RESILIENCE AMONG AMERICAN INDIAN ADOLESCENTS: INVESTIGATION INTO THE ROLE OF CULTURE

By

GLENNA STUMBLINGBEAR-RIDDLE

Bachelor of Science in Psychology University of Science and Arts of Oklahoma Chickasha, Oklahoma 2004

Master of Science in Educational Psychology Oklahoma State University Stillwater, OK 2007

> Submitted to the Faculty of the Graduate College of the Oklahoma State University in partial fulfillment of the requirements for the Degree of DOCTOR OF PHILOSOPHY July, 2010

RESILIENCE AMONG AMERICAN INDIAN

ADOLESCENTS: INVESTIGATION INTO

THE ROLE OF CULTURE

Dissertation Approved:

Dr. John S. C. Romans	
Dissertation Adviser	
Dr. Don Boswell	
Dr. Julie Dorton Clark	
Dr. Carrie Winterowd	
Dr. Kayte Perry	
Outside Committee Member	
Dr. Mark E. Payton	
Dean of the Graduate College	

ACKNOWLEDGMENTS

It is my pleasure to thank those who made this dissertation possible. I would like to express my deepest appreciation to the American Psychological Association's Minority Fellowship Program for funding my dissertation and for fellowship support for three years. I would also like to extend my sincere thanks and gratitude to my dissertation chair, Dr. John S. C. Romans, who remained patient and supportive of me through all my clinical, research, and professional endeavors. Without his persistent guidance and encouragement this dissertation would not have been possible. Additionally, I'm thankful for my committee members Dr. Don Boswell, Dr. Julie Dorton Clark, Dr. Katye Perry, and Dr. Carrie Winterowd, for their interest, words of wisdom, and support along the way.

I would also like to express my appreciation and thankfulness to Dr. Jami Bartgis, Dr. Stephen Shoemaker, Michelle Gourd, and the Indian Health Care Resources Center for helping to inspire my research efforts, for their constant support, and for giving me the privilege to conduct community-based participatory research with their agency. It has been a pleasure collaborating and working with each of you.

Additionally, I am very appreciative and heartily thankful for my family and friends. I would like to thank my husband Ryan Riddle for believing in me, for his love and support, and for helping me reach my goals. I am also thankful for the positive role models in my life that include my grandparents, the late Richard and Trina Stumblingbear, the late Bob Beeler, Marcella Beeler-Beaty and my parents, Rhygonna Hogan and Glenn Stumblingbear. I would also like to express my appreciation to my dear friend and colleague Desi Harless, for his support and assistance with data collection. Lastly, I offer my regards and blessings to all of those who supported me in any manner during the completion of my dissertation.

Author Note

Glenna Stumblingbear-Riddle, Department of Counseling Psychology, Oklahoma State University.

This research was supported by a dissertation support award granted by the American Psychological Association's Minority Fellowship Program.

Correspondence concerning this article should be addressed to Glenna Stumblingbear-Riddle, Department of Counseling Psychology, Oklahoma State University, 434 Willard Hall, Stillwater, OK 74078. Telephone: 405-509-1893, E-mail: glenna.stumblingbear@okstate.edu

TABLE OF CONTENTS

Chapter Pag	e;e
I. INTRODUCTION	
Brief Overview of American Indian Issues	
II. REVIEW OF LITERATURE12	,
American Indian Adult Concerns, Problems, and Issues	
III. METHODOLOGY)
Researcher's Experience, Worldview, and Biases)
Research Design and Statistical Procedures	3

Chapter	Page
IV. RESULTS	51
V. DISCUSSION	55
Summary Limitations Implications and Conclusions Future Research	63 65
REFERENCES	75
Reference List 1	75 84
APPENDICES	96

LIST OF TABLES

Γable	Page
1	72
	73
	73
	74
5	74

CHAPTER I

INTRODUCTION

American Indians (AI) represent 1.5 % of the United States population (Ogunwole, 2002). According to the United States Census Bureau (2000), of the 1.5 % identified, 0.9% reported being only American Indian/Alaska Native (AI/AN) while 0.6% endorsed being AI/AN and at least one other ethnicity. Although commonalities (i.e., spirituality and respect for elders) exist, AI remain a highly heterogeneous group that encompasses over 550 federally recognized tribes and nations as well as several nonfederally recognized tribes and nations. AI reside in urban, as well as rural settings, further contributing to the diversity of AI groups. Thus, it is imperative to note that several of the issues that AI experience (i.e., physical health and alcohol related issues) are not necessarily specific to all AI tribes and nations or prevalent in all AI communities.

Yet, negative stereotypes of AI linger in the literature, which has been referred to as "ethnic glossing" (Trimble, 2007). Ethnic glossing is described as a tendency to view individuals in a particular ethnic group as being alike and sharing common problems.

This conclusion is often implicitly made and based largely on a researcher's biases and assumptions, which can contribute to misleading or inaccurate information (Trimble, 2007). Therefore, it remains critical for the reader to be mindful in understanding that the following information shared is dependent on the sample and may not necessarily represent AI as a whole.

Additionally, there is no consensus or clear agreement concerning which term should be used when referring to AI. This topic can also be quite controversial (Trimble & Clearing-Sky, 2009). The following terms have often been used that include AI, AI/AN, Native American, Indigenous Peoples, by the specific tribe or nation (i.e., Pawnee and Kiowa), First Nations in Canada, Indian, and recently the term Native or Native People(s). In this study, the term AI is used, following discussions with the participants in the study regarding mutual preferences on this issue.

Brief Overview of American Indian Issues

Historically, much of the research involving AI has demonstrated vast economic, physical, and psychological disparities between AI and European Americans (Angell, Kurz, & Gottfried, 1997; Cameron & Turtle-Song, 2002; Garrett & Carroll, 2000; Indian Health Service [IHS], 1997; Johnson & Tomren, 1999; Joseph & Taylor, 2003; Snipp, 1995, 1997; Stevens & Smith, 2005; Substance Abuse and Mental Health Services Administration [SAMHSA], 2003; Whitbeck, Hoyt, Chen, & Stubben, 2002). According to the 2003-2005 population survey, AI obtained lower rates of health insurance and over 2 times higher poverty rates, compared to the remainder of the population (IHS, 2005).

Based upon a report by IHS (1997), "age-adjusted" mortality rates were significantly higher for AI when compared to all other ethnicities. Overall as a group, AI demonstrated higher incidences of alcoholism (579%), accidents (212%), suicide fatalities (70%), and homicide rates (41%) compared to the general U. S. population. The problems experienced by AI are not unique to individuals in middle to late adulthood but also apply to AI adolescents and young adults (SAMHSA, 2003; Stewart-Sabin & Chaffin, 2003).

Explanations Concerning American Indian Issues

Researchers grapple over specific AI issues and have provided explanations that include biological, psychological, and sociocultural factors. For instance, Berry, Kim, Minde, & Mok (1987) examined the disparities among AI as possible outcomes due to forced acculturation and assimilation, which may be indicative of the detrimental effects of losing culture and a sense of cultural connection. This explanation has been referred to as "acculturative stress". In other words, stress related to the demands to fit in, integrate, and ultimately identify with the European American culture. One authority Berry et al., (1987) suggested that acculturative stress might perpetuate alcohol and substance abuse and suicide rates among AI due to their loss of identity, which historically has been attributed as a source of strength in their culture.

Recently, researchers attributed some of the current problems experienced by AI to historical trauma, loss, and grief as a result of "ethnic cleansing", AI genocide, and forced assimilation of the AI survivors by European Americans (Braveheart, 1999; Braveheart & DeBruyn, 1998; Duran, 2006; Duran & Duran, 1995; Snipp, 1997). The researchers suggested that the social injustices and traumas experienced by AI are passed down

generationally because past issues and experiences have not been grieved for by previous generations. Therefore, AI may experience unresolved emotional distress that manifests itself into many of the seemingly chronic problems (i.e., alcoholism, obesity, and suicide) that exist among this group today.

Another consideration involves the role of AI boarding schools. From a historical perspective many AI have attended boarding schools and many AI are currently attending boarding schools, which is related to both positive and negative outcomes. For example, some AI described their boarding school experiences to be equated with strong friendships and hero success stories, while some of the negative outcomes included loneliness, various forms of abuse, and detrimental effects of losing the ability to speak one's tribal language (Colmant et al., 2004; Lomawaima, 1994). Many of these experiences are passed down generationally, which lends to multigenerational issues (i.e., trauma and loss).

For instance, Colmant et al. (2004) qualitatively explored the meaning of the AI boarding school experience among former and current students. Results demonstrated that one factor (i.e., background information) was essential in the construction of the AI boarding school experience. Specifically, what the AI students learned from previous generations such as their parents and/or grandparents largely influenced how they perceived their own experience. AI students recalled hearing stories of abuse, humiliation, and reported difficulty attaching to their parents who attended boarding schools, while other AI students shared hero stories that helped them cope in the setting (Colmant et al., 2004).

Other researchers have started taking into account what AI consider as strengths in overcoming the issues presented. For instance, Johnson, Peck, and Davis (2007) gathered

information about the mental and community health needs concerning urban AI. Both of the adults and adolescents surveyed placed the AI culture(s) that included AI practices, heritage, traditional and tribal ways, and ceremonies as significant sources of strength and well-being in their lives. It appears that although AI are aware of cultural strengths, historically researchers have failed to acknowledge those aspects. As a result, much of the research has focused on identifying the specific problems that plague AI by operating from a deficit-model rather than a strengths-based model (Johnson et al., 2007; LaFromboise, Hoyt, Oliver, & Whitbeck, 2006; Whitesell, Mitchell, Spicer, & Voices of Indian Teen Project Team, 2009).

Resilience Research: Paradigm Shift towards a Strengths-Based Model

A shift in focusing more on strengths despite high-risk factors has been achieved by researchers that have focused on resilience. Notably, Werner and Smith's (1992) longitudinal research concerning at-risk to high-risk populations, demonstrated that at least 50% to 70% of adolescents in the at-risk to high-risk category were able to show evidence of resilience in spite of the adversity they faced. They suggested that it is imperative to begin exploring the ways adolescents succeed and remain resilient despite the impact of multiple risk factors.

Resilience research has evolved over the last four decades; the initial focus was on the individual's internal characteristics that promoted resilience. However, after researchers noticed the positive impact of external factors (i.e., positive family and community influences) the concept of resilience progressed to include external factors outside of the individual that also foster resilience (Fleming & Ledogar, 2008; LaFromboise et al., 2006).

More recently, resilience research has continued to evolve as researchers have started exploring resilience and culture among ethnic groups. Thus, a new term developed to describe the role of culture, which is commonly referred to as "cultural resilience". Cultural resilience has often been used to "denote the role that culture may play as a resource for resilience in the individual" (Fleming & Ledogar, 2008, p. 10). Thus, resilience research is now commonly viewed as a process that is also contextual (Fleming & Ledogar, 2008; Luthar, 2006; Rutter, 1990).

Therefore, in contrast to only identifying risk factors that influence problem behaviors, researchers are beginning to identify protective factors (i.e., individual and cultural factors) that promote healthier outcomes under the same adverse situations.

Consequently, a trend in current AI research emphasizes a movement away from focusing solely on deficits to shifting towards assessing how culture may promote strength and resilience that helps AI overcome obstacles.

However, resilience research among ethnic populations and AI in particular is limited. Therefore, further research is warranted that involves identifying predictors of resilience among AI adolescents. Additionally, most research involving AI adolescents is limited to reservation-dwelling AI even though the U.S. Census (2000) indicated that 57% of the AI population currently resides in urban settings (IHS, 2005). Likewise, Safran, Safran, and Pirozak (1994) and Snipp (1995) indicated that AI adolescents are increasingly more likely to be raised in urban areas compared to past generations, which has resulted in both positive and negative outcomes.

For instance, researchers have highlighted risk factors associated with a lack of cultural connection and an increase in suicide rates among AI adolescents who live in more urban settings (Freedenthal & Stiffman, 2004; Johnson & Tomren, 1999). These investigations further demonstrate the need for research concerning the unique experiences and needs of urban AI adolescents. This is also particularly crucial when considering that the frequency of completed suicides for AI between the ages of 15 to 19 years (i.e., 20.5 per 100,000) was double the rate compared to adolescents in the general U.S. population (i.e., 10.0 per 100,000) (Centers for Disease Control, 2002). Additionally, 15% to 30% of AI adolescents have reported a suicide attempt. For that reason, it's imperative that additional research explore resilience and the unique experiences of urban AI adolescents.

Of particular interest in this study was to explore the role of culture in identifying protective factors that promote resilience among urban AI adolescents. Is there something unique and resilient about identifying and being more enculturated into AI culture and traditions that serves as a source of strength against high risks and challenges for urban AI adolescents? In particular, what protective factors promote resilience among urban AI adolescents?

American Indian Resilience

Resilience is a multidimensional construct and specific common resilience variables have been used in previous research by LaFromboise et al., (2006) and Whitesell et al., (2009) to examine this construct due to the fact that at this time there is no specific instrument that measures AI resilience. LaFromboise et al. developed a set of items that would be representative of commonly accepted dimensions of resilience, which are

associated with pro-social behaviors and the absence of problem behaviors. The pro-social items chosen reflected the adolescents' level of school involvement which included: attitudes about school, academic plans, and school competence (i.e., current academic grades). Adolescents who had given positive responses to 10 questions (i.e., how well they liked school and how hard they tried in school) were identified as resilient. The adolescents that had indicated that they planned on completing a college education were also categorized as being resilient. Finally, school grades were measured through self-report (LaFromboise et al., 2006).

In regard to academic performance, based on studies by Whitbeck, Hoyt, Stubben, & LaFromboise (2001) and LaFromboise et al. (2006) it was predicted that AI adolescents who strongly identified with AI culture would perform better in school, compared to their less identified counterparts. However, they also explained that this hypothesized relationship between academic performance and cultural identity would be complex. For instance, they discussed how forced acculturation and distrust in the educational system might influence students who highly identify with their culture to reject academics. Therefore, the researchers also considered how self-esteem and cultural identity were associated with academic performance.

In a similar study, Whitesell et al. (2009) examined possible relationships concerning academic performance among AI adolescents. Their work started as part of the Study Group on Race, Culture, and Ethnicity (SGRCE). Their sample included 1,611 reservation-dwelling AI who represented three tribes from the Western United States from the Voices of Indian Teens Project Team. Models were developed throughout the longitudinal study to describe the process of socialization and parental influences in the development of self-esteem,

cultural identity, and academic achievement among the AI adolescents identified. Whitesell et al. assessed academic success based on academic grades, perceived academic performance, attitudes toward school, and educational goals. Problem behaviors were also assessed.

However, protective factors remained the focus of their study as the only problem behavior assessed was alcohol use.

Intent of the Study

This study explored the experiences of urban AI adolescents from a strengths-based conceptualization utilizing community-based participatory research in hopes of transferring the "psychological research into community problem-solving strategies" to benefit the AI community involved (Stokols, 2006, p. 63). This conceptualization is also consistent with the National Congress of American Indians (NCAI) research methodology (NCAI, 2005). Particularly, the NCAI has placed great emphasis on protecting AI and AI culture by placing safety measures (i.e., Indian Health Service Institutional Review Boards) in requiring researchers to use appropriate measures that inform the community of the results and the community benefits from participating in research (NCAI, 2005). Additionally, Beals et al. (2009) recently discussed how the actions set by the NCAI and U.S. tribes resulted from the need to protect AI from harm by requiring research that is culturally informed, sensitive, and competent. In conclusion, Beals et al., (2009) expressed that part of the role of researchers is having the, "responsibility to explicitly include the perspectives of those most impacted by their work" (p. 341).

Therefore, due to the nature of this research and in accordance with conducting culturally competent research, a community-based participatory research (CBPR) model was

used for developing, collecting, analyzing, and interpreting results. A community board of AI professionals and community members reviewed and provided feedback concerning the research methodology. Out of respect and protection, the specific AI agency and community is not identified. However, the urban area selected was appropriate based on the U. S. Census (2000) data that reflected a high percentage of AI/AN for that region.

Summary

The focus of this study was to investigate these issues by engaging with the specific AI community in assessing resilience among urban AI adolescents from a South Central region of the U.S. Research has shown that certain ties to AI culture (i.e., enculturation) appear to serve as protective factors, which result in resilient outcomes such as higher school competence and abstinence from alcohol (Yoder, Whitbeck, Hoyt, & LaFromboise, 2006). Additionally, self-esteem, subjective well-being, and social support from family and friends have also been shown to serve as protective factors that promote resilience among AI adults, college students, and adolescents (Bergstrom, Clearly, & Peacock, 2003; House, Stiffman, & Brown, 2006, LaFromboise et al., 2006; Montgomery, Miville, Winterowd, Jeffries, & Baysden, 2003; Powers, 2006; Stiffman et al., 2007; Whitesell et al., 2009; Wolsko, Lardon, Mohatt, & Orr, 2007).

This study extends the literature by investigating from a culturally informed manner the resilient and related experiences of urban AI adolescents. This study examined possible predictors of resilience that previous research has supported among AI that included enculturation, self-esteem, subjective well-being, and social support from family and friends. The AI community also requested that alcohol abuse was assessed by an approved measure

deemed appropriate for the sample. Thus, alcohol abuse was also explored for their purposes but was not included in this study.

CHAPTER II

REVIEW OF LITERATURE

American Indian Adult Concerns, Problems, and Issues

In addition to the AI concerns, problems, and issues identified in several studies (Angell, Kurz, & Gottfried, 1997; Cameron & Turtle-Song, 2002; Garrett & Carroll, 1997; Indian Health Service, 1997; Johnson & Tomren, 1999; Joseph & Taylor, 2003; National Survey on Drug Use and Health, 2003; Snipp, 1995, 1997; Stevens & Smith, 2005) more recent data collected from an urban AI community identified mental health and community health needs specific to a South Central region of the U.S. While the participants in this study indicated drug and alcohol abuse as being the most severe problem within their community Beals et al. (2009) suggested that overly focusing on problems caused by alcohol use has contributed to unbalanced attention on alcohol use despite numerous other issues that AI endure. While alcohol may be problematic in many AI communities, it is often difficult to determine specifically what personal, cultural, contextual, and community factors may influence the overuse of alcohol as a coping tool.

At any rate, the above AI community reported alcohol abuse as being a severe problem according to 65% of the adult sample. Another area of concern included household income. Specifically, about 50% of the adult sample earned an annual income of less than \$20,000 while only 31% earned between \$20,000 and \$35,000, which is of particular concern when considering that a majority of the participants had children or dependents in the home. Other important areas reported included: general health needs (i.e., diabetes), mental health needs (i.e., high need for prevention, education, and treatment services), issues specific to adolescents (i.e., tobacco use and teen pregnancy), and other socioeconomic issues (Johnson et al., 2007).

American Indian Adolescent Concerns, Problems, and Issues

Similarly, AI adolescents are concerned about alcohol and substance abuse issues. In addition to surveying adults Johnson et al. (2007) obtained information from AI adolescents and found their sample also identified alcohol and drug abuse as severe problems. In particular, 71% of the adolescent participants rated alcohol abuse as a severe problem and about 69% rated drug abuse as a severe problem. Indeed many AI adolescents have experimented with alcohol and drugs (i.e., cannabis and inhalants) by the age of 15 and the onset of initial experimentation is declining. For example, Stewart-Sabin and Chaffin (2003) discussed evidence suggesting that AI adolescents have started using alcohol and drugs at a much younger age (i.e., 12 years old).

Consequently, AI adolescents are at an increased risk of abusing substances, while their counterparts experience detrimental consequences due to the negative influence of alcohol and drugs. For instance, some adverse consequences include greater negative involvement with the justice system, higher rates of psychological and physical

health problems, and lower educational attainment (Stewart-Sabin & Chaffin, 2003). Alcohol abuse is also a major factor in preventable deaths, which were 133% greater among AI ages 15-24 years when compared to European Americans within the same age group (Snipp, 1997). Additionally, studies conducted by Cameron and Turtle-Song (2002) and Johnson and Tomren (1999) demonstrated that AI adolescents display more psychological problems such as depression and anxiety, compared to other U. S. ethnic groups. A possible consequence of depressive symptomology for AI adolescents appears to be suicide and suicidal ideation. Cameron and Turtle-Song (2002) pointed out that AI adolescent rates of suicide are 72 % greater than the general U. S. population (Cameron & Turtle-Song, 2002; U.S. DHHS, 2000).

Further, it has been indicated that Alaskan Native males have the highest percentage of suicide rates in the world. Although AI adolescents are at an increased risk for suicidal ideation and exhibit higher prevalence rates associated with alcohol and suicide deaths than any other group there are wide variations among the rates of suicide between different tribes and nations (Olson, 2006). For instance, several studies have demonstrated relationships between increased rates of suicide among adolescents and young adults in less traditional tribes (Angell, Kurz, & Gottfried, 1997; Garrett & Carroll, 2000; Johnson & Tomren, 1999).

On an educational level, alcohol and substance abuse attributed to at least 50% of the dropout rates among AI adolescents (Snipp, 1997). Specific to low educational achievement Donovan and Cross (2002) also discussed how AI students are more likely to be labeled as having some type of learning disability. Furthermore, alcohol and substance abuse among AI has also been associated with gang involvement that

represents a developing problem, as AI gangs were fairly unheard of until 1992. However, AI gangs have become a larger problem on reservations, in urban areas, in some rural areas, and are often found within residential AI boarding schools. Gang activity has been associated with alcohol and substance abuse, high unemployment, and low educational attainment (Joseph & Taylor, 2003; Whitbeck, Hoyt, Chen et al., 2002).

Acculturative Stress

Berry et al. (1987) proposed acculturative stress as an explanation for the disproportionate economic, physical, and psychological issues that AI face. Acculturation has been defined as "culture change which results from continuous, first hand contact between two distinct cultural groups" (Berry et al., 1987, p. 491), while others defined the term as "the degree to which the individual accepts and adheres to both majority (European American) and tribal cultural values" (Choney, Berryhill-Paapke, & Robbins, 1995, p. 76). As a result of the difficulties that individuals encounter while going through the process of acculturation, the concept acculturative stress was proposed to explain this unique and often detrimental phenomenon. Acculturative stress is expressed as a unique type of stress that results from being in the midst of the acculturative process (Berry et al., 1987; Choney, Berryhill-Paapke, & Robbins, 1995).

Background on Resilience

The study of human resilience started when a group of researchers noticed that some children would succeed despite several challenges and adverse conditions.

Researchers began to conduct longitudinal studies and initially identified children who experienced adversity but did not buckle. These children appeared to be invulnerable,

ego-resilient, and hardy (Benard, 1991). More recently these adolescents have been referred to as "resilient."

There are many definitions of resilience among researchers and some consider the concept elusive because it lacks an authoritative definition (Neenan, 2009). Nonetheless, resilience has been described as the ability to adapt without developmental impairment despite being exposed to risk (Arrington & Wilson, 2000; Masten, 1997), which demonstrates the ability to achieve and be successful despite the amount of stress or stressors in one's life (Arrington & Wilson, 2000). According to Masten and Gewirtz (2006) resilience is the "positive adaptation in the context of challenge" (p. 1). Similarly, Persuad (2001) views resilience as an essential aspect of positive mental health and wellbeing.

Furthermore, Bergstrom et al. (2003) stated that "resilient people can bounce back after setbacks and difficulties, while others faced with similar circumstances reach their breaking point and fall along the wayside" (p. 64). Given these definitions, it is imperative to keep in mind that resilience does not necessarily reflect invulnerability.

Neenan (2009) stated "no matter how robust you've become by dealing with tough times, you still remain vulnerable to coping poorly with future adversities" (p. 5). Likewise, one authority, Luthar (1991) demonstrated that adolescents in the midst of adversity who demonstrated high social competence, which is viewed as a resilient factor, may still have had difficulties in other areas of life. Specifically, the resilient adolescents from an innercity sample had significantly higher rates of depression and anxiety symptoms, compared to competent adolescents from backgrounds with lower stress levels.

Therefore, while these adolescents demonstrated resilience in one area, other forms of

problems (i.e., depression) may have developed due to severe life stressors (Luthar, 1991).

Researchers such as Masten and Gerwitz (2006) and Masten (1997) argued that more information concerning resilience could be extremely beneficial in increasing the likelihood of positive outcomes for children and adolescents considered at-risk.

Furthermore, a need for more solution-oriented approaches is warranted in order to turn negative situations around by promoting solution-oriented strategies that serve as protective factors (Benard, 1995).

Historically, the research involving resilience heavily focused on the adolescent's ability to develop confidence, competence, and a caring nature despite being at-risk or living in adversarial circumstances (Werner and Smith, 1992). However, growing resilience research has shifted beyond a trait-oriented conceptualization to a multidimensional developmental process (Constantine, Benard, & Diaz, 1999; Werner & Smith, 1992). Furthermore, Benard (1995) professed that individuals do not solely foster resilience, but that familial, communal, and environmental factors also contribute and cultivate positive characteristics in individuals. The resiliency factors can help people develop positive attributes (i.e., social competence) and entails such traits that include self-esteem, self-efficacy, autonomy, and optimism. These positive attributes are often referred to as protective factors (Arrington & Wilson, 2000).

Another important area when conceptualizing resilience is to consider the developmental level of the individual. For instance, when assessing resilience among adolescents it is important to keep in mind pertinent developmental issues. According to

Erikson's psychosocial stages of development, adolescents are dealing with industry vs. inferiority (i.e. competence) and ego identity vs. role confusion (fidelity) (Engler, 2006). Of particular relevance to AI adolescent development is the role of enculturation, which relates to identity formation and will be discussed later (Zimmerman, Ramirez, Washienko, Walter, & Dyer, 1998).

Recently, the study of resilience has expanded to include different cultures and contextual variables. Still the work remains limited due to the prominence of research involving resilience among European American adolescents. However, some researchers have explored resilience among different groups of adolescents. Specifically, Everall, Altrows, and Paulson (2006) qualitatively investigated resilience among a group of female Caucasian adolescents that overcame suicidal ideation. The researchers were primarily interested in understanding how these adolescents perceived overcoming suicidal ideations. A resilience framework was used to conceptualize these processes. They examined four protective factors that include social processes, emotional processes, cognitive processes, and purposeful/goal-directed action among three domains (i.e., individual, family, and community factors).

Several imperative and consistent themes emerged. They found that all participants reported having at least one significant supportive individual in their life. With regard to emotional processes they found that all participants reported feeling sad or depressed. Additionally, another common emotion felt was anger. For many of the participants the process of confronting difficult emotions and expressing them to others proved beneficial. Another theme associated with cognitive processes involved focusing on personal positive aspects, increasing awareness of their personal choice, and control

over situations. Finally, for many of the participants recognizing personal choice and control helped them have a greater sense of self- efficacy, which motivated them to take action. The researchers concluded that being able to overcome suicidal ideation could be understood through a resilience lens.

Resilience appears to be a dynamic and multidimensional process that evolves and involves mutual exchanges between the individual and environment. Therefore, the researchers suggested that future studies investigate the experience of ethnic adolescents and male adolescents (Everall, Altrows, & Paulson, 2006).

Resilience among Ethnic Groups

Consequently, research regarding resilience among ethnic groups has increased over the last few years. A current trend has been to assess resilience and examine potential protective factors that are predominant for certain ethnic groups. For example, research has been conducted to address whether adolescents from different ethnic groups have unique or specific elements of their culture that serve as protective factors that buffer against adversity.

Miller and MacIntosh (2006) explored this question in regard to African American adolescents. These researchers investigated the impact of racial socialization and racial identity as protective factors that promote resilience among a sample of at-risk urban African American adolescents. Racial socialization is a process that occurs within the context of the family within their community (i.e., traditions, practices, intergroup and interpersonal relationships, and position in the social hierarchy), which is believed to protect individuals from other environmental detriments based upon their ethnicity. In

contrast, racial identity is a process of identifying with individuals based on shared ideas, thoughts, and feelings. Racial identity appears quite crucial during adolescence as adolescents attempt to understand and find their place in society (Engler, 2006; Miller &MacIntosh, 2006).

Further, Miller and MacIntosh (2006) found that a positive racial identity served as a buffer against daily hassles that the students faced in school. In other words, a strong sense of racial identity may have helped these adolescents not allow perceived obstacles to stand in their way of academic achievement. They also found that a higher level of collective self-esteem was positively related to higher involvement in school activities, which promoted resilience and strengthened a sense of belongingness to their ethnic group. However, these researchers stressed that their findings were exploratory and that further investigation concerning resilience among ethnic populations is needed in order to identify and qualify culturally specific factors that may be useful in developing appropriate interventions for adolescents that are at-risk.

Likewise, Fuligni, Witkow, and Garcia (2005) also highlighted the importance of racial identity among adolescents in terms of the importance of identifying with their culture. In particular, Fuligni et al. (2005) investigated racial identity or ethnic identity as they refer to it among Mexican, Chinese, and European adolescents. Specifically, 589 participants from the aforementioned backgrounds participated in the study. The participants were first asked to select different ethnic labels that included national origin (i.e., Chinese), pan-ethnic labels that were all encompassing of a global culture (i.e., Asian), hyphenated American labels (i.e., Asian-American) and American. Then the participates were administered a number of measures that assessed seven academic

attitudes such as "educational utility" (p. 802) which is referred to as "the extent which adolescents believe that education is integral for their future success" (p. 802), value of academic success, and school self-concept while also assessing their academic achievement based on their grades. The researchers found that all students from all cultural backgrounds selected multiple ethnic labels.

However, the Mexican and Chinese adolescents chose more labels than their counterparts, which also demonstrated the importance of ethnic identity. Furthermore, although there was no association between ethnic labeling and academic achievement an association was found between the strength of the adolescents' ethnic identification and their level of academic achievement. For example, Mexican and Chinese adolescents that closely identified and thought positively about their ethnic background consistently held more positive attitudes towards education.

Correspondingly, Barrera, Li and Chassin (1993, 1995) investigated cultural resilience among a group of Hispanic and Caucasian adolescents. The researchers found that parental alcoholism and life stress were highly associated with Caucasian adolescents. Thus, the Caucasian group appeared more susceptible to parental alcoholism and life stress than compared to the Hispanic group. The researchers concluded that the results could indicate some unique factor about being Hispanic or having cultural ties that helped alleviate the effects of parental alcoholism and life stress. Due to some limitations of the two studies (i.e., methodological issues) the researchers could not conclude that their findings fully supported evidence for Hispanic cultural resilience.

As a result, Barrera, Hageman and Gonzales (2004) expanded the literature concerning the differences related to resilience among Hispanic and Caucasian adolescents. The researchers suggested that more information was needed in understanding how specific risks such as life stress among adolescents might be moderated by the adolescent's ethnicity. In other words, are there some aspects of a Hispanic adolescent's culture that help promote resilience?

The participants in their study consisted of Hispanic and Caucasian adolescents from inner city school districts. Unlike the Barrera and colleagues (1993, 1995) studies the Barrera and colleagues (2004) did not find any evidence to support that Hispanic adolescents were more resilient to the effects of parental alcoholism and life stress than Caucasian adolescents. Nonetheless, they did find that stress did predict psychological distress for both groups. Although the primary hypothesis was not supported, an interesting finding related to gender and ethnicity interactions was revealed. Specifically, they found greater gender differences in psychological distress among Caucasian adolescents compared to Hispanic adolescents. They also found that adolescent girls demonstrated greater susceptibility to life stress than boys.

Resilience: American Indian Culture and Identity

According to McCubbin and McCubbin (2005) culture and ethnic identity play a vital role in the familial process of recovery and resilience. Moreover, individuals hold specific "cultural meaning systems" (p. 40) that help guide the individual's behaviors and emotions and provide a definition of what a situation means. Likewise, identity development from an AI viewpoint places more emphasis on creating connections and

understanding the self in relation to all their surroundings that include their family, tribe, community, and general environment. The emphasis is not focused solely on individualistic identity but appears more collectivistic by encompassing contextual factors. Through this process of establishing connections AI develop a strong sense of self, which manifests in mental, emotional, physical, and spiritual well-being (Bergstrom et al., 2003).

However, the process remains complex and is more multifaceted considering the diversity that exists among all the AI tribes and nations. Specifically, the U. S. federal government recognizes over 550 AI tribes and nations, which all consist of specific traditions and beliefs that are unique to each tribe and geographical region (IHS, 1997; Stevens & Smith). For the purposes of this study the focus will be on commonalties that include "shared core values, beliefs, and behaviors" (i.e., importance of the extended family and respect for elders) (Heavy Runner & Morris, 1997, p. 1). Moreover, HeavyRunner and Morris (1997) suggested that AI experience the world through a cultural framework that help AI understand where they originated from, where they are presently, and where they are headed, which further makes cultural identity a predominant foundation and source of strength.

Other complexities and considerations are related to the degree the AI individual accepts, identifies, and adheres to their AI culture referred to as enculturation and with the European American culture referred to as acculturation. Acculturation has been defined as "culture change, which results from continuous, first hand contact between two distinct cultural groups" (Berry et al., 1987, p. 491) while others define acculturation as "the degree to which the individual accepts and adheres to both majority (White/Euro-

American) and tribal cultural values" (Choney, Berryhill-Paapke, & Robbins, 1995, p. 76).

Researchers have struggled to conceptualize the process of acculturation in identity development among AI. There are important elements to consider due to that fact that certain factors may be more or less predominant depending on how the AI individual defines themselves in the European American mainstream society. Spindler and Spindler (1985) attempted to address these complexities and identified five types of "Indianness" (i.e., peyote cult, native-oriented, transitional, lower-status acculturated, and elite acculturated) all components of the acculturative process. However, the work of Spindler and Spindler (1985) was only based off of one Northern tribe.

Thus, Loye and Robert Ryan (1982) included traditional, transitional, marginal, assimilated, and bicultural in an effort to be more encompassing. The traditional represents AI individuals who strongly accept, identify, and adhere to the traditions of their specific culture (i.e., speak the language while knowing little English). These individuals observe their own tribal ways and are very resistant to change in adopting European American traditions. Second, transitional represents individuals who still hold onto their cultural beliefs, but can speak English. These individuals may doubt or question some of their traditional ways but are not able to fully accept and integrate European American beliefs and values.

Next, individuals from the marginal group may appear defensively AI, yet cannot live by their cultural ways or identify with the mainstream European American society.

Suffice to say, this group tends to have more difficulties in coping with their problems

because they lack identity in either culture (Loye and Robert Ryan, 1982 as cited in LaFromboise et al., 1990, Trimble &Mohatt, 1990). Individuals from the assimilated group, for the most part have been accepted by the mainstream society while they have abandoned their AI traditions and values. Finally, bicultural individuals appear to function in both cultures and are generally accepted in both. These individuals are thought to be able to accept, identify, and adhere to their unique AI traditions and values, while also successfully operating in the European American mainstream society (Huffman, 2001; LaFromboise & Rowe, 1983; Loye and Robert Ryan, 1982 as cited in LaFromboise et al., 1990).

Additionally, Herring (1996) identified four distinct AI familial groups that include traditional, nontraditional (bicultural), acculturated, and pantraditional families. Based off the contributions of Herring (1989, 1996) Garrett and Pichette (2000) adapted this framework to include five levels of acculturation among AI. The five levels include traditional, marginal, bicultural, assimilated, and pantraditional. The first four are consistent with what has been previously explained. The fifth level pantraditional refers to assimilated AI who decided to return to traditional AI ways in order to seek abandoned or lost traditions, cultural beliefs, and values. These individual are generally accepted by mainstream society (Garrett & Pichette, 2000).

Furthermore, based off the work concerning the resilient aspects of biculturalism the construct enculturation developed, which is often considered the opposite of acculturation. Enculturation is the process by which the individual learns and identifies with her or his own specific culture (Little Soldier, 1985; Zimmerman et al., 1998). This construct will be further explored in relation to AI resilience.

Research involving resilience among AI is a fairly recent line of inquiry that has been explored in few contexts. For example, Wolsko et al., (2007) explored the health and wellness of a sample of Yup'ik participants. The researchers also measured the participants' levels of enculturation and acculturation. The researchers shared that their study was a shift from focusing on deficits in "Native communities towards examining the positive health benefits of greater self-determination and of affirming the intrinsic worth of indigenous worldviews" (Wolsko et al., 2007, p. 52). The researchers found that participants who endorsed higher levels of acculturation expressed a higher rate of psychosocial stress, identified using alcohol and drugs as a coping strategy, and reported less happiness.

In contrast, participants who appeared more enculturated into their Yup'ik culture demonstrated greater happiness, used religion and spirituality as a coping strategy, and reported using alcohol and drugs less frequently than their counterparts. The researchers highlighted that the current study suggests that Yup'ik individuals generally link the acculturative process with negative health and stress while individuals who identified with their Yup'ik culture (i.e., traditions) view the enculturative process as a means of promoting health and overall well-being (Wolsko et al., 2007).

In addition, Montgomery et al. (2000) explored resiliency factors among a group of AI undergraduate students. These researchers were interested in assessing the resiliency factors that helped AI undergraduate students succeed in a university setting.

The AI undergraduate students who were near graduation or had recently graduated were

recruited for their study. The results indicated that family values and participation in AI traditions positively influenced their lives in terms of facilitating educational experiences that fostered their success. Specifically, traditional and internalized self-talk, the ability to bring one's culture into the university setting, learning that was consistent with their traditional ways (i.e., direct learning), and positive perceptions of social support systems (i.e., family, elders, and other AI students) all promoted resilient behaviors associated to their success. It appeared that these AI students adapted to a traditional European American university setting while still being enculturated into their own tribe(s) or nation(s) and cultural traditions and practices, which positively attributed to their success. This phenomenon is similar to the concept of biculturalism based off studies by Huffman (2001) and LaFromboise and Rowe (1983).

Specifically, Huffman (2001) investigated attrition and persistence among a group of traditional AI college students and found that a secure ethnic identity was positively associated to their success in a non-AI university setting. Interestingly, students who demonstrated a strong and secure AI identity were able to engage within two cultural settings that included AI culture and non-AI university settings. These students were able to operate within two cultures without having to lose their cultural identity and pride. It has been conceptualized that these students did not sacrifice their AI ways but learned new skills from the mainstream culture that helped them be successful in both cultures. These results are consistent with a previous study conducted by LaFromboise and Rowe (1983) who found that AI college students who appeared bicultural demonstrated greater success in a university setting. Likewise, Byron (1997) also found this bicultural buffering phenomenon in a study of AI adults. In particular, AI participants who

identified themselves as bicultural appeared less likely to suffer from depression, compared to their counterparts.

More recently Belcourt-Dittloff (2006) found many significant relationships that supported cultural elements that served as buffers against adversity and enhanced resilience among a group of AI students and AI from rural and urban communities. This research demonstrated the importance of various resiliency factors that include hope, social support, general resilient coping abilities, traditional cultural and spiritual practices, ethnic pride/enculturation, and communal mastery. In particular, AI with higher resiliency factors had higher life satisfaction, "adversarial growth" (i.e., growth through adversity), and lower levels of psychological distress. Belcourt-Dittloff (2006) suggested that cultural hope that included hope, ethnic culture, religion, spirituality, and enculturation scores served as a both a moderator and main effect on psychosocial status, negative affect, and historical trauma, as it predicted 12% of the variance. Cultural hope contributed to 28% of the variance in adversarial growth, positive affect, and quality of life. Taken together, the aforementioned studies emphasize the imperative role that culture and enculturation play in the lives of many AI.

Resilience among American Indian Adolescents

Research conducted by the National Longitudinal Study of Adolescent Health (NLSAH) (Resnick et al., 1997) examined 90,000 adolescents from a national representative sample. The researchers explored the role of adolescents' social settings on their health and behavior. The study revealed the importance of family, school, and personal qualities that appeared to protect adolescents from harm. For example, the

adolescents' who felt a strong sense of connection to their family system were less likely to engage in problem and risky behavior. The study conducted by the NLSAH is congruent and applicable to resilience among AI adolescents. Specifically, Bergstrom et al. (2003) demonstrated several factors that appeared to foster resilience among AI adolescents that included positive family, school, and community social support systems and individual factors (i.e., good self-concept, strong sense of direction, and tenacity). However, these students also identified being grounded and connected to their tribal culture as another important factor concerning their resilience. These students also expressed the latter as their primary reason for staying in school.

Similarly, Whitesell et al. (2009) examined potential relationships concerning AI adolescents and academic success based on the Study Group on Race, Culture, and Ethnicity (SGRCE). Participants were recruited from the Voices of Indian Teens Project Team that consisted of 1,611 reservation-dwelling AI from three tribes in the U. S. After the completion of the three year longitudinal study models were developed to explain the impact of socialization and parenting influences on AI participants' self-esteem, cultural identity, and academic success. Academic success and achievement was based on grades, perceived academic performance, attitudes toward school, and educational goals. Problems behaviors such as alcohol and drug use were also reported though protective factors that promoted resilience remained the focus of the study. The researchers found that self-esteem was strongly associated to academic achievement though no direct effects and small indirect effects were obtained for cultural identity and academic success. Furthermore, it appeared that the participants' available personal resources (i.e.,

perceived competence and internal locus of control) and level of problem behaviors meditated self-esteem and academic success.

Specifically, participants with available personal resources had higher self-esteem and academic success while the opposite was true for participants associated with more problem behaviors. The researchers highlighted that a majority of the associations between self-esteem and academic success can be attributed to the intermediary effects of both problems behaviors and personal resources. They concluded that positive self-esteem may serve as a protective factor that promotes and shapes the development of personal resources, which strengthen academic success and enhance resilience against problem behaviors.

However, the researchers did not find a relationship associated with AI identity. They concluded that the relationship between self-esteem and AI identity is quite complex and that it was difficult to assess, as they did not include an outcome indicator of collective goals, cultural identity, or measure enculturation. They added that the measure selected to assess AI identity was brief and may have not incorporated all aspects of the construct.

Whitesell et al. (2009) also discussed how their conceptualization was a "rather narrow definition of success" (p. 47) as performance, school attitudes, educational goals, and self-reported grades were the only indicators included while other school related experiences were not considered. Additionally, the researchers argued that their definition of achievement was based on mainstream values, which may not align with AI identity as another explanation for the findings. In conclusion, additional research geared towards

understanding how culture influences school success, concern for culturally informed definitions, and broader success measures in order to better understand the complex relationship between AI culture and academic success was recommended.

Similarly, Whitbeck et al. (2001) investigated resilience among a group of AI adolescents from a Midwestern reservation. In contrast to Whitesell et al. (2009) their findings did demonstrate a positive relationship between AI adolescents' level of enculturation and academic success. For instance, one study showed that although a majority of AI adolescents lived in adverse households, 60% of these adolescents demonstrated positive school outcomes with an absence of problem behaviors. Despite the many hardships that these AI students had faced many demonstrated resilience. The results highlighted important factors that appeared to assist AI adolescents in buffering the effects of the level of adversity in their lives. For example, the strongest predictor of resilience was enculturation (Whitbeck et al., 2001; LaFromboise, et al., 2006).

Additionally, along with AI culture and enculturation, spirituality has been shown to be a key contributor of resilience, which relates to aspects of AI culture that depend on the individual and tribe or nation referenced. For example, Garroutte, Goldberg, Beals, Herrell, and Manson et al., (2003) purported that in their sample of AI adolescents, participants with higher levels of cultural spirituality had lower rates of suicidal ideation, than compared to their counterparts who endorsed lower levels of cultural spirituality. The results remained consistent even when simultaneously adjusting for gender, age, education, substance abuse, high alcohol consumption, and level of psychological distress. Furthermore, Graham (2001) found that spirituality was related to higher school competence among a group of at-risk First Nations students from Canada. These results

are congruent with other studies that have found enculturation, biculturalism, and AI spirituality as significant factors that promoted resilience among AI college students and adolescents, as evidenced by their success in school and general well-being (Graham, 2001; Huffman, 2001; Montgomery et al., 2000).

Predictors of Resilience

Of particular interest in this study was the specific role of enculturation, self-esteem, subjective well-being, social support from family, and social support from friends in contributing to positive and resilient outcomes (i.e., academic success) that further promote resilience among urban AI adolescents. Enculturation has been defined as "the process by which individuals learn their home culture" (Little Soldier, 1985, p.185). Furthermore, enculturation is a state of being that includes the extent to which individuals identify, incorporate, and feel a sense of pride in their ethnic culture (Zimmerman et al., 1998). Enculturation is conceptualized as a multidimensional construct that primarily encompasses three global areas (i.e., participation in traditional and tribal activities, identification with culture, and traditional and tribal spirituality). Specifically, research suggests that stronger involvement in traditional culture may result in more positive and resilient outcomes.

For instance, Whitbeck et al. (2001) and Zimmerman et al. (1998) concluded that AI adolescents who valued, identified with, and participated in their culture and appeared more enculturated, also demonstrated higher self-esteem, stronger social support systems, and higher levels of academic achievement. Additionally, Yoder et al. (2006) found that lower levels of enculturation, negative life events, and perceived discrimination were

significant predictors of suicidal ideation among AI adolescents. This study further highlights the importance of culture in buffering and promoting resilience among AI adolescents despite negative life events and perceptions. Taken together, it appears that there is support for the positive impact of culture concerning AI adolescents' resilience in terms of academic success despite the findings from the Whitesell et al. (2009) study. Thus, it appears important to further explore resilience and the complex relationship between AI culture and resilience.

Another variable that is often explored involving AI resilience is self-esteem, which has been noted in the aforementioned studies. Self-esteem has been conceptualized to involve an individual's personal evaluation of one's self that includes such factors as personal approval and personal worth (Rosenberg, 1965). Positive and healthy self-esteem has often been related to perceived competence, social support, and other personal qualities that facilitate students' academic success (Whitesell et al., 2009). Moreover, in both the general population and in the AI culture(s) low self-esteem has been associated with adolescent alcohol and substance use (Radin et al., 2006). Although the relationship between self-esteem and school success has been demonstrated the opposite has been shown in other studies. Thus, the research is unclear and appears dependent on how one defines self-esteem. Furthermore, discord remains among researchers concerning the process in terms of real causal relationships and bidirectional effects versus no relationship (Baumeister, Campbell, Krueger, & Vohs, 2003).

Additionally, there are also mixed results regarding the role of self-esteem in promoting resilience among AI adolescents. Specifically, Radin et al. (2006) found that low self-esteem and high peer deviance was associated with the highest influence of

alcohol abuse among younger AI adolescents. The researchers noted that this changed over time and was not as influential among older AI adolescents. The researchers proposed that younger adolescents may be more vulnerable with lower self-esteem and more susceptible to peer influence. However, Baumeister et al. (2003) argued that low self-esteem does not appear to directly influence alcohol and substance abuse as they reiterate that longitudinal studies have primarily yielded no relationship between self-esteem and alcohol abuse. They also mentioned that while many studies found relationships between the two, other equivalent studies failed to show a relationship between self-esteem and alcohol abuse. The evidence concerning self-esteem is unclear and mixed. Therefore, further investigation is warranted.

In addition to self-esteem, social support has also been identified as a resiliency factor. According to Duran et al., (2005) social support consists of the networks that individuals have in their communities. The significant role of social support has been well documented in research. Specifically, Everall et al. (2006) found that Caucasian adolescents in who had at least one significant supportive relationship with an individual (i.e., mother, caregiver, or teacher) had less suicidal ideation, compared to participants who lacked a supportive significant relationship. Similarly, Werner and Smith (1992) found that having a close significant relationship with a parental figure, family member, or mentor was a contributing factor for adolescents who demonstrated resilience. Thus, it appears important for adolescents to have at least one significant close relationship to foster a sense of social support.

The role of social support is also significant among AI adolescents. Researchers have found that the family serves as the main part of the social support system for AI

adolescents (Belcourt-Dittloff, 2006; Brown & Robinson Kurpris, 1997; Whitbeck et al., 2001; Zimmerman et al., 1998). In particular, social support from mothers and grandmothers strongly influenced academic persistence of 991 AI female high school students in a study conducted by Bowker (1992). More recently, LaFromboise et al. (2006) found that maternal warmth and community support appeared to serve as protective factors that encouraged resilience among reservation-dwelling AI adolescents. Specifically, AI adolescents with higher levels of maternal warmth and community support appeared more resilient, as they reported less problem behaviors and academic success.

Likewise, Hobfoll et al. (2002) and Belcourt-Dittloff (2006) demonstrated that social support and communal mastery were key elements of AI resilience among adult samples. Specifically, Hofball et al. (2002) explored the impact of child emotional and physical abuse compared to sexual abuse on AIDS related outcomes. They found that AI women who encountered either type of abuse appeared at risk but that AI women who experienced emotional and physical abuse were at greater risk. However, they also confirmed that AI women with higher levels of social support and mastery demonstrated greater resilience. Although a sense of mastery was important social support played a stronger role in resilience. Therefore, it appears that positive social support from family serves as a protective factor that promotes resilience not only during adolescence but throughout the lifespan.

Social support from friends and mentors is also essential. For example, Griffin (1991) and Kimbrough, Molock, and Walton (1996) noted that social support from friends and mentors has been shown to reduce the level of discomfort among ethnic

populations on predominantly Caucasian campuses. The researchers suggested that social support may account for improvements in academic persistence. Furthermore, research specific to AI has shown that positive social support on campus has been noted as a significant predictor of academic persistence among AI college students (Brown & Robinson Kurpius, 1997; Gloria & Kurpius, 2001; Montgomery et al., 2000).

Specifically, Gloria & Kurpius (2001) found social support to be the strongest predictor of academic persistence among AI college students from a predominantly non-AI college campus, which is congruent with prior studies. After accounting for social support, comfort on campus and self-beliefs were the next predictors of academic persistence for this sample (Gloria & Kurpius, 2001). However, it should be noted that social support from family and friends was not significantly associated to academic non-persistence. The researchers suggested that AI family and friends may be supportive regardless of the AI student's academic persistence or non-persistence (Gloria & Kurpius, 2001).

Taken together, research concerning the impact of social support from family and friends concerning AI adolescent resilience is limited and even more restricted in regard to urban AI adolescents. However, Waller and Okamoto (2003) qualitatively explored 32 non-reservation dwelling AI adolescents' perceptions of substance use or resistance in the context of culture and family. The results demonstrated that participants' family (i.e., siblings and cousins in particular) played a pivotal role in the adolescent's decision to use or resist substance use given their family's cultural expectations. For instance, if a participant's sibling or cousin was against substance use the adolescent reported that s/he would not use out of respect for their sibling or cousin, which was an emerging finding.

Nevertheless, the reverse is also true. In other words, if the participant's sibling or cousin appeared to support use of the substance then s/he would use. Therefore, siblings and cousins also served as risk factors for certain participants.

Overall, these research findings are encouraging because many of the identified factors (i.e., enculturation and social support) that appear to promote resilience are all factors that AI families and communities can foster to potentially promote resilience among AI adolescents in their communities (LaFromboise et al, 2006). However, although research involving resilience among AI adolescents is increasing many questions remain unanswered.

First, it is not yet understood what accounts for why some AI adolescents in similar adverse circumstances do not demonstrate resilience while others appear able to. Second, another component not understood is how AI living in urban settings compares and contrasts to their counterparts that reside on reservations (Freedenthal & Stiffman, 2004). This issue is becoming increasingly more important due to the growing percentage of AI living in urban settings (Census, 2000; IHS, 2005; Safran, Safran, &Pirozak, 1994; Snipp, 1995). Additionally, research has shown that certain ties to AI culture appear to serve as protective factors (i.e., enculturation). Yet, a better understanding of the mechanisms through which these factors function and the various ways enculturation directly and indirectly boosts resilience for AI adolescents is needed.

Overall, a better understanding of this phenomenon referred to as cultural resilience is needed in order to promote further resilience. LaFromboise et al. (2006) suggested that future research address why some AI adolescents are more resilient than

others in similar adverse circumstances. It was also noted that investigations concerning various combinations of stressors related to gender, family, and community variables that may possibly buffer against problem behaviors and negative outcomes are also warranted. Ultimately, it is hoped that by gaining this knowledge concerning predictors of AI resilience that the information will help establish more effective prevention, intervention, and policy. In addition, this information will help identify specific needs and experiences of urban AI adolescents, which is limited in the literature at this time.

CHAPTER III

METHODOLOGY

Researcher's Experience, Worldview, and Biases

The researcher in this study identifies as an AI from the Kiowa tribe, who is pursuing a doctoral degree in Counseling Psychology on a predominately Caucasian campus. The researcher is a first generation college student that was raised in a predominately rural AI community. The researcher has conducted studies that include AI enculturation, tribal attachment, AI subjective-well being, hope among AI, and perfectionism and coping strategies among college students. During graduate training the researcher realized the limited research concerning strengths among AI and AI culture. Based on the researcher's own experiences and considering other AI students' success stories, interest grew in exploring resilience among urban AI adolescents.

Participants

Out of the 213 participants, 196 surveys were completed and were used in the study. The uncompleted surveys were excluded from analysis. To be eligible to

participate in the study, AI adolescents self-reported being enrolled in a federally recognized tribe. Therefore, participants who did not report enrollment in a federally recognized tribe were not included. Furthermore, minors (i.e., below the age of 18) were also not allowed to participate if they lacked parental permission or did not provide verbal assent.

In terms of gender, 114 (58.2%) participants were female and 82 (41.8%) were male. The participants' ages ranged from 14 to 18 years (M=16.24, SD=1.61), while 35.7% were 18 years and 23.0% were 14 years of age. In terms of educational aspirations, 175 (89.3%) reported having plans to complete high school while two (1.0%) did not plan to, and 19 (9.7%) reported don't know. Additionally, 125 (63.8%) reported having plans to attend college, 14 (7.1%) did not plan to, and 57 (29.1%) reported don't know. Other demographic information was also obtained (See Table 1).

Out of the 20 federally recognized tribes, the most well represented included Creek 65 (33.2%), Cherokee 33 (16.8%), Pawnee 23 (11.7%), Osage 18 (9.2%), Seminole 10 (5.1%), and Cheyenne and Arapaho 9 (4.6%). Other tribes or nations less represented included Sac & Fox 6 (3.1%), Comanche 4 (2.0%), Kiowa 4 (2.0%), Ponca 4 (2.0%), Navajo 4 (2.0%), Absentee-Shawnee 3 (1.5%), United Keetoowah Band of the Cherokee 3 (1.5%), Choctaw 2 (1.0%), Iowa 2 (1.0%), Sioux 2 (1.0%), Chickasaw 1 (0.5%), Kaw 1 (0.5%), Wichita 1 (0.5%), and Otoe-Missouria 1 (0.5%). Additionally, 105 (53.6%) participants expressed representing only one tribe or nation while 91 (46.4%) indicated being more than one tribe or nation.

Materials and Procedures

This study was approved by the Oklahoma State University (OSU) Institutional Review Board (IRB) and by the AI agency and community advisory board. AI adolescents were recruited by the researcher via purposive sampling procedures and with the support and assistance of the AI agency and community. The sample size was determined using the following four input parameters: .05 alpha level, 4 predictors, .15 anticipated medium effect size, and .80 desired statistical power (Cohen, 2003). Recruitment efforts occurred in the following ways: letters mailed to parents through AI education programs, flyers placed at the AI agency (See Appendix B), AI agency related community gatherings, and local AI traditional dances (i.e., pow-wows). However, a majority of the data were collected at local AI pow-wows.

Participants were administered a battery of inventories that gathered demographic information, level of enculturation, level of self-esteem, level of subjective well-being, adolescents' perceptions of social support from family and friends, and level of resilience. A few qualitative responses were also collected on the demographic sheet based on the request of the AI agency but were not included in this study. Participation was strictly voluntary. The parental permission form described the costs and benefits of participation. Parental consent and adolescent verbal assent was obtained (See Appendices C-D). In addition, participants were each given a \$15.00 gift card from a national discount store for their participation.

Measures

The following measures were all approved by the AI agency. Some measures were approved without changes while others were modified by request of the AI agency

due to their concerns regarding appropriateness and fit of specific measures with an urban sample of AI adolescents. Additionally, it should also be noted that the term "Indian" was preferred by the AI agency and community. Therefore, in accordance to the CBPR model and in fostering cultural competent research the term Indian was used in applicable measures.

Native American Community Health Survey: Youth (NACHSY). The NACHSY (modified from Johnson et al., 2007) consists of 31-items that included closed and openended questions. This survey was constructed by a collaborative team of researchers from the University of Oklahoma and by the AI agency's community advisory board that consists of AI professionals, elders, parents, youth, and other community members interested in developing programs for their AI community. The NACHSY went through several revisions until there was agreement among all partners. Further revisions were made following the pilot study. Additional items were added due to the feedback gained by the advisory board. The NACHSY assesses information about demographics, physical health, behavioral health, wellness, community services, and social support.

For the purposes of this study the measure was adapted to 11-items that reflected demographic information, behavioral health, help seeking behaviors, community services, and social support. Additional questions were also added to assess federal enrollment status, tribal affiliation(s), and social support. Sample items include: "Do you currently or have you in the past, had any issues/concerns that you think might be related to your emotional health, such as difficulties with your feelings or thinking?" and "Did you seek help for emotional health issues or concerns? If so please list the sources you received helped from (Examples- parent, doctor, Indian or tribal services, ceremonies)".

Further, the qualitative responses were not used in this study but were collected by request of the AI agency. The NACHSY is an appropriate measure for the purposes of this study as it adheres to the CBPR model; established approval after appropriate revisions were made by the board created by the AI agency and community and endured a pilot study.

American Indian Enculturation Scale (AIES). The AIES (modified from Winterowd et al., 2008) was initially a 16-item measure developed by a team of researchers that included some AI team members. In depth interviews were also conducted to gain a better understanding of the role of traditional ways (i.e., traditional customs and practices) of AI college students' success in a college setting. Success was demonstrated by students who had remained in college and were graduating that semester or near graduation. The items that emerged were based on both professional and personal experiences of the research team members in conjunction with literature pertaining to AI issues. After results were obtained from the initial study, one item was added based on commonalities among the AI sample.

The current AIES is a 17-item measure that assesses level of enculturation among AI by examining level of participation in traditional behaviors, practices, and spiritual components of AI culture. The measure assesses participation in AI traditional, tribal, and community activities using a 7-point Likert scale that ranged from 1 (*not at all like me*) to 7 (*a great deal like me*). Sample items include: "Attend Indian church?", "Seek help from Elders?", and "Attend Indian dances?" Due to the characteristics of the participants and based on the request by the AI agency and community board, four items were added to this measure. Specifically, these items were: "Use Indian humor or slang?", "Look at

things from an Indian worldview or perspective?", "If you do not have access to Indian events or activities would you participate if those resources were available?", and "Are you proud to be Indian?" Additionally, a few concrete examples were added to some questions based on feedback provided by the AI agency and community board due to a concern that adolescent participants would be confused by some items. Some examples of the concrete items added include: "Sundance, spiritual advisor, and medicine man". In the current study the Cronbach's alpha coefficient concerning the first 17-items was .92. After four items were added the Cronbach's alpha coefficient was .93.

Further, the AIES is an appropriate measure for enculturation, as it was developed by researchers that included their personal and professional experiences as AI researchers and was based upon commonalities found to exist among a group of AI sampled in a previous qualitative study (Montgomery et al., 2000). In addition, the use of the AIES with AI adults in clinical and non-clinical samples has been supported by principal component analysis which provided evidence of construct validity (Winterowd et al., 2008). Cronbach's alpha coefficient of .91 was obtained for the clinical sample and Cronbach's alpha coefficient of .90 was obtained across two non-clinical samples that demonstrated the scale's internal consistency. This scale was not used among AI adolescents prior to this study. However, in the current study the Cronbach's alpha coefficient was .93, which demonstrated strong internal consistency (Nunnally, 1978).

Tri-Ethnic Center's Self-Esteem Scale (TECSES). The TECSES (modified from Oetting & Beauvais, 1990/1991) was used to assess self-esteem by selecting 12-items that are appropriate for the purposes of this study. The item scores ranged from 1 (most of the time), 3 (none of the time), to 9 (don't know/refused). This measure assesses different

aspects of self-esteem (i.e., self-worth, perceived competence, and positive image to others). Sample items include: "Are you proud of yourself?" and "Do other people your age like to be with you?" The items selected from the TECSES appeared suitable, as it has been validated among underrepresented ethnic adolescents that include AI adolescents. In addition, construct validity was supported and the Cronbach's alpha coefficient for this scale was .77, in a study that involved AI adolescents in which the selected items were used (Thrane, Whitbeck, Hoyt, & Shelley, 2004). In the current study the Cronbach's alpha coefficient was .85.

Satisfaction With Life Scale (SWLS). The SWLS (Diener, Emmons, Larsen, & Griffin, 1985) was used to measure subjective well-being. This scale appears to be one of the most common ways to measure subjective well-being by assessing the individual's global life satisfaction (Diener, Suh, & Oishi, 1997). The SWLS consists of cognitive components of subjective well-being and does not assess positive affect. The SWLS consists of 5-Likert items. The scores ranged from 1 (strongly disagree) to 7 (strongly agree). Sample items include: "In most ways my life is close to my ideal" and "I am satisfied with my life".

The SWLS has been shown to be a reliable and valid measure of global life satisfaction. This measure has been shown to be suitable for a wide range of age groups and has been extensively used in a variety of applications (Diener et al., 1997; Pavot & Diener, 1993). The SWLS demonstrated strong internal reliability with a Cronbach's alpha coefficient of .87 and a two month test-retest stability coefficient of .82 (Diener et al., 1985). Similarly, Pavot, Diener, Colvin, and Sandvik (1991) demonstrated good

internal reliability with a Cronbach's alpha coefficient of .85 and a one month test-retest stability coefficient of .84.

Additionally, Diener et al. (1985) provided evidence on the convergent validity of the SWLS with other measures of life satisfaction (i.e., *Andrews/Withey Scale* coefficient of .68 and *Fordyce Global Scale* with a coefficient of .82) while Pavot and Diener (1991) demonstrated convergent validity with the *Fordyce Global Scale* with a coefficient of .45. Additionally, the SWLS demonstrated a negative relationship with measures of emotional distress. The SWLS has also shown discriminant validity in individual differences of participants (i.e., impulsivity) as unrelated with the SWLS (Pavot & Diener, 1993). The SWLS has been successfully utilized with AI samples (Winterowd et al., 2007). Furthermore, in the current study the Cronbach's alpha coefficient was .89, which demonstrated strong internal consistency (Nunnally, 1978).

Perceived Social Support from Family (PSS-Fa) and Perceived Social Support from Friends (PSS-Fr). The PSS-Fa and PSS-Fr (Procidano & Heller, 1983) was used to measure social support from family and friends. The PSS-Fa and PSS-Fr scales consist of 20-items each with statements that assess an individual's perceptions of social support from family and friends. These scales consists of declarative statements to which the participant would endorse a "yes, no, or don't know" response. The scores ranged from 0 (no perceived social support) to 20 (maximum level of perceived social support).

Sample items from both family and friends forms include: "Most other people are closer to their family than I am", "I rely on my family for emotional support", "My friends give me moral support I need", and "My friends are sensitive to my personal

needs". This scale has evidenced high internal consistency, with a Cronbach's alpha coefficient of .90. The final Cronbach's alpha coefficients ranged from .88 to .91 for PSS-Fa and .84 to .90 for PSS-Fr. The test-retest coefficient for a period of time of over one month was .83 (Procidano & Heller, 1983).

Both scales also demonstrated good concurrent validity and are correlated with social competence and psychological distress. The scale also has strong construct validity across three samples of undergraduate students with a Cronbach's alpha coefficient of .92 for PSS-Fa and .89 for PSS-Fr (Procidano & Heller, 1983). However, the gender and ethnicity of the students were not reported. Therefore, specific psychometric information concerning AI is not known. However, in the current study the Cronbach's alpha coefficient for both the social support from family and social support from friends scales evidenced .89, which demonstrated high internal consistency among this sample (Nunnally, 1978).

Resilience. For the purposes of this study resilience was measured as a multidimensional construct assessed with similar variables utilized in the studies by LaFromboise et al. (2006) and Whitesell et al. (2009). Therefore, resilience was assessed by a self-report survey that consisted of 11-items specific to school involvement based on the following areas: attitudes toward school, academic plans, and current academic grades. The survey consisted of 8-items and scores ranged from 1 (none of the time) to 5 (always). Sample items include: "How often do you like school?", "Is it important for you to make good grades?" and "How often are you not in trouble at school?"

In addition, two questions assessed academic plans that included their plans to graduate high school and attend college. This information is categorical and responses included either "yes, no, or don't know" responses. In conclusion, current grades were also measured based on a Likert-type scale that ranged from 1 to 5. Sample responses included: "above average, average, and very poorly". A numerical range for each grade description was not provided. The Cronbach's alpha coefficient in the current study was .80. Thus, it appears this measure was a reliable instrument that demonstrated internal consistency (Nunnally, 1978).

Research Design and Statistical Procedures

It is imperative to note that this study has been designed to utilize CBPR. In accordance with conducting culturally competent research the feedback gained through the CBPR model was instrumental in assisting with developing, collecting, analyzing, and interpreting results. The AI agency and community board reviewed and provided feedback concerning the research methodology based on their professional and personal experiences of being AI and/or being knowledgeable of the AI issues under investigation. Specific AI issues within their community were also considered.

Analyses

This investigation was designed as a correlational study to determine factors that assist in predicting degree of resilience among AI adolescents. Upon completion of data collection, responses to research questions were analyzed using SPSS 17.0 software, as correlations and regressions were computed and analyzed. The following includes a list of research questions with their corresponding statistical procedures:

- Is there a relationship between enculturation and resilience?
 Correlations were analyzed to determine the relationship between enculturation and resilience.
- 2) To what extent does level of enculturation predict resilience?
 A simple linear regression was analyzed to determine significant variance between the predictor and the criterion variable. Enculturation was entered as the predictor variable and resilience was entered as the criterion variable.
- Is there a relationship between enculturation, self-esteem, social support from family, social support from friends, and resilience?
 Correlations were analyzed to determine the relationships between enculturation, self-esteem, social support from family, social support from friends, and resilience.
- 4) To what extent does level of enculturation, self-esteem, social support from family, and social support from friends predict resilience?

 A standard multiple regression was analyzed to determine significant variance between the predictors and criterion variable. Enculturation, self-esteem, and social support from family, and social support from friends were entered as the predictor variables while *resilience* was entered as the criterion variable.
- 5) Is there a relationship between enculturation, subjective well-being, social support from family, social support from friends, and resilience?

Correlations were analyzed to determine the relationships between enculturation, subjective well-being, social support from family, social support from friends, and resilience.

6) To what extent does level of enculturation, subjective well-being, social support from family, and social support from friends predict resilience?
A standard multiple regression was analyzed to determine significant variance between the predictors and criterion variable. Enculturation, subjective well-being, social support from family, and social support from friends were entered as the predictor variables while *resilience* was entered as the criterion variable.

CHAPTER IV

RESULTS

Prior to analysis, data were reviewed and examined for data-entry errors, incomplete surveys, normal distribution, and outliers. Due to the design of the self-esteem measure TECSES the "don't know/refused" responses were considered missing data. The pairwise deletion method in SPSS was used to handle missing values. Thus, the "don't now/refused" cases were deleted for the self-esteem variable, which lowered n (i.e., self-esteem n=159, all other variables N=196). The frequency of missing data for the TECSES scale was 37 (18.9%). The internal-consistency computed for the TECSES scale yielded adequate reliability with a Cronbach's alpha coefficient of .85.

Preliminary data analysis included a computation of means, standard deviations, and correlations for the scales that were administered. Reliability analysis was conducted in order to determine the Cronbach's alpha coefficients for each measure (See Table 2). Correlation and regression analyses were conducted to answer the research questions posited in this study. It should be noted that high scores were desirable for all study variables with the exception of self-esteem. On the self-esteem measure low scores

demonstrated higher self-esteem and were desirable, which resulted in negative relationships. All study variables were initially investigated using the Pearson product-moment correlation coefficient. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, and homoscedasticity.

The Pearson bivariate correlation coefficients tended to reach statistical significance. However, most correlations were small and medium. Results demonstrated a small, positive relationship between enculturation and resilience [r=.26, p<.01], with higher levels of enculturation associated with higher levels of resilience. About 7 % of the variance in urban AI adolescent scores was common to these two variables. Additionally, correlations between level of enculturation, self-esteem, subjective well-being, social support from family, social support from friends, and resilience also reached statistical significance. Notably, results demonstrated a large, negative relationship between self-esteem and subjective well-being [r=-.50, p<.01]. As previously mentioned, a negative relationship concerning self-esteem was desirable as low scores reflect higher self-esteem. Thus, higher levels of self-esteem tended to be related to higher levels of subjective well-being. These two variables shared 25% of the variance based on the squared coefficient of determination.

Furthermore, a moderate, positive relationship between social support from friends and resilience was demonstrated, suggesting that the increase in level of social support from friends was also associated with an increase in level of resilience [r=.48, p<.01, 23% shared variability]. There was also a moderate, positive relationship found between subjective well-being and resilience [r=.47, p<.01, 22% shared variability]. A negative, moderate relationship was associated with self-esteem and social support from

family [r=-.44, p<.01, 19% shared variability] and between self-esteem and resilience [r=-.38, p<.01, 14% shared variability]. Recall that a negative relationship in regard to the self-esteem measure was desirable, as lower scores reflected higher self-esteem.

Therefore, higher levels of self-esteem were also associated with higher levels of social support from friends and higher levels of resilience (See Table 2).

Additional preliminary analyses were conducted to ensure no violation of the assumptions of multicollinearity, normality, linearity, homoscedasticity, and independence of residuals. During the next phase of data analyses, three separate standard multiple regressions were conducted to determine the amount of variance in resilience that could be accounted for by 1) enculturation alone, 2) by enculturation, self-esteem, social support from family, and social support from friends, and by 3) enculturation, subjective well-being, social support from family, and social support from friends. Thus, resilience was regressed on enculturation, self-esteem, subjective well-being, social support from family, and social support from friends. As shown in Table 3, the results concerning the first regression demonstrated that the predictor variable enculturation only accounted for 7% of the total variance in resilience [F (1,194) =13.83; p<.001].

The second regression examining resilience with the predictor variables indicated that, taken together, enculturation, self-esteem, social support from family, and social support from friends explained 33% of the variance in AI adolescents resilience scores [F (4,154) =18.65; p<.001]. When each predictor was assessed individually, three tests of the partial regression coefficients reached statistical significance for self-esteem (t=-2.30; p<.023), social support from family (t=2.44; p<.016), and social support from friends (t=4.76; p<.001), while enculturation did not appear as a significant predictor.

However, social support from friends (b=.34) was a stronger predictor of AI adolescents' resilience scores than self-esteem (b=-.17) and social support from family (b=.19). Thus, these results indicated that self-esteem, social support from family, and social support from friends served as significant predictors that demonstrated a significant unique contribution to the prediction of resilience scores among urban AI adolescents. Yet, social support from friends appeared as the strongest predictor, which reflected the strongest unique contribution (See Table 4).

The third regression, with the predictor variables enculturation, subjective well-being, social support from family, and social support from friends results indicated that 34% of the variance in AI adolescents' resilience scores were accounted for [F (4,191) =24.92; p< .001]. After each predictor was assessed individually, two tests of the partial regression coefficients reached statistical significance for subjective well-being (t=3.40; p< .001) and social support from friends (t=4.83; p< .001) while enculturation and social support from family were not statistically significant.

Nonetheless, social support from friends (b=.31) was a stronger predictor of AI adolescents' resilience scores than subjective well-being (b=.25). Therefore, these results indicated that both subjective well-being and social support from friends were significant predictors of resilience scores among urban AI adolescents. As shown in Table 5, social support from friends was a stronger predictor and demonstrated the strongest significant unique contribution that accounted for resilience, among all predictor variables.

CHAPTER V

DISCUSSION

Summary

The goal of this study was to explore resilience among urban AI adolescents. Of particular interest was to examine the role of culture among other variables in identifying protective factors that support resilience among urban AI adolescents. Specifically, the purpose was to shed light on such questions concerning if there is something unique and resilient about identifying and being more enculturated with AI culture and traditions, that served as sources of strength against high risks and adversity for urban AI adolescents. Previous research has demonstrated that certain aspects of AI culture (i.e., enculturation) have served as a protective factor, which resulted in resilient outcomes such as higher level of school competence, academic achievement, and abstinence from alcohol among AI adolescents (Yoder et al., 2006).

Results concerning the simple linear regression demonstrated that enculturation

served as a statistically significant predictor of resilience and accounted for 7% of the total variance in resilience. Further, when other predictors were added, in two standard multiple regressions the results evidenced, that the predictor variables enculturation, self-esteem, social support from family, and social support from friends explained 33% of the variance in urban AI adolescents' resilience scores while the predictor variables enculturation, subjective well-being, social support from family, and social support from friends accounted for 34% of the variance in resilience.

However, when each predictor was assessed individually only the predictor variables self-esteem, social support from family, and social support from friends reached statistical significance, while enculturation did not appear as a significant predictor in the first standard multiple regression. In other words, urban AI adolescents' with higher levels of self-esteem, social support from family, and social support from friends were more likely to have higher resilience scores described as higher school involvement, positive attitude towards school, and academic achievement based on grades.

Additionally, when the predictor variable self-esteem was removed and replaced by the predictor variable subjective well-being in the second standard multiple regression, after each predictor was independently assessed only subjective well-being and social support from friends appeared statistically significant. In other words, urban AI adolescents who perceived having higher levels of subjective well-being and social support from their friends also demonstrated higher levels of resilience. However, when each predictor was assessed individually, social support from friends appeared as the strongest predictor of AI adolescents' resilience in both multiple regression analyses.

Thus, out of all of the aforementioned variables, social support from friends continued to

play a crucial role in predicting resilience among urban AI adolescents, as it remained the strongest predictor.

There are commonalties and differences between the results of the current study and in regard to previous research. First of all, enculturation appeared to serve as a protective factor for urban AI adolescents. In other words, urban AI adolescents with higher levels of enculturation that included AI identification and participation in traditional ways, values etc., also demonstrated higher resilience scores. Resilience was defined by each participant's level of school involvement, attitudes towards school, and academic grades. Information concerning plans to complete high school and attend college was also included. The aforementioned criteria have often been used to capture AI resilience by many authorities (Huffman, 2001; LaFromboise et al., 2006; Montgomery et al., 2000; Powers, 2006).

It is not too surprising that a positive relationship between enculturation and resilience demonstrated in this study is consistent with previous research, which has demonstrated positive relationships between enculturation and resilience among AI adults, reservation-dwelling AI adolescents, and AI college students (Belcourt-Dittloft, 2006; Bergstrom et al., 2003; Huffman, 2001; LaFromboise et al., 2006; Montgomery et al., 2000; Powers, 2006; Resnick et. al., 1997). However, it appears that the process of enculturation may operate differently among urban AI adolescents. Specifically, although a positive impact of enculturation among urban AI adolescents in the current study was found, the effect was not as strong when compared to previous research. Moreover, enculturation was not the strongest predictor when considering other variables, which highlights a unique difference among urban AI adolescents. For example, LaFromboise et

al. (2006) explored family, community, and school influences on resilience among reservation-dwelling AI adolescents and found enculturation as the strongest predictor of resilience. Thus, this study highlights the differences concerning previous work with reservation-dwelling AI adolescents.

Specifically, in the current study enculturation was positively associated with resilience but the effect was small and when other predictors (i.e., self-esteem, subjective well-being, social support from family, and social support from friends) were added into the equation, enculturation no longer served as a statistically significant predictor.

Instead, the other variables served as significant predictors while social support from friends in two separate standard multiple regressions appeared as the strongest predictor that made a significant unique contribution to urban AI adolescents' resilience scores.

It is plausible that the role of enculturation among urban AI adolescents is different due to limited access to the AI community and limited resources provided in urban settings, which also limits the role of enculturation as a potential strength. For instance, Stiffman et al. (2007) explored personal, familial, and environmental strengths among 401 reservation-dwelling and urban AI adolescents. The researchers noted that urban AI adolescents provided less positive tribal strengths, compared to their reservation-dwelling counterparts. According to the reservation advisors associated with this study, this phenomenon likely resulted from the greater prominence of the tribal community and accessible resources available in reservation settings. Thus, they mentioned that the absence of positive tribal strengths could be due to a limited perception of tribal strengths, as urban AI adolescents may not encounter positive tribal

strengths in their daily lives compared to the experiences of reservation-dwelling AI adolescents.

Furthermore, this finding in the current study does not suggest that urban AI adolescents are not interested in AI culture or traditions. In fact, in a recent study by House et al. (2006) 40% of urban AI adolescents reported that the most important aspects of their AI identity and culture included AI traditions, rituals, and ceremonies while about 46% shared being most proud of the aforementioned. Thus, it seems reasonable that urban AI adolescents value AI traditions and culture but may not be unable to regularly engage in those traditions and customs due to the limitations that exist in urban areas.

Similarly, past research has shown that families who have relocated to urban settings tend to report feeling isolated from tribal social support systems and resources that naturally exist in tribal communities (i.e., reservation settings), which further highlights special challenges for AI living in urban settings (Huang & Gibbs, 1992). Additionally, it is quite probable that urban AI adolescents find themselves wedged in between two cultures (i.e., mainstream and AI culture) and may have more difficulty benefiting from either one. For instance, Oetting and Beauvois (1990-1991) discussed the tendency for AI adolescents' who lack identification to either AI culture or mainstream culture to be at greater risk for failure at school, which demonstrated consequences of not identifying with a cultural group.

Another consideration in regard to enculturation, relates to how enculturation was measured. The AIES was used to assess enculturation and although items were added based on the request of the AI agency and board, the scale may not fully encapsulate the

complexities involved in the process of enculturation among urban AI adolescents. Particularly, many items on the measure are behavioral (i.e., attend pow-wows). Thus, it is possible that for urban AI adolescents, this specific measure of enculturation limited their scores due to limited access to AI cultural events and opportunities found in urban settings. Additionally, researchers are still attempting to figure out how to best describe and assess enculturation, culture, and ethnicity due to the difficulties associated with these constructs (House et al., 2006). This process appears even more difficult when exploring the role of enculturation among urban AI adolescents and warrants further investigation.

Finally, it is also possible that the weak relationship between enculturation and resilience in this study may be due to the manner in which resilience was classified. For example, Whitesell et al. (2009) explained that their results concerning no relationship between AI identity and academic success could be due to problems with their measure. Thus, it is possible that the measure used in the current study may have not sufficiently reflected the process of enculturation on resilience among urban AI adolescents.

In addition to the predictor enculturation, self-esteem, social support from family, and social support from friends served as significant predictors that accounted for 33% of the variance in resilience while enculturation, subjective well-being, social support from family, and social support from friends, explained 34% of the variance in resilience. However, as previously mentioned when the predictors were examined independently enculturation did not appear significant and social support from family was not significant in the last regression. This demonstrates another difference found when compared to previous research by Whitbeck et al. (2001), Whitesell et al. (2009), and

Zimmerman et al. (1998) who demonstrated that AI adolescents who identified with, valued their culture, and participated in traditional activities, also demonstrated higher levels of enculturation, higher self-esteem, stronger social support systems, and higher levels of academic achievement (i.e., resilience).

Nonetheless, self-esteem did appear as a critical aspect of urban AI adolescents' resilience. Specifically, a large significant relationship was evidenced and self-esteem did contribute to the prediction of urban AI adolescents' resilience. This appears consistent with Whitesell et al. (2009) longitudinal study that involved 1,611 reservation-dwelling AI adolescents. In their study they found that self-esteem was strongly and positively related to academic success. Thus, the impact of positive self-esteem concerning resilience appears important for urban and reservation-dwelling AI adolescents.

Additionally, social support appears significant among AI adolescents and is well documented in the research literature. Specifically, researchers have demonstrated that family serves as a principal component of social support for AI adolescents (Belcourt-Dittloff, 2006; Brown & Robinson Kurpris, 1997; Whitbeck et al., 2001; Zimmerman et al., 1998). In particular, social support from mothers and grandmothers strongly influenced academic persistence of 991 AI female high school students (Bowker, 1992). Similarly, LaFromboise et al. (2006) demonstrated that AI adolescents with higher levels of maternal warmth and community support appeared more resilient evidenced by less problem behaviors and academic success. Additionally, social support from friends and mentors is also vital. For example, Gloria & Kurpius (2001) found social support to be the strongest predictor of academic persistence among AI college students from a predominantly non-AI college campus.

Although some of the results in the current study appear consistent with previous research an interesting finding emerged in regard to the impact of social support from friends. As previously mentioned, self-esteem, subjective well-being, social support from family, and social support from friends all appeared as significant predictors of resilience. However, when examining the results of both standard multiple regressions, social support from friends served as the strongest significant predictor, when assessing the predictors individually. Thus, social support from friends made the strongest significant unique contribution that accounted for resilience.

Therefore, although the other variables also served as predictors it was the predictor social support from friends that played the largest role that accounted for the variance in resilience. In other words, urban AI adolescents with higher levels of social support from friends also demonstrated higher resilience scores. At surface level, this finding is not unexpected when considering the importance of friends during adolescence but it is interesting that out of all the predictors social support from friends appeared the strongest. This finding highlights the significant and unique role of friends among urban AI adolescents because based on much of the previous research the strongest predictors tend to be enculturation and social support from family.

These results are consistent with Stiffman et al. (2007) research that involved both urban and reservation-dwelling AI adolescents. Particularly, the results revealed that urban AI adolescents were twice as likely to list their friends and school as strengths, while reservation-dwelling AI adolescents were more likely to rate tribal cultural activities, as strengths. Furthermore, one in two urban AI adolescents reported being unable to identify what was best about their tribal community although tribal cultural

activities were valued. It seems plausible that urban AI adolescents may seem removed from their cultural community based on the limitations in urban settings. Notably, the tribal community is not as prominent or strong in urban areas. There are also limited tribal resources and cultural opportunities for urban AI adolescents to participate in and feel a sense of belonging to. All of these factors likely contribute to the importance of social support from friends among urban AI adolescents.

Limitations

While this study helped paint a picture of the experiences of urban AI adolescents in terms of their enculturation, self-esteem, subjective well-being, social support from family, and social support from friends on resilience concerning school involvement, school attitudes, academic grades, plans to graduate high school and attend college, it was exploratory in nature and due to the correlational design causality cannot be inferred. Also, the quantitative method of this study could not sufficiently explain the complexities that exist concerning the aforementioned variables or accurately represent how urban AI adolescents experience their culture.

Thus, exploratory efforts were made to shed light on how culture, self-esteem, subjective well-being, and social support from family and friends may benefit urban AI adolescents' resilience. Further, there are also limitations in terms of the information obtained. For example, some demographic information was not collected in regard to their socioeconomic status, whether or not they have always lived in an urban setting vs. rural or reservation setting, their spiritual or religious preferences, sexual orientation,

parents and familial educational history, what type of school system the participants' attend, and what type of college they would like to attend.

This study also did not account for urban AI adolescents who were not enrolled with a federally recognized tribe. Thus, urban AI adolescents who were not enrolled members or who had state recognition only were not included in the study. Additionally, the manner in which participants were recruited could have impacted the results and may serve as a limitation. Specifically, a community-based participatory research model was used and all of the urban AI adolescents were associated with one specific AI agency. Thus, these participants appeared to utilize the AI agency's services and were present at cultural events. Therefore, it is plausible that the participants did demonstrate as a more resilient sample.

Furthermore, this study was based only on self-report measures. Tribal enrollment and academic status verification was not gathered. These types of limitations do not appear specific to this study, as a majority of survey research utilizes subjective accounts by the respondents. However, caution is warranted when interpreting the results due to the sole dependence of self-report provided by the urban AI adolescents. Similarly, the recruited participants had to obtain parental permission from parents or guardians and although they were informed that their responses in the questionnaires would be anonymous to ensure confidentiality, perhaps participants were influenced by the extent their parents or guardians were involved in the research process. Thus, parental or guardian influence(s) may have impacted how participants endorsed items. Another consideration is the fact that the participants recruited all had parents or guardians who were available and agreed to their research participation, which could have affected the

results. Additionally, due to the design of the self-esteem measure "don't know/refused" responses were considered missing values and the pairwise deletion method was used, which lowered n from 196 to 159 on the self-esteem variable. This could have also influenced the results by potentially limiting the effect size concerning the correlations and regressions.

Moreover, the selection bias that exists in the sample warrants consideration before making conclusions concerning the results. For instance, the sample of interest included urban AI adolescents only; the sample was only recruited from one urban area and although the sample appeared representative of the South Central region of the U. S., only 20 federally recognized tribes were represented. Therefore, this study may lack generalizability to other AI adolescents of other tribes or nations in urban areas outside of this region. Moreover, the sample was quite small considering that there are more than 550 federally recognized tribes that exist in the U. S. and the findings do not necessarily apply to other AI adolescents (U.S. Department of Health & Human Services, 2001).

Therefore, replication is warranted in order to determine whether or not the results are unique to the sample. Also, there are limitations concerning potential comparisons of the results to other ethnic populations, as the sample only included urban AI adolescents who self-identified being enrolled in a federally recognized tribe. Given these limitations, these findings provide insight into the experiences of urban AI adolescents and demonstrated specific significant protective factors that fostered resilience.

Implications and Conclusions

This study extends the literature by investigating from a culturally informed manner the resilient and related experiences of urban AI adolescents. This is critical as most research involving AI adolescents is limited to reservation-dwelling AI despite the fact that 57% of the AI population currently resides in urban settings (IHS, 2005; U. S. Census, 2000). Additionally, it has been noted that AI adolescents are increasingly more likely to be raised in urban areas, which has contributed to positive and negative consequences (Safran, Safran, and Pirozak, 1994; Snipp, 1995). For instance, although urban AI seem to struggle less with some issues (i.e., poverty) specific to reservation-dwelling AI, urban AI experience unique and specific sets of challenges due to urbanization (Huang & Gibbs, 1992; Powers et al., 2006; Snipp, 1995). Moreover, researchers have documented risk factors related to a lack of cultural connection and an increase in suicide rates among urban AI adolescents (Freedenthal & Stiffman, 2004; Johnson & Tomren, 1999).

Therefore, this study advances resilience research among urban AI adolescents by identifying protective factors that significantly contribute to their resilience and also demonstrated the unique and strong influence of social support from friends. This study also generally supports previous research that has highlighted how cultural, personal, environmental, and familial factors contribute to AI adolescents' resilience. Furthermore, what is most promising about the results is that the predictors (i.e., enculturation, self-esteem, subjective well-being, social support from family, and social support from friends) identified to promote resilience among urban AI adolescents are all factors that are each within the domain that tribes or nations, AI agencies, families, teachers, school systems, mental health professionals, and community organizations can directly

influence. It seems likely and encouraging that at risk urban AI adolescents could benefit from specific strategies and programs geared toward increasing enculturation, self-esteem, subjective well-being, social support from family, and social support from friends in particular.

Furthermore, although resilience was narrowly defined in terms of involvement in school, attitudes towards school, academic grades, and plans to complete high school and attend college, previous research has well documented that AI adolescents appear at a greater risk for school dropout. Specifically, in a recent report the graduation rates among AI on average was 46%, which was lower than graduation rates for all racial and ethnic groups that included Caucasian (69.8%), Asians (77.9%), African American (54.7%), and Hispanics (50.8%) (Faircloth & Tippeconnic, 2010). Therefore, AI adolescents who demonstrate resilience through greater involvement in school, positive attitudes towards school, higher academic grades, and have plans to complete high school and attend college in deed appear quite resilient when considering the aforementioned statistics.

Overall, the results from this study demonstrated specific predictors that serve as protective factors that contributed to resilience among urban AI adolescents. These results have practical implications and could potentially be useful in helping to bridge the gap in educational achievement among AI adolescents. Specifically, urban public school systems could play a crucial role in providing urban AI adolescents with an important source of social and cultural support, which could promote resilience and improve graduation rates if school systems improved conditions to maximize school success for urban AI adolescents. It appears that for many reservation-dwelling AI tribal resources are readily available in their tribal communities, which helps provide them strength.

However, urban AI adolescents are in a setting with limited tribal resources and limited presence of their tribal community due to urbanization. Thus, urban AI adolescents lack sources of cultural strength that would be naturally found within their tribal communities and it seems the urban AI adolescents rely heavily on social support from friends. Thus, due to the fact that urban AI adolescents spend a majority of their time at school, it appears particularly important that the school systems attempt to implement tribal programs and activities and provide social opportunities in order to raise educational outcomes and resilience among urban AI adolescents.

Faircloth and Tippeconnic (2010) stated:

Children and youth hold the key to the social, economic, and cultural survival of the American Indian and Alaska Native population in the United States. Failure to ensure that Native youth graduate from high school places the entire population at risk. (p. 21)

Additionally, tribal communities within urban settings could increase the visibility of tribal and cultural programs to help promote utilization of their services. Also, additional tribal and cultural resources within urban settings are needed in order to reach out to more urban AI adolescents and families to further promote resilience among urban AI adolescents. Perhaps tribal communities and school systems in urban settings could build liaisons with each other to help urban AI adolescents obtain services. With additional resources, increased efforts geared towards increasing visibility and access to services, and with collaboration between tribal communities and school systems it is hoped that more urban AI adolescents could be positively impacted.

Finally, there are also relevant clinical implications concerning the results. This study although exploratory in nature, did identify significant predictors of resilience among urban AI adolescents. Specifically, enculturation, self-esteem, subjective well-being, social support from family, and social support from friends each appear to represent positive cultural, personal, familial, and environmental influences. Therefore, it appears reasonable to expect that for AI agencies, tribal communities, and mental health professionals working with urban AI adolescents, AI families, or urban AI adolescent clients that they could explore the aforementioned influences and work with them to increase the positive impact of each factor in their lives.

For instance, Clark and Witko (2006) discussed current treatment modalities that appear beneficial given the specific challenges and struggles that urban AI adolescents encounter. These treatment modalities include youth camps, group exercises, individual and family therapy, and traditional medicine, which all appear consistent with the current findings and represent aspects of the variables that served as predictors of resilience (i.e., enculturation and social support from friends). Thus, it seems these specific treatment modalities warrant consideration and would likely be very useful when working with urban AI adolescents.

Future Research

Although this study shed light on some experiences of urban AI adolescents it was exploratory. However, the findings are very encouraging and demonstrate the importance of additional research that investigates resilience and the related needs among urban AI adolescents. Furthermore, based on the concerns and recommendations raised

by Faircloth and Tippeconnic (2010) additional research is warranted geared toward improving educational outcomes of AI adolescents. Perhaps focusing on how culture can positively impact school success would be advantageous. Additionally, these results merit replication in order to determine whether or not they are unique to the specific sample. Therefore, it would be beneficial to extend this study to include samples from other urban AI adolescents who reside in urban areas outside the South Central region of the U.S., to include reservation-dwelling and rural AI adolescents, and non-AI adolescents. It may also be beneficial to use an alternative self-esteem measure to determine whether the effect would be larger.

As previously mentioned resilience was narrowly defined and reflected only one aspect related to positive developmental outcomes for adolescents. Resilience is a very multidimensional construct and difficult to assess. As a result, research aimed at improving the measurement of resilience is necessary. Another consideration is the potential benefits of broadening resilience measures, as it is much needed and would be quite valuable in increasing the understanding of some of the questions that remain and for preventative efforts. Also, another variable to consider is the role of spirituality. Previous research has shown that spirituality is positively associated with resilience among AI (Garroutte et al., 2003) and among First Nations adolescents (Graham, 2001). However, spirituality was not included in the current study but it seems important to add and further explore in future resilience research among urban AI adolescents. Another way to broaden this measurement would be to include parent and teacher reports that include direct observations of resilience and cultural involvement among urban AI adolescents.

Furthermore, social support from friends played a critical role in urban AI adolescents' demonstration of resilience. In the current study, no information beyond level of social support from friends was gathered. However, given the results it appears that additional information about their friendships (i.e., who their friends are and what their friends mean to them) could be useful in better understanding the results and experiences of urban AI adolescents. For example, perhaps their friends are comprised of mostly other AI adolescents. If this was the case, more support for enculturation and culture regarding resilience among urban AI adolescents could be demonstrated.

With that in mind, a qualitative approach would likely add depth and richness to the understanding of the experiences of urban AI adolescents. In depth information concerning the predictors that served as protective factors, examples of the actual role(s) that friends play, exploring what their friends mean to them, attempts to discover what they view as challenges and strengths in an urban setting, and what their culture means to them could expand the quantitative results gathered.

Table 1

Descriptive Characteristics of the urban American Indian Adolescent Sample

<u>Descriptive Characte</u> Variable	eristics of the 1 N	<u>urban Americai</u> %	n Indian Adolescent So M	imple SD
Age			16.24	1.61
14	45	23.0		
15	29	14.8		
16	25	12.8		
17	27	13.8		
18	70	35.7		
Gender				
Female	114	58.2		
Male	82	41.8		
Living Arrangements	S			
Mother	42	21.4		
Father	14	7.1		
Parents	90	45.9		
Grandparent(s)	26	13.3		
Aunt/Uncle	3	1.5		
Friend	4	2.0		
Alone	8	4.1		
Partner	1	0.5		
Other	8	4.1		
Family Situation				
Deny/Blank	110	56.1		
Absent Sibling	31	15.8		
Divorce	21	10.7		
Overcrowd in home	15	7.7		
Death	6	3.1		
General chaos	4	2.0		
Teen pregnancy	3	1.5		
Living w/ other	2	1.0		

Table 2
Summary of Intercorrelations, Means, Standard Deviations, & Alpha Coefficients

	1	2	3	4	5	6	M	SD	α
1. E		31**	.36**	.19**	.26**	.26**	93.78	28.45	.93
2. SE			44**	28**	50**	38**	18.13	4.62	.85
3. SSFA				.37**	.57**	.42**	12.16	5.37	.89
4. SSFR					.39**	.48**	11.21	5.50	.89
5. SWB						.47**	22.78	7.28	.89
6. R							30.55	7.03	.80

Note. E=Enculturation; SE=Self-Esteem; SSFA=Social Support from Family; SSFR=Social Support from Friends; SWB=Subjective-Well-Being; R=Resilience.

Intercorrelations, means, standard deviations, and Cronbach's alpha coefficients for participants represent (N=196) with the exception of the study variable SE (n=159) due to missing data. **p<.01, two-tailed.

Table 3

Note. * p < .05. **p < .01, two-tailed.

Results of S	<u>imple Regression</u>	<u>n Analys</u>	is of Ei	<u>nculture</u>	<u>ation on Resilience</u>	<u>'</u>	
Criterion	Predictor	Beta	В	SE	95% CI	F	\mathbb{R}^2
Resilience	Enculturation	.26**	.064	.017	[.0310]	13.83	.07**

Regression Analysis of Enculturation, Self-Esteem, & Social Support on Resilience

Table 4

Table 5

Criterion	Predictors	Beta	В	SE	95% CI	F	R^2
Resilience						18.65	.33**
	Enculturation	.07	.02	.02	[0205]		
	Self-Esteem	17*	26	.12	[4904]		
	Social Sup (FA	.19*	.25	.10	[.0546]		
	Social Sup (FR	.34**	.44	.09	[.2662]		

Note. Social Sup (FA)= Social Support (Family); Social Sup (FR)= Social Support (Friends). *p < .05. **p < .01, all two-tailed.

Analysis of Enculturation, Subjective Well-Being, & Social Support on Resilience

Criterion	Predictors	Beta	В	SE	95% CI	_ F	R^2
Resilience						24.92	.34**
	Enculturation	.09	.02	.02	[0105]		
	Subjective WB	.25**	.24	.07	[.1038]		
	Social Sup (FA)	.13	.17	.10	[0237]		
	Social Sup (FR)			.08	[.2457]		

Note. Social Sup (FA)= Social Support (Family); Social Sup (FR)= Social Support (Friends); Subjective WB= Subjective Well-Being. *p < .05. **p < .01, all two-tailed.

REFERENCE LIST 1

- Angell, G., Kurz, B. J., & Gottfried, G. M. (1997). Suicide and North American Indians:

 A social constructivist perspective. *Journal of Multicultural Social Work*, 6(3/4),

 1-25. doi:10.1300/J285v06n03 01
- Beals, J., Belcourt-Dittloff, A., Freedenthal, S., Kaufman, C., Mitchell, C., Whitesell, N.,
 & Walters, K. (2009). Reflections on a proposed theory of reservation-dwelling
 American Indian alcohol use: Comment on Spillane and Smith (2007).
 Psychological Bulletin, 135(2), 339-343. doi:10.1037/a0014819
- Berry, J. W., Kim, U., Minde, T., & Mok, D. (1987). Comparative studies of acculturative stress. *International Migration Review*, 21(3), 491-511. doi:10. 2307/2546607
- Braveheart, M. Y. H. (1999). *OyatePtayela*: Rebuilding the Lakota nation through addressing historical trauma and loss among Lakota parents. *Journal of Human Behavior & Social Environment*, 2(1/2), 109-126. doi:10.1300/J137v02n01_08
- Braveheart, M. Y. H., & DeBruyn, L. M. (1998). The American Indian holocaust:

 Healing historical unresolved grief. *American Indian & Alaska Native Mental*Health Research, 8(2), 60-82. Retrieved from http://aianp.uchsc.edu/ncaianmhr/
 journal_home.htm

- Cameron, S. C., & Turtle-Song, I. (2002). Native American mental health: An examination of resiliency in the face of overwhelming odds. In F. D. Harper & J. McFadden (Eds.), *Culture and counseling: New approaches* (pp. 66-80). Boston, MA: Allyn & Bacon.
- Clark, R. L., & Witko, T. M. (2006). Growing up Indian: Treatment with urban American Indian adolescents. In T. M. Witko (Ed.), *Mental healthcare for urban Indians:*Clinical insights from Native practitioners (pp. 173-187). Washington, DC:

 American Psychological Association.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple*regression/correlation analysis for behavioral sciences (3rd ed.). Mahwah, NJ:

 Lawrence Earlbaum Associates.
- Colmant, S., Schultz, L., Robbins, R., Ciali, P., Dorton, J., & Rivera-Colmant, Y. (2004).

 Constructing meaning to the Indian boarding school experience. *Journal of American Indian Education*, 43(3), 22-40.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49(1), 71-75. doi: 10.1207/s153 27752jpa4901
- Diener, E., Suh, E., & Oishi, S. (1997). Recent findings on subjective well-being. *Indian Journal of Clinical Psychology*, 24, 25-41.
- Duran, E. (2006). *Healing the soul wound: Counseling with American Indians and other Native peoples.* New York, NY: Teachers College Press.
- Duran, E., & Duran, B. (1995). *Native American postcolonial psychology*. Albany, NY: Staten University of New York Press.

- Faircloth, S. C., & Tippeconnic, III, J. W. (2010). The dropout/graduation rate crisis among American Indian and Alaska Native Students: Failure to respond places the future of Native Peoples at risk. Los Angeles, CA: The Civil Rights

 Project/Proyecto Derechos Civiles at UCLA. Retrieved from www.civilrights

 project.ucla.edu
- Fleming, J., & Ledogar, R. J. (2008). Resilience, an evolving concept: A review of literature relevant to aboriginal research. *A Journal of Aboriginal & Indigenous Community Health*, 6(2), 7-23.
- Freedenthal, S., & Stiffman, A. R. (2004). Suicidal behavior in urban American Indian adolescents: A comparison with reservation youth in a Southwestern state.

 Suicide & Life-Threatening Behavior, 34(2), 160-172. doi:10.1521/suli.34.2.160
 32789
- Garrett, M. T., & Carroll, J. J. (2000). Mending the broken circle: Treatment of substance dependence among Native Americans. *Journal of Counseling and Development*, 78(4), 379-388.
- House, L. E., Stiffman, A. R., & Brown, E. (2006). Unraveling cultural threads: A qualitative study of culture and ethnic identity among urban southwestern

 American Indian youth, parents, and elders. *Journal of Child and Family Studies*, 15(4), 393-407. doi:10.1007/s10826-006-9038-9.
- Johnson, C., Peck, S., & Davis, S. (2007). *Native American Community Health Survey*.

 Unpublished manuscript, University of Oklahoma, Norman, OK.

- Johnson, T., & Tomren, H. (1999). Helplessness, hopelessness, and despair: Identifying the precursors to Indian Youth suicide [Special issue]. *American Indian Culture & Research Journal*, 23(3), 287-301. Retrieved from http://aisc.metapress.com/content/120819
- Joseph, J., & Taylor, D. (2003). Native-American youths and gangs. *Journal of Gang Research*, 10(2), 45-54.
- Lafromboise, T., Hoyd, D. R., Oliver, L. & Whitbeck, L. B. (2006). Family, community, and school influences on resilience among American Indian adolescents in the upper Midwest. Journal of Community Psychology, 34(2), 193-209. doi: 10.1002/jcop.20090
- Lomawaima, T. K. (1994). *They call it prairie light: The story of Chilocci Indian School*Lincoln, NE: University of Nebraska Press.
- Luthar, S. S. (2006). Resilience in development: A synthesis of research across five decades. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology, risk, disorder, and adaptation* (pp. 740-795). New York, NY: Wiley.
- Montgomery, D., Miville, M. L., Winterowd, C., Jeffries, B., & Baysden, M. F. (2000).

 American Indian college students: An exploration into resiliency factors revealed through personal stories. *Cultural Diversity and Ethnic Minority Psychology*, 6(4), 387-398. doi:10.1037/1099-9809.6.4.387
- National Congress of American Indians. (2005, November). *The National Congress of American Indians Resolution: Tribal ownership of health-related data*(Resolution #TUL-05-059). Washington, DC: Author. Retrieved from http://www.ncai.org/ncai/data/resolution/annual2005/TUL-05-059.pdf

- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York, NY: Mcgraw-Hill.
- Oetting, E. R., & Beauvais, F. (1990-1991). Orthogonal cultural identification theory:

 The cultural identification of minority adolescents. *International Journal of Addictions*, 25, 65-685.
- Office of Applied Studies. (2004). Results from the 2003 National Survey on Drug Use and Health: National findings (DHHS Publication No. SMA 04-3964, NSDUH Series H-25). Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from http://www.oas.samhsa.gov/nhsda/2k3nsduh/2k3 Results.htm
- Ogunwole, S. U. (2002). *The American Indian and Alaska Native population, 2000*.

 Washington, DC: U.S. Dept. of Commerce, Economics, and Statistics

 Administration, U.S. CensusBureau.
- Pavot, W., Diener, E., Colvin, C. R., & Sandvik, E. (1991). Further validation of the Satisfaction With Life Scale: Evidence for the cross-method convergence of well-being measures. *Journal of Personality Assessment*, *57*(1), 149-161. doi:10.1207/s 15327752jpa5701_17
- Pavot, W., & Diener, E. (1993). Review of the Satisfaction With Life Scale.

 *Psychological Assessment, 5, 164-172. doi:10.1037/1040-3590.5.2.164
- Procidano, M. E., & Heller, K. (1983). Measures of perceived social support from friends and from family: Three validation studies. *American Journal of Community**Psychology, 11, 1-23. doi:10.1207/s15327752jpa5701_17
- Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In J. Rolf, A. S. Masten, D. Cicchetti, K. H. Nuchterlein, & S. Weintraub (Eds.), *Risk and*

- protective factors in the development of psychopathology (pp. 181-214). New York, NY: Cambridge University Press.
- Safran, S. P., Safran, J. S., & Pirozak, E. (1994). Native American youth: Meeting their needs in a multicultural society. *Journal of Humanistic Education and Development*, 33, 5-57.
- Snipp, C. M. (1995). American Indian studies. In J. A. Banks & C. A. McGee Banks (Eds.), *Handbook of research on multicultural research* (pp. 245-258). New York, NY: Macmillan.
- Snipp, C. M. (1997). The size and distribution of the American Indian population: Fertility, mortality, migration, and residence. *Population Residence Policy Review*, *16*(1-2), 61-93. doi:10.1023/A:1005784813513
- Stevens, P., & Smith, R. L. (2005). Substance abuse counseling: Theory and Practice (3rded.). Upper Saddle, NJ: Pearson Prentice Hall.
- Stewart-Sabin, C., & Chaffin, M. (2003). Culturally competent substance abuse treatment for American Indian and Alaska Native youths. In S. J. Stevens & A. R. Morral (Eds.), *Adolescent substance abuse treatment in the United States: Exemplary models from a national evaluation study* (pp. 155-182). New York, NY: Haworth Press.
- Stiffman, A. R., Brown, E., Freedenthal, S., House, L., Ostmann, E., & Man Soo, Yu. (2007). American Indian youth: Personal, familial, and environmental strengths.

 *Journal of Child and Family Studies, 16, 331-346.
- Stokols, D. (2006). Toward a science of transdisciplinary action research. *American Journal of Community Psychology*, 38, 63-77. doi:10.1007/s10464-006-9060-5

- Thrane, L. E., Whitbeck, L. B., Hoyt, D. R., & Shelley, M. C. (2004).Comparing three measures of depressive symptomology among American Indian adolescents.

 *American Indian & Alaska Native Mental Health Research, 11(3), 20-42.

 Retrieved from http://aianp.uchsc.edu/ncaianmhr/journal_home.htm
- Trimble, J. E. (2007). Prolegomena for the connotation of construct use in the measurement of ethnic and racial identity. *Journal of Counseling Psychology*, 54(3), 247-258. doi:10.1037/0022-0167.54.3.247
- Trimble, J. E., & Clearing-Sky, M. (2009). An historical profile of American Indians and Alaska Natives in psychology. *Cultural Diversity and Ethnic Minority Psychology*, 15(4), 338-351. doi:10.1037/a0015112
- U. S. Census Bureau. (2000). The American Indian and Alaska Native population: 2000.
 Washington, DC: Author. Retrieved from http://www.census.gov/population/wwww/socdemo/race/indian.html
- U. S. Department of Health and Human Services. (2001). *Mental health: Culture, race,*and ethnicity-A supplement to mental health: A report of the Surgeon General

 (SMA01-3613).Rockville, MD: Author. Retrieved from http://mentalhealth.samhs

 a.gov/cre/default.asp
- U. S. Department of Health and Human Services, Public Health Service, Indian Health Service. (2000). *IHS fact sheets: Indian health disparities*. Rockville, MD: Author. Retrieved from http://info.ihs.gov/Disparities.asp
- U. S. Department of Health and Human Services, Public Health Service, Indian Health Service, Office of Public Health, Program Statistics Team. (1997). *Trends in Indian health-1997*. Rockville, MD: Author. Retrieved from http://www.ihs.gov/

- publicinfo/publications/trends98/trends98.asp
- Werner, E., & Smith, R. (1992). Overcoming the odds: High-risk children from birth to adulthood. New York, NY: Cornell University Press.
- Whitbeck, L. B., Hoyt, D. R., Chen, X., & Stubben, J. D. (2002). Predictors of gang involvement among American Indian adolescents. *Journal of Gang Research*, 10(1), 1079-3062.
- Whitbeck, L. B., Hoyt, D. R., Stubben, J. D., & LaFromboise, T. (2001). Traditional culture and academic success among American Indian children in the upper Midwest. *Journal of American Indian Education*, 40(2) 48-60. Retrieved from http://jaie.asu.edu/
- Whitesell, N. R., Mitchell, C. M., Spicer, P., & The Voices of Indian Teen Project Team. (2009). A longitudinal study of self-esteem, cultural identity, and academic success among American Indian adolescents. *Cultural Diversity and Ethnic Minority Psychology*, *15*(1), 38-50. doi:10.1037/a0013456
- Winterowd, C. L., Montgomery, D., Stumblingbear, G., Harless, D., Hicks, K.,
 &Webster, K. (2007, November). Exploring enculturation, subjective well-being,
 and hope among American Indians. Poster session presented at the Association of
 Behavioral and Cognitive Therapies Conference, Philadelphia, PA.
- Winterowd, C., Montgomery, D., Stumblingbear, G., Harless, D., Hicks, K., & Webster, K. (2008). Development of the American Indian Enculturation Scale to assist counseling practice. *American Indian and Alaska Native Mental Health Research*, 15(2), 1-18. Retrieved from http://aianp.uchsc.edu/ncaianmhr/journal_home.htm

Yoder, K. A., Whitbeck, L. B., Hoyt, D. R., & LaFromboise, T. (2006). Suicidal ideation among American Indian Youths [Special issue]. *Archives of Suicide Research*, 10(2), 177-190. doi:10.1080/13811110600558240

REFERENCE LIST 2

- Angell, G., Kurz, B. J., & Gottfried, G. M. (1997). Suicide and North American Indians:

 A social constructivist perspective. *Journal of Multicultural Social Work*, 6(3/4),

 1-25. doi:10.130 0/J285v06n03_01
- Arrington, E. G., & Wilson, M. N. (2000). A re-examination of risk and resilience during adolescence: Incorporating culture and diversity. *Journal of Child and Family Studies*, *9*(2), 221-230. doi:10.1023/A:1009423106045
- Barrera, M., Jr., Hageman, D. N., & Gonzales, N. A. (2004). Revisiting Hispanic adolescents resilience to the effects of parental problem drinking and life stress.

 *American Journal of Community Psychology, 34(1/2), 83-94. doi:10.1023/B:AJC P.0000040148.72858.81
- Barrera, M., Li, S. A., & Chassin, L. (1993). Ethnic group differences in vulnerability to parental alcoholism and life stress: A study of Hispanic and non-Hispanic
 Caucasian adolescents. *American Journal of Community Psychology*, 21, 15-35.
 doi:10.1007/BF00938205

- Barrera, M., Li, S. A., & Chassin, L. (1995). Effects of parental alcoholism and life stress on Hispanic and non-Hispanic Caucasian adolescents: A prospective study.

 *American Journal of Community Psychology, 23(4), 479-507. doi:10.1007/BF025 06965
- Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Health*, *4*(1), 1-44. doi:10.1111/1529-1006.01431
- Beauvais, F., Chavez, E. L., Oetting, E. R., Deffenbacher, J. L., & Cornell, G. R. (1996).

 Drug use, violence, and victimization among White American, Mexican

 American, and American Indian dropouts, students with academic problems, and students in good academic standing. *Journal of Counseling Psychology*, 43(3), 292-299. doi:10.1037/0022 -0167.43.3.292
- Beals, J., Belcourt-Dittloff, A., Freedenthal, S., Kaufman, C., Mitchell, C., Whitesell, N.,
 & Walters, K. (2009). Reflections on a proposed theory of reservation-dwelling
 American Indian alcohol use: Comment on Spillane and Smith (2007).
 Psychological Bulletin, 135(2), 339-343. doi:10.1037/a0014819
- Belcourt-Dittloff, A. (2006). *Resiliency and risk in Native American communities: A*culturally informed investigation. Poster session presented at the annual meeting of the Association of Behavioral and Cognitive Therapies, Chicago, IL.
- Benard, B. (1991). Fostering resiliency in kids: Protective factors in the family, school, and Community. Retrieved from ERIC database. (ED335781)

- Benard, B. (1995). Fostering resiliency in children. Retrieved from ERIC database. (ED386327)
- Bergstrom, A., Clearly, L. M., & Peacock, T. D. (2003). *The seventh generation: Native students speak about finding the good path.* Charleston, WV: AEL.
- Berry, J. W., Kim, U., Minde, T., & Mok, D. (1987). Comparative studies of acculturative stress. *International Migration Review*, 21(3), 491-511. doi: 10.2307/2546607
- Bowker, A. (1992). The American Indian female dropout. *Journal of American Indian Education*, 31, 3–19. Retrieved from http://jaie.asu.edu/
- Brown, L. L., & Robinson Kurpius, S.E. (1997). Psychosocial factors influencing academic persistence of American Indian college students. *Journal of College Student Development*, 38, 3-12.
- Byron, D. M. (1996). *The relationship of cultural identification to depression and alcohol use among urban American Indians* (Doctoral dissertation). Retrieved from

 Dissertations & Theses: A & I. (AAT 9640053)
- Cameron, S. C., & Turtle-Song, I. (2002). Native American mental health: An examination of resiliency in the face of overwhelming odds. In F. D. Harper & J. McFadden (Eds.), *Culture and counseling: New approaches* (pp. 66-80). Boston, MA: Allyn & Bacon.
- Centers for Disease Control. (2002). Web-based Injury Statistics Query and Reporting System (WISQARS). Retrieved from www.cdc.gov/injury/wisqars/fatal.html
- Choney, S., Berryhill-Paapke, E., & Robbins, R. (1995). The acculturation of American Indians: Developing frameworks for research and practice. In J. G. Ponterotto, J.

- M. Casas, L. A.Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (pp. 73-92). Thousand Oaks, CA: Sage.
- Constantine, N. A., Benard, B., & Diaz, M. (1999). *Measuring protective factors and resilience traits in youth: The healthy kids resilience assessment*. Paper presentation at the annual meeting of the Society for Prevention Research, New Orleans, LA.
- Duran, B., Oetzel, J., Lucero, J., Jiang, Y., Novins, D. K., Manson, S., . . . American Indian Service Utilization and Psychiatric Epidemiology Risk and Protective Factors Project Team. (2005). Obstacles for rural American Indians seeking alcohol, drug, or mental health treatment. *Journal of Consulting & Clinical Psychology*, 73(5), 819-829. doi:10.1037/0022-006X.73.5.819
- Engler, B. (2006). *Personality theories* (7th ed.). Houghton Mifflin Company.
- Everall, R. D., Altrows, J., & Paulson, B. L. (2006). Creating a future: A study of resilience in suicidal female adolescents. *Journal of Counseling & Development*, 84, 461-470.
- Freedenthal, S. R., & Stiffman, A. R. (2004). Suicidal behavior in urban American Indian adolescents: A comparison with reservation youth in a Southwestern state. *Suicide* & *Life-Threatening Behavior*, 34(2), 160-172. doi:10.1521/suli.34.2.160.32789
- Fuligni, A. J., Witkow, M., & Garcia, C. (2005). Ethnic identity and the academic adjustment of adolescents from Mexican, Chinese, and European backgrounds. *Developmental Psychology*, 41(5), 799-811. doi:10.1037/0012-1649.41.5.799

- Garrett, M. T., & Pichette, E. F. (2000). Red as an apple: Native American acculturation and counseling with or without the reservation. *Journal of Counseling & Development*, 78(1), 3-13.
- Garroutte, E. M., Goldberg, J., Beals, J., Herrell, R., & Manson, S. M. (2003). Spirituality and attempted suicide among American Indians. *Social Science & Medicine*, 56(7), 1571-1579. doi:10.1016/S0277-9536(02)00157-0
- Gloria, A. M., & Robinson Kurpius, S. E. (2001). Influences of self-beliefs, social support, and comfort in the university environment on the academic nonpersistence decisions of American Indian undergraduates. *Cultural Diversity* & *Ethnic Minority Psychology*, 7(1), 88-102. doi:1037/1099-9809.7.1.88
- Graham, B. L. (2001). Resilience among American Indian youth: First Nations youth

 resilience study (Doctoral dissertation). Retrieved from Dissertations & Theses: A

 & I. (AAT3008689)
- Griffin, O.T. (1991). Minority student education: Concepts and policies. *Western Journal of Black Studies*, *15*, 235–240.
- HeavyRunner, I., & Morris, J. S. (1997). Traditional Native culture and resilience.

 *Research Practice, 5(1) 1-6.
- Herring, R. D. (1989). The American Indian family: Dissolution by coercion. *Journal of Multicultural Counseling & Development*, 17, 4-13.
- Herring, R. D. (1996). Synergetic counseling and Native American Indian students.

 *Journal of Counseling & Development, 74, 542-547.
- Hobfoll, S. E., Bansal, A., Schurg, R., Hobfoll, I., Young, S., Pierce, C. A., & Johnson, R. (2002). The impact of perceived child physical and sexual abuse history on

- Native American women's psychological well-being and aids risk. *Journal of Consulting & Clinical Psychology*, 70(1), 252-257. doi:10.1037/0022-006X.70.1.252
- Huang, L. N., & Gibbs, J. T. (1992). Partners or adversaries? Home-school collaboration across culture, race, and ethnicity. In C. Christenson & J. Conoley (Eds.), *Home-school collaboration: Enhancing children's academic and social competence* (pp.81-110). Silver Spring, MD: The National Association of School Psychologists.
- Huffman, T. (2001). Resistance theory and the transculturation hypothesis as explanations of college attrition and persistence among culturally traditional American Indian students. *Journal of American Indian Education*, 40(3), 1-39. Retrieved from http://jaie.asu.edu/
- Johnson, C., Peck, S., & Davis, S. (2007). *Native American Community Health Survey*.

 Unpublished manuscript, University of Oklahoma, Norman, OK.
- Johnson, T., & Tomren, H. (1999). Helplessness, hopelessness, and despair: Identifying theprecursors to Indian Youth suicide. *American Indian Culture & Research Journal*, 23(3), 287-301. Retrieved from http://aisc.metapress.com/content/120819
- Joseph, J., & Taylor, D. (2003). Native-American youths and gangs. *Journal of Gang Research*, 10(2), 45-54.
- Kawamoto, W., & Cheshire, T. (2005). American Indian families: Resilience in the face of legal, economic, and cultural assault. In K. H. Barrett & W. H. George (Eds.), *Race, culture, psychology, & law* (pp. 299-308). Thousand Oaks, CA: Sage.
- Kimbrough, R. M., Molock, S. D., & Walton, K. (1996). Perception of social support,

- acculturation, depression, and suicidal ideation among African American college students at predominately Black and predominately White universities. *Journal of Negro Education*, 65, 295-307. doi:10.2307/2967346
- LaFromboise, T., & Rowe, W. (1983). Skills training for bicultural competence:

 Rationale and application. *Journal of Counseling Psychology*, 30, 589-595.

 doi:1037/0022-0167.30.4.589
- LaFromboise, T., Trimble, J. E., & Mohatt, G. V. (1990). Counseling intervention and American Indian tradition: An integrative approach. *The Counseling Psychologist*, 18(4), 628-654.doi:10.1177/0011000090184006
- Little Soldier, L. (1985). To soar with the eagles: Enculturation and acculturation of Indian children. *Childhood Education*, *61*(3), 185-191.
- Luthar, S. S. (1991). Vulnerability and resilience: A study of high-risk adolescents. *Child Development*, 62(3), 600-616.doi:10.2307/1131134
- Masten, A. S., & Gewirtz, A. H. (2006). Resilience in development: The importance of early childhood. In R. E. Tremblay, R. G. Barr, & R. DeV. Peters (Eds.), *Encyclopedia on Early Childhood Development*. [online] Montreal, Quebec: Center of Excellence for Early Childhood Development. Retrieved from http://www/child-encyclopedia.com/documents/Masten-GewirtzANGxp.pdf
- Masten, A. S., Hubbard, J. J., Gest, S. D., Tellegen, A., Garmezy, N., & Ramirez, M. (1999). Competence in the context of adversity: Pathways to resilience and maladapation from childhood to late adolescence. *Development & Psychopathology*, 11, 143-169. doi:10.1017/S0954579499001996
- Masten, A. S. (1997). Resilience in children at-risk. Research/Practice, 5(1), 1-6.

- McCubbin, L. D., & McCubbin, H. I. (2005). Culture and ethnic identity in family resilience: Dynamic processes in trauma and transformation of Indigenous People.

 In M. Ulgar (Ed.), *Handbook for working with children and youth: Pathways to resilience across cultures and contexts* (pp. 27-44). Thousand Oaks, CA: Sage.
- Miles, B. W. & Hurdle, D. E. (2003). Resiliency factors related to substance use/resistance: Perceptions of Native adolescents of the Southwest. *Journal of Sociology & Social Welfare*, XXX(4), 79-92.
- Miller, D. B., & MacIntosh, R. (2006). Promoting resilience in urban African American adolescents: Racial socialization and identity as protective factors. *Social Work Research*, 23(3), 159-170.
- Montgomery, D., Miville, M. L., Winterowd, C., Jeffries, B., & Baysden, M. F. (2000).
 American Indian college students: An exploration into resiliency factors revealed through personal stories. *Cultural Diversity and Ethnic Minority Psychology*, 6(4), 387-398. doi:10.1037/1099-9809.6.4.387
- Neenan, M. (2009). *Developing resilience: A cognitive-behavioural approach*. New York, NY: Routledge Taylor & Francis Group.
- Office of Applied Studies. (2004). Results from the 2003 National Survey on Drug Use and Health: National findings (DHHS Publication No. SMA 04-3964, NSDUH Series H-25). Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from http://www.oas.samhsa.gov/nhsda/2k3Results. htm
- Olson, L. (2006). American Indians and Suicide: A neglected area of research. *Trauma, Violence, and Abuse, 7*(1), 19-33. doi:10.1177/1524838005283005

- Persaud, R. (2001). Staying sane: How to make your mind work for you. London, England: Bantam Press.
- Powers, K. M. (2006). An exploratory study of cultural identity and culture-based educational programs for urban American Indian students. *Urban Education*, *41*, 20-49. doi:10.1177/0042085905282249
- Radin, S. M., Neighbors, C., Walker, P. S., Walker, D. R., Marlatt, G. A., & Larimer, M. (2006). The changing influences of self-worth and peer deviance on drinking problems in urban American Indian adolescents. *Psychology of Addictive Behaviors*, 20(2), 161-170. doi:10. 1037/0893-164X.20.2.161
- Rosenberg, M. (1965). *Society and adolescent self-image*. Princeton, NJ: Princeton University Press.
- Safran, S. P., Safran, J. S., & Pirozak, E. (1994). Native American youth: Meeting their needs in a multicultural society. *Journal of Humanistic Education and Development*, 33, 5-57.
- Snipp, C. M. (1995). American Indian studies. In J. A. Banks & C. A. McGee Banks (Eds.), *Handbook of research on multicultural research* (pp. 245-258). New York: Macmillan.

- Snipp, C. M. (1997). The size and distribution of the American Indian population: Fertility, mortality, migration, and residence. *Population Residence Policy Review*, *16*(1-2), 61-93. doi:10.1023/A:1005784813513
- Spindler, L., & Spindler, G. (1985). Male and female adaptation in culture change.

 American Anthropologist, 60, 217-233. doi:10.1525/aa.1958.60.2.02a00020
- Stevens, P., & Smith, R. L. (2005). Substance abuse counseling: Theory and Practice (3rded.). Upper Saddle, NJ: Pearson Prentice Hall.
- Stewart-Sabin, C., & Chaffin, M. (2003). Culturally competent substance abuse treatment for American Indian and Alaska Native youths. In S. J. Stevens & A. R. Morral (Eds.), *Adolescent substance abuse treatment in the United States: Exemplary models from a national evaluation study* (pp. 155-182). New York, NY: Haworth Press.
- Strand, J. A., & Peacock, T. D. (2002). Nurturing resilience and school success in

 American Indian and Alaskan Native students. Retrieved from ERIC database.

 (ED471488)
- Thornton, B., Collins, M., & Daugherty, R. (2006). A study of resiliency of American Indian high school students. *Journal of American Indian Education*, 45(1), 4-16. Retrieved from http://jaie.asu.edu/
- U. S. Department of Health and Human Services, Public Health Service, Indian Health Service. (2000). IHS fact sheets: Indian health disparities. Rockville, MD:
 Author. Retrieved from http://info.ihs.gov/Disparities.asp
- U. S. Department of Health and Human Services, Public Health Service, Indian Health Service, Office of Public Health, Program Statistics Team. (1997). *Trends in*

- Indian health-1997. Rockville, MD: Author. Retrieved from http://www.ihs.gov/publicinfo/publications/trends98/trends98.asp
- Walker, R. D. (2001). Alcohol, drug, and mental health problems in urban AmericanIndian adolescents and women (final report to NIAAA). Unpublished manuscript,Oregon Healthand Science University, Portland, OR.
- Waller, M. A., & Okamoto, S. C. (2003). Resiliency factors related to substance use/resistance: Perceptions of Native adolescents of the Southwest. *Journal of Sociology and Social Welfare*, XXX(4), 79-94.
- Werner, E., & Smith, R. (1992). Overcoming the odds: High-risk children from birth to adulthood. New York, NY: Cornell University Press.
- Whitbeck, L. B., Hoyt, D. R., Chen, X., & Stubben, J. D. (2002). Predictors of gang involvement among American Indian Adolescents. *Journal of Gang Research*, 10(1), 1079-3062.
- Whitbeck, L. B., Hoyt, D. R., Stubben, J. D., & LaFromboise, T. (2001). Traditional culture and academic success among American Indian children in the upper Midwest. *Journal of American Indian Education*, 40(2) 48-60. Retrieved from http://jaie.asu.edu/
- Winterowd, C. L., Montgomery, D., Stumblingbear, G., Harless, D., Hicks, K., & Webster, K. (2007, November). *Exploring enculturation, subjective well-being, and hope among American Indians*. Poster session presented at the Association of Behavioral and Cognitive Therapies Conference, Philadelphia, PA.
- Winterowd, C., Montgomery, D., Stumblingbear, G., Harless, D., Hicks, K., & Webster, K. (2008, August). *Tribal attachment, hope, and well-being among American*

- *Indians*. Poster session presented at the American Psychological Association, Boston, MA.
- Wolsko, C., Lardon, C., Mohatt, G. V., & Orr, E. (2007). Stress, coping, and well-being among the Yup'ik of the Yukon-Kuskokwim Delta: The role of enculturation and acculturation. *International Journal of Circumpolar Health*, 66(1), 51-61.
- Yoder, K. A., Whitbeck, L. B., Hoyt, D. R., & LaFromboise, T. (2006). Suicidal ideation among American Indian Youths [Special issue]. *Archives of Suicide Research*, 10(2), 177-190. doi:10.1080/13811110600558240
- Zimmerman, M. A., Ramirez, J., Washienko, K. M., Walter, B., & Dyer, S. (1998).

 Enculturation hypothesis: Exploring direct and protective effects among

 NativeAmerican youth. In H. I. McCubbin, E. A. Thompson, A. I. Thompson, &

 J. E.Fromer (Eds.), *Resiliency in Native American and immigrant families* (pp. 199-220) Thousand Oaks, CA: Sage.

APPPENDICES

Appendix A

Resilience among American Indians:

Investigation into the role of Culture

Be a part of an important American Indian Research Study!

Are you between 14-18 years of age?

Are you an American Indian?

If you answered yes to these questions and your parent gives permission you may be eligible to participate in this study!

The purpose of this study is to explore the role of culture in what influences pro-social behaviors such as academic success and problem behaviors such as drinking alcohol. While the results may not directly benefit you it is hoped the information provided will be considered in order to better serve American Indian adolescents, families, and communities in providing better services in the future. Participants will receive a \$15 gift-card for participating and completing the surveys.

This study is being conducted at local pow-wows and cultural events sponsored by the Indian Health Care Resources Center. Please call Glenna Stumblingbear, Doctoral Candidate, Oklahoma State University, at (940)642-1289 or email glenna.stumblingbear@okstate.edu for more information.

Appendix B

Parent Permission Form

Dear Parents/Legal Guardians,

Your child is invited to participate in a research study exploring cultural experiences, strengths and problem behaviors among American Indian adolescents. We are interested in exploring the role of culture in terms of what influences pro-social behaviors (i.e., academic success) and problem behaviors (i.e., drinking alcohol). This study will take place at local powwows in the community and at Indian Health Care Resources Center cultural events. Your child will be asked to fill out a survey that is made up of a series of self-surveys that consists of questions related to culture, mental health, social support, alcohol use, and self-esteem. For example, questions will include: Are you proud of yourself? Do you drink alcohol? and Attend Indian pow-wows? This project is not an intervention; we are simply collecting your son's and/or daughter's responses to a few self-survey questions. It should take approximately between 30 to 45 minutes for your child to participate.

Although answering some questions may make some people feel uncomfortable, we do not feel that your son/daughter is in any great harm by participating in this research. However, your child will be free to skip any question(s) that makes him/her feel uncomfortable. Additionally, your child will also have the right to cease participation of the study at any point during the survey. All information your child provides will be anonymous. His or her information will be identified by code number only. You will not have access to your child's responses in order to protect confidentiality and in order to keep risks associated with sensitive questions to a minimum. All information will be stored in a locked file cabinet. The primary researcher and her dissertation chair Dr. John Romans will have access to the data. The information your child provides will be locked and kept safe for five years. After the five years, all information collected from this study will be destroyed. Furthermore, individual responses to the questions in the survey will not be published in any manner. Only group information will be presented in any publications generated from this research. Therefore, your child will not be personally identified in any way.

If you give permission for your child to participate in this study, your child will first be asked if he or she would like to participate and will be provided with an opportunity for assent or dissent to participate. Thus, your child's participation is strictly voluntary and he or she has the right refuse to participate and/or to withdraw from this study at any time. If you allow your child to participate and your child agrees to participate, upon completion of the surveys your child will be given a \$15 gift-card for participation. While you and your child may not be directly benefited by the results generated from this study it is hoped that this information will be considered in order to

better serve American Indian adolescents, families, and communities in providing better services in the future.

If you have questions about your rights as a research volunteer, you may contact Dr. Sheila Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-1676 or irb@okstate.edu.

Thank you for your help wi	th this project. It is greatly	y appreciated!
Sincerely,		
Glenna Stumblingbear, M.S.		
By signing this form you are provi this study. I have read and fully u		·
As parent or guardian I would like name)		(print child's
to participate in the describe	d research.	
not to participate in the resea	arch above	
Parent/Guardian Name (printed)	Date	
Signature of Parent/Guardian	Date	
I certify that I have personally participant sign it.	explained this document	t before requesting that the
Signature of Researcher	Date	

Appendix C

Script to obtain assent or dissent

Your parent(s)/legal guardian has given permission for you to participate in this project. (Note: I will review and explain with him/her the parent permission form that explains the study, how long their participation should take, right to withdraw at any time etc). Do you have any questions at this point? Would you like to participate in this study?

VITA

Glenna Stumblingbear-Riddle

Candidate for the Degree of

Doctor of Philosophy

Thesis: RESILIENCE AMONG AMERICAN INDIAN ADOLESCENTS:

INVESTIGATION INTO THE ROLE OF CULTURE

Major Field: Counseling Psychology

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in Counseling Psychology at Oklahoma State University, Stillwater, Oklahoma in December, 2010.

Completed the requirements for the Master of Science in Educational Psychology at Oklahoma State University, Stillwater, Oklahoma in 2007.

Completed the requirements for the Bachelor of Science in Psychology at the University of Science and Arts of Oklahoma, Chickasha, Oklahoma in 2004.

Experience:

APA-Accredited Clinical Psychology Internship with the Oklahoma Health Consortium, Norman, Oklahoma.

APA-Accredited PhD in Counseling Psychology at Oklahoma State University.

Professional Memberships:

American Psychological Association Association for Behavioral and Cognitive Therapies Society of Indian Psychologists Name: Glenna Stumblingbear-Riddle Date of Degree: July, 2010

Institution: Oklahoma State University Location: Stillwater, Oklahoma

Title of Study: RESILIENCE AMONG AMERICAN INDIAN ADOLESCENTS: INVESTIGATION INTO THE ROLE OF CULTURE

Pages in Study: 100 Candidate for the Degree of Doctor of Philosophy

Major Field: Counseling Psychology

Scope and Method of Study: Exploratory Research Study

Findings and Conclusions:

In this study Resilience was regressed on Enculturation, Self-Esteem, Subjective Well-Being, and Social Support from Family and Friends. The researcher's findings demonstrated that 7% of the total variance in Resilience was explained by Enculturation. Further, 33% of the total variance in Resilience was accounted for by Enculturation, Self-Esteem, and Social Support from Family and Friends, while 34% of the total variance in Resilience was contributed by Enculturation, Subjective Well-Being, and Social Support from Family and Friends. However, Social Support from Friends served as the strongest predictor considering all variables. Additionally, the correlation coefficients tended to reach statistical significance. Notably, results demonstrated a large, negative relationship between Self-Esteem and Subjective Well-Being [r=-.50, p<.01]. A medium, positive relationship between Social Support from Friends and Resilience [r=.48, p<.01, 23% shared variability]. This study demonstrated how the experiences of American Indian adolescents living in urban settings need to be further explored, especially in regards to social support from friends. The role of culture assessed by level of enculturation appeared to operate differently among urban American Indian adolescents. Specifically, culture appeared important but the role of social support from friends remained as the strongest predictor of resilience. It is concluded that the role of friends may be especially critical in urban settings, as tribal communities and resources are less prominent and accessible in urban areas. Implications are provided in terms of prevention within school systems and among tribal communities and mental health professionals.