

# **RESILIENCE AMONG URBAN AMERICAN INDIAN ADOLESCENTS: EXPLORATION INTO THE ROLE OF CULTURE, SELF-ESTEEM, SUBJECTIVE WELL-BEING, AND SOCIAL SUPPORT**

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*Abstract: The effects of enculturation, self-esteem, subjective well-being, and social support on resilience among urban American Indian (AI) adolescents from a South Central region of the U.S. were explored. Of the 196 participants, 114 (58.2%) were female and 82 (41.8%) were male (ages 14-18 years). Thirty-three percent of the variance in resilience was accounted for by enculturation, self-esteem, and social support, while 34% of the variance in resilience was contributed by enculturation, subjective well-being, and social support. However, social support from friends remained the strongest predictor.*

American Indians (AIs) represent about 1.7 % of the United States population according to data from the most recent U. S. Census (U.S. Census Bureau, 2010). Although commonalities (e.g., respect for elders) exist, AIs remain a highly diverse group, encompassing over 550 federally recognized tribes/nations as well as several non-federally recognized tribes/nations in the U.S. across many different geographical regions. Thus, it is crucial to note that many issues faced by AIs are not necessarily generalizable to all AI tribes/nations or common in all AI communities.

## **Brief Overview of American Indian Issues**

A considerable amount of research involving AIs has demonstrated several disparities in psychological and physical health between AIs and European Americans (Angell, Kurz, & Gottfried, 1997; Cameron & Turtle-Song, 2002; Indian Health Service [IHS], 1997, 2005; Johnson & Tomren, 1999; Stevens & Smith, 2005; Yoder, Whitbeck, Hoyt, & LaFromboise, 2006). Taken as a whole group, AIs demonstrated high rates of mental health problems and higher incidences of alcoholism (579%), accidents (212%), suicide (70%), and homicide (41%) compared to the general U.S. population. The problems experienced by AIs are not specific to adults, but are also experienced

by AI adolescents (LaFromboise, Albright, & Harris, 2010; LaFromboise, Medoff, Lee, & Harris, 2007; Stewart-Sabin & Chaffin, 2003; Stiffman, Alexander-Eitzman, Silmere, Osborne, & Brown, 2007; Yoder et. al, 2006).

### **Explanations Concerning Issues Faced by AIs**

Researchers have provided biological, psychological, and sociocultural explanations for the issues faced by AIs. Recent research has explored the impact of historical trauma, loss, grief, colonization, genocide, and forced assimilation on AI well-being. Researchers have suggested that the multiple traumas experienced by AIs are passed down generationally because these past experiences have not yet been grieved (Berry, Kim, Minde, & Mok, 1987; Brave Heart, 1999, 2003; Brave Heart, Chase, Elkins, & Altschul, 2011; Duran, 2006; Duran & Duran, 1995; Gone, 2007; Whitbeck, Walls, Johnson, Morrisseau, & McDougall, 2009). That is, unresolved emotional distress may manifest itself in many of the seemingly chronic problems (e.g., alcoholism and suicide) that exist among AI adults and adolescents today. It has been argued that these chronic problems are symptoms of deeper issues associated with the devastating impact of colonization (Gone, 2009) and other traumas. Furthermore, the findings of Chase (2011) and Colmant et al. (2004) have shown that AIs tend to identify historical traumatic events as contributors to the decline of AI value systems and culture, and to the perpetuation of multigenerational loss.

### **Resilience Research: Paradigm Shift towards a Strengths-Based Model**

Although resilience has been defined broadly, for the purposes of this study, it is defined as a “dynamic process that enables the individual to respond or adapt under adverse situations” (Thornton & Sanchez, 2010, p. 455). The concept of resilience in research has evolved over the last four decades, and some researches exploring resilience recently have focused more on strengths than on high-risk factors. Initially, researchers examined internal characteristics of an individual that promoted resilience. However, after researchers noticed the positive impact of external factors (e.g., family and community), the concept of resilience expanded to include both types of factors that can foster it (Feinstein, Driving-Hawk, & Baartman, 2009; Fleming & Ledogar, 2008; LaFromboise et al., 2006). This shift was emphasized in Werner and Smith’s (1992) longitudinal research, which showed that at least 50-70% of adolescents identified as at-risk to high-risk demonstrated resilience despite adversity.

## Resilience among AIs

Recently, resilience research has evolved to include the role of culture among different ethnic groups. Specifically, the term cultural resilience has been used to “denote the role that culture may play as a resource for resilience in the individual” (Fleming & Ledogar, 2008, p. 10). However, resilience research among AIs is limited. Additionally, most research involving AI adolescents is limited to reservation-dwelling AIs, even though the U.S. Census indicated that most of the AI population currently resides outside AI/Alaska Native (AN) areas (U.S. Census Bureau, 2010). Furthermore, recent AI generations are more likely to be raised in urban settings (Safran, Safran, & Pirozak 1994; Urban Indian Health Commission, 2007; U.S. Census Bureau, 2010; Snipp, 1995). These changes have resulted in both positive and negative outcomes. For example, resources such as educational programs are more readily available in some urban areas, but urban AIs may also experience a lack of cultural connection, increased suicide risk, and increased levels of hopelessness (Freedenthal & Stiffman, 2004; LaFromboise et al., 2010; Johnson & Tomren, 1999).

## Intent of the Study

In this study, the primary researcher was particularly interested in exploring the role of culture, self-esteem, subjective well-being, and social support in determining which protective factors foster resilience among urban AI adolescents. Researchers have demonstrated that certain connections or ties to AI culture (i.e., enculturation) appear to be protective factors, and have resulted in resilient outcomes such as higher school competence (Yoder et al., 2006). Self-esteem, subjective well-being, and social support from family and friends were explored in this study based on previous research, which has illustrated how such variables have promoted resilience among AI adults, college students, and adolescents (House, Stiffman, & Brown, 2006, LaFromboise et al., 2006; Montgomery, Miville, Winterowd, Jeffries, & Baysden, 2000; Powers, 2006; Stiffman et al., 2007; Whitesell, Mitchell, Spicer, & The Voices of Indian Teens Project, 2009; Wolsko, Lardon, Mohatt, & Orr, 2007).

In addition, resilience is often linked to positive outcomes such as school success. While school success is only one dimension that taps into resilience, it is often used as an indicator for future successes, which is particularly crucial for adolescents identified as at-risk (Faircloth & Tippeconnic, 2010; Feinstein et al., 2009; LaFromboise et al., 2006; Thornton & Sanchez, 2010). Resilience specific to school success was of central importance to the community participating in this study; therefore, school success was measured by examining AI adolescent’s attitudes and involvement in school, academic grades, and plans to complete high school and attend college.

## METHOD

### Participating Community

In accordance with conducting culturally competent research, a community-based participatory research (CBPR) model was implemented throughout the research process in terms of developing the study and collecting, analyzing, and interpreting results. The participating AI community has an agency with a community advisory board composed of AI professionals and community members. The community advisory board's primary function is reviewing services and programs that pertain to the agency and surrounding AI communities. In this study, the board's role included active involvement in reviewing the study's materials, providing feedback concerning the research methodology, and providing feedback on questionnaire development. The community is located in an urban area in a South Central region of the U.S. Out of respect and protection, the specific AI community and its agency are not identified. However, the urban AI area selected was appropriate based on U.S. Census data, which reflect a high percentage of AI/AN residents for that area (U.S. Census Bureau, 2010).

The primary researcher identifies as an AI from the Kiowa tribe. The researcher was raised in a predominately rural AI community, has conducted studies that examine enculturation, tribal attachment, subjective well-being, and hope among AI adults and adolescents, and has a previous affiliation to the AI agency and community, including work experience at the central offices of the agency conducting the research.

### Participants

A total of 213 AI adolescents who reside in the community described above were recruited for participation. Because some surveys were incomplete, only 196 surveys were used in the study. AI adolescents self-reported enrollment in a federally recognized tribe, and all participants were affiliated with an AI agency that offers programs to AI members of federally recognized tribes. Of the 196 participants, 114 (58.2%) were female and 82 (41.8%) were male. Participants' ages ranged from 14 to 18 years ( $M = 16.24$ ,  $SD = 1.61$ ); 35.7% were 18 years and 23.0% were 14 years of age. A total of 20 federally recognized tribes, representative of the area surveyed, were included.

### Materials and Procedure

The university Institutional Review Board and the AI agency's community advisory board approved this study. The primary researcher, with the support of the AI agency, recruited participants. Recruitment methods included letters mailed to AI education programs, flyers, and announcements

at AI agency outreach programs and local AI traditional dances (i.e., powwows) sponsored by the AI agency. The primary researcher and one research assistant were present at AI agency outreaches and powwows. The participants were informed of the voluntary nature of the research process. The parental permission form outlined and described related costs and benefits. Parents provided their consent and minor participants provided verbal assent. Participants also received a \$15 gift card for participation. A variety of inventories (described below) that gathered demographic information, level of enculturation, self-esteem, subjective well-being, perceptions of social support from family and friends, and level of resilience were administered to participants onsite (e.g., at AI agency outreaches and powwows) in a private area.

## Measures

### **Native American Community Health Survey: Youth (NACHSY)**

The NACHSY (modified from Johnson, Peck, & Davis, 2007) consists of 31 closed- and open-ended questions pertaining to demographics, physical and behavioral health, wellness, community services, and forms of social support. It was used in this study in a modified format, mainly to collect demographic information; thus, psychometric data are not available. Based on the AI agency and community's needs, the primary researcher and AI agency's community advisory board modified the demographic portion of the survey to 11 items that include information about demographics, behavioral health, help-seeking behaviors, and social support. Questions were also added to assess federal enrollment status, tribal affiliation(s), and specifics concerning social support.

### **American Indian Enculturation Scale (AIES)**

The AIES (modified from Winterowd et al., 2008a) was originally a 16-item measure developed by a team that included some AI researchers. The current version of AIES consists of 17 items that measure level of enculturation among AIs by determining their participation in traditional behaviors and practices (i.e., "Seek help from Elders?"). The AIES is rated using a 7-point Likert scale that ranges from 1 (*not at all like me*) to 7 (*a great deal like me*). Based on the request of the AI community advisory board, the following four items were added: "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?"

The AIES appears to be an appropriate measure for enculturation based on its development. Furthermore, in a study with AI adults in both clinical and non-clinical samples, the AIES was supported by principal component analysis, which provided evidence of the measure's construct validity (Winterowd et al., 2008a). Specifically, 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, demonstrating the scale's internal consistency. However, the AIES was not utilized among AI adolescents until this study. In this study, the alpha reliability coefficient was .93.

#### **Tri-Ethnic Center's Self-Esteem Scale (TECSES)**

The TECSES (modified from Oetting & Beauvais, 1990/1991) was used to determine level of self-esteem; researchers selected from it 12 items that appeared appropriate for this study's purposes. Item scores range from 1 (*most of the time*) to 3 (*none of the time*) to 9 (*don't know/refused*). Items include "Are you proud of yourself?" The items selected from the TECSES have been validated among AI adolescents. The construct validity has been demonstrated; the Cronbach's alpha coefficient for this scale was .77 in a study that involved AI adolescents (Thrane, Whitbeck, Hoyt, & Shelley, 2004). In the current study, the alpha reliability coefficient was .85.

#### **Satisfaction With Life Scale (SWLS)**

The SWLS (Diener, Emmons, Larsen, & Griffin, 1985) was used to assess subjective well-being. The SWLS consists of 5 items on a Likert scale. Item scores range from 1 (*strongly disagree*) to 7 (*strongly agree*). Items include "In most ways my life is close to my ideal." The SWLS has been shown to be a reliable and valid measure of subjective well-being among AI college students and an older adult AI population, as evidenced by 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). The SWLS has also been used among AI adults (Winterowd et al., 2008b), although it had not been used previously among AI adolescents. The alpha reliability coefficient in the current study was .89.

#### **Perceived Social Support from Family (PSS-Fa) and Perceived Social Support from Friends (PSS-Fr)**

The PSS-Fa and PSS-Fr (Procidano & Heller, 1983) were utilized to determine the level of social support from family and friends. The PSS-Fa and PSS-Fr scales both consist of 20 items that reflect the participant's perceptions of social support. The items are declarative statements; the participant selects a response for each: "yes," "no," or "don't know." Item scores range 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" and "My friends give me moral support I need." The scales have demonstrated high internal consistency, with a Cronbach's alpha coefficient of .90. The final Cronbach's alpha coefficients reported range from .88 to .91 for PSS-Fa and .84 to .90 for PSS-Fr. The test-retest coefficient was .83 during a one-month time period (Procidano & Heller, 1983). The scales have also shown 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 AIs is not known. In the current study, the Cronbach's alpha coefficients for social support from family and social support from friends scales was .89.

### **Resilience**

Because this study sought to explore resilience specific to school success among urban AI adolescents, resilience was measured and determined by using variables similar to those from studies involving AI adolescents by LaFromboise et al. (2006) and Whitesell et al. (2009). Thus, the resilience variables are limited to school success, and only this dimension of resilience is addressed. Information about participant level of resilience was assessed by a self-report survey consisting of 11 items pertaining to school involvement. Of the total items, 8 are specific to attitudes toward school, 2 address academic goals in regards to graduating high school and plans to attend college, and 1 assesses current academic grades. Sample items include "Is it important for you to make good grades?" and "Do you put a lot of effort into school?" Response options range from 1 (*none of the time*) to 5 (*always*). The alpha reliability coefficient in this study was .80.

## **RESULTS**

Prior to analysis, data were examined for data-entry errors, incomplete surveys, normal distribution, and outliers. Due to the design of the TECSES self-esteem measure, TECSES the "don't know/refused" responses were considered missing data; however, because the sample size was so small, the researcher did not want to drop participants who had missing data. The pairwise deletion method in SPSS was used to handle missing values (the researcher consulted with others who have used this measure and selected this method based on their recommendation). The "don't know/refused" cases were deleted for the self-esteem variable, which lowered the 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%) and the internal consistency computed for the TECSES scale revealed adequate reliability with a Cronbach's alpha coefficient of .85. It is also important to note that high scores were desirable for all variables with the exception of self-esteem. Low scores were desirable for self-esteem variables to indicate higher self-esteem, which resulted in negative relationships.

The preliminary data analysis included a computation of means, standard deviations, and correlations pertaining to the scales. Reliability analyses were conducted to determine the Cronbach's alpha coefficients (see Table 1). The Pearson bivariate correlation coefficients tended to reach statistical significance, although most correlations were small and medium. Particularly, results demonstrated a large, negative relationship between self-esteem and subjective well-being ( $r = -.50, p < .01$ ), which was desirable as low scores reflected higher self-esteem. A moderate,

positive relationship between social support from friends and resilience was found ( $r = .48, p < .01$ ), and a moderate, positive relationship was found between subjective well-being and resilience ( $r = .47, p < .01$ ).

**Table 1**  
Summary of Intercorrelations, Means, Standard Deviations, and Alpha Coefficients<sup>1,2</sup>

	1	2	3	4	5	6	<i>M</i>	<i>SD</i>	<i>Alpha</i>
1. Enculturation	--	-.31**	.36**	.19**	.26**	.26**	93.78	28.45	.93
2. Self-esteem		--	-.44**	-.28**	-.50**	-.38**	18.13	4.62	.85
3. Social Support from Family			--	.37**	.57**	.42**	12.16	5.37	.89
4. Social Support from Friends				--	.39**	.48**	11.21	5.50	.89
5. Subjective Well-being					--	.47**	22.78	7.28	.89
6. Resilience						--	30.55	7.03	.80

<sup>1</sup> High/positive scores were desirable for all study variables except Self-esteem. On the Self-esteem measure, low/negative scores were desirable, which resulted in negative relationships

<sup>2</sup>  $N = 196$  except for the study variable Self-esteem, where  $N = 159$  due to missing data

\*\*  $p < .01$ , two-tailed

Furthermore, negative, moderate relationships were found between self-esteem and social support from family ( $r = -.44, p < .01$ ), and between self-esteem and resilience ( $r = -.38, p < .01, 14\%$ ). Thus, higher levels of self-esteem were also associated with higher levels of social support from friends and higher levels of resilience. To our surprise, only a small, positive relationship between enculturation and resilience ( $r = .26, p < .01$ ) was demonstrated (see Table 1). In regards to educational aspirations, 175 participants (89.3%) reported having plans to finish high school, while 2 (1.0%) did not plan to complete high school, and 19 (9.7%) reported that they did not know. Furthermore, 125 (63.8%) reported having plans to attend college, 14 (7.1%) did not plan to attend college, and 57 (29.1%) reported that they did not know.

Due to the exploratory nature of this study, during the next phase of data analysis, two separate standard multiple regressions were conducted to determine the amount of variance in resilience that could be accounted by 1) enculturation, self-esteem, social support from family, and social support from friends; and 2) enculturation, subjective well-being, social support from family, and social support from friends. The models were also set up in this manner so they would

be similar to those used in previous research with reservation-dwelling AI adolescents, to attempt to shed light on potential similarities and differences among urban AI adolescents. Taken together, two separate standard multiple regressions were analyzed to demonstrate the amount of variance in resilience among the predictors. The first regression results demonstrated that, together, enculturation, self-esteem, social support from family, and social support from friends accounted for 33% of the variance in AI adolescents’ resilience scores. After each predictor was individually analyzed, 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 ( $t = 4.76$ ;  $p < .001$ ). Social support from friends appeared as the strongest predictor when considering AI adolescents’ resilience scores (see Table 2).

**Table 2**  
**Regression Analysis of Enculturation, Self-esteem, and Social Support on Resilience**

Criterion	Predictors	<i>Beta</i>	<i>B</i>	<i>SE</i>	95% CI	<i>F</i>	<i>R</i> <sup>2</sup>
Resilience						18.65	.33**
	Enculturation	.07	.02	.02	[-.02 to .05]		
	Self-esteem	-.17*	-.26	.12	[-.49 to -.04]		
	Social Support from Family	.19*	.25	.10	[.05 to .46]		
	Social Support from Friends	.34**	.44	.09	[.26 to .62]		

\*  $p < .05$

\*\*  $p < .01$ , all two-tailed

The second regression results, which included the predictor variables enculturation, subjective well-being, social support from family, and social support from friends, revealed that 34% of the variance in AI adolescents’ resilience scores was accounted for by the predictors. When individually analyzed, two tests of the partial regression coefficients reached statistical significance for subjective well-being ( $t = 3.40$ ;  $p < .001$ ) and social support from friends ( $t = 4.83$ ;  $p < .001$ ). Social support from friends remained the strongest predictor when considering AI adolescents’ resilience scores (see Table 3).

**Table 3**  
**Regression Analysis of Enculturation, Subjective Well-being, and Social Support on Resilience**

Criterion	Predictors	Beta	B	SE	95% CI	F	R <sup>2</sup>
Resilience						24.92	.34**
	Enculturation	.09	.02	.02	[-.01 to .05]		
	Subjective Well-being	.25**	.24	.07	[-.10 to -.38]		
	Social Support from Family	.13	.17	.10	[-.02 to .37]		
	Social Support from Friends	.31**	.40	.08	[-.24 to .57]		

\*  $p < .05$

\*\*  $p < .01$ , all two-tailed

## DISCUSSION

The goal of the current study was to explore resilience among urban AI adolescents, especially the role of culture among other variables in identifying protective factors supporting resilience among urban AI adolescents—and in particular, whether higher involvement with AI culture/traditions serves as source of strength against adversity and challenges for urban AI adolescents. Previous research has demonstrated such findings; however, much of the research is limited to reservation-dwelling AI adolescents, AI adults, and AI college students (Belcourt-Dittloff, 2006; Bergstrom, Clearly, & Peacock, 2003; Huffman, 2001; LaFromboise et al., 2006; Montgomery et al., 2000; Powers, 2006; Resnick et. al., 1997).

The predictor enculturation appeared to serve as a protective factor for urban AI adolescents, although correlations were small. Thus, urban AI adolescents with higher levels of enculturation demonstrated higher resilience scores. The positive relationship found between enculturation and resilience evidenced in this study appears only slightly consistent with previous research involving AI adults, reservation-dwelling AI adolescents, and AI college students (Belcourt-Dittloff, 2006; Bergstrom et al., 2003; Huffman, 2001; LaFromboise et al., 2006; Montgomery et al., 2000; Powers, 2006; Resnick et. al., 1997). Specifically, LaFromboise et al. (2006) explored familial, communal, and school influences on resilience among reservation-dwelling AI adolescents and found that enculturation was the strongest predictor. In the current study, it was surprising that, although a positive correlation between enculturation and resilience was shown, the effect was not as strong, and social support from friends, rather than enculturation, served as the strongest predictor.

Therefore, it seems the role of enculturation may differ somewhat between urban and reservation-dwelling AI adolescents, at least as evidenced by the results of the current study. It is possible that this difference may be attributed to the limited representation of AI communities and limited AI resources provided in urban areas. Thus, enculturation as a potential strength would also seem limited. For example, Stiffman et al. (2007) examined different strengths in regards to personal, familial, and environmental factors among 401 reservation-dwelling and urban AI adolescents. The researchers noticed that urban AI adolescents in their sample did not identify aspects of their tribe (e.g., tribal activities) as strengths as often as did reservation-dwelling AI adolescents.

The reservation advisors for the Stiffman et al. (2007) study concluded that this finding was likely due to the greater presence of tribal communities and more readily available tribal resources within reservation settings. They also noted that this finding might be due to the fact that urban AI adolescents often do not encounter tribal activities as a positive force in their daily lives, compared to the experiences of reservation-dwelling AI adolescents. Recently, LaFromboise et al. (2010) noted a similar phenomenon in which reservation-dwelling AIs tended to have lower levels of hopelessness compared to both urban and rural AIs. The researchers suggested that (among other variables often found in reservation settings) a prominent sense of culture in their immediate surroundings and collective efficacy could serve as positive forces for reservation-dwelling AIs and might account for the finding.

Similarly, past research has demonstrated negative consequences (e.g., feelings of isolation) among families that have moved from a reservation to an urban setting, due to limited tribal support systems and resources (Huang & Gibbs, 1992). It is also probable that urban AI adolescents find themselves torn between two cultures (i.e., AI and Euro-American), which may make it difficult for them to benefit from either one. Furthermore, Grosjean (2008) has described the difficult process of becoming bicultural and has noted that some cultures have difficulty understanding and accepting that an individual can be part of two or more cultures. This phenomenon has been documented by researchers such as Oetting and Beauvais (1990/1991), who have discussed the complex issues facing AI adolescents who do not identify with either culture. Specifically, these adolescents' risk for failure at school appears greater, which further demonstrates the importance of identifying with a cultural group. In the same way, LaFromboise et al. (2010) found that AI adolescents who were able to be adaptable and skillful in both AI and Euro-American cultures appeared to have lower levels of hopelessness compared to their counterparts. Again, individuals who lacked identification with any culture seemed to struggle most.

The variables self-esteem, subjective well-being, and social support from family and friends were also explored. Taken together, enculturation, self-esteem, and social support from family and friends served as significant predictors that accounted for 33% of the variance in resilience while

enculturation, subjective well-being, and social support from family and friends accounted for 34% of the variance in resilience. Yet, when the predictors were assessed individually, enculturation and social support from family were no longer significant. This finding contrasts with research by Whitbeck, Hoyt, Stubben, & LaFromboise (2001), Whitesell et al. (2009), and Zimmerman, Ramirez, Washienko, & Dyer (1998), who have shown that identifying with, valuing, and participating in AI culture are all associated with higher levels of enculturation, self-esteem, social support, and academic achievement. It is important to note that the current findings do not contradict the previous research concerning the positive benefits of enculturation and social support from family; rather, they likely reflect differences associated with the unique needs and lived experiences of urban AI adolescents.

Furthermore, in this study self-esteem did appear as an important component of urban AI adolescents' resilience (as a large significant relationship was evidenced); it also contributed to the prediction of urban AI adolescents' resilience. This finding appears consistent with longitudinal research conducted by Whitesell et al. (2009) that involved 1,611 reservation-dwelling AI adolescents. In this study, self-esteem was strongly and positively related to academic success. Thus, higher self-esteem appears important for both urban and reservation-dwelling AI adolescents, representing a similarity between the two groups. Additionally, although the aforementioned variables all appeared as significant predictors of resilience in the current study, social support from friends made the strongest significant and unique contribution to resilience. This finding is not too unexpected when considering the important role of friends during adolescence, but it is interesting that it represented as the strongest predictor. This finding highlights the significant and unique role of friends among urban AI adolescents because, based on much of the previous research concerning mostly reservation-dwelling AI adolescents (e.g., LaFromboise et al. [2006] and Stiffman [2007]), the strongest predictors are often enculturation and social support from family.

These results parallel research by Stiffman et al. (2007) that involved perceptions of both urban and reservation-dwelling AI adolescents. The results revealed that urban AI adolescents were two times more likely to list their friends and school system as strengths, while reservation-dwelling AI adolescents were more likely to list tribal cultural activities. Moreover, one in two urban AI adolescents were unable to report what was best about their tribal communities, although they endorsed that they valued tribal cultural activities. It seems reasonable that urban AI adolescents may feel uncertain or unsure about their cultural communities due to the limitations in urban settings (i.e., less prominent tribal communities/resources and less opportunity to engage with tribal communities).

It should not be assumed based on the results of this study that urban AI adolescents do not value their culture. For example, House et al. (2006) results indicated that 40% of urban AI adolescents conveyed that the most important aspects of their AI identity and culture were AI ceremonies and traditions, while 46% reported being most proud of their AI ceremonies and

traditions. Thus, it seems reasonable that urban AI adolescents value AI traditions and culture; yet, due to the limitations of urban living, they are not provided with the opportunity to regularly engage in AI cultural activities. It is plausible that these various factors contribute to the significant role of friends among urban AI adolescents.

### **Limitations**

Although this study helped paint a picture of the experiences of urban AI adolescents regarding the impact of enculturation, self-esteem, subjective well-being, social support from family, and social support from friends on resilience specific to school success, the study was exploratory in nature; thus, the results are interpreted with caution and causality is not inferred. Also, the quantitative method of this study does not sufficiently capture the complexities of AI identity and culture or precisely reflect how urban AI adolescents experience their culture. Open-ended, qualitative measures can be useful in studies such as this. However, in keeping with the CBPR research methods driving this study, we agreed with the agency's community advisory board that quantitative measures should be used, as these appeared most important to the community's needs.

Additionally, all participants in the study were associated with one specific AI agency. Thus, they had access to and utilized the AI agency's services, including cultural events, which might have made them a more resilient sample. The results are dependent on self-report measures alone, the sample size was small, and information regarding tribal enrollment and academic status verification was not obtained. Further, the resilience measure only assessed positive outcomes specific to school success. Resilience is a multidimensional construct and the measure in this study is limited because only one dimension (i.e., school success) was obtained. Lastly, the participants were recruited from one urban area and represented only 20 federally recognized tribes.

### **Implications and Conclusions**

This study adds to the literature by exploring the resilience of urban AI adolescents in a culturally informed manner (i.e., the study used a CBPR research model, which incorporated the valued participation of and feedback from the AI agency and its community advisory board). Such research is increasingly important as more AI adolescents reside in urban areas and are faced with problems specific to urbanization (Powers, 2006; Safran et al., 1994; Snipp, 1995). Although the primary intent of the study was to explore the role of culture, this study extends resilience research by illustrating the unique and strong influence of social support from friends as a protective factor in terms of resilience among urban AI adolescents. This outcome was not anticipated but reveals a

unique finding and a key difference between urban and reservation-dwelling AI adolescents. Also, in general, this study in general supports and complements prior resilience research that has noted the positive impact of cultural, personal, environmental, and familial factors among AI adolescents.

### **Future Research**

This study was exploratory in nature, and additional research focusing on understanding how culture and social support positively build resilience would be beneficial. Also, the results merit replication with other samples. It would be advantageous to include samples of other AI adolescents who reside in other urban areas, and to include reservation-dwelling and rural AI adolescents, as well as non-AI adolescents. Another consideration would be to explore various elements of social support from friends, as that predictor appears key in urban AI adolescents' demonstration of resilience. In this study, only level of support from friends was obtained; additional information about friendships is needed in order to better understand the results. Specific information pertaining to whom AI adolescents befriend and how they determine friendships would be useful in understanding the results and adolescents' experiences. For instance, if friends consist of mostly other AI adolescents, then more support for enculturation and cultural influences regarding resilience among urban AI adolescents could be demonstrated.

With that in mind, a qualitative approach would be beneficial in terms of adding richness to the understanding of the lived experiences of urban AI adolescents. Additionally, though resilience was narrowly defined in this study in relation to school success (e.g., involvement in school, academic grades, and college plans), earlier research by Faircloth and Tippeconnic (2010) has documented that AI adolescents appear at greater risk for school attrition: Notably, the graduation rate among AI adolescents on average was 46%, lower than the graduation rates for all ethnic groups. Thus, AI adolescents who show resilience through positive outcomes like greater school success indeed demonstrate resilience.

The finding that appears most promising is that the specific protective factors that were found to contribute to resilience among urban AI adolescents, such as enculturation and social support from friends, can be directly and positively influenced and promoted by tribes/nations, AI agencies, families, teachers, school systems, and mental health professionals. These results have practical implications and could potentially be useful in helping to bridge the gap in educational achievement among AI adolescents. Additionally, tribal communities within urban settings could increase the visibility of tribal and cultural programs to help promote utilization of services. Finally, mental health professionals who work with urban AI adolescents, families, and other clients could explore the influences of culture and friends to promote and increase the positive impact of each in their AI clients' lives.

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