY TO MENTAL HEALTH**

Historically, minority status has been linked with a risk for a variety of negative mental health outcomes, including identity confusion (Erikson, 1968), poor self-image (Tajfel, 1978), and feelings of alienation (Blackwell & Hart, 1982). However, findings implicating greater risk for psychological problems or low self esteem among ethnic minorities have been seriously criticized on a variety of methodological grounds (e.g., Aboud, 1987; Banks, 1976; Brand, Ruiz, & Padilla, 1974). Many earlier studies failed to attend to such factors as developmental considerations, the meaning of constructs to a particular cultural group, measurement artifacts (e.g., Aboud, 1987; Trimble, 1987), and the frequent use of “ethnic glosses” to define populations (Trimble, 1990-91).
These substantial methodological concerns, particularly those associated with the measurement of psychological constructs, are particularly problematic in research with Native American people (see Spencer & Markstrom-Adams, 1990). For example, Trimble (1987) challenged findings suggesting that Native Americans tended to have lower self-esteem than other members of society, noting major cultural differences in the meaning of “self-concept.” Native American cultures possess a sociocentric view of self, which incorporates a world view of self beyond the person. In other words, Native Americans tend to have an extended self-concept which includes fluid boundaries (Pepper & Henry, 1992). Among Native American children, this extended self-concept has been represented by an emphasis on family ties, traditional customs and beliefs, and moral thought evidenced in their self-descriptions (Rotenberg & Cranwell, 1989). As such, research with Native American populations needs to pay particular attention to the measurement and meaningfulness of particular constructs for this group.

Many researchers have posited that ethnic identity is critical to self-concept and psychological functioning of minority ethnic group members (e.g., Maldonado, 1975; Phinney, 1990; Phinney, Lochner, & Murphy, 1990). Phinney (1990) noted that empirical research examining the construct of ethnic identity has been both limited and rife with methodological problems. In addition, earlier research frequently utilized a “deficit” framework to study minority populations (e.g., Choney, Berryhill-Paapke, & Robbins, 1995; LaFromboise, 1988). Given these considerations, as well as significant advances in the conceptualization of ethnic identity and cross-cultural research (e.g., Lonner & Berry, 1986; Phinney, 1996), the following review will emphasize more recent literature.
Research by Phinney and Colleagues

A great deal of the emerging research in the area of ethnic identity has been conducted with adult populations. Because the current study is interested in ethnic identity among adolescents, an overview of the work of Phinney and her colleague is presented. Based on a series of studies (e.g., Phinney, 1989; Phinney & Tarver, 1988) designed to assess the utility of Marcia’s stages of identity development among ethnically diverse adolescents, Phinney (1989) proposed a three stage model of ethnic identity among minority youth. Several recent studies present empirical support for this model (e.g., Phinney, 1992; Phinney and Alipuria, 1990; Roberts, Phinney, Romero, & Chen, 1996).

In an early exploratory study, designed to examine ethnic identity search and commitment in ethnically diverse adolescents, Phinney and Tarver (1988), employed an open-ended interview technique with two groups of American-born, middle-class, eighth graders attending an integrated urban high school. The subjects consisted of a random sample of 24 African American and 24 White students, equally divided between males and females, ranging in age from 12 to 14 years. In this study, Phinney and Tarver (1988) found that over one-third of the subjects had engaged in some level of exploration regarding their ethnicity, as indicated by an expressed interest in learning more about their culture as well as active involvement in this process. This finding offered support that the process of an ethnic identity search is evident among some students in the eighth grade. Although no significant ethnic group differences were found, there was a trend toward higher search ratings among African American subjects, especially African American females. This observation was noted to be consistent with an earlier study by Phinney
and Alipuria (1987) which found significantly higher levels of search among African American college students than among their White peers.

To further explore stages of ethnic identity development, Phinney (1989) developed an in-depth standardized interview, the Ethnic Identity Interview (EII), derived from ego identity research (Grotevant & Cooper, 1981; Marcia, 1966) but specific to the topic of ethnicity. Using this interview, Phinney evaluated 91 American-born students in the tenth grade. This sample, ranging in age from 15-17 years old, was comprised of 14 Asian-American, 25 African American, 25 Hispanic, and 27 White students from integrated urban high schools. In this study, Phinney observed that although a high percentage of minority youth had engaged in an examination of the relevance of their ethnic group membership and its impact, White students had engaged in significantly lower levels of search and commitment of their ethnic identity. Further, these White subjects did not demonstrate progression towards the development of ethnic identity and pride. Phinney concluded that the results of this study provided empirical support for the importance of ethnicity to identity and the three stages of ethnic identity development among American-born minority adolescents.

Based on the EII (Phinney, 1989), Phinney (1992) developed the Multigroup Ethnic Identity Measure (MEIM) to facilitate research on identity exploration of various ethnic groups. While acknowledging limitations of this instrument, Phinney (1992, 1996) maintains it is a useful tool for studying correlates of ethnic identity, especially given that interviews are both time-consuming and difficult to code.

The MEIM, a questionnaire, is based on the conceptualization of ethnic identity as a continuous variable; scores indicate a range from a low or weak identity to a high,
positive identity. The items are designed to measure the extent of exploration and commitment regarding one's ethnicity, and the degree to which attitudes are positive. Although this measure does not allow for classification of individuals by stages, it does provide a means of assessing the strength of identity with low scores being suggestive of a weak or negative identity and high scores as indicative of a strong, positive identity. Subsequent studies by Phinney and her colleagues have provided support for the instrument as valid for students in junior high school through college (Phinney, 1992; Roberts, et al., 1996).

In another study, Phinney and Alipuria (1990) examined ethnic identity search and commitment, the importance of ethnicity as an identity issue, and the relationship of ethnic identity to self-esteem among college students. Based on questionnaires given to approximately two hundred urban college students of Asian-American, African-American, Mexican-American descent and a White comparison group, these researchers concluded: (a) exploration of ethnic identity issues was significantly higher among minority group subjects than the majority group subjects; (b) ethnicity as related to identity was rated significantly more important by minority group members than by Whites; and (c) self-esteem was positively correlated with the extent that subjects had explored and resolved issues involving their ethnicity.

Research using the Ethnic Identity Interview (EII) or Multigroup Ethnic Identity Measure (MEIM) has provided additional support for Phinney's three stage model. These studies by Phinney and her colleagues offer empirical support for the following assertions: (a) ethnic minorities score higher than Whites on ethnic identity, (b) African Americans score higher than other minority group members (Phinney, 1992; Phinney,
Dupont, Espinosa, Revill, & Sanders, 1994); and (c) ethnic identity shows a low but consistent positive correlation with self-esteem across all ethnic groups including Whites (Phinney, Cantu, & Kurtz, 1997; Roberts, et al., 1996).

The developmental nature of ethnic identity is supported by studies showing a greater proportion of tenth graders than eighth graders indicating evidence of ethnic identity search (Phinney, 1989; Phinney & Tarver, 1988), as well as observations that college students evidence higher levels of ethnic identity development when compared to high school students (Phinney and Chavira, 1992). Phinney and Chavira (1992) retested students from a previous study (Phinney, 1989) and, in addition to providing further support for the developmental progression of ethnic identity, provided some evidence for the stability of achieved ethnic identity. Further, these authors found that the stage of ethnic identity was significantly correlated with self-esteem at both periods of investigation.

Several studies have investigated the direct relationship between ethnic identity and psychological adjustment. For example, results from Phinney’s studies (Phinney 1989, 1992), demonstrate a significant correlation between ethnic identity and self-esteem among minority high school and college students. Although additional studies have provided evidence of the relationship between ethnic identity development and self-esteem (Parham & Helms, 1985; Phinney & Alipuria, 1990; Phinney & Chavira, 1992), Phinney (1991), emphasizes the equivocal nature of this correlation. Acknowledging concerns regarding methodological problems, Phinney further emphasizes that the level of commitment is an important factor in the relationship between ethnic identity and self esteem. She states that self-identification as a minority is a “prerequisite that should be
present before ethnic identity is assumed to influence self-esteem” (p. 194). This relationship also incorporates a number of other variables including: involvement in ethnic behaviors and practices, positive evaluation of the group, and preference for one’s own group.

More specifically, according to Phinney (1991), “ethnic identity is a multidimensional construct involving ethnic feelings, attitudes, knowledge, and behaviors” (p. 193). She further identified the principle components of high ethnic identity as being high levels of: (a) identification of oneself as a group member; (b) positive evaluation of one’s group; (c) involvement in activities and traditions of the group; (d) interest and knowledge about the group; (e) a rising commitment and sense of belonging to one’s ethnic group; and (f) being happy and having a preference for one’s group. Conversely, lower levels of ethnic identity are associated with lower levels of these variables. Collectively, these components of ethnic identity significantly impact one’s understanding of self, sense of efficacy in one’s environment, and comfort with self.

In summary, based on a series of studies using the MEIM, Phinney (1996) concludes, “Ethnic identity, as measured by this scale appears to be a characteristic of individuals that can be reliably measured, that shows variation across both individuals and ethnic groups, and that is implicated in psychological well-being” (p. 148). However, exploration of ethnic identity among Native American adolescents has been limited.

Native American Ethnic Identity Research

Several recent studies have addressed the influence of ethnic identity among Native American adolescents (e.g., Doerner, 1995; Gordon, 1995; Oetting & Beauvais, 1990-91). Based on a series of studies examining ethnic identity from the framework of the
orthogonal cultural identification theory, Oetting and Beauvais (1990-91) developed a number of core scale items to assess patterns of cultural identification. Collectively, these items form a measure, the *Orthogonal Cultural Identification Scale (OCIS)*, which allows for independent assessment of identification with two or more cultures. Oetting and Beauvais (1990-91) used this measure to explore dual identification among several ethnic groups, including the identification with American Indian and White American cultures among American Indian adolescents. Consistent with earlier work by Berry (1988), these researchers examined four main types of identification: (a) *High bicultural identification*, indicating high identification with both American Indian and White American traditions, beliefs, and values; (b) *high identification with one culture and medium identification with the other*, indicating high identification with American Indian and medium identification with White American traditions, beliefs, and values, or vice versa; (c) *monocultural identification*, indicating high identification with either White American or with American Indian traditions, beliefs, and values; and (d) *low identification*, indicating low identification with either American Indian and White American traditions, beliefs, and values.

Further, the *Orthogonal Cultural Identification Scale (OCIS)* was used in a series of studies (Beauvais, 1992; Oetting, Beauvais, & Edwards, 1988, 1989) designed to examine the relationship between cultural identification and adolescent substance use. Using this measure, Beauvais and colleagues found differential patterns of identification for Native American youth and Mexican-American youth. For example, the majority of (reservation) Native American adolescents indicated medium identification with both American Indian and White American cultures, while (urban) Mexican-American youth
indicated a pattern of high Hispanic identification and moderate White identification. Based on these studies, Oetting and Beauvais (1990-91) submitted that identification with either culture may serve as an individual’s source of personal and social strength and will correlate with one’s general well-being and positive psychological adjustment. Further, these authors asserted that bicultural patterns of identification can exist without essential conflict, and that “it is not mixed cultural identification but weak cultural identification that creates problems” (p. 679).

Several subsequent studies have examined the utility of orthogonal cultural identification theory as well as the eight-item scale proposed by Oetting and Beauvais (1990-1991). Building on the work of Oetting and Beauvais (1990-1991), several instruments have been designed to measure how strongly individuals are connected to their perceptions of what it means to be an Indian as well as possible identification with more than one ethnic group.

For example, Moran, Fleming, Somervell, and Manson (1994), expanded the OCIS by adding items measuring familiarity with tribal language and religious practices. Similar to earlier studies, they found that most adolescents identified to some extent with both Indian and White items. Further, an exploratory factor analysis yielded a two factor model represented by independent factors of Indian identity and White identity.

Doerner (1995) offered further support for a two factor model for an acculturation scale based upon the orthogonal identification theory of Oetting and Beauvais (1990-91). Doerner’s study was designed to investigate whether levels of cultural identification would moderate the relationship between psychiatric disorder and risk factors, such as interparent violence. Despite lack of evidence for the main hypotheses, he found that
adolescents' level of bicultural identification did mitigate the influence of stress. Doerner, however, submitted that the construct of "cultural identification" proposed by Oetting and Beauvais (1990-91) may be more appropriately termed "cultural immersion." As such, Doerner concluded that "low levels of bicultural immersion were associated with an increased probability of disorder." An important implication of this study is related to its support for bicultural competence training; Doerner (1995) asserted that the development of bicultural skills may reduce the risk of psychiatric disorder among Native American adolescents.

Using the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992), Gordon (1995) explored the relationship between ethnic identity, academic achievement and self-esteem among Native American adolescents. Based on a small sample (N=22) of middle and high school students, Gordon (1995) found support for the MEIM as a useful tool for research with Native American youth. The students who participated in his study ranged in age from 12 to 18 years. Nineteen students (86.4%) identified themselves as Native American and three (13.6%) as Mixed Heritage. Gordon compared the Ethnic Identity Interview and the MEIM among these students and found that the MEIM was sensitive enough to distinguish between Native American students who were unexamined and achieved in ethnic identity development. Thus, he concluded that the MEIM could be used to distinguish between students at differing stages of ethnic identity development.

Interestingly, in Gordon's study, the mean score of the MEIM for the Native American sample was high compared with the means reported for any ethnic group in Phinney's (1992) study. He noted that, as seen in scores obtained by African Americans in Phinney's study, these scores may be attributable to the influence of historical traumas.
as well as their physically distinguishable status that has served to make these individuals more aware of the impact of ethnicity. Finally, Gordon found no significant difference between MEIM scores based on the age or gender.

In another study, Lysne and Levy (1997) examined differences in ethnic identity in Native American adolescents as a function of school context. Based on a measure of ethnic identity adapted from the Multigroup Ethnic Identity Measure (Phinney, 1992), these authors found support for both an age-related progression in ethnic identity development as well as differences in ethnic identity commitment based on school and community-based contexts. Specifically, results of a survey administered to 101 Native American students in grades 9 through 12, revealed that Native American adolescents attending high school with a predominantly Native American student body evidenced greater levels of ethnic identity exploration and commitment than Native American adolescents attending high school with a predominantly White student body. Although the 12th grade students in both contexts demonstrated greater ethnic identity commitment than their 9th grade counterparts, 12th grade students from the predominantly Native American school context evidenced greater levels of ethnic identity exploration and commitment than their same age peers attending the predominantly White school. These results underscore the importance of school and community-based contexts on ethnic identity in Native American adolescents. Interestingly, in this study differences in ethnic identity based on gender were evidenced only among 12th grade subjects.

In a series of studies, Zimmerman, Ramerirez-Valles, Washienko, Walter, and Dyer (1996) examined properties of a measure of enculturation for Native American youth. These authors argue that the use of the term enculturation, although consistent with
Phinney’s (1992) conceptualization of ethnic identity, is preferred with this population given historical attempts to forcibly assimilate them into the White majority culture. These authors found that a measure of enculturation that assessed (a) cultural affinity, defined as pride and interest in culture, (b) cultural identity, based on a single Likert-scale question: “Do you see yourself as American Indian?” and (c) involvement in cultural activities as measured by a checklist of nine activities, formed a single factor. Nonetheless, they concluded that enculturation is a multidimensional construct which includes participation in culturally relevant activities and/or a connection to one’s heritage.

Hill, Solomon, Tiger, and Fortenberry (1993) investigated cultural identity systems and health behaviors among rural Native American adolescents of Oklahoma. Involvement in cultural identity systems was quantified by assessing the degree and quality of participation in a variety of identity systems including: ethnicity, religion, family, and school. Results supported that involvement in cultural identity systems such as religion, family, and school were more critical than ethnicity. Moreover, involvement with school had the strongest statistical association with health-related behaviors. These authors concluded that cultural identity is a measurable construct yet the relation between culture and health is complex. Nonetheless, these authors cautioned that these findings were based on four tribal groups in Oklahoma and are not generalizable to other groups. Further, they emphasize that they did not assess patterns of thinking, feeling, and acting with regard to ethnic identity. Interestingly, there were no significant differences in health-related behaviors based on ethnic self-identification as pure or mixed.
Additional studies of interest to the current investigation include two studies of cultural identity among American Indian adults (Ferguson, 1976; Penn-Kennedy & Barber, 1995). Using classifications parallel to Berry's (1980), Ferguson (1976) found that response to alcoholism treatment for 110 Navajo men was significantly different based on the individual's "stake" in society. Stake was operationally defined as none, old, modern, or both, based on associations with stock-raising, old-style farming or a "quasi-traditional" lifestyle. Both having a stake in traditional society as well as having a stake in both traditional and modern society (bicultural) was associated with greater length of abstinence at 1-2 year follow-up. Conversely, individuals lacking a stake in either society and those with a stake only in modern society were more prone to relapse. Moreover, those individuals with stakes in both old and modern societies demonstrated the most enduring patterns of sobriety. However, it is important to emphasize that a major component of cultural identity in this study was related to an emphasis on vocational identity.

Penn-Kennedy and Barber (1995) investigated cultural identity and control of diabetes among adult members of the Omaha Tribe in Nebraska. Using a 19-item scale developed exclusively for the Omaha Tribe, cultural identity was conceptualized as a multidimensional variable, involving components of background, community involvement, cultural heritage, language, leisure activities, and perceived comfort with the "Indian way of life." These authors found moderate support for their hypothesized relationship between cultural identity and control of diabetes. Specifically, high cultural identity was positively correlated with diabetes control, at least when control was measured in terms
of blood sugar levels. These authors proposed that cultural identity may serve to mediate the influence of environmental stressors on unhealthy eating habits.

**Cross-cultural studies**

Developmental models of ethnic identity have attempted to provide information about how identity is established within one's cultural group, and the relationship of that identity to the person's attitudes, behaviors, and psychological adjustment. Several recent studies examining the impact of ethnic identity on adolescent substance use suggest that the relationship between ethnic identity and substance abuse is complex (Felix-Ortiz & Newcomb, 1995) and varies for diverse cultural groups (e.g., Oetting & Beauvais, 1990-91; Trimble, 1995). For example, Felix-Ortiz & Newcomb (1995), using a multidimensional measure of cultural identity, determined that among Latino/Latina adolescents, certain components of cultural identity were associated with increased drug use, while others were associated with decreased drug use. However, among Native American youth, Trimble (1995) failed to find support for the relationship between ethnic identity and alcohol involvement. He concluded that associations with peers who use drugs accounted for the greatest portion of variance in explaining alcohol use among these youth. Nonetheless, Trimble (1995) suggested that ethnic identity might serve as a mediator variable among this population.

**RATIONALE AND NEED FOR THE PRESENT STUDY**

Numerous studies indicate that Native American youth evidence disproportionately higher rates of substance abuse, depression, suicide and other mental health problems (Berlin, 1987a; Blum, et al., 1992; Yates, 1987). Many researchers have linked these serious problems to rapid culture change and loss of tradition (e.g., Berlin 1986, 1987a).
Further, it has been suggested that Native American adolescents may be extremely susceptible to high stress levels engendered by the developmental task of identity establishment, and may feel “particularly caught between two cultures” (OTA, 1990, p.1). The development of ethnic identity is likely to be further complicated by the large percentage of American Indian youth from mixed heritage background (Trimble & Medicine, 1993).

There is considerable conceptual support for the critical nature of ethnic identity among Native American youth. For example, many recent studies have emphasized that schools for Native American youth must strive to integrate the maintenance of Indian cultural identity with the acquisition of the knowledge and skills necessary for participation in mainstream society (Badwound & Tierney, 1988; Little Soldier, 1989; Reyhner, 1992a; Van Hamme, 1996). Yet, empirical research examining the relationship between ethnic identity development and psychological adjustment, particularly among Native Americans, remains limited (McShane, 1988; Phinney, 1990).

Recent methodological advancements related to the conceptualization and measurement of ethnic identity have served as a catalyst for the current investigation. Trimble and Medicine (1993) propose that, given the tremendous diversification among Native American populations, the construct of ethnic identity represents an important and viable alternative to the use of classification categories or “ethnic glosses” (see Trimble, 1990-91) for indigenous peoples (Moran, et al., 1994; Trimble & Medicine, 1993). Considering the marked diversity among Native American populations, there is a critical need to attend to specific geographic and/or tribal affiliation in research among Native American peoples (e.g., Trimble, 1987). Thus, an investigation of the construct of ethnic
identity which incorporates a regional or tribal perspective may serve to reduce problems with external validity (Botvin, Schinke, & Orlandi, 1995; Trimble, 1990-91).

Issues related to the serious conceptual and methodological problems that have plagued cross-cultural research have been well documented (e.g., Beauvais & Trimble, 1992; Spencer & Markstrom-Adams, 1990). Trimble and Medicine (1993), in their review of research with American Indian populations, emphasize major concerns stemming from a lack of culturally sensitive measures. These authors identify two main psychometric issues confounding such research: (a) assumptions of conceptual equivalence of psychological constructs across cultures and (b) the reliance on norms typically based on White Americans. Trimble and Medicine (1993) argue “that in its present form the current knowledge base of psychology cannot be effectively generalized to the American Indian” (p. 134). In light of these concerns, this study attempted to employ only measures with some established validity and reliability among Native American youth.

These issues are perhaps best illustrated in research examining differences in self-concept across culturally diverse groups. Much of the early research that included cross-cultural comparisons of self-esteem has not only been rife with methodological confounds (Aboud & Skerry, 1984) but also has had potentially damaging consequences (e.g., Banks, 1976; Banks & Banks, 1995). Oyserman and Markus (1993) have cogently stated, “though individuals worldwide all appear to have a sense of self, its content, processes, and structures are bound to sociocultural context and thus are likely to differ” (p. 212). Similarly, Trimble (1987) emphasized that the majority of traditional studies on self-esteem among American Indians have failed to consider their perceptions of life and
self. This author explains that American Indians (as well as many other non-European cultures) have an extended self-concept that includes fluid boundaries but most of the commonly used measures of self-concept fail to take into account a sociocentric view that incorporates a world view of self beyond the person. For example, Rotenberg and Cranwell (1989) noted that among American Indian children an extended self-concept was represented by an emphasis on family ties, traditional customs and beliefs, and moral thought evidenced in their self-descriptions.

Finally, because Native Americans are a relatively young group, there is a critical need to examine risk and resiliency factors among Native American youth (Yates, 1987). According to the 1990 census, the median age of American Indians in this country is 26.3 years which is significantly younger than the median age of the general United States population of 34.4 years. Additionally, when analyzed according to age categories, American Indians (including Eskimos and Aleuts) are the youngest of all ethnic groups; 37.4 percent are 18 years of age or younger (Aponte & Crouch, 1995). Further, Native Americans have the lowest rates of high school graduation and college attendance of any ethnic group. Thus, advancements in knowledge regarding critical development periods such as adolescence may serve to promote better prevention and intervention programs (McShane, 1988).

This project was designed to examine the relation between ethnic identity, self-esteem, emotional well-being, and depression among Native American reservation youth. In this study, previous research efforts related to ethnic identity among minority adolescents were extended in several important ways. First, ethnic identity was conceptualized as a multidimensional construct, enabling exploration of the various
dimensions of identification with more than one culture as well as bicultural identification.

Second, this investigation attempted to focus on a more homogeneous group of Native Americans, examining ethnic identity among several tribes of Lakota/Dakota Sioux. Third, this study attempted to use culturally sensitive measures, by employing only psychological instruments that have demonstrated reliability and validity with Native American adolescents. Finally, with respect for the tenet that no one group should be compared to another (e.g., Dana, 1993; Spencer & Markstrom-Adams, 1990; Watts, Machabanski, & Karrer, 1993), this study employed a within group research design.

The primary goal of the current research was to examine the relative influence of American Indian ethnic identification (AI), White-American identification (WA), and bicultural identification measured as the interaction of AI and WA, as predictors of self-esteem, emotional well-being, and depression among Lakota/Dakota Sioux adolescents. A second goal included an investigation of the psychometric properties of two scales of ethnic identity with this population including an analysis of cross-validation of these two measures. Finally, the influences of additional demographic, cultural and personal variables were explored.

Research Questions

Consistent with the primary goals, the current research project was designed to answer the following questions:

1. How well do American Indian ethnic identification, White American identification, and bicultural identification assessed by the interaction of these, predict self-esteem, emotional well-being, and depression among a specific group of Native American youth, the Lakota/Dakota Sioux? More specifically,
1.1. What is the predictive ability of American Indian (AI) ethnic identification and White American (WA) identification, as measured by the Acculturation Questionnaire for Adolescents (AQA), for self-esteem, emotional well-being, and depression among Lakota/Dakota Sioux youth? Does the construct of bicultural identification, assessed by the interaction of these scores (i.e., AI X WA), contribute significantly to this predictive ability?

1.2. How well does level of ethnic identity, as measured by the Multigroup Ethnic Identity Measure (MEIM), predict self-esteem, emotional well-being, and depression among Lakota/Dakota Sioux youth? Further, what is the relative contribution of the MEIM supplementary scale, Other Group Attitudes (OGA), as well as the interaction of the MEIM and the OGA, in this predictive ability?

2. A second series of questions relates to psychometric considerations and includes:

2.1. Is the AQA an appropriate and psychometrically sound tool for use with Native American youth? Does the AQA demonstrate adequate internal reliability (Cronbach’s alpha) and construct validity for this population (i.e., what is the correlation between scores on the AQA and specific cultural knowledge, attitudes, and practices as reported by the students)?

2.2. Is the MEIM an appropriate and psychometrically sound tool for use with Native American youth? Does the MEIM demonstrate adequate internal reliability (Cronbach’s alpha) and construct validity for this population (i.e., what is the correlation between scores on the MEIM and specific cultural knowledge, attitudes, and practices)?
2.3. Are the MEIM and AQA tapping similar constructs among Native American youth (i.e., what is the correlation between scores on the MEIM and scores on the AQA)?

Major Hypotheses

On the basis of the literature reviewed, the following hypotheses have been developed regarding ethnic identity among Native American adolescents, especially the relationship between ethnic identity, self-esteem, emotional well-being, and depression among Lakota/Dakota Sioux youth.

1. Consistent with previous research with Native American reservation youth (Oetting & Beauvais, 1990-91; Moran, et al., 1994), the majority of students will report at least medium identification with both American Indian culture and White American culture based on the Acculturation Questionnaire for Adolescents (AQA).

2. Both the Acculturation Questionnaire for Adolescents (AQA) and the Multigroup Ethnic Identity Measure (MEIM) will receive support of psychometric adequacy as an appropriate tool for measuring ethnic identity among Native American youth, as determined by the internal reliabilities (Cronbach’s alphas) and construct validities for both measures with this sample. More specifically,

2.1. There will be a positive correlation between the MEIM and the AQA score measuring American Indian ethnic identification.

2.2. There will be a positive correlation between both the MEIM and the AQA score measuring American Indian ethnic identification and specific cultural knowledge, attitudes, and practices.
3. Based on the AQA, both American Indian ethnic identification and White American identification, as well as bicultural identification assessed by the interaction of the two, will provide unique contribution as significant predictors of self-esteem, emotional well-being, and depression among the Lakota/Dakota Sioux youth participating in this study. More specifically,

3.1. Level of identification with American Indian culture (independent of level of identification with White American culture) will be a significant predictor of measures of self-esteem, emotional well-being, and depression.

3.2. Level of identification with White American culture (independent of level of identification with American Indian culture) will be a significant predictor of measures of self-esteem, emotional well-being, and depression.

3.3. The multiplicative product of American Indian ethnic identification and White American identification (i.e., bicultural identification assessed by the interaction of these two scores) will contribute unique variance in predicting self-esteem, emotional well-being, and depression.

4. Similarly, both the MEIM and OGA, as well as the interaction of the two, will provide unique contribution as significant predictors of self-esteem, emotional well-being, and depression among the Lakota/Dakota Sioux participating in this study.

5. There will be significant differences in ethnic identity and self-esteem based on age and gender. That is,

5.1. Consistent with previous findings supporting individual progression with age to higher levels of ethnic identity among other minority groups (e.g., Phinney
& Chavira, 1992), there will be a positive correlation between age and both MEIM and self-esteem scores.

5.2. Consistent with previous findings supporting gender differences related to self-esteem and ethnic identity among other minority groups (e.g., Phinney & Chavira, 1992), males will score higher on both the MEIM and self-esteem measures.

**Overview of Method**

The overall purpose of this study was to examine ethnic identity, including both American Indian ethnic identification and White American identification, as well as bicultural identification assessed by the interaction of the two, as predictors of self-esteem, emotional well-being, and depression among a cohort of Native American adolescents. A survey was administered to 141 Lakota/Dakota Sioux adolescents. The survey was comprised of: (a) two measures of ethnic identity; (b) separate measures of self-esteem, emotional well-being, and depression; and (c) a variety of items to assess demographic variables and cultural influences.
CHAPTER II

METHOD

PARTICIPANTS

Participants were 141 students in grades 7 to 12 attending middle and secondary schools located on or near Indian reservations in South Dakota. Of the surveys completed, 137 surveys (97.2%) were included in the data analysis based on the following criteria: (a) appropriate completion of the questionnaire, and (b) reporting of “Native American” or “American Indian” as an ethnic identity in at least one of two places on the survey. On the four surveys omitted, two students had self-identified as “non-Indian,” one student failed to complete several sections of the survey, and one student employed a fixed random response set. The vast majority of these students lives on reservations within the state of South Dakota and belongs to one or more of several local tribes. All participating schools were either predominantly or exclusively Native American, serving primarily Lakota/Dakota Sioux youth. The Lakota/Dakota Indians are members of the great Sioux Nation and have been historically associated with the Northern Plain Indians. The specific schools and tribes are not revealed here to protect the identities of the individuals, tribes, and agencies involved.

PROCEDURES

Subsequent to final approval from relevant School Boards and Tribal Councils, both parents and students received letters of advanced notification that their school had agreed to participate in a local study designed to explore adolescent development among today’s Native American youth. (See Parent Research Information Letter and Student...
Research Information Letter in Appendices A and B). They were informed that participation was voluntary, would not affect educational involvement in any way, and that students could withdraw from the study at any time. Further, they were informed of the procedures and assured of confidentiality and the complete anonymity of responses. Completion of both the parental consent section and the student consent section of the Research Consent Form (see Appendix C) was required in order to participate in the study. Participants were also informed that, in the future, the overall results of the survey would be shared with students, school staff and the local community to increase understanding of factors influencing today's youth. Parents were also permitted to request to receive a written copy of this feedback. Of the 750 letters distributed, approximately 150 signed parental consent forms were returned. Of those returned, not all of the students were available to take the survey when administered at their school.

On the day of the survey, the experimenter ensured that written informed consent had been obtained from both the student and parent(s). Interested and eligible students were directed to an alternative classroom by school personnel. Survey procedures were reviewed with students and they were directed to review the instructions on the front page of the survey while the experimenter read them aloud. Students were again reminded not to place their names on any of the forms and re-assured of the anonymity of their answers. Students completed the questionnaires independently of classmates and the experimenter remained available to answer any questions. (Specific details can be found in the Data Collection Protocol in Appendix D). Participants completed the survey during one class period. All students participating in the survey received five dollars compensation following the collection of the questionnaires.
MEASURES

Prior to actual data collection, pilot testing was conducted to ensure the questionnaire could be completed within one hour and that it was not disturbing to any subjects. Of the fourteen subjects involved in this pilot testing, all completed the survey in less than 45 minutes and indicated that they were not particularly bothered by the survey or any specific questions. All but one student reported that they found the survey interesting and would take it again if given the chance. Based on this pilot testing, the survey packet was compiled to include the measures described below.

The student questionnaire encompassed three main areas of measurement:
(a) Ethnic identity; (b) psychological functioning including self-esteem, emotional well-being, and depression; and (c) sociodemographic characteristics together with questions regarding ethnic and cultural experiences. (These items along with the survey cover sheet can be found in Appendix E entitled American Indian Survey: Introduction and Demographic and Ethnic/Cultural items.)

Ethnic Identity. To examine the construct of ethnic identity, two measures that best illuminate recent work in this area (i.e., Oetting & Beauvais, 1990-91; Phinney, 1992), were selected. These two measures were counterbalanced in the survey packet to allow for analysis of order effects.

Acculturation Questionnaire-Adolescent Version. The Acculturation Questionnaire-Adolescent version (AQA) is a measure developed in accordance with the orthogonal cultural identification theory advanced by Oetting and Beauvais (1990-91). In the initial studies by Oetting and Beauvais (1990-91), item responses were scored by a classification system: A lot, 4 points; Some, 3 points; Not much, 2 points; and Not at all,
Oetting and Beauvais (1990-91) classified average item scores of greater than 3 as "High" in terms of their level of identification with a culture; average item scores between 2 and 3 were labeled "Medium" and average item scores below 2 were considered to depict "Low" identification. Thus, higher values indicate a greater degree of identification with a culture, and when viewed orthogonally, there are nine patterns of culture identification possible when two cultures are represented. (The Acculturation Questionnaire-Adolescent Version can be found in Appendix F.)

Oetting and Beauvais (1990-91) assert that it may be possible to assess cultural identification using two specific items: (1) Do you live in the... way of life? and (2) Are you a success in the... way of life? These authors note that despite the vagueness of the phrase "way of life," it appears to tap the intended construct. These authors estimate that Cronbach's alpha values would approach .70 when appropriate and meaningful cultural constructs (e.g., "tribe") were inserted within these two items. Further, Oetting and Beauvais (1990-91) report that when assessing youth the addition of two items: (3) Does your family live in the... way of life? and (4) Is your family a success in the... way of life, enhances both reliability and validity. Specifically, Oetting and Beauvais (1990-91), report that among Native American youth, these four items presented using "American Indian" as a cultural construct, yielded oblique factor coefficients ranging from .76 to .85. Among these same subjects, when "White American" was inserted in these four items, factor coefficients ranged from .77 to .81.

Oetting and Beauvais (1990-91) further explored concurrent and discriminant validity of both versions of these four items by examining correlations between the items and a number of other items commonly considered to be related to Indian culture.
"Does your family teach you about Indian ways?"). The correlations between the oblique factor domain comprising American Indian identification and the Indian culture-related items ranged from .39 to .74. The correlations between White American identification and the Indian culture-related items ranged from .16 to .26. These authors concluded these results were indicative of good concurrent validity of the four item scale.

The AQA, constructed by the principal investigators of the Native American Adolescent Project (NAAP; see Doerner, 1995), is based on the orthogonal cultural identification theoretical framework and includes the actual culture-related items developed by Oetting and Beauvais (1990-91). Doerner (1995) conducted a factor analysis that yielded two robust factors which he labeled “Indian Cultural Immersion” and “White Cultural Immersion,” respectively.

The Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992), developed for use with adolescents and adults, was used to assess the subject’s primary ethnic identity. The MEIM consists of fourteen items designed to tap three aspects of ethnic identity; positive ethnic attitudes and sense of belonging (five items); ethnic identity achievement (seven items); and ethnic behaviors or practices (two items). Although these components of ethnic identity are conceptually distinctive, they are highly correlated and are adequately represented by a single score on the MEIM (Phinney, Cantu, & Kurt, 1997). The measure utilizes a four-point Likert scale (1 = strongly disagree, 4 = strongly agree). An ethnic identity score is determined based on the average of all items, hence, scores can range from 1 (very low) to 4 (very high ethnic identity). The MEIM
contains reverse-scored items to discourage response set. (The Multigroup Ethnic Identity Measure can be found in Appendix G.)

Phinney (1992) calculated an overall reliability of .81 for a high school sample (N = 417) and a reliability of .90 for a college sample (N = 136). Further, Roberts, Phinney, Romero, and Chen (1996) demonstrated adequate support for internal reliability across ethnic groups; in their sample of more than 5000 adolescents, internal consistency (as measured by Cronbach’s alphas) ranged from .80 to .89 across eleven ethnic groups.

The MEIM has demonstrated a high level of content validity based on correlations scores with relevant demographic variables, self-esteem, and school achievement in expected directions (e.g., Phinney, 1992, 1993a; Taylor, Casten, Flickinger, Roberts & Fulmore, 1994). Additionally, in a large scale study with a variety of ethnic groups, Roberts, et al. (1996) reported the MEIM was positively correlated with measures of psychological well-being and negatively correlated with loneliness and depression. However, despite impressive statistical validation resulting from this study, it is important to note that less than 1% of the total sample (N = 5423) were identified as Native Americans.

Two supplementary components of the MEIM include measures of: (a) Other-Group Attitudes (OGA), a six item scale to assess attitudes toward other groups and a reported reliabilities of .71 and .75 with high school students (Phinney, 1992; Phinney et al., 1997); and (b) Ethnic self-identification and parental-identification, ascertained by an initial open-ended statement regarding the respondent’s ethnic identity as well as three final questions requiring participants to select an appropriate ethnic label from a list of broad categories of groups including “mixed.”
Psychological Functioning. To explore psychological variables, three measures with demonstrated reliability and validity with this population, were employed.

Emotional Well-Being (EWB), a scale consisting of 9 items designed to assess general mood, represents one of ten dimensions of health from the Indian Adolescent Health Survey (Greer, 1988). This is a pseudo-interval scale with scores ranging from 0 to 10. This instrument was field tested on more than 1,000 American Indian adolescents and screened by a national steering committee to ensure the instrument was relevant and applicable to American Indian students (Blum, et al., 1992). Blum and colleagues (Blum, et al., 1992; Greer, 1988) reported internal reliabilities between .71 and .78 and adequate construct validity based on significant correlations in expected directions with other relevant measures. (The Emotional Well-Being Scale can be found in Appendix H.)

Depression was measured using the Center for Epidemiological Studies-Depression Scale (CES-D; Radloff, 1977), a widely used instrument with demonstrated validity and reliability with Native Americans (e.g., Beals, Manson, Keane, & Dick, 1991) and other samples (Radloff, 1977, 1991). On this scale, each student was instructed to rate his/her experiences during the preceding week for each of 20 items designed to tap a variety of affective, cognitive, psychophysiologic and behavioral symptoms of depression. Subjects responded on a four-point scale ranging from rarely or none of the time, some or a little of the time, a lot of the time, and most or all of the time. Total CES-D scores were calculated by first reversing the direction of the positive affect statements and then summing the items. (Note: In this study, five items were reversed due to an additional item being mistakenly worded in a positive direction; the item read My sleep was restful
instead of *My sleep was restless.*) Numerical values associated with the responses were assigned ranges from 0-3; the total score could fall between 0 and 60, with higher scores indicating greater levels of depression. Manson and colleagues (Manson, Ackerson, Dick, Baron, & Fleming, 1990) have reported high reliability (alpha = .82) among American Indian adolescents. (The Center for Epidemiological Studies-Depression Scale can be found in Appendix I.)

*Self-Esteem* was assessed using a subscale from the *Intercultural Self-Perception Scale* (Trimble, 1987), a measure of generalized feelings adolescents’ report about themselves. This fourteen-item global self-esteem scale was compiled from selected items from the two commonly used measures of self-esteem, the *Rosenberg Self Esteem Scale* (Rosenberg, 1986) and the *Coopersmith Self-Esteem Inventory* (Coopersmith, 1981) and includes both positively and negatively worded statements. This scale was developed by Trimble and colleagues (Trimble, 1987) to accommodate different ethnic and cultural perspectives in the United States and has been determined to be a culturally relevant measure for American Indians (Dana, 1993). Trimble reports internal reliabilities in the low .80s among Native Americans (personal communication, October 22, 1997). (The Self-Esteem Scale can be found in Appendix J.)

*Demographic Information.* Additional sociodemographic variables included in this survey were compiled from previous surveys developed for Native American youth such as the Indian Adolescent Health Survey (Greer, 1988). Basic categories were delineated into (a) *General information* including: age, gender, religious interest, grade, self-reported grade average, school interest, gang involvement; (b) *About self and family* including: parents’ residence, family support, non-family support, tribal language spoken
at home, tribal language spoken by grandparents, time with grandparents, feelings about the future; and (c) Ethnic/Cultural Experiences including information regarding: an Indian name, Indian friends, reservation experience, Indian pride, Indian values, Indian healers, discrimination, spiritual learning and spiritual importance, importance of and participation in traditional activities, other racial groups' importance (i.e., to know; to respect), interest in learning Indian language, knowledge of and desire to learn culture, cultural confusion and cultural stress. (These items can be found In Appendix E entitled American Indian Youth Survey: Introduction and Demographic and Ethnic/Cultural Items.)

Along with consideration of the individual items of Ethnic and Cultural Experiences, a summary variable labeled “Cultural Importance” was also calculated. This variable was comprised of the additive total of 18 items which rated both the importance of and frequency of participation in traditional activities (i.e., ceremonies, arts and crafts, Tobacco offering, Sweats, Eagle feather, Indian elder, Smudging).

Open-ended Question. Finally, on the last page of the questionnaire, subjects were provided an opportunity to describe their thoughts and/or feelings about completing the survey.
CHAPTER III
RESULTS

PRELIMINARY CONSIDERATIONS

Following a preliminary discussion regarding statistical power, the primary results of this study are presented in four main sections. The first section reviews descriptive statistics and includes demographic characteristics of the current sample as well as the means, standard deviations, ranges and reliabilities for the primary variables. The second section examines the psychometric properties of the scales of American Indian (AI) ethnic identification, White American (WA) identification, and the Multigroup Ethnic Identity Measure (MEIM). The next section explores the results of a series of multiple regression analyses examining the predictive ability of ethnic identity for the criterion variables of psychological adjustment. Section four investigates specific hypotheses regarding the relationship between age, gender, ethnic identity and self-esteem. Finally, additional analyses of relevant demographic and cultural variables are reviewed.

The power analysis procedure recommended by Cohen (1988; 1992) was employed to estimate the number of subjects required to detect a small to medium effect size, defined as an Effect Size Index ($f^2$) ranging from .02 to .15, based on multiple partial correlations ($R^2$) between measures of psychological adjustment and the predictor variables. According to Cohen (1992), with an alpha level set at .01 (to reduce experimentwise risk for multiple analyses) and beta value set at the .20 level (power level of .80), a sample size of 118 subjects is required to detect a medium effect. Consequently, the current sample of 137 subjects appears adequate for the present analyses.
DESCRIPTIVE STATISTICS

Demographic Characteristics of the Sample

The final sample included 52 males (38%) and 85 females (62%). The participants were mostly 12-, 13-, 14-, and 15-year-olds ($M = 14.3$ years; $SD = 1.83$ years; range = 11-19). The students were from grades seven through twelve, and included: 32 7th graders (23.4%), 43 8th graders (31.4%), 25 freshmen (18.2%), 16 sophomores (11.7%), 9 juniors (6.6%), and 12 seniors (8.8%).

Of the students who participated in this study, 97 (70.8%) identified themselves as "American Indian" and 40 (29.2%) as "Mixed" ethnic identity. All participants who indicated that they were of mixed ethnic background included American Indian as part of their ethnic heritage. Of the respondents, 89 (65%) reported spending most of their life on the reservation, 24 (17.5%) endorsed spending more than half of their life on the reservation, and 19 (13.9%) identified spending less than half of their life on the reservation. The remaining 5 (3.6%) related they had spent only a short time on the reservation. The frequency data for the above variables is presented in Table 1.

Summary Statistics and Reliabilities for Primary Variables

The variables used in the primary analyses can best be grouped into three categories. The first grouping includes scores on measures of ethnic identity: (a) American Indian (AI) ethnic identification, (b) White American (WA) identification, and (c) Ethnic Identity (MEIM), as well as the MEIM supplementary scale of Other Group Attitudes (OGA). The second set of measures is comprised of instruments which assess psychological functioning, namely the variables of: (d) Self-Esteem (SE), (e) Emotional Well-Being (EWB), and (f) the Center for Epidemiological Studies-Depression Scale (CES-D).
Table 1

Frequency Statistics for Demographic Characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>52</td>
<td>38</td>
</tr>
<tr>
<td>Female</td>
<td>85</td>
<td>62</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>.7</td>
</tr>
<tr>
<td>12</td>
<td>16</td>
<td>11.7</td>
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<td>13</td>
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<td>29.2</td>
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<td>14</td>
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<td>24.1</td>
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<td>15</td>
<td>14</td>
<td>10.2</td>
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<td>16</td>
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<td>5.8</td>
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<td>7</td>
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<td>10</td>
<td>16</td>
<td>11.7</td>
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<td>11</td>
<td>9</td>
<td>6.6</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
<td>8.8</td>
</tr>
<tr>
<td><strong>Self Ethnic- Identification</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian</td>
<td>97</td>
<td>70.8</td>
</tr>
<tr>
<td>Mixed</td>
<td>40</td>
<td>29.2</td>
</tr>
<tr>
<td><strong>Lived on Reservation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes, most of my life</td>
<td>89</td>
<td>65</td>
</tr>
<tr>
<td>More than half my life</td>
<td>24</td>
<td>17.5</td>
</tr>
<tr>
<td>Less than half my life</td>
<td>19</td>
<td>13.9</td>
</tr>
<tr>
<td>No, only a short time</td>
<td>5</td>
<td>3.6</td>
</tr>
</tbody>
</table>
Finally, the third category consists of a scale designed to appraise the individual’s interest and participation in cultural activities and has been labeled (g) Cultural Importance. To facilitate data analysis, final scores for AI ethnic identification, WA identification, and SE were transformed such that higher values correspond with higher levels of the relevant construct. Thus, in the final data analysis reported scores on all instruments are presented in a positive direction.

For each of the above measures, Cronbach’s alpha, a frequently used reliability coefficient based on consistency of scale items, was computed with data obtained from the current study. Table 2 presents the means, standard deviations, obtained ranges, and internal reliability coefficients for each of these measures.

American Indian Ethnic Identification and White American Identification Scales (from the Acculturation Questionnaire-Adolescent Version). In the current study, a significant problem with missing data prohibited the use of the previously described factor structure proposed by Doerner (1995). Although the questionnaire was designed to encourage respondents to answer items for more than one ethnic group, many of the subjects responded to only one set of questions, presumably the items relevant to their primary ethnic identification. A variety of options for handling missing data were explored, however, based on statistical considerations, the initial eight items (i.e., two sets of four questions each) identified by Oetting and Beauvais (1990-91) were used in this study. That is, given that each of these two sets of four items (a) represented an almost complete data set for each subject, (b) yielded significant correlations with the factor structure proposed by Doerner (1995), and (c) yielded higher alphas than the two
Table 2

Summary Statistics and Reliability Coefficients for Primary Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Means</th>
<th>Standard Deviations</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian Ethnic Identification</td>
<td>2.73</td>
<td>.76</td>
<td>1.00</td>
<td>4.00</td>
<td>.86</td>
</tr>
<tr>
<td>White American Identification</td>
<td>2.66</td>
<td>.78</td>
<td>1.00</td>
<td>4.00</td>
<td>.85</td>
</tr>
<tr>
<td>Multi-group Ethnic Identity Measure</td>
<td>3.06</td>
<td>.46</td>
<td>1.93</td>
<td>3.93</td>
<td>.82</td>
</tr>
<tr>
<td>Other Group Attitudes</td>
<td>3.00</td>
<td>.52</td>
<td>1.33</td>
<td>4.00</td>
<td>.55</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>53.64</td>
<td>8.88</td>
<td>33.00</td>
<td>70.00</td>
<td>.80</td>
</tr>
<tr>
<td>Emotional Well-Being</td>
<td>53.88</td>
<td>14.75</td>
<td>17.50</td>
<td>86.60</td>
<td>.83</td>
</tr>
<tr>
<td>Center for Epidemiological Scale-Depression</td>
<td>16.75</td>
<td>9.90</td>
<td>0.00</td>
<td>41.00</td>
<td>.87</td>
</tr>
<tr>
<td>Cultural Importance</td>
<td>21.04</td>
<td>8.52</td>
<td>2.00</td>
<td>43.00</td>
<td>.87</td>
</tr>
</tbody>
</table>

Note. n = 137 unless otherwise indicated.

a Scores tranformed in positive direction.

b Mean based on 4-item scale.

c n = 136.

d CES-D based on 19 items.
item data sets, subsequent analyses using American Indian ethnic identification and White American identification were based solely on these eight items.

Tables 3 and 4 present reliability coefficients and correlations for the two and four item scales (Oetting and Beauvais, 1990-91) and the factor scores (Doerner, 1995). These statistical analyses, based on the computation of scores from subjects with complete data sets, reveal a significant correlation between the eight items proposed by Oetting and Beauvais (1990-91) and Doerner’s (1995) factor structure. For both American Indian ethnic identification and White American identification, there was a statistically significant correlation between each four item scale and their respective factor score. Additionally, the two sets of four items yielded higher alphas than the two item data sets; items assessing American Indian ethnic identification yielded a Cronbach’s alpha of .86 and those assessing White American identification yielded a Cronbach’s alpha of .85.

In summary, in place of the AQA scales, all subsequent analyses of American Indian ethnic identification and White American identification are based on the eight items proposed by Oetting and Beauvais (1990-91). To reduce confusion, hereafter, this eight item measure will be referred to as the Cultural Identification Scale (CIS) and the terms American Indian (AI) ethnic identification and White American (WA) identification will be used to refer to each of the four item scales.

Multigroup Ethnic Identity Measure. Consistent with previous research, based on the current sample, a reliability analysis of the MEIM yielded an alpha of .82. Both the mean score of 3.06 and standard deviation of .46 are similar to observed means for ethnic minorities in Phinney’s (1992) study.
Table 3

Cronbach's Alpha Statistics for American Indian Ethnic Identification and White American Identification Factors and 2 and 4 Item Scales

<table>
<thead>
<tr>
<th></th>
<th>2 item scale</th>
<th>4 item scale</th>
<th>2-Factor Model (Doerner, 1995)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>American Indian</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic Identification</td>
<td>.68&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.86&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.90&lt;sup&gt;c&lt;/sup&gt; (10 items)</td>
</tr>
<tr>
<td><strong>White American</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identification</td>
<td>.72&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.85&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.80&lt;sup&gt;d&lt;/sup&gt; (11 items)</td>
</tr>
</tbody>
</table>

**Note.**

<sup>a</sup> n = 138

<sup>b</sup> n = 137

<sup>c</sup> n = 126

<sup>d</sup> n = 99
Table 4

**Correlational Analyses for American Indian Ethnic Identification and White American Identification Factors and 2 and 4 Item Scales**

<table>
<thead>
<tr>
<th></th>
<th>2 item scale</th>
<th>4 item scale</th>
<th>2-Factor Model (Doerner, 1995)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>American Indian Ethnic Identification</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 item scale</td>
<td>--</td>
<td>.92&lt;sup&gt;a&lt;/sup&gt; **</td>
<td>.83&lt;sup&gt;c&lt;/sup&gt; **</td>
</tr>
<tr>
<td>4 item scale</td>
<td>--</td>
<td>.89&lt;sup&gt;c&lt;/sup&gt; **</td>
<td></td>
</tr>
<tr>
<td>2-Factor Model (10 items)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>White American Identification</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 item scale</td>
<td>--</td>
<td>.88&lt;sup&gt;b&lt;/sup&gt; **</td>
<td>.83&lt;sup&gt;d&lt;/sup&gt; **</td>
</tr>
<tr>
<td>4 item scale</td>
<td>--</td>
<td>.88&lt;sup&gt;d&lt;/sup&gt; **</td>
<td></td>
</tr>
<tr>
<td>2-Factor Model (11 items)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note.** **p < .01.**

<sup>a</sup> n = 138
<sup>b</sup> n = 137
<sup>c</sup> n = 126
<sup>d</sup> n = 99
**Other Group Attitudes.** Although Phinney et al. (1997) reported the OGA had an alpha equal to .75 with a slightly older sample, in the current study the OGA yielded a relatively low internal consistency of .55. Additionally, both the mean score of 3.00 and standard deviation of .52 are much lower than the observed means for adolescents in Phinney’s (1992) study.

**Self-Esteem.** Reliability of the 14 items which assessed self-esteem for the current sample as measured by Cronbach’s alpha coefficient was found to be .80. Total scores on this measure ranged from 33 to 70, with a mean of 53.64 and a standard deviation of 8.88.

**Emotional Well-Being.** The nine items which assessed emotional health yielded a Cronbach’s standardized alpha of .83 in this study. Total scores on this measure ranged from 17.5 to 86.6, with a mean of 53.88 and a standard deviation of 14.75.

**Center for Epidemiological Studies-Depression Scale.** In this sample, one item was dropped from this scale (i.e., *I felt everything I did was an effort*), as it consistently correlated negatively with other scale items as well as the total score and reduced the standardized item alpha from .87 to .85. Thus, in this study, CES-D scores are based on a 19-item scale. Based on these 19 items, the total scores ranged from 0 to 41, with a mean of 16.75 and a standard deviation of 9.90.

**Cultural Importance.** Along with consideration of the individual items of Ethnic and Cultural Experiences, a summary variable labeled “Cultural Importance” was also calculated. This scale, comprised of 18 items which rated the importance and frequency of participation in cultural activities (i.e., ceremonies; arts and crafts; Tobacco offering; Sweats; Eagle feather; Indian elder; Smudging), yielded a Cronbach’s alpha of .87.
RESULTS OF HYPOTHESIS TESTING

Descriptive Statistics for Ethnic Identification

Hypothesis 1, that the majority of students would report at least medium identification with both American Indian culture and White American culture, was examined at a descriptive level based on the research by Oetting and Beauvais (1990-91). As already noted, this analysis was based on the eight items used by Oetting and Beauvais (1990-91) and item responses in the present study were recoded such that responses were scored from 4 (a lot) to 1 (not at all).

Further, based on the classification system proposed by Oetting and Beauvais (1990-91), average item responses in the current study were categorized to indicate either low, medium, or high identification. More specifically, an average item score of more than 3 was assigned to represent “high” identification and an average item score of less than 2 was assigned to represent “low” identification. Average item scores between 2 and 3 were labeled “medium” in terms of their level of identification with a culture. The distributions of these patterns of identification are illustrated in Table 5. Consistent with Hypothesis 1, the center cell, showing medium identification with both American Indian and White American cultures, is larger than any other cell.

Moreover, an analysis of the cumulative frequency of all scores above 2 (i.e., all scores between 2 and 4) reveals that a total of 118 of 137 (86.1%) of the scores for American Indian ethnic identification and 115 of 137 (83.9%) of the scores for White American identification fell between 2 and 4. Finally, the overall mean for American Indian ethnic identification was 2.73 (SD = .76) and the mean for White American identification was 2.66 (SD = .78). Thus, Hypothesis 1 was supported based on both
<table>
<thead>
<tr>
<th>American Indian Ethnic Identification</th>
<th>White American Identification</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>4</td>
<td>7</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>(2.9%)</td>
<td>(5.1%)</td>
<td>(5.8%)</td>
<td>(13.9%)</td>
</tr>
<tr>
<td>Medium</td>
<td>10</td>
<td>43</td>
<td>15</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>(7.3%)</td>
<td>(31.4%)</td>
<td>(10.9%)</td>
<td>(49.6%)</td>
</tr>
<tr>
<td>High</td>
<td>8</td>
<td>31</td>
<td>11</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>(5.8%)</td>
<td>(22.6%)</td>
<td>(8.0%)</td>
<td>(36.5%)</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>81</td>
<td>34</td>
<td>137</td>
</tr>
<tr>
<td></td>
<td>(16.1%)</td>
<td>(59.1%)</td>
<td>(24.8%)</td>
<td>(100%)</td>
</tr>
</tbody>
</table>

Note. Classifications are based on Oetting and Beauvais (1990-91): Average item scores of less than 2 are classified as Low; average item scores between 2 and 3 are classified as Medium; and average item scores of more than 3 are classified as High.
frequency criteria and mean scores; the majority of students did report at least medium identification with both American Indian culture and White American culture.

Psychometric Properties

Hypothesis 2 addressed the psychometric properties of the American Indian (AI) ethnic identification and White American (WA) identification scores and the Multigroup Ethnic Identity Measure (MEIM). An examination of the previously noted Cronbach’s alphas (see Table 2) demonstrates that each of these measures of ethnic identification had acceptable levels of internal consistency. On the other hand, the MEIM supplementary scale, the Other Group Attitudes (OGA) score yielded a relatively low alpha. Nonetheless, the moderately high internal reliabilities of the AI and WA identification scores and the MEIM lend support for their utility in measuring ethnic identity among Lakota/Dakota Sioux youth.

Prior to examining additional psychometric considerations of these measures, potential effects related to the order of administration were examined. In this study, a counterbalanced design which alternated the order of the AQA and MEIM was employed. To assess the possible influence of the order in which the measures were completed, a one way Analysis of Variance (ANOVA) for Questionnaire Form was conducted. These results yielded no significant overall mean differences on the MEIM, AI or WA identification scores based on the survey form (see Table 6), supporting that there were no significant order effects for any of the measures of ethnic identification.

To examine validity considerations, correlational analyses were conducted between the MEIM, AI and WA identification scores, as well as the summary score of “Cultural Importance” and each of these measures of ethnic identification. The “Cultural
### Table 6

**Summary of ANOVA Results for Questionnaire Form**

<table>
<thead>
<tr>
<th>Variable</th>
<th>ANOVA</th>
<th>MEANS</th>
<th>Form A</th>
<th>Form B</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="1,135">American Indian Ethnic Identification</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="1,135">Ethnic Identification</a></td>
<td>.681</td>
<td>2.78</td>
<td>2.68</td>
<td></td>
</tr>
<tr>
<td><a href="1,134">White American Ethnic Identification</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="1,134">Identification</a></td>
<td>.917</td>
<td>2.60</td>
<td>2.73</td>
<td></td>
</tr>
<tr>
<td><a href="1,135">Multigroup Ethnic Identity Measure</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="1,135">Identity Measure</a></td>
<td>.460</td>
<td>3.09</td>
<td>3.03</td>
<td></td>
</tr>
<tr>
<td><a href="1,135">Other Group Attitudes</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="1,135">Other Group Attitudes</a></td>
<td>.174</td>
<td>3.01</td>
<td>2.98</td>
<td></td>
</tr>
</tbody>
</table>

**Note.** No significant differences found.
Importance" scale was calculated from a total score for a variety of items assessing cultural knowledge, attitudes, and practices. These correlations are displayed in Table 7.

As predicted by Hypothesis 2.1, there was a significant positive correlation between the MEIM and the Al ethnic identification scale ($r = .47; p < .001$). Thus, the cross-validation of scores on both instruments purporting to measure level of ethnic identity supports that these measures appear to be tapping similar constructs.

Hypothesis 2.2 stated that both the MEIM and the American Indian (Al) ethnic identification would be positively correlated with items assessing specific cultural knowledge, attitudes, and practices. In other words, the construct validity of the MEIM and Al ethnic identification was assessed through an empirical investigation of the relationship between these scores and relevant cultural items. Scores on both the MEIM and the Al ethnic identification scale yielded significant positive correlations with a summary score of "Cultural Importance" comprised of items assessing specific cultural knowledge, attitudes, and practices. The correlation for the Al ethnic identification scale and the "Cultural Importance" summary score is .57 ($p < .001$), while the correlation for the MEIM and "Cultural Importance" summary is .42 ($p < .001$). These correlations lend support for Hypothesis 2.2.

A more detailed analysis of the relationship between these measures of ethnic identity and selected items assessing specific cultural knowledge, attitudes, and practices is presented in Tables 8, 9, 10. For the Al ethnic identification scale, there is a significant correlation with each of the items related to both the practice and importance of culturally related behaviors and values. These correlations, ranging from .21 to .54, are indicative of good concurrent validity. Similarly, although not as pronounced, the
Table 7

Correlational Analysis for Measures of Ethnic Identity, Other Group Attitudes, and Cultural Importance

<table>
<thead>
<tr>
<th>Measure</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. American Indian Ethnic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. White American Identification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Multigroup Ethnic Identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Other Group Attitudes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Cultural Importance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. **p < .01. ***p < .001.
Table 8

Correlations Between Specific Items of Cultural Practices, Measures of Ethnic Identity and Other Group Attitudes

<table>
<thead>
<tr>
<th>Item</th>
<th>American Indian Ethnic Identification</th>
<th>White American Identification</th>
<th>Multigroup Ethnic Identity Measure</th>
<th>Other Group Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In the past year, how often did you...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...attend or participate in Indian ceremonies?</td>
<td>.43***</td>
<td>.11</td>
<td>.34***</td>
<td>.19**</td>
</tr>
<tr>
<td>...attend any Indian cultural events such as feasts or pow wows?</td>
<td>.21*</td>
<td>-.16</td>
<td>.12</td>
<td>-.02</td>
</tr>
<tr>
<td>...participate in Indian dancing or drumming?</td>
<td>.30***</td>
<td>-.04</td>
<td>.30***</td>
<td>.18*</td>
</tr>
<tr>
<td>...work on Indian arts or crafts?</td>
<td>.31***</td>
<td>.00</td>
<td>.27**</td>
<td>.19*</td>
</tr>
<tr>
<td>...talk with an Indian Elder when you're making a decision?</td>
<td>.47***</td>
<td>-.03</td>
<td>.40***</td>
<td>.21*</td>
</tr>
<tr>
<td>...read, talk about, or take a class on Indian history or culture?</td>
<td>.23**</td>
<td>.11</td>
<td>.32***</td>
<td>.09</td>
</tr>
</tbody>
</table>

Note. *p < .05. **p < .01. ***p < .001.
<table>
<thead>
<tr>
<th>Item</th>
<th>American Indian Ethnic Identification</th>
<th>White American Ethnic Identification</th>
<th>Multigroup Ethnic Identity Measure</th>
<th>Other Group Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...go to a sweat?</td>
<td>.26**</td>
<td>.03</td>
<td>.11</td>
<td>-.08</td>
</tr>
<tr>
<td>...smudge?</td>
<td>.27**</td>
<td>-.10</td>
<td>.05</td>
<td>-.02</td>
</tr>
<tr>
<td>...offer tobacco?</td>
<td>.34***</td>
<td>-.04</td>
<td>.10</td>
<td>.02</td>
</tr>
<tr>
<td>...do you talk with an Indian Elder when you’re making a decision?</td>
<td>.43***</td>
<td>-.08</td>
<td>.28***</td>
<td>.08</td>
</tr>
<tr>
<td>Have you...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...ever gone to a medicine man or woman, spiritual person or traditional healer?</td>
<td>.32***</td>
<td>-.04</td>
<td>.16</td>
<td>-.08</td>
</tr>
<tr>
<td>...received an eagle feather yet?</td>
<td>.31***</td>
<td>.04</td>
<td>.23**</td>
<td>.02</td>
</tr>
<tr>
<td>...been given your Indian name?</td>
<td>.32***</td>
<td>.12</td>
<td>.13</td>
<td>.08</td>
</tr>
</tbody>
</table>

Note. *p < .05. **p < .01. ***p < .001.
<table>
<thead>
<tr>
<th>Item</th>
<th>American Indian Ethnic Identification</th>
<th>White American Ethnic Identification</th>
<th>Multigroup Ethnic Identity Measure</th>
<th>Other Group Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td>For you, how important is it to...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...offer tobacco?</td>
<td>.29**</td>
<td>-.06</td>
<td>.32**</td>
<td>-.12</td>
</tr>
<tr>
<td>...go to a sweat?</td>
<td>.39***</td>
<td>-.05</td>
<td>.26**</td>
<td>-.06</td>
</tr>
<tr>
<td>...receive an eagle feather?</td>
<td>.40***</td>
<td>-.22*</td>
<td>.33**</td>
<td>.09</td>
</tr>
<tr>
<td>...talk to an Indian Elder when you're making a decision?</td>
<td>.28**</td>
<td>-.29**</td>
<td>.27**</td>
<td>.04</td>
</tr>
<tr>
<td>...smudge?</td>
<td>.35***</td>
<td>-.08</td>
<td>.23**</td>
<td>.10</td>
</tr>
<tr>
<td>...listen to your grandparents?</td>
<td>.25**</td>
<td>.00</td>
<td>.27**</td>
<td>-.17*</td>
</tr>
<tr>
<td>...take care of sick relatives?</td>
<td>.26**</td>
<td>-.02</td>
<td>.24**</td>
<td>.17*</td>
</tr>
</tbody>
</table>

Note. *p < .05. **p < .01. ***p < .001.
Table 10

Correlations Between Language Items, Measures of Ethnic Identity and Other Group Attitudes

<table>
<thead>
<tr>
<th>Language Item</th>
<th>American Indian Ethnic Identification</th>
<th>White American Ethnic Identification</th>
<th>Multigroup Ethnic Identity Measure</th>
<th>Other Group Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td>How interested are you in learning a tribal or Indian language?</td>
<td>.54***</td>
<td>-.23**</td>
<td>.47***</td>
<td>.16</td>
</tr>
<tr>
<td>How often is a tribal language spoken in your home?</td>
<td>.42***</td>
<td>-.05</td>
<td>.25**</td>
<td>.02</td>
</tr>
<tr>
<td>How often do any of your grandparents speak their tribal language?</td>
<td>.23**</td>
<td>-.19*</td>
<td>.13</td>
<td>.02</td>
</tr>
<tr>
<td>When you hear your tribe's language spoken do you understand it?</td>
<td>.20*</td>
<td>.06</td>
<td>.08</td>
<td>.04</td>
</tr>
<tr>
<td>Can you speak your tribe's language?</td>
<td>.19*</td>
<td>.09</td>
<td>.18*</td>
<td>.07</td>
</tr>
</tbody>
</table>

Note. *p < .05. **p < .01. ***p < .001.
majority of these cultural items are also significantly correlated with the MEIM. Conversely, very few of these items are significantly correlated with either WA identification or OGA scores. Collectively, these results lend support to both convergent and discriminant validity of these measures as well as considerable support for Hypothesis 2.2.

Multiple Regression Analyses: Ethnic Identity And Psychological Functioning

Hypotheses 3 and 4 stated that measures of ethnic identification would explain a significant proportion of the variance of self-esteem, emotional well-being and depression, among a cohort of Native American adolescents. However, given that three separate schools participated in the study, an initial analysis investigated possible between group differences on demographic variables. Hence, to examine possible group differences, a one-way analysis of variance (ANOVA) was conducted, using school location as a factor, and age, gender, and GPA as independent variables. The results show a significant effect for age (F [2,134] =8.91, p < .001); the largest group of subjects yielded the greatest age variance. Given this observation, and because research on the relationships between age, gender, ethnicity, self-esteem, and depression has produced mixed results (e.g., Martinez & Dukes, 1991), both age and gender were controlled for in subsequent analyses.

Next, intercorrelations among the major variables used in the present study were examined for multicollinearity. Multicollinearity was assessed through the examination of Pearson correlations and the use of a tolerance criterion during regression analyses (see Glantz & Slinker, 1990). (Refer to Table 7 for a review of correlations among variables.) The correlations are generally low to moderate, and none is high enough to cause concerns regarding multicollinearity (see Tabachnick & Fidell, 1989).
To examine the role of ethnic identity in predicting self-esteem, emotional well-being, and depression, separate hierarchical regression analyses using blockwise selection (see Pedhazur, 1973) were computed for each dependent variable. In each of these analyses, the ordering of entry of the independent variables was guided by the proposed hypotheses. In block one, the variables of age and gender were entered as covariates to control for their influence. The next two blocks were comprised of either: (a) the American Indian (AI) ethnic identification and White-American (WA) identification, followed by a measure of bicultural identification assessed by the AI X WA interaction; or (b) the MEIM score for Ethnic Identity (MEIM) and supplementary score for Other Group Attitudes (OGA), followed by the multiplicative MEIM X OGA interaction. Thus, these two separate sets of variables acted as predictors for each of the criterion variables.

To summarize, to test hypotheses 3 and 4, a series of hierarchical regression analyses were conducted in which age and gender were entered initially as covariates, AI and WA identification scores or MEIM and OGA scores served as the independent variables and scores on measures of Self-Esteem (SE), Emotional Well-Being (EWB), or the Center for Epidemiological Studies-Depression Scale (CES-D) served as dependent variables. Overall, this procedure permitted the independent assessment of main and interaction effects. Further, this approach is deemed most appropriate for the examination of moderator effects (Cohen & Cohen, 1983; Shepperd, 1991) as well as for scores on interval-level data (Kerlinger & Pedhazur, 1973).
American Indian Ethnic Identification and White American Identification

Hypothesis 3 stated that both American Indian ethnic identification and White American identification, as well as bicultural identification (assessed by the interaction of the two), would explain a significant proportion of the variance observed for self-esteem, emotional well-being, and depression among the Lakota/Dakota Sioux students participating in this study.

To test this hypothesis, three separate hierarchical multiple regression analyses were performed. Age and gender were entered in block one to control for their influence, and the scores of AI ethnic identification and WA identification were entered in block two. Finally, a measure of bicultural identification, assessed by the interaction of the scores (i.e., AI X WA), was entered in block three to determine if this interaction contributed any unique variance. Multiple regression analyses based on each of the criterion variables will be discussed separately (data are summarized in Table 11).

Self-Esteem. For the criterion variable of self-esteem, the variables of age and gender entered in block one, emerged as a significant predictor ($R^2_A = .044$, $F_{A}(133,2) = 3.08, p < .05$), accounting for approximately 4.4% of the variance. When the variance shared by age and gender was removed, the variables entered in block two, AI ethnic identification and WA identification, did not significantly contribute to the variance ($R^2_A = .037$, $F_{A}(131,2) = 2.64, ns$). Further, the interaction term (AI X WA) did not increase $R^2$.

Thus, neither of the variables of ethnic identification (i.e., the AI ethnic identification nor WA identification) accounted for a significant amount of the variance for the criterion variable of self-esteem above that accounted for by age and gender.
Table 11

Hierarchical Regression Analyses with Cultural Identification Scales of American Indian Ethnic Identification and White American Identification as Predictors of Self-Esteem, Emotional Well-Being, and Depression

<table>
<thead>
<tr>
<th>Variable</th>
<th>Block 1</th>
<th>Block 2</th>
<th>Block 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>.210</td>
<td>.285</td>
<td>.289</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.04^4</td>
<td>.081</td>
<td>.083</td>
</tr>
<tr>
<td>$R^2\Delta$</td>
<td>.044</td>
<td>.037</td>
<td>.002</td>
</tr>
<tr>
<td>$F\Delta$</td>
<td>3.08*</td>
<td>2.64</td>
<td>.28</td>
</tr>
<tr>
<td>Beta</td>
<td>.194*</td>
<td>-.060</td>
<td>.071</td>
</tr>
<tr>
<td>Beta$^a$</td>
<td>1.69</td>
<td>-.060</td>
<td>-.190</td>
</tr>
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Table 11 (Continued)

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<td></td>
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<td></td>
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### CES-D: Depression

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<th>R²Δ</th>
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</table>

**Note.**<sup>a</sup> Represents standardized beta coefficients in the final equation with all variables entered; n = 136.

*<sup>p</sup> < .05; **<sup>p</sup> < .01

AI (American Indian)
WA (White American)
Emotional Well-Being. Similarly, for the criterion variable of emotional well-being (EWB), age and gender were entered first in the hierarchical regression analysis and accounted for just slightly above 5% of the variance ($R^2_A = .051$, $F_A (133,2) = 3.59$, $p < .05$). In subsequent blocks, neither AI ethnic identification nor WA identification, as well as the interaction term (AI X WA), significantly increased $R^2$.

Center for Epidemiological Studies: Depression. For the criterion variable of depression (CES-D), none of the variables entered accounted for a significant amount of variance.

Thus, Hypothesis 3 was not supported for any of the criterion variables; neither of the variables of ethnic identification were significant predictors for the criterion variables of self-esteem, emotional well-being, or depression. For these three measures, neither AI ethnic identification or WA identification contributed additional significant variance above that accounted for by age and gender.

Multi-group Ethnic Identity Measure (MEIM) and Other Group Attitudes (OGA)

Hierarchical multiple regressions were also performed to test Hypothesis 4 that the Multi-group Ethnic Identity Measure (MEIM) and Other Group Attitudes (OGA), as well as the interaction of these two scores (MEIM X OGA), would make significant contributions to the variance for the criterion measures of self-esteem, emotional well-being, and depression. These three separate analyses were performed using the following variables as predictors of each of the criterion variables: the MEIM, the OGA, and a multiplicative interaction term of these two scores (MEIM X OGA). Again, in all these analyses, age and gender were entered first as covariates. Multiple regression analyses
based on each of the criterion variables will be discussed separately (data are summarized in Table 12).

**Self-Esteem.** For the criterion variable of self-esteem, both age and the MEIM emerged as significant predictors. Hierarchical multiple regression revealed that age and gender, entered at block one, accounted for approximately 4.5% of the variance ($R^2_A = .045, F_A (134, 2) = 3.15, p < .05$). When the variance shared by age and gender was removed, the variables entered at block two, the MEIM and OGA, significantly contributed an additional 7.2% to the variance ($R^2_A = .072, F_A (132, 2) = 5.38, p < .01$). The MEIM X OGA interaction, entered at block three, did not significantly increase $R^2$.

**Emotional Well-Being.** For the criterion variable of EWB, the hierarchical regression revealed that age and gender accounted for approximately 5.3% of the variance ($R^2_A = .053, F (134, 2) = 3.72, p < .05$); the MEIM and OGA contributed a significant additional 6.4% to $R^2$ ($R^2_A = .117, F_A (132, 2) = 4.83, p < .01$); and the MEIM X OGA interaction did not significantly increase $R^2$.

**Center for Epidemiological Studies: Depression.** In the hierarchical multiple regression analysis for CES-D performed for the MEIM and OGA, none of the variables entered accounted for a significant amount of variance.

Thus, Hypothesis 4 was partially supported. For both the criterion variables of self-esteem and emotional well-being, the MEIM accounted for a significant amount of variance. However, neither the OGA, nor the interaction term (MEIM X OGA), significantly contributed any unique variance. For the criterion variable of depression, none of the predictor variables accounted for a significant amount of the variance.
Table 12

Hierarchical Regression Analyses with Multigroup Ethnic Identity Measure and Other Group Attitudes as Predictors of Self-Esteem, Emotional Well-Being, and Depression

<table>
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<tr>
<th>Variable</th>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>.072</td>
<td>5.38**</td>
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Table 12 (Continued)

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<td>4.83**</td>
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Table 12 (Continued)

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<td>.204</td>
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**Note.** $^a$ Represents standardized beta coefficients in the final equation with all variables entered; n = 136.

* $p < .05$; ** $p < .01$; *** $p < .001$

(MEIM) Multigroup Ethnic Identity Measure

(OGA) Other Group Attitudes

(M X O) MEIM X OGA
**Age and Gender**

Hypothesis 5 addressed the demographic variables of age and gender in relation to ethnic identity and self-esteem. These relationships were assessed by Pearson correlation or ANOVA and Tukey comparisons when appropriate.

Hypothesis 5.1 stated older high school students would score higher on the MEIM and the measure of self-esteem than their younger counterparts. The results yielded mixed findings. The score on the MEIM was not correlated with age ($r = .019, ns$). However, the correlation between age and SE scores was significant ($r = .197; p < .05$). Although not predicted, the correlation between age and EWB was also significant ($r = -.210; p < .05$), but not in the expected direction; age was negatively correlated with EWB.

Hypothesis 5.2 stated that males would score higher than females on the MEIM and the measure of self-esteem. To examine the possible impact of gender on the MEIM and SE, separate one way ANOVAs were conducted. The results demonstrated that there was no significant difference in mean scores based on gender for the MEIM ($F [1, 135] = 2.76, ns$) or SE ($F [1, 135] = 1.09, ns$).

**SUPPLEMENTARY ANALYSES**

**Ethnic identity and Background Variables**

Further analysis of subject’s scores on measures of ethnic identity according to demographic and cultural variables was also carried out using Pearson correlations and one-way ANOVA followed by Tukey comparisons, as appropriate. Special consideration was given to the following variables: (a) Self-identification as American Indian versus mixed ethnic identification; (b) Length of time living on the reservation; and (c) Perception of self as a religious or spiritual person.
Ethnic Self-identification

Two-thirds of the students who participated in this study, self-identified as “American Indian” and just less than one-third identified as “Mixed” ethnic identity (identifying American Indian as part of their ethnic heritage). To examine possible between-group differences related to self-identification, a one-way ANOVA was conducted. There were no significant differences between these two groups on any of the measures of ethnic identity (e.g., MEIM scores ($F[2,134] = 4.57$, $ns$). Thus, there was no significant difference on any of the measures of ethnic identity based on subjective identification as American Indian or mixed ethnic identification.

Length of Time Living on the Reservation

Participants also varied in their report of the length of time they have lived on the reservation. Again, close to two thirds (65%) of the respondents reported spending most of their life on the reservation. Another 17.5% endorsed spending more than half of their life on the reservation. Conversely, almost 14% identified spending less than half of their life on the reservation and the remaining 3.6% related they had spent only a short time on the reservation. A one-way ANOVA revealed no significant differences on any of the measures of ethnic identity based on length of time on reservation.

Perception of Self as a Religious or Spiritual Person

Greater consideration of self as a religious or spiritual person was significantly positively correlated with scores on the MEIM ($r=.309; p < .001$), OGA ($r=.184; p < .05$), and AI ethnic identification ($r=.246; p < .01$). Conversely, this variable was not significantly correlated with WA identification ($r=.110; ns$).
**Additional Analyses**

Three additional analyses addressed in this study included an examination of two specific items on the self-esteem subscale, an investigation of the possible influence of Cultural Confusion or Cultural Stress, and a post hoc investigation of the construct validity of the OGA. Finally, ratings and themes of an open-ended survey question will be presented and discussed.

The self-esteem subscale used in the study was based on a measure that was intended to be more culturally sensitive. Nonetheless, a particularly interesting set of questions on this measure related to feelings of worth compared to "other people like myself" as well as "non-Indians." Specifically, question number 3 reads: "I feel I'm a person of worth, at least on an equal plane with other people like myself." and question number 5 reads "I feel I'm a person of worth, at least on an equal plane with non-Indians." Although correlations on these two items were statistically significant ($r = .48, p < .001$) differences between these two items were examined using a paired samples T-test. Results of these paired comparisons revealed that students rated themselves higher on question 3 than on question 5 ($t=3.43, p < .001$). In other words, on average, students rated themselves higher in comparison "to other people like myself" than in comparison "with non-Indians."

A similar analysis was conducted to examine possible differences between "Cultural Confusion" and "Cultural Stress." Students' ratings in response to the questions, "How much confusion do you experience due to differences between American Indian and White American culture?" versus "How much stress do you experience as a result of differences between American Indian and White American culture?" were highly
correlated ($r=.57, p < .001$). Further, there were no statistically significant differences between these two items ($t=1.35$, $ns$). Although, there were no significant correlations found between “Cultural Stress” and the primary measures, a significant correlation ($r=.19, p < .05$) was evidenced between American Indian ethnic identification and the item assessing “Cultural Confusion.”

Despite a relatively low alpha, the current study provides some support for the content validity of the OGA. The subscale yielded significant positive correlations with two related survey items assessing attitudes toward other racial/ethnic groups. These items, displayed in Table 13, relate to the importance of (a) getting to know people of a different race and (b) respecting the values of people of a different race or culture. Another interesting finding was significant gender differences evidenced for the OGA; females scored significantly higher than males on this measure.

Lastly, a review of ratings and themes generated for the open-ended statement at the end of the survey will be presented and discussed. One-hundred students provided a written response to the statement: “Please take a moment to describe your thoughts and/or feelings about completing this survey.” Using a typed list of the total responses, a group of nine master’s level clinicians were instructed to independently rate each statement as either negative, neutral or positive and to provide comments on any obvious themes evident in a particular response. Based on overall ratings from all nine clinicians, over three-fourths (77%) of these responses were scored in the positive direction. The remaining items received an overall neutral rating. Thus, although there were some responses that received negative ratings from some individuals, no responses were rated as negative by the majority of raters. A significant number of emerging themes were
Table 13

**Correlations Between Rated Importance of Other Racial or Cultural Groups, Measures of Ethnic Identity and Other Group Attitudes**

<table>
<thead>
<tr>
<th>Item</th>
<th>American Indian Ethnic Identification</th>
<th>White American Ethnic Identification</th>
<th>Multigroup Ethnic Identity Measure</th>
<th>Other Group Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td>...to get to know people of a different race than you are?</td>
<td>-0.01</td>
<td>0.20</td>
<td>0.08</td>
<td>0.38**</td>
</tr>
<tr>
<td>...to respect the values of people of a different race or culture than you are?</td>
<td>-0.02</td>
<td>0.23**</td>
<td>0.18*</td>
<td>0.34**</td>
</tr>
</tbody>
</table>

*Note.* *p < .05. **p < .01. ***p < .001.*
related to comments regarding ethnic pride and introspection/insights regarding the importance of traditions in their lives. Many students indicated they felt good about taking the survey.
CHAPTER IV
DISCUSSION

OVERVIEW OF CURRENT STUDY

Recent conceptual and methodological advancements in multicultural research have
served as a catalyst to the current study. Many earlier cross-cultural studies, particularly
those conducted with American Indian populations, lacked methodological sophistication.
Typical limitations included: (a) a disregard for the tremendous diversification among
Native American populations and (b) measurement confounds stemming from
assumptions of conceptual equivalence of psychological constructs across cultures and
the reliance on norms typically based on White Americans. Further, despite the
 burgeoning interest in the construct of ethnic identity among culturally diverse groups,
 few studies have addressed this topic among American Indian adolescents. Thus, the
present investigation was undertaken to examine the relationship between ethnic identity
and psychological adjustment among a particular group of Native Americans, the
Lakota/Dakota Sioux. It is hoped that an increased understanding of this relationship will
be useful in identifying characteristics of positive ethnic identity which may assist in
further clarifying the goals of multiethnic identity education as well as interventions to
promote healthy personal identity and growth for people of all colors.

The primary hypotheses of this study predicted that higher levels of ethnic
identification would be associated with better psychological functioning. Additional
hypotheses addressed the psychometric properties of two separate measures of ethnic
identity, as well as measures of psychological adjustments, with this Native American
population. Finally, considerations regarding the unique challenges of cross-cultural research, as well as recommendations for future research, are discussed.

Findings Related to Hypothesis Testing

The results of this research support the utility of a multidimensional conceptualization of ethnic identity (e.g., Oetting & Beauvais, 1990-91; Phinney, 1991) among Lakota/Dakota Sioux youth. As predicted by Hypothesis 1, the majority of the youth in this study, indicated medium identification with both American Indian and White American cultures. This finding is consistent with that of similar studies (Doerner, 1995; Moran, et al., 1994; Oetting & Beauvais, 1990-91) which reported that the majority of American Indian students endorsed medium identification with both cultures. Similarly, this pattern of bicultural identification has been reported in studies with other minority groups (e.g., Oetting & Beauvais, 1990-91; Rotheram-Borus, 1990).

Hypothesis 2 addressed the psychometric properties of both the Cultural Identification Scale (i.e., the eight core items from the Acculturation Questionnaire for Adolescents) and the Multigroup Ethnic Identity Measure (MEIM) when used with the current population. Several findings provide support for the construct validity of these measures. First, the internal consistency reliability (Cronbach’s alpha) reported by Phinney (1992) and found on the “ethnic identity” segment of the MEIM in this study was .90 and .82, respectively, while the 4 item American Indian ethnic identification scale showed a similarly high reliability with an alpha of .86. Second, the scores on the two scales purporting to measure ethnic identity were significantly correlated ($r = .47; p < .001$) with each other. And third, scores on both measures were highly correlated with an overall score of “Cultural importance,” with the 4 item American Indian ethnic
identification scale (r = .57; p < .001) demonstrating a higher correlation when compared to the MEIM (r = .42; p < .001).

These results support Phinney's (1992) assertion that ethnic identity is a meaningful construct that can be measured for different ethnic groups. Consistent with the predictions of Hypothesis 2, both the Cultural Identification Scale and the Multigroup Ethnic Identity Measure (MEIM) were found to have adequate psychometric properties as measures of ethnic identity among this population. Both measures yielded moderate to high internal reliabilities as well as evidence of concurrent and construct validity. As predicted by Hypothesis 2.1, there was a positive correlation between the MEIM and the scale measuring American Indian ethnic identification. Additionally, consistent with Hypothesis 2.2, there was a significant positive correlation between both these scores and a summary score of "Cultural Importance." In fact, the 4 item scale of American Indian ethnic identification was significantly correlated with all items tapping specific cultural knowledge, attitudes, and practices. Similarly, the MEIM demonstrated significant correlations with the majority of these items. Nonetheless, differences between these two measures were evident and will be discussed in more detail later in this section.

Hypotheses 3 and 4 involved a series of multiple regression analyses examining the predictive ability of ethnic identity for the criterion variables of psychological adjustment. The results of the present study did not support Hypothesis 3. That is, based on the Cultural Identification Scale, neither of the ethnic identity scores (American Indian ethnic identification or White American identification) or bicultural identification (assessed by the interaction of the two), explained a significant proportion of the variance observed for
self-esteem, emotional well-being or depression, above that predicted by age and gender, among the Lakota/Dakota Sioux students participating in this study.

One possible explanation for this finding is Doerner’s (1995) assertion that this scale may actually be tapping “cultural immersion” instead of “cultural identification.” Thus, the high and consistent correlations with cultural practices may actually be related to knowledge of, and familiarity with, cultural activities as opposed to identification. Support for this interpretation includes a recent study by Oetting and colleagues (Oetting, Swaim, & Chiarella, 1998). Using a slightly modified version of the Cultural Identification Scale, these authors concluded that cultural identification is highly related to involvement in cultural activities and strongly rooted in the family. Collectively, these findings indicate that items on the Cultural Identification Scale may be assessing a more objective, or cognitive, component of ethnic identity. Thus, their lack of predictive abilities in the current study may be attributable to the affective nature of the criterion measures.

Conversely, hierarchical multiple regressions analyses performed to test Hypothesis 4 demonstrated that even when age and gender were statistically controlled, the scores on the MEIM significantly contributed to variance for the criterion measures of self-esteem and emotional well-being. However, the MEIM did not contribute a significant proportion of the variance observed for depression above that explained by age and gender. In other words, MEIM scores were significantly correlated with measures of self-esteem and emotional well-being, or feelings about one’s self, but were not associated with the mood state of depression. Although these findings may lend some support to the MEIM’s ability to assess a subjective or affective component of ethnic
identity, they also highlight the need for a discussion of the measures of psychological adjustment employed in the current study. This topic will be discussed further in the next section.

Finally, Hypothesis 5 addressed the relationships between the variables of age and gender and the measures of the MEIM and self-esteem. The predicted relationships between the MEIM and age, as well as the MEIM and gender, were not supported; MEIM scores were not significantly correlated with age or gender. The finding that ethnic identity is not related to gender is consistent with those reported by Phinney (1992) for her college sample. However, earlier studies (e.g., Phinney & Tarver, 1988) found gender differences on the ethnic commitment component of the MEIM. Nonetheless, given cross-cultural differences in expectations placed on males versus females, a greater understanding of the role of gender in ethnic identity development will be an important area of future research.

The lack of support for a relationship between the MEIM and age was surprising given the professed developmental focus of the MEIM. Phinney (1992), based on higher MEIM scores observed in her college student sample in comparison to a high school sample, suggested that ethnic identity may be more salient for older rather than younger students. Nonetheless, students in the current study represented early to middle adolescence ($M = 14.3$ years; $SD = 1.83$) which may represent an earlier developmental stage. In addition to these developmental considerations, it is likely that Phinney's college subjects had experienced a more ethnically diverse environment possibly serving to increase the salience of ethnic issues. Further, in addition to the relatively homogeneous ethnic context of the students in this study, the current design also did not
allow for cross-sectional analyses of differences related to age. Thus, although the developmental nature of ethnic identity was not demonstrated in this investigation, further exploration is warranted.

The results of this study did not support the predicted relationship between gender and measures of self-esteem; scores on this measure did not differ between males and females. Previous investigations related to gender and self-esteem have yielded mixed results many of which are likely to be further compounded by cultural and ethnic issues.

Nonetheless, there was support for a significant relationship between age and self-esteem. As predicted, self-esteem scores were positively correlated with age. However, the meaning of this finding may not be clear given issues related to the construct of self-esteem in the current study. An interpretation may be particularly complicated by the observed inverse relationship between age and emotional well-being. One possible explanation may be related to the multidimensional nature of self-esteem as well as developmental differences in components of self-esteem (see Harter, 1990). For example, a recent study by Zimmerman and colleagues (Zimmerman, Copeland, Shope, & Dielman, 1997) suggests that the multidimensional nature of self-esteem coupled with group variation may account for earlier equivocal findings regarding age and self-esteem. These researchers found support for the developmental stability of self-esteem for some, but not all, components of self-esteem as well as evidence for different self-esteem trajectories among adolescents.

Secondary Analyses and Findings

As a result of problems stemming from missing data, a rather serendipitous finding of this study relates to the utility of the eight-item scale proposed by Oetting and Beauvais
Overall, this scale demonstrated adequate internal reliability as well as construct and concurrent validity. Although the MEIM also demonstrated moderate-high internal reliabilities as well as a high level of content validity based on correlations scores with relevant cultural items, differences between the four-item scale assessing Native American ethnic identification and the 14 item ethnic identity scale from the MEIM are apparent. Statistically, a significant correlation of .47 between these measures accounts for approximately 22% of the shared variance. Therefore, despite a significant amount of common variance, there are considerable differences between these measures.

The high correlations of the Cultural Identification Scale with traditional activities and cultural importance supports Doerner’s assertion that the CIS represents an experienced based cultural identification. The MEIM evidenced lower correlations than the CIS with items of cultural practices and activities, a finding which may be attributable to the fact that only two items on the MEIM are designed to directly assess behaviors. Phinney (1992) proposed that the MEIM assesses three interrelated components of ethnic identity: (a) positive ethnic attitudes and sense of belonging, (b) ethnic identity achievement, and (c) ethnic behaviors or practices. However, statistical analyses have typically yielded one single factor for the ethnic identity items. Nonetheless, Phinney’s assertion, coupled with significant correlations between the MEIM and both self-esteem and emotional well-being, may support the idea that the MEIM taps an affective component of ethnic identity.

Although not predicted in the original hypotheses, the two supplementary components of the MEIM, Other-Group Attitudes (OGA) and Ethnic self-identification, yielded some interesting information. In contrast to the moderately-high alphas reported
by Phinney et al. (1997) for the OGA, the current study yielded a much lower internal consistency of .55. There are several possible explanations for this difference. First, the sample investigated by Phinney and her colleagues (Phinney et al., 1997) was slightly older than the current sample and, therefore, the difference might be explained by developmental considerations in measuring other group attitudes. Another consideration relates to the segregated nature of the current population. For the most part, youth in this study interact predominantly with other American Indian youth and may be somewhat insulated from exposure to non-Indian populations. Nonetheless, significant positive correlations between the OGA and two survey items rating the importance of getting to know and respecting the values of people of a different race or culture, lends some support for the construct validity of this scale. Further, the OGA was found to have significant gender differences; females scored significantly higher than males on this measure. This finding may best be understood within the framework of Gilligan’s (1982) theory regarding an “ethic of care,” or sense of responsibility towards others, which tends to shape the relationships of women.

Finally, the variable of “Ethnic self-identification” was examined to determine possible differences between participants that self-identified as being of “American Indian” versus “Mixed” ethnic heritage. Overall, there were no significant differences on scores of ethnic identity based on “Ethnic self-identification.” This finding suggests that ethnic self-identification may not be as critical or salient for this group. Similarly, Hill and colleagues (Hill, et al., 1993) reported that among Oklahoma Indian youth, identification as pure or mixed background meant little in regard to health behaviors. Several possible explanations for such findings may involve special circumstances related to being Native
American. Specifically, these may include the fact that (a) Native Americans are the only ethnic group with a legal definition (Trimble & Fleming, 1989) based on blood quantum or "percentage of Indianness," (b) the majority of American Indian youth are from mixed ethnic background (Trimble & Medicine, 1993), and (c) identity for reservation youth appears to be most strongly related to tribal enrollment or identification with their tribe (Fleming, 1992). Fleming (1992) asserts that for reservation youth "tribal identity" is their primary identity.

Measurement Issues Related to Psychological Functioning

A number of researchers have addressed important methodological considerations in cross-cultural assessment (Berry, 1980; Dana, 1993; Dodd, Nelson, Hofland, 1992; Rotenberg & Cranwell, 1989; Spencer & Markstrom-Adams, 1990; Trimble, 1987). Despite this author's efforts to use only measures with demonstrated reliability and validity among American Indians, there continue to be very few well-researched instruments for this population (Dana, 1995). A major concern relates to the lack of published normative data for this population. Hence, a number of psychometric considerations related to cultural issues emerged and warrant discussion.

The following discussion addresses cross-cultural issues in assessment within the framework of Berry's (1980) assumptions of equivalence of measures. Berry (1980) distinguished three types of equivalence between cultures including: (a) conceptual, (b) functional, and (c) metric.

In the current study, issues regarding the measurement of self-esteem relate to concerns regarding conceptual equivalence. Conceptual equivalence is predicated on an understanding of the worldview of a particular culture. In this case, it is important to
underscore that American Indians differ in their view of self-concept and self-esteem from White people (Dodd, et al., 1992; Rotenberg & Cranwell, 1989; Trimble, 1987). However, self-concept measures generally assess attributes important to the self-concept of Whites but not to American Indian children (Rotenberg & Cranwell, 1989). For example, Rotenberg and Cranwell (1989), using an open-ended self-description measure to compare self-concepts between these groups found that American Indian children demonstrated a greater external orientation than White children did. Overall, American Indians, as well as many other non-European ethnic groups, appear to have a sense of self based on a collective identity which is oppositional to the social identity of most White Americans (Dana, 1993; Fordham & Ogbu, 1986).

Hence, a major concern in cross-cultural assessment includes issues regarding “conceptual equivalence” or the belief that a given construct is equivalent from one culture to another. Although Trimble’s Intercultural Self-Perception Scale was constructed for, and by, Native Americans, given the length of the full scale, only the 14 item subscale of self-esteem was employed as a global measure of the construct. However, despite a modestly high internal reliability with this sample, this sole use of one subscale may have compromised the integrity of the full measure. Trimble’s chosen focus on self-perception represents a view of self of which self-esteem is just one, possibly not the most important, component for Native American people (see also Dana, 1993, 1995). Thus, the question of what constitutes self-esteem remains critical.

In this study, the self-esteem subscale was significantly correlated with White American identification (r = .206; p = .016). One possible explanation for this may be that this subscale is tapping a construct associated with a dominant society view of self.
This hypothesis may be illustrated by an examination of items typically purported to assess global self-esteem. For example, several questions based on the *Rosenberg Self-Esteem Inventory* tend to emphasize comparisons to others. Traditionally, Native Americans have maintained a great deal of respect for uniqueness and individuality; this belief that everyone has an important purpose and role to play is predicated on a cooperative not competitive view of self. Thus, the importance of recognizing variations in the dimension of self-concept with age (Byrne, 1996; Harter, 1990) and across cultures (Dana, 1993; Rotenberg & Cranwell, 1989) must be emphasized.

Further information regarding self-esteem from a cross-cultural perspective may be gleaned from differences in how participants in the current study responded to questions evaluating their worth in comparison with other “Indians” versus “non-Indians.” Two questions on the self-esteem scale revealed significant differences between how students perceived their own worth in comparison with their own group versus non-Indians (see questions 3 and 5, Appendix, J). Specifically, students identified more frequent feelings of worth in comparison with their peers than in comparison with non-Indians. This finding appears consistent with earlier assertions by Bryde (1971) who emphasized that self-esteem among American Indian tribes of the Great Plains is highly intermingled with group identity; that is, participants reported feeling better about themselves as part of their own group then when comparing themselves to others.

An alternative explanation for this finding may relate to issues of internalized oppression. An example from a review of the present-day experiences of American Indian people by Dodd and colleagues (Dodd, et al., 1992) depicts the potential consequences of a negative stereotype frequently associated with Native Americans and
illustrates the potential impact of overt prejudice. These authors describe the prevalence of older and often somewhat dilapidated automobiles often seen in or near Indian towns. In reality the presence of these cars is likely associated with low incomes and poor road conditions, yet they are often referred to as “reservation” or “Indian” cars. This designation suggests the notion that inferiority is good enough for American Indian people. Collectively, such negative expectations may directly impact feelings of self-worth.

Nonetheless, hypotheses regarding self-esteem and the meaningfulness of different responses based on the particular reference group must be interpreted cautiously. In addition to the convoluted nature of the construct of self-esteem, the current findings may in part be related to the overall nature of the questionnaire. Further, the investigation regarding differences in these two questions was an exploratory investigation and no efforts were made to control for order effects. Nevertheless, future examination of such differences should include a greater emphasis on follow-up responses. (See Phinney & Rotheram, 1997a, for a review of the complimentary use of qualitative and quantitative approaches in ethnic research.)

A review of findings related to Center for Epidemiological Studies-Depression Scale illustrates the concept of metric equivalence (Berry, 1980). Although Manson and colleagues (Manson et al; 1990) reported good internal consistency of the CES-D when used with American Indian adolescents, they underscored the need for caution in the standard interpretative use of this measure. Specifically, these authors identified variations in the dimensional structure of the CES-D, as well as concerns regarding an appropriate cut-off score with this population. They noted that use of the standard cutoff
score of 16 proposed by Radloff (1991), results in a high number of false-positives among Native American youth.

Consistent with this finding, in the present study, one of the items was uniformly interpreted differently among this group. The item, “I felt everything I did was an effort,” consistently correlated negatively with other scale items as well as the total depression score. Thus, it appears that youth in this study interpreted an opposite meaning, perhaps to mean that they had “put forth effort” in everything they did. As noted earlier, this item was dropped in the final analysis from this scale.

These particular findings highlight the constructs of conceptual and metric equivalence and further underscore the need for greater emphasis on appropriate cultural sensitivity in interpretation of measurements with this population. Further, they emphasize major problems related to cross-cultural comparisons.

LIMITATIONS OF THE STUDY AND PROPOSED AREAS FOR FUTURE RESEARCH

Sample Limitations

In this study, participants included 137 Lakota/Dakota Sioux adolescents in grades 7 through 12. All of these students reside on reservations within the state of South Dakota and belong to one or more of several local tribes. Participating schools were either predominantly or exclusively Native American, serving primarily Lakota/Dakota Sioux youth. Of the 750 letters initially distributed, approximately 150 signed parental consent forms were returned. Of these, four parents declined to have their child participate and one student chose not to participate on the day of the survey. Further, not all eligible students were in attendance when the surveys were administered at their school. Overall,
this response rate was significantly less than anticipated during earlier stages of the study. However, it is important to note that a variety of efforts were made to secure additional consent forms including attempts to provide increased access to Consent Form packets to both students and key school administrators, as well as on-going personal appearances by the investigator at schools.

Difficulties recruiting a larger sample may be related to several factors. A particular challenge of this study was the requirement for active consent from both parents and students; in order for a student to participate they needed to have written authorization from their parent or guardian. In addition to the logistical considerations of getting these forms returned, there are perhaps some additional cultural considerations worthy of discussion.

Much of the research conducted within Native American communities employs a "passive parental consent" strategy which requires that parents return the consent form only if they prefer their child not participate in the study. Although, on one hand, this procedure may be utilized in an attempt to reduce the logistical considerations regarding the return of the form, another possible explanation may be related to aspects of traditional Native American child-rearing practices.

Among most Native American cultures, traditional child-rearing practices include a philosophy which encourages "self-determinism" in which the child’s freedom of choice is valued and respected (Brendtro, Brokenleg & Van Bockern, 1990; Good Tracks, 1973; Red Horse, 1983). Inherent to this philosophy, is the belief that children are competent-beings and are encouraged to make their own decisions. Further, it is believed that every person has the right to choose their own behaviors as long as it does not interfere with
the goals of the group (Good Tracks, 1973). Thus, a traditional parenting style incorporates the concept of “non-interference” (sometimes misperceived as permissive or negligent); more traditional Native American parents respect their child’s decisions and feel they do not have the right to interfere in their activities. Consequently, many parents feel that the decision to participate is totally up to the child. Hence, the concept of “parental consent” is not congruent with traditional values.

Nonetheless, given egregious injustices related to past research (e.g., Deloria, 1969), reticence to participate in this study may be attributable to issues related to historic or cultural distrust. Clearly, attitudes regarding research in Native American communities range from cautious to hostile. From this perspective, informed consent could be recast in terms of an empowerment model, emphasizing the rights of participants and the choice regarding participation. Perhaps this examination of possible conflicting viewpoints regarding the issue of parental consent may shed some light on the complexities and challenges of being “caught” between traditional values and the need for adaptive responses to contemporary issues.

In light of the lower than anticipated response rate, it is necessary to question the representativeness of the current sample. Again, it is important to emphasize that this study, by design, investigates a selected group of Native American youth, Lakota/Dakota Sioux adolescents, and does not profess to be representative of all Native American youth. Nonetheless, it is possible that those students who participated may represent a subset of the desired cohort of Native American adolescents.

First, it is important to note that all the subjects who participated in this study were enrolled in school; thus this sample does not include dropouts, incarcerated youth, and
other young people not attending school. Hence, it is likely that those at highest risk may not be represented in the current study. Another concern relates to the potential bias of those parents and students willing to participate. Earlier research in American Indian communities, for example, found that differences in parental attitudes, particularly political activism, were associated with higher self-esteem among the youth who participated (Beuf, 1977). The fact that participants in this study were more willing to disclose than their counterparts may be associated with other characteristics such as confidence or trust levels.

The final sample was considerably younger than initially anticipated and represented a higher number of females than males. Nonetheless, the ages and grades of participants were similar to patterns of student enrollment and illustrate the high attrition rate among Native American high school students (Attneave, 1982). Further, this sample primarily represents youth attending fairly segregated schools who are limited in their daily interactions with non-Indians. As such, it is possible that reservation life has kept them fairly insulated from direct experiences of a prejudicial nature and that these individuals may have not experienced what Cross (1971; 1978) identified as an “encounter.” Support for this possibility may be provided by survey comments in which many students indicated that they had not thought of such questions before, suggesting that these questions may represent a type of encounter experience for them. Further exploration of such findings may serve to facilitate goals of promoting more positive adjustment for students who leave the reservation for higher educational opportunities.

As mentioned earlier in this section, there are several considerations relative to the sample that should be taken into account when interpreting the findings. The current
sample represents a non-random sample; issues regarding sample specificity and cohort considerations are particularly important in interpreting the results. The current sample represents youth from several specific tribes who currently reside, and have spent the majority of their life, on the reservation. Thus, these findings are not generalizable to urban counterparts or other tribal youth. Additionally, all communities were treated as if they were homogeneous groups; although as is always true, important subgroups are likely to exist within communities.

Additional Limitations

In addition to sample considerations, another issue of concern relates to the exclusive use of self-report measures. Although Okazaki and Sue (1995) emphasize the importance of both multiple measures and multiple methods of assessment in research with ethnic minorities, they also underscore the many unique challenges for such research. Although the use of multiple methods of assessment did not seem feasible in the current study, research that includes other sources of information about a youth’s behavior could be helpful and should be encouraged in future research of this nature.

Another limitation worthy of mention includes a failure to control for social desirability or response bias. In general, the majority of students who participated indicated a positive response to the survey. Slightly less than three-quarters of the participants responded to an open-ended question inquiring about their reactions to the survey. The majority of these students responded positively and a number commented that they wanted to share information in order to help others. While this viewpoint is commendable and represents the cultural value of “generosity,” it may lend further support to possible differences between those who participated versus those who did not.
Finally, the correlational nature of the present study does not allow us to determine the causal relationship between ethnic identity and psychological health. Clearly, ethnic identity is a multifaceted construct and the relationship between ethnic identity and psychological adjustment is complex.

Strengths of this study include the use of several similar tribal groups to understand the construct of ethnic identity for a unique group of adolescents. Further, although this study underscores the need to generate more normative data for this population, it also provides a additional data for the current population. Further refinement of measures of ethnic identity will assist in clarification of correlates of high or low ethnic identity which may facilitate goals and interventions to promote healthy personal identity and interpersonal relationships. Additional research will be required to further refine these measures. A valid and reliable measure of ethnic identity will serve as a tremendous asset in both research and practice with this population.

RESULTS AND CONCLUSIONS

This study proposed and conducted an investigation of the psychometric properties of two measures of ethnic identity when used with Native American adolescents. Overall, perhaps the greatest contribution of the current study is that the Cultural Identity Scale and the MEIM both demonstrated high internal consistency and construct validity with this population.

Further, the results suggest that the Cultural Identification Scale may measure a more objective component of cultural identity related to participation in cultural activities and family involvement, while the MEIM seems to assess a more subjective component of ethnic identity. As such both instruments appear to have considerable strengths for
different purposes. The Cultural Identification Scale, composed of just eight-items, certainly represents a useful screening tool far superior to ethnic "glosses" or categories. The MEIM, composed of 14 items may be more useful for a variety of applications related to developmental research. At times, the combination of the two instruments may be preferable.

Recent research emphasizing an orthogonal conceptualization of ethnic identity is encouraging. Similar conceptual evolution has been evidenced in other areas such as androgyny. This study lends additional support for an orthogonal conceptualization of cultural identification as well as the continuous and independent measurement of cultural identification (see also Oetting, et al., 1998). Although the interaction term was not significant in the current study, analyses which promote the use of continuous variables, as opposed to median splits or arbitrary categorizations, are likely to be useful.

Finally, although this project is designed to promote greater understanding of ethnic identity, especially bicultural identity among Native American youth, it is not intended to minimize the importance of macrosocietal influences. Minority adolescents face many sociocultural forces that need to be ameliorated; many issues specific to ethnic identity development of Native American youth have their roots in the distressing economic and social issues that confront Native Americans. This research is not to be considered as an alternative to, or to detract from, addressing these problems. However, it is hoped that further exploration of the process of ethnic identity development may provide meaningful insights into factors which may facilitate positive self-growth and interpersonal relations and, thereby, offer knowledge and recommendations to assist us in fostering and nurturing resiliency in Native American youth.
A major concern in conducting ethnic research is the reality that it is impossible to conduct such research that does not have evaluative implications (Gonzales & Cauce, 1995; Phinney & Rotheram, 1987b). Ideally, the main goal of research on ethnic socialization is to maximize individual’s positive attitudes toward their own and other ethnic groups (Katz, 1987). This aim, toward harmony with all things and one another, is a fundamental value of the Native American culture.

Healthy ethnic identity and cross-ethnic attitudes must include those in which you feel good about yourself, but are also positive toward other ethnic groups (e.g., Ponterroto 1991; Smith 1991). As ethnic issues become increasingly important, both nationally and internationally, further awareness of the role of ethnic identity in psychological health may facilitate clarification of the goals of ethnic identity education. Equipped with greater knowledge and sensitivity, it is hoped that we will be able to mitigate racism and prejudice and perpetuate harmony with mother earth and all living things. Hopefully, in at least some small way, this study contributes toward that end.
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with ethnic/racial communities (DHHS Publication No: ADM 92-1884), (pp. 147-171).


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Dear Parent/Guardian:

I am a doctoral candidate in the Clinical Psychology program at Old Dominion University, Norfolk, Virginia. At present, I am conducting a research study designed to help us understand more about how Native American teenagers in today’s society feel about themselves. This project has been approved by the Institutional Review Board at Old Dominion University, the Board of Education at your child’s school, and your Tribal Council. Your child’s school has been selected to participate in this study and I would like to ask your permission for your child to participate.

What is involved? Students who participate will be asked to complete a survey on their feelings about school, family, and self. It will take approximately one class period. All students who complete the survey will receive five dollars.

Potential Benefits and Concerns. Students will be asked to complete this survey along with other students during class time. No important lessons will be missed. All students not wishing to participate will be re-located to another room for an alternative activity to be decided by school officials.

As with any research, there may be unforeseen risks related to participation. But to minimize the risk in this case, the surveys will be anonymous and few of the questions could be seen as sensitive. One possible benefit of participating in this project is that it may encourage students to think more about how they feel about themselves. The overall results of this study may also be useful in designing prevention programs for community youth.

Participation is voluntary. Participation in this study is completely voluntary. There will be no penalty or consequences if you do not wish for your child to be in this study, and permission may be withdrawn at any time during the study. Students may also refuse to answer any of the questions on the survey. If you agree your child may participate, the information in this letter will be reviewed with your child on the day of the survey, and he/she will have the opportunity to decide whether or not to participate.

Information is confidential. All information will be confidential. Names will not be on the survey and only myself and a small number of research assistants will see the completed questionnaires. We will not know how particular individuals answered the questions and we will not report any personal responses.
APPENDIX A (Continued)

Questions? We would appreciate it if you would return one copy of the attached Consent Form whether or not you would like your child to participate, so that we know that this information has reached you. You may keep this letter and one copy of the Consent Form for your records. If you have any questions, please feel free to contact Ms. Susan Pittenger (605) 734-3355 or 734-5072. If I am not available please leave your name and number and I will contact you as soon as I am able. You may also contact [Name, Position and Number of School Contact Person].

If necessary, additional information regarding this study is available by contacting my Dissertation Advisor, Janis Sanchez, Ph.D. (757-683-4439). Dr. Val Derlega of the Institutional Review Board at Old Dominion University (757-683-3118) can also answer any questions about the rights to participate in research. I am willing to assist you in making any of these calls and/or willing to reimburse you for any expense incurred to make these contacts.

Please contact me or leave me a message at (605) 734-5072 or 734-3355, if you have any questions or if you wish to review any of the materials that will be used in the study or you may let me know the best way to contact you in the space provided on the attached Consent Form.

Thank you for your consideration.

Sincerely,

[Signature]

Susan M. Pittenger, M.A.
Doctoral Candidate, Virginia Consortium for Clinical Psychology
Old Dominion University, Norfolk, VA
Dear Student:

I am a doctoral candidate in the Clinical Psychology program at Old Dominion University, Norfolk, Virginia. At present, I am conducting a research study designed to help us understand more about how Native American teenagers in today's society feel about themselves. This project has been approved by the Institutional Review Board at Old Dominion University, the Board of Education at your school, and your Tribal Council. Your school has been selected to participate in this study and I would like to ask your permission to participate.

What is involved? Students who participate will be asked to complete a survey on their feelings about school, family, and self. It will take approximately one class period. All students who complete the survey will receive five dollars.

Potential Benefits and Concerns. Students will be asked to complete this survey along with other students during class time. No important lessons will be missed. All students not wishing to participate will be re-located to another room for an alternative activity to be decided by school officials.

As with any research, there may be unforeseen risks related to participation. But to minimize the risk in this case, the surveys will be anonymous and few of the questions could be seen as sensitive. One possible benefit of participating in this project is that it may encourage students to think more about how they feel about themselves. The overall results of this study may also be useful in designing prevention programs for community youth.

Participation is voluntary. Participation in this study is completely voluntary. There will be no penalty or consequences if you do not wish to be in this study. You may withdraw at any time during the study and refuse to answer any of the questions on the survey. In order for you to participate, we must first have your parent's/guardian's consent.

Information is confidential. All information will be confidential. Names will not be on the survey and only myself and a small number of research assistants will see the completed questionnaires. We will not know how particular individuals answered the questions and we will not report any personal responses.

Questions? We would appreciate it if you would sign the accompanying Research Consent Form if you agree to participate. If you have any questions, please feel free to raise your hand, and I or my assistant, will speak with you. You may keep this letter...
APPENDIX B (Continued)

for your records, and if you have any questions later, please feel free to contact Ms. Susan Pittenger (605) 734-3355 or 734-5072. If I am not available please leave your name and number and I will contact you as soon as I am able. You may also contact [Name, Position and Number of School Contact Person].

If necessary, additional information regarding this study is available by contacting my Dissertation Advisor, Janis Sanchez, Ph.D. (757-683-4439). Dr. Val Derlega of the Institutional Review Board at Old Dominion University (757-683-3118) can also answer any questions about the rights to participate in research. I am willing to assist you in making any of these calls and/or willing to reimburse you for any expense incurred to make these contacts.

Thank you for your consideration.

Sincerely,

Susan M. Pittenger, M.A.
Doctoral Candidate, Virginia Consortium for Clinical Psychology
Old Dominion University, Norfolk, VA
APPENDIX C

RESEARCH CONSENT FORM

Students are being asked to participate in a study designed to help researchers understand more about how Native American teenagers in today’s society feel about themselves.

In order for students to participate in this study, both the Parent/Guardian and Student need to sign the following Consent Form. If both the Parent/Guardian and Student consent to the student’s participation, the student will be asked to complete a questionnaire that asks feelings about school, family, and self. It will take approximately one class period. The information students provide on the survey is confidential; names will not be on the survey and student’s responses will be anonymous and private. Upon completion of the survey each student will receive five dollars.

Please remember that participation in this study is completely voluntary. There will be no penalty or consequences if either the Parent/Guardian or Student do not wish to participate, and consent may be withdrawn at any time during the study. Students may also refuse to answer any of the questions.

In summary, you and/or your child do not have to give permission, and permission may be withdrawn at any time without any problem. However, each student’s answers are important to us and we would appreciate your permission and completion of the activities.

Please complete the appropriate section below:

NON-CONSENT SECTION (Parent only)

If you prefer that your child not to participate, please check one of the following boxes:

☐ I would like more information before giving consent for my child to participate in this study. Contact me at: ________________________________

☐ I do not wish my child to participate in this study.

Parent/Guardian’s Signature/Date: ________________________________

Student’s name: ________________________________
CONSENT SECTION: Please note that in order for students to participate in this survey both the Parent and Student must sign this form.

Part 1: To be completed by the Parent/Guardian. If you agree to have your child participate, please review the following information and sign where indicated.

This project has been explained to me and I have been allowed to ask questions about it. I understand that students do not have to fill out the questionnaire if they don't want to and this will not affect their grades or the way they are treated in any way. Students can stop part way through if they want and skip any questions they don't want to answer. I have read the permission letter and this form, understand the project, and agree that my child may participate.

I, ________________________________, give my consent for my child to participate in this study described above.

Parent/Guardian's Signature/Date: ________________________________
Student's name: ________________________________________________

Part 2: To be completed by the Student (on the day of the survey):

This project has been explained to me and I have been allowed to ask questions about it. I understand that I do not have to fill out the questionnaire if I don't want to and this will not affect my grades or the way I am treated in any way. I can stop part way through if I want and skip any questions I don't want to answer. I have read the permission letter and this form, understand the project, and agree to participate.

I, ________________________________, give my consent to participate in the study described above.

Student Signature/Date: ________________________________

Please have the student return one copy of this Consent Form to school no later than (date). Thanks!!!
APPENDIX D

DATA COLLECTION PROTOCOL

1. PREPARE THE TEST ENVIRONMENT

_____ Check that all students have returned Parent Consent Form.

_____ Make sure there are enough pencils and copies of the Student Research Information Letter and Survey.

2. INTRODUCE MYSELF AND THE PURPOSE OF THE STUDY

_____ Make sure all subjects have a comfortable place to sit and complete the survey.

_____ Introduce myself.
- Name
- Where I live
- Study approved by School Board and Tribal Council
- Relevant persons assisting with the study
- My experiences as a youth therapist and my interest in understanding more about adolescent development in today’s society.

3. ESTABLISH CONSENT

_____ Distribute pencils and copies of the Student Research Information Letter to each student.

_____ On no materials except the consent forms are you to write your names. I do not want to be able to identify the survey materials to any specific person.

_____ Participation in this study is voluntary. If you complete the survey materials as requested, you will receive a certificate to be exchanged for $5 at the end of the school day.

_____ Ask the students to read the consent form to themselves as I read the consent form aloud to them.

_____ Allow students to ask any questions they may have at this time and I, or the assistant, will try to answer all questions. (Try to establish rapport and trust at this time).

_____ Discuss the debriefing immediately following completion of the survey and upcoming feedback, as well as the fact that they may contact [Contact Person].

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APPENDIX D (Continued)

______ At this point, each student needs to decide if they want to participate in the study.

- **If they do not wish to participate**, they are instructed to go to alternative classroom. Thank them for listening.

- **If they do want to participate**, they are asked to sign the consent form and I will collect them. They will be instructed to keep the Student Research Information Letter for their records. The returned Consent Forms will be shuffled into random order so that I will not be able to match names with survey materials.

4. ADMINISTER THE TEST MATERIALS

______ Distribute survey to each student.

______ Read the instructions out loud to them. If they have questions please raise their hands and ask questions. No question is a dumb question.

______ Announce that they may start the survey and if they have additional questions they may raise their hands and I, or the assistant, will answer them individually. (No answers about particular items will be answered, only questions regarding the general process of completing the survey or reading assistance.)

______ When they have completed the survey they should raise their hand. They will then be instructed to place the survey upside down in the box on the front desk, return pencil, and pick up a certificate to redeem for cash at the end of the school day. Then they are to return to their seat and remain quiet until others are finished.

5. DEBRIEFING

______ Students will be debriefed regarding the overall intent of the study and will be informed that they will receive additional information at a later date.

______ Allow students to ask questions and try to provide appropriate feedback. Direct them to the Student Assistance Program if necessary.

______ Thank them again and remind them that they can redeem their certificate in the office at the end of the day.
AMERICAN INDIAN YOUTH SURVEY: INTRODUCTION AND DEMOGRAPHIC AND ETHNIC/CULTURAL ITEMS

Thank you for agreeing to participate in this survey. It is hoped that this survey will help us to understand your thoughts and concerns so that programs can be developed to serve teens better.

This is NOT a test. Your name will NOT appear on the survey so no one will know your answers. Please feel free to answer exactly as you feel. Your participation is voluntary and you do not have to answer any particular questions if you would prefer not to.

If you have a question, raise your hand and a staff person will come to you.

Remember:

- Your answers are private.
- Do not talk to each other—it is important that the room be quiet.
- Respect others privacy—do not look at anyone else’s booklet.
- Do not write your name on this booklet.

Your help today is VERY IMPORTANT to us.

Thanks again for your help!
APPENDIX E (Continued)

1. How old were you on your last birthday?
   - 11 years old or younger
   - 12 years old
   - 13 years old
   - 14 years old
   - 15 years old
   - 16 years old
   - 17 years old
   - 18 years old
   - 19 years old or older

2. What is your sex?
   - Male
   - Female

3. Do you think of yourself as a religious person or a spiritual person?
   - Very much so
   - Quite a bit
   - Some
   - A little bit
   - Not at all

4. What is your grade in school right now?
   - 7th grade
   - 8th grade
   - 9th grade
   - 10th grade
   - 11th grade
   - 12th grade

5. In general what are your grades right now?
   - A
   - B
   - C
   - Less than C
   - Don’t know

6. How do you feel about going to school?
   - I like school very much
   - I like school quite a bit
   - I like school some
   - I don’t like school very much
   - I hate school

7. Which of the following statements best describes you?
   - I am not involved in a gang and do not have friends who are in gangs
   - I have friends or know people in gangs but I am not in a gang
   - I spend some time in gangs
   - I spend a lot of time in gangs

8. Are your parents...?
   - living together
   - living separately or apart
   - one of my parents is dead
   - both of my parents are dead
   - don’t know

9. Do you talk about your problems or concerns with anyone in your family?
   - no
   - yes, and it helps
   - yes, but it doesn’t help

10. If you were having a serious problem, is there an adult (who is not in your family) you would feel okay talking to?
    - yes
    - no

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<table>
<thead>
<tr>
<th>Question</th>
<th>Choices</th>
</tr>
</thead>
<tbody>
<tr>
<td>50. My ethnicity is:</td>
<td>Asian, Asian American, or Oriental, Black or African American, Hispanic or Latino, White, Caucasian, European, not Hispanic, American Indian, Mixed; parents are from two different groups, Other (write in):</td>
</tr>
<tr>
<td>51. My father's ethnicity is:</td>
<td>Asian, Asian American, or Oriental, Black or African American, Hispanic or Latino, White, Caucasian, European, not Hispanic, American Indian, Mixed; parents are from two different groups, Other (write in):</td>
</tr>
<tr>
<td>52. My mother's ethnicity is:</td>
<td>Asian, Asian American, or Oriental, Black or African American, Hispanic or Latino, White, Caucasian, European, not Hispanic, American Indian, Mixed; parents are from two different groups, Other (write in):</td>
</tr>
<tr>
<td>53. Have you been given your Indian name?</td>
<td>Yes, No, Not sure</td>
</tr>
<tr>
<td>54. How many of your close friends are Indian?</td>
<td>None, Some, Most, All</td>
</tr>
<tr>
<td>55. Were you raised on the reservation?</td>
<td>Yes, I have spent most of my life on the reservation, I have spent more than half my life on the reservation, I have spent less than half my life on the reservation, No, I have only been on the reservation for a short time</td>
</tr>
<tr>
<td>56. Are you proud of being an Indian?</td>
<td>I'm not at all proud, I'm somewhat proud, I'm very proud, I'm not Indian</td>
</tr>
<tr>
<td>57. Are Indian values important to you?</td>
<td>not at all important, somewhat important, very important</td>
</tr>
<tr>
<td>58. Have you ever gone to a medicine man or woman, spiritual person or traditional healer?</td>
<td>yes, no</td>
</tr>
<tr>
<td>59. Do you feel discriminated against (treated unfairly) because you are Indian?</td>
<td>not at all, a little, some, quite a bit, a lot</td>
</tr>
</tbody>
</table>

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APPENDIX E (Continued)

60. Where do you learn about spirituality? (mark all that are true for you)
   ○ from parents or other family members
   ○ from Indian Elders
   ○ at church
   ○ at school
   ○ at an after school program
   ○ nowhere

61. How important are your spiritual beliefs to you?
   ○ very important
   ○ somewhat important
   ○ not important

62. For you, how important is it to...
   a. ...go to church?
      ○ very important
      ○ somewhat important
      ○ not important
   b. ...offer tobacco?
      ○ very important
      ○ somewhat important
      ○ not important
   c. ...go to a sweat?
      ○ very important
      ○ somewhat important
      ○ not important
   d. ....receive an eagle feather?
      ○ very important
      ○ somewhat important
      ○ not important
   e. ..talk to an Indian Elder when you’re making a decision?
      ○ very important
      ○ somewhat important
      ○ not important
   f. ...smudge?
      ○ very important
      ○ somewhat important
      ○ not important

63. How important is it to you to.....
   a. ...get to know people who are a different race than you are?
      ○ very important
      ○ somewhat important
      ○ not important
   b. ....respect the values of people who are a different race or culture than you are?
      ○ very important
      ○ somewhat important
      ○ not important

64. How interested are you in learning a tribal or Indian language?
   ○ very interested
   ○ somewhat interested
   ○ not at all interested

36. How often is a tribal language spoken in your home?
   ○ never
   ○ sometimes
   ○ often
   ○ everyday

66. How often do any of your grandparents speak their tribal language?
   ○ never
   ○ sometimes
   ○ most of the time
   ○ always
   ○ don’t know

67. How often do you see your Indian grandparents?
   ○ every day
   ○ at least once a week
   ○ at least once a month
   ○ at least once a year
   ○ never / deceased
APPENDIX E (Continued)

68. When you hear your tribe’s language spoken do you understand it?

○ none of it
○ some of it
○ about half
○ most of it
○ all of it

69. Can you speak your tribe’s language?

○ not at all
○ a few words
○ know many words, but can’t have a conversation
○ fairly well
○ very well

70. How much do you...

a. ...know about Indian legends and stories?

○ nothing
○ a little
○ some
○ quite a bit
○ a lot

b. ...want to learn about Indian legends and stories?

○ not at all
○ a little
○ some
○ quite a bit
○ a lot

c. ...get to learn about Indian legends and stories?

○ not at all
○ a little
○ some
○ quite a bit
○ a lot

71. How much have you learned about Indian culture from....

a. ...your family?

○ none
○ some
○ quite a bit
○ a lot

b. ...school?

○ none
○ some
○ quite a bit
○ a lot

72. In the past year, how often did you...

a. .....attend or participate in Indian ceremonies?

○ never
○ once
○ 2 or 3 times
○ 4 or more times

b. .....attend any Indian cultural events such as feasts or powwows?

○ never
○ once
○ 2 or 3 times
○ 4 or more times

c. .....participate in Indian dancing or drumming?

○ never
○ once
○ 2 or 3 times
○ 4 or more times

d. .....work on Indian arts or crafts?

○ never
○ once
○ 2 or 3 times
○ 4 or more times
APPENDIX E (Continued)

e. ...talk with an Indian Elder about your tribe’s history?
   - never
   - once
   - 2 or 3 times
   - 4 or more times

f. ...read, talk about, or take a class on Indian history or culture?
   - never
   - once
   - 2 or 3 times
   - 4 or more times

73. How much have you learned about Indian stories from...
   a. ...your family?
      - none
      - some
      - quite a bit
      - a lot
   b. ...school?
      - none
      - some
      - quite a bit
      - a lot

74. How often do you go to a sweat?
   - weekly
   - monthly
   - a couple times a year
   - never

75. How often do you go to church?
   - weekly
   - monthly
   - a couple times a year
   - never

58. How often do you smudge?
   - daily
   - weekly
   - monthly
   - a couple times a year
   - I don’t smudge

77. How often do you offer tobacco?
   - never
   - rarely
   - sometimes
   - often

78. How often do you talk with an Indian Elder when you’re making a decision?
   - never
   - rarely
   - sometimes
   - often

79. Have you received an eagle feather yet?
   - yes
   - no

80. How much confusion do you experience due to differences between American Indian and White American culture?

81. How much stress do you experience as a result of differences between American Indian and White American culture?
The following questions ask about the way you and your family see yourselves in your own culture as well as other cultures. Please read each item and mark the best answer.

<table>
<thead>
<tr>
<th>Question</th>
<th>A lot</th>
<th>Some</th>
<th>Not much</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>40. Do you live by or follow the traditions of your tribe’s way of life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>41. Does your family live by or follow your tribe’s traditional way of life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>42. When you are an adult, will you be a success within your tribe’s traditional way of life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>43. Is your family a success within your tribe’s traditional way of life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>44. Do you live by or follow the White-American way of life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>45. When you are an adult, will you be a success within the White-American way of life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>46. Is your family a success within the White-American way of life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>47. When you are an adult and have your own family, will you do special things together or have special traditions based on...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) the traditions of your tribe’s way of life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b) White American culture?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c) Other (specify)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>49. Does your mother see herself as...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) a Native American?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b) White American?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>e) Other (specify)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
APPENDIX F (Continued)

<table>
<thead>
<tr>
<th></th>
<th>A lot</th>
<th>Some</th>
<th>Not much</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>50. Does your father see himself as...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) a Native American?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b) White American?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c) Other (specify...)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>51. Does your family teach you about your tribe’s ways?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>52. Do you take part in your tribe’s religious ceremonies?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>53. Does your family take part in your tribe’s traditional activities and events?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>54. Do you take part in your tribe’s traditional activities and events?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>55. How much do you want to know your tribe’s legends and stories?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>56. How much do you want to know White American legends and stories?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>57. Do you speak your tribe’s language?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>58. Do you speak your tribe’s language at home?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>59. Do you think in your tribe’s language?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>60. Do you think in English?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>61. How important is going to a medicine man when you are sick?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
APPENDIX F (Continued)

62. Some families have special activities or traditions that take place every year at particular times (such as holiday parties, special meals, religious activities, trips or visits). How many of these special activities or traditions does your family have that are based on...

   a) your tribe's culture?  
   b) White American culture?  
   c) Other (specify)  

63. Does being an Indian cause you problems?

64. How many of your friends are White American?

65. How many of your friends are neither American Indian nor White?

66. How upset would your parents be if you decided to marry a White American?

67. How upset would your parents be if you decided to marry someone who was neither American Indian nor White?

68. How important is it for you to...

   a) Visit your grandparents?  
   b) Listen to your grandparents?  
   c) Take care of sick relatives?  
   d) Be successful in your job?  
   e) Get the best job possible?  
   f) Go to college in the future?  
   g) Go to a doctor when you are sick?  
   h) Vote in elections in the future?
APPENDIX G

MULTIGROUP ETHNIC IDENTITY MEASURE

In this country, people come from a lot of different cultures and there are many different words to describe the different backgrounds or ethnic groups that people come from. Some examples of the names of ethnic groups are Mexican-American, Hispanic, Black, Asian-American, American Indian, Anglo-American, and White. Every person is born into an ethnic group, or sometimes two or more groups, but people differ on how important their ethnicity is to them, how they feel about it, and how much their behavior is affected by it. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it.

Please fill in: In terms of ethnic group, I consider myself to be:

| Use the numbers given below to indicate how much you agree or disagree with each statement: |
|---------------------------------------------|-----------------|-----------------|-----------------|-----------------|
| 4: Strongly agree | 3: Somewhat agree | 2: Somewhat disagree | 1: Strongly disagree |

1. I have spent time trying to find out more about my own ethnic group, such as its history, traditions, and customs. 4 3 2 1
2. I am active in organizations or social groups that include mostly members of my own ethnic group. 4 3 2 1
3. I have a clear sense of my ethnic background and what it means for me. 4 3 2 1
4. I like meeting and getting to know people from ethnic groups other than my own. 4 3 2 1
5. I think a lot about how my life will be affected by my ethnic group membership. 4 3 2 1
6. I am happy that I am a member of the group I belong to. 4 3 2 1
7. I sometimes feel it would be better if different ethnic groups didn’t try to mix together. 4 3 2 1
8. I am not very clear about the role of my ethnicity in my life. 4 3 2 1

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Use the numbers given below to indicate how much you agree or disagree with each statement:

<table>
<thead>
<tr>
<th></th>
<th>4: Strongly agree</th>
<th>3: Somewhat agree</th>
<th>2: Somewhat disagree</th>
<th>1: Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.</td>
<td>I often spend time with people from ethnic groups other than my own.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>10.</td>
<td>I really have not spent much time trying to learn more about the culture and history of my ethnic group.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>11.</td>
<td>I have a sense of belonging to my own ethnic group.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>12.</td>
<td>I understand pretty well what my ethnic group membership means to me, in terms of how to relate to my group and other groups.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>13.</td>
<td>In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>14.</td>
<td>I have a lot of pride in my ethnic group and its accomplishments.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>15.</td>
<td>I don’t try to become friends with people from other ethnic groups.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>16.</td>
<td>I participate in cultural practices of my own group, such as special food, music, or customs.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>17.</td>
<td>I am involved in activities with people from other ethnic groups.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>18.</td>
<td>I feel a strong attachment towards my own ethnic group.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>19.</td>
<td>I enjoy being around people from ethnic groups other than my own.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>20.</td>
<td>I feel good about my cultural or ethnic background.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
APPENDIX G (Continued)

21. My ethnicity is:

- Asian, Asian American, or Oriental
- Black or African American
- Hispanic or Latino
- White, Caucasian, European, not Hispanic
- American Indian
- Mixed; parents are from two different groups
- Other (write in):

22. My father's ethnicity is:

- Asian, Asian American, or Oriental
- Black or African American
- Hispanic or Latino
- White, Caucasian, European, not Hispanic
- American Indian
- Mixed; parents are from two different groups
- Other (write in):

23. My mother's ethnicity is:

- Asian, Asian American, or Oriental
- Black or African American
- Hispanic or Latino
- White, Caucasian, European, not Hispanic
- American Indian
- Mixed; parents are from two different groups
- Other (write in):
EMOTIONAL WELL-BEING SCALE

1. Have you felt in control of your behavior, thoughts, emotions, or feelings (during the past month)?
   - All of the time
   - Most of the time
   - Some of the time
   - A little of the time
   - None of the time

2. How happy or satisfied or pleased have you been with your personal life (during the past month)?
   - Extremely happy, could not have been more satisfied or pleased
   - Very happy
   - Satisfied, pleased
   - Somewhat dissatisfied
   - Very dissatisfied

3. Have you been waking up fresh and rested (during the past month)?
   - Every day
   - Most every day
   - Less than half the time
   - Rarely
   - None of the time

4. Has your daily life been full of things that were interesting to you (during the past month)?
   - All of the time
   - Most of the time
   - Some of the time
   - A little of the time
   - None of the time

5. Have you been feeling emotionally secure and sure of yourself (during the past month)?
   - All of the time
   - Most of the time
   - Some of the time
   - A little of the time
   - None of the time

6. How have you been feeling in general (during the past month)?
   - In an excellent mood
   - In a very good mood
   - My moods have been up and down a lot
   - In a bad mood
   - In a very bad mood

For the questions 7-9 below, mark the number which seems closest to how you have generally felt during the past month.

7. How RELAXED or TENSE have you felt (during the past month)?
   - Very Relaxined
   - Very Tense
   - 1  2  3  4  5  6  7

8. How much ENERGY, PEP, VITALITY have you felt (during the past month)?
   - No energy
   - At all
   - Very Energetic
   - 1  2  3  4  5  6  7

9. How DEPRESSED or CHEERFUL have you felt (during the past month)?
   - Very Depressed
   - Very Cheerful
   - 1  2  3  4  5  6  7
APPENDIX I

CENTER FOR EPIDEMIOLOGICAL STUDIES-DEPRESSION SCALE

Below is a list of statements dealing with general feelings. Please rate your feelings during the past week using this 4 point scale:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Rarely</th>
<th>Some</th>
<th>A lot</th>
<th>Most or All</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I was bothered by things that usually don’t bother me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. I did not feel like eating; my appetite was poor.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. I felt that I could not shake off the blues, even with the help of my family and friends.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. I felt that I was as good as other people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I had trouble keeping my mind on what I was doing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. I felt depressed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. I felt that everything I did was an effort.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. I felt hopeful about the future.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. I thought my life had been a failure.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. I felt fearful.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. My sleep was restless.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. I was happy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. I talked less than usual.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. I felt lonely.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. People were unfriendly.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. I enjoyed life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17. I had crying spells.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18. I felt sad.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19. I felt that people disliked me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20. I could not “get going.”</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
APPENDIX J

SELF-ESTEEM SCALE

Please read each sentence very carefully, then draw a circle around the number that shows how often it is true or not for you. There are no right or wrong answers, because people have different thoughts and feelings. We are interested in how you usually think and feel about yourself. Please answer all items.

1=Almost always true  2=Often True  3=Sometimes true  4=Seldom true  5=Never true

1. I take a positive attitude toward myself.
   1  2  3  4  5

2. I feel I do not have much to be proud of.
   1  2  3  4  5

3. I feel I’m a person of worth, at least on an equal plane with other people like myself.
   1  2  3  4  5

4. One of my goals in life is to be free of the control of others.
   1  2  3  4  5

5. I feel I’m a person of worth, at least on an equal plane with non-Indians.
   1  2  3  4  5

6. On the whole, I am satisfied with myself.
   1  2  3  4  5

7. I am able to do things as well as most other people.
   1  2  3  4  5

8. I wish I could have more respect for myself.
   1  2  3  4  5

9. Sometimes I think I am no good at all.
   1  2  3  4  5

10. I feel that my life is not very useful.
    1  2  3  4  5

11. I am a useful person to have around.
    1  2  3  4  5

12. I feel I can’t do anything right.
    1  2  3  4  5

13. As a person, I do a good job these days.
    1  2  3  4  5

14. When I do a job, I do it well.
    1  2  3  4  5
VITA

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