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# American Indian Youth: Personal, Familial, and Environmental Strengths

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**Abstract** We present data from interviews with 401 youths on the relationship of personal, familial, and environmental strengths to the outcomes of urban and reservation American Indian youths. Urban youths consistently nominated more strengths than tribal youths, except in the area of tribal strengths. Quantitative data show how those strengths relate to their school success, daily functioning, mental health, and ethnic identity. Personal and familial strengths are related to positive school success and functioning. Environmental strengths demonstrate complex relationships in which tribal strengths are related to increased mental health problems and school strengths are related to fewer problems. The results of our study speak to the need to include multiple categories of different strengths in research and to focus on strengths as well as problems in clinical interventions.

**Keywords** American Indian · Mental health · Strengths · Youth

Research on youths has usually focused on problem behaviors rather than positive behaviors, competence, or strengths (e.g., Donovan, Jessor & Costa, 1993; Garmezy, 1993; Gordon, 1997). Yet, we know that success, health, and prevention of problems often depend on the strengths that an individual possesses internally or can find in his or her family or environment (Werner & Smith, 1992). We also know that research often ignores many of these strengths and resources. American Indian youths, in particular, have been a continued focus

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of published research detailing problems, much to the consternation of the American Indian community. American Indian researchers have constantly stated that a more helpful focus would be on resiliency, effective adaptations, coping, and stories of survival (LaFromboise & Dizon, 2003). When the primary goals of research focus on life outcomes and findings relevant to prevention and health promotion, we must look beyond pathology to social and instrumental competence and community involvement (Mitchell & Beals, 1997). This paper presents data from open-ended and structured questions about the personal, familial, and environmental strengths of urban and reservation American Indian youths, and the relationship of these strengths to other positive and negative outcomes.

Much of the literature on the strengths perspective (one aspect of which is referred to as a resilience or holistic perspective, Kaplan, 1999) comes from social work and psychology (Cross, 1998). Werner and Smith (1992) defined resilience as the individual's ability to recover from or adjust rapidly to misfortune or change. Waller (2001) described the strengths and resilience concepts as central to the grand theory of "ecosystems." According to this theory, human behavior is shaped by interactions and interrelationships with various systems and environments. The resiliency model provides a theoretical basis for examining strengths associated with success in the context of challenges. It details personal, relational, and community factors that are protective for youths and factors that promote capacity-building within individuals and groups (Garmezy, 1993; Kaplan, 1999; Masten & Powell, 2003). Like the resiliency model, the developmental assets model promotes positive and thriving behaviors among youths that protect them from engaging in a variety of high-risk behaviors, including alcohol use, violence, and use of illicit drugs (Benson, 2001; Benson & Leffert, 1999; Scales & Leffert, 1999). Resiliency concepts are often conceptualized as being on opposite ends of a continuum ranging from a "stressor" at one end to a "protector" or resilience mechanism at another (Radke-Yarrow & Brown, 1993). Others define the concept of "strengths" as going beyond the aspect of risk and potentially having independent or orthogonal relationships with risk (Hawkins, Cummins & Marlatt, 2004). This article uses the concept of "strengths" to refer to a present or current situation only with no preconceived relationship to outcomes.

Some researchers have attempted to explain theoretical approaches that are unique to the American Indian culture and the strengths perspective. Gilgun (2002) discusses American Indian strengths in terms of completing the circle of American Indian Medicine Wheels to promote the themes of belonging, mastery, independence, & generosity. Taking a different approach, a treatise by First Nations (Goodluck & Willeto, 2001) posits that there are two major views of human behavior. The first view is that human behavior can be examined objectively, and understood linearly, as part of a "cause-and-effect" process. The second view is that human behavior can be best understood as a personal, subjective, cyclical process, and an interaction of multi-dimensions. Research is typically based on the first viewpoint, which is closely aligned with resilience theories (Cross, 1998; Gutierrez, Parson, & Cox, 1998; Kaplan, 1999). Some American Indian researchers think that strengths need to be described and understood as entities unto themselves (Beals et al., 2003; Waller, Okamoto, Mikes, & Handle, 2003).

The fact that there is limited research on positive behaviors among American Indian adolescents supports the need to examine the notion of "strength" by itself. This is because strength characteristics develop within a complex mixture, with the presence of positive behaviors not necessarily being linearly associated with the absence of negative behavior (Hawkins et al., 2004; Mitchell & Beals, 1997). However, almost universally, familial strengths appear as a significant factor in both the research and theoretical literature (e.g., Bearinger et al., 2005; Cummins, Ireland, Resnick, & Blum, 1999; Stubben, 1997). Research

on the association of strengths with problem behaviors shows that family involvement in spiritual ceremonies or cultural identity is associated with less substance abuse, violence, and alienation (Stubben, 1997; Thurman & Green, 1997).

Measurement of strengths (as opposed to protective "factors" or "resilience mechanisms" or "developmental assets") in the general literature on adolescents has been very narrow and typically is applied only to personal strengths. Familial strengths or environmental strengths are seldom measured, or are measured in limited areas: academic achievement and church attendance (Donovan, Jessor, & Costa, 1993); attending church, reading about African American history, doing something fun with adults they lived with, accomplishing something to be proud of, and exercising or playing sports (Resnicow, Ross-Gaddy, & Vaughn, 1995) ; and church attendance, grade point average, school attendance, and a composite scale score of eight positive behaviors (Farrell, Danish, & Howard, 1992).

Many ethnic researchers and theorists have struggled with how to define strengths in a manner appropriate to diverse cultures. For example, Saleebey (1996, 2001) includes the following as strengths: what people have learned about themselves, others, and their worlds; personal qualities, traits, and virtues that they possess; talents; knowledge of cultural and personal stories and lore; and pride. In a similar pattern, Early and Glenmaye (2000) state that: " . . . the strengths approach . . . involves systematically examining survival skills, abilities, knowledge, resources . . . " (p. 119). Other researchers have defined "strengths" as involvement in community activities, positive behaviors, success in school, participation in cultural activities, high competencies, community-mindedness, and social support (Mitchell & Beals, 1997). The Search Institute found that, for American Indian and Asian students, "constructive use of time" is more strongly correlated with success in school than for other students (Sesma & Roehlkepartain, 2003). Cross-cultural work of this nature in examining strengths is not common, and cross-cultural studies usually use predetermined strength categories without regard to potential cultural differences (Coll, Akerman, & Cicchetti, 2000). No one has first gone to the population and/or culture and asked representatives to define their personal, familial and environmental strengths, let alone their cultural strengths.

A broad base of literature, much of it not research-based, consistently refers to a number of strengths in the American Indian community that are shaped by their customs, cultural values, and beliefs (Bullerdick, 2000). Hundreds of tribes exist in this country, and, although each has unique features, common strengths have been identified. They include having an extended family, having respect for elders, maintaining traditional ways, having a sense of humor, having resilience, and encouraging autonomy for children. Although there is no research literature on humor, resiliency, or child autonomy, the following summarizes research and theory on the other strengths.

Several American Indian researchers (LaFramboise & Dizon, 2003; Oetting, Donnermeyer, Trinble, & Beauvais, 1998; Red Horse, 1997) emphasize the "extended family" and its inherent and critical social value as an American Indian strength (Walsh, 1996). Traditionally, American Indians practiced informal caregiving through the extended family, whose members included mothers, fathers, siblings, grandparents, aunts, uncles, and cousins (Garwick & Auger, 2000; Harris, Page, & Begay, 1988). The importance of family may be further reinforced by the American Indians' status as an ethnic group of color. For adolescents of color, a strong family orientation may protect against the effects of discrimination (Vasquez & De Las Fuentes, 1999). Such a family provides culturally competent care by honoring the youth's racial, ethnic, cultural, and socioeconomic diversity (Garwick & Auger, 2000).

The notion of "respect for elders" is closely tied to the function of the extended family. Great importance is placed on age and accordant life experiences (Joe & Malach, 1992). Thus, parents may seek the much-valued advice and assistance of older family members

and elders. For American Indian families, the family's relationship with elders enhances resiliency (Johnson, 1995). Several focus groups that we conducted with American Indian youths, parents, and elders from reservation and urban settings revealed the critical value of "respect" for elders among American Indians and how this value makes American Indian culture unique from others (House, Stiffman, & Brown, 2006).

Many American Indians who are interested in strengthening their communities are emphasizing the importance of more closely identifying with "traditional ways" and they do this by blending cultural activities and beliefs with conventional American activities, beliefs, and practices (Goodluck & Willeto, 2001; Stubben, 1997). In one study, spiritual/traditional practices were shown to be a protective factor against suicide among American Indians (Garroutte et al., 2003). However, other research in this area that assessed traditions and culture as a strength has had conflicting results, with identity and self-concept and participation in traditions sometimes being associated with decreased (Thurman & Green, 1997) and sometimes increased rates of alcohol or substance use (Hawkins et al., 2004; Mail, Heurtin-Roberts, Martin, & Howard, 2002; Petoskey, Van Stelle, & De Jong, 1998; Yu, Stiffman, & Freedenthal, 2005).

In response to the growing concern that most research on American Indians focuses only on problems with a linear view of human behavior, several American Indian groups have identified strengths indicators to guide studies of Native American children and youths (Goodluck & Willeto, 2001). These publications identify "strengths" as the maintenance of culture; the opportunity for ceremonial participation; the preservation of community strengths such as nurturance and protection of children and youths; and positive interpersonal relationships.

Despite the growing literature on the need for a strengths perspective, there has been no study where researchers have asked American Indian youths about their perceptions of their personal, familial, and environmental strengths. Nor has anyone looked at strengths in multiple life domains or how perceptions might differ between urban and reservation youths (Bachman, 1992). Further, no one has considered how strengths relate to each other and to different types of personal problems (Luthar & Cicchetti, 2000).

## Method

This paper is based on data from the American Indian Multisector Help Inquiry (AIM-HI), a NIDA-funded study of service use and drug-use information in two American Indian adolescent populations: one urban- and one reservation-based. Both representative groups are from a single Southwestern state. Although designed for a study of youth problems and services for those problems, AIM-HI also examined personal, familial, environmental (peer, neighborhood, school, tribe) strengths.

### Sample

A sample of 401 youths (about 200 from each area) was interviewed in person in 2001. Youths aged 12 to 19 were recruited through a two-stage method. First, a sample of 300 tribal-based and 300 urban-based youths was randomly selected from tribal enrollment records; in the second stage, they were selected from school district records. These lists assured that the selection was representative of all the American Indian youths in both areas. Only one child per household was enrolled.

The Internal Review Boards at Washington University, the tribal council, and the urban school district reviewed, shaped, and approved the consent and protection procedures. Personnel from local American Indian educational and health services made the initial contact with the families who had adolescent children, notifying them about AIM-HI and encouraging their participation. Families were asked to return a fold-over, pre-stamped postcard signed by the youth and a guardian. In the card, the guardian either consented to or refused the research. Families who did not actively refuse were contacted directly by the interviewers. Only six families or youths refused in each area.

### Screening, identification, and recruitment

Of the approximately 300 youths in each area who participated in the brief interview, 150 in each area were randomly selected for the long interview. To enrich the sample with youths likely to need services, we added the first 50 youths from each area who were not randomly selected in the 150 but who scored more than the borderline clinical cutoff point ($T > 63$) for the Achenbach Youth Self Report (YSR) (Achenbach, 1991) and above 15 for the Columbia Impairment Scale (CIS) (Bird et al., 1993).

### Interview procedures

Interviewers first explained the brief interview and the full study and obtained parent/guardian and youth consent (if not already obtained by signature). For completing the YSR and CIS, each youth was offered a T-shirt with an AIM-HI logo designed by a local American Indian artist. If the youth met either random-selection or high-need enrichment criteria, the interviewer scheduled the long interview, for which each youth was paid an additional $25.00. Of the youths who completed the brief interview and were scheduled for the long interview, 2.7% refused or had a parent withdraw consent.

The field supervisors and most of the interviewers were American Indian. AIM-HI held a six-day session for field supervisors and a four-day training session for interviewers. Interviewers were required to accurately and smoothly complete a practice interview prior to entering the field. All interviews were audio taped for monitoring and backup purposes. Supervisors, who gave immediate feedback, reviewed each interviewer's entire first two interviews, and selected sections of further interviews.

### Instruments

#### *Open-ended measures of strengths*

Youths were asked the following open-ended questions concerning personal, familial, and environmental strengths:

- Personal: What are your personal best strong points? What are you best at? and What is your biggest accomplishment?
- Familial: What are the best things about your family?
- Environmental: What are the best things about your friends? What are the best things for youths about your neighborhood or community? What are the best things for youths about your school? and What are the best things for youths about your tribal community?

Answers to the open-ended questions about personal, familial, and environmental strengths were transcribed, read by four staff members for patterns of responses, and placed

into categories based on the natural grouping of the youths' answers. This coding was reviewed by at least two other individuals for consistency and clarity. Conflicting categorizations were resolved by consensus after discussion.

In this paper, we first describe the categories and the answers that comprised each category as a strengths scale. Then we describe how we used a count of the number of strengths that each youth listed for each category. This method parallels other methods that some studies have used, which is to count symptoms to assess problems. However, in our study, the strengths were volunteered instead of presented as a preconceived list of a fixed number of symptoms, as problem scales usually are.

*Structured measures of personal strengths*

*School Strengths* were assessed as the youths' grade point average during the last academic year. *Functioning* was assessed using the WHO-DAS, World Health Organization-Disability Assessment Scale, which was modified for adolescents by asking about school rather than work disability. We then reverse-scored the results so that they would indicate functioning rather than impairment (Epping-Jordan & Ustun, 2000). *Cultural/Spiritual Strengths* were measured using ethnic identity questions from the Oetting and Beauvais (1991) Cultural Identity Scale. Questions about participation in American Indian spirituality and traditions included the following categories: memorials/feasts, "sweats," talking circles, "spiritual running," healing ceremonies, naming ceremonies, give-a-ways, and religious events.

*Structured measures of familial strengths*

*Family Relationships* (specifically, dissatisfying relationships) were assessed with an adaptation of the Family Satisfaction Scale (Hudson, 1982). Subjects used a five-point scale to rate how much time, during the previous six months their family "got on their nerves," how much they really enjoyed their family, whether they could depend on their family, whether their family argued too much, or whether they felt like a stranger in their own home. Positive questions were reverse-coded. (Cronbach's alpha $=$ .72). To assess *Family Mental Health* youths were provided with nine brief descriptions of diagnostic criteria and were asked if a family member matched any of these descriptions (Stiffman, 1989) (Cronbach's alpha $=$ .78).

*Structured measures of environment*

*School Environment* was assessed with six questions covering drug dealing, shootings or knifings; incidences of teachers being injured by students; incidences of school equipment being intentionally damaged; whether there was discrimination; and whether there was anger/stress at school. Answers were scored on a three-point scale ("none," "some," "a lot"). (Hadley-Ives, Stiffman, & Doré, 2000) (Cronbach's alpha $=$ .63). *Neighborhood Environment* was measured through the adolescent's rating of their neighborhood problems on a three-point scale ("none," "some," "a lot"). The summed items included shootings, murders, abandoned buildings, neighbors on welfare, prostitution, drug dealing, and/or homeless individuals (Cronbach's $\alpha = 0.83$). *Peer Environment*. Peer misbehavior was assessed by asking how many of the youth's acquaintances and friends (people about their age) had trouble with the police or juvenile officers; had babies or fathered babies; used alcohol, tobacco, marijuana, inhalants, and/or other illegal drugs; were both unemployed and out of school; sold drugs or marijuana; and/or belonged to a gang during their lifetimes (Stiffman, Hadley-Ives, Elze,

Johnson, & Doré, 1999). Responses on a five-point scale ("none," "a few," "about half," "most," "all") were summed. Cronbach's alpha coefficient was 0.84.

*Structured measures of personal factors/problems*

Questions concerning depression, conduct disorder, and substance abuse or dependence (alcohol and other drugs) came from the National Institute of Mental Health's Diagnostic Interview Schedule (DIS-IV) (Robins & Helzer, 1994). The DIS section on drug abuse or dependence was modified to exclude any substances used exclusively for spiritual or healing ceremonies.

## Analyses

We first describe the categories and the answers that comprised each category of strengths assessed from the open-ended questions. We then describe these categories as a strength scale based on a count of the number of strengths listed by a youth for each category. As explained earlier, this parallels the methods that some studies use in counting symptoms to assess problems, except that the strengths were volunteered instead of presented as a preconceived list of a fixed number of symptoms as problem scales usually are.

All analyses were completed using SAS software (SAS Institute, 1999). Because the study deliberately enriched the sample with high-need youth after the random brief screening interview, we weighted the data to reflect the percentages of disorders found in the general community sampled. To do this, two proportions were calculated based on the ratio of youths in the initial larger random sample ($n = 567$) to those in the smaller over-sampled high-need group ($n = 401$): one for youth who met high-need criteria (203/182) and one for those who did not meet high-need criteria (364/219). This recreated a sample N equivalent to that in the original random sample and with the same balance of high-need youth. This weighted N was used to calculate all rates of strengths and problems. These weights were 1.7 for the youths who did not meet high-need over sampling criteria and 1.1 for the youth who did meet high-need criteria. N's presented in the tables are the actual N, but percentages reflect the weighted data. No percentages changed significantly after weighting.

## Results

### Description of open-ended responses

Because the strength questions were open-ended, the youths varied in their responses, ranging from multiple detailed comments (up to 22 in total) to no comments at all. In general, urban youths were more likely to give extended and positive comments than the reservation youths, and we later explore the reason for this pattern.

### Personal strengths

Youths averaged 1.4 responses for personal strengths, with a range from none to five. Categories for their responses included "friendly, kind, smart, humorous, responsible, independent, positive, good family, good communicator, good personality, physically able and artistic (music, dance, or literature)." The descriptors chosen most often by the youths

included the following: "friendly, kind, independent, smart, and funny/humorous." Most of these self-attributions closely parallel the American Indian cultural emphases on relationships, humor, and independence for children. One in four urban youths versus about one in eight reservation youths reported that they were friendly, kind, independent, and smart. Urban youths were also more likely to state that they were funny and had a good personality. In contrast, reservation youths were more likely to say that they did not know what their personal best strong point was. It is important to note that, although asked about personal strong points, many listed family as their personal strong point, thereby revealing the traditional American Indian connections between self and family.

When asked about skills they possessed, the youths responded with the largest list, ranging from having no skills to having ten skills. The average was 1.5 skills. The skill categories included sports, the arts, being friendly, being responsible, being close to their family, being good in academics, being creative, and whether they worked, were confident, or were funny. Close to one in five urban youths and one in eight reservation youths nominated sports. About one in seven urban youths and one in 10 reservation youths stated they were best at art. When describing themselves as friendly or responsible or mentioning family, half of the descriptions mentioned some aspect of helping others, such as "helping people with their problems," or "helping people out," or "taking care of my sisters." When describing themselves as smart, or citing academics as a strength, math was the most highly mentioned area. Again, reservation youths were eight times as likely to report that they did not know what they were best at. The lack of a response in the reservation youths could have been due to cultural sanctions against openly discussing strengths with outsiders (although the interviewers were American Indians). The reservation youths were four times more likely to report that they were best at nothing, possibly indicating that they had low self-opinions or that they respected cultural taboos against speaking positively of oneself.

## Familial strengths

The youths averaged 1.3 responses for familial strengths, with a range of zero to four. Categories included dependability, support and love, fun, family activities, community activities, and "just staying together no matter what." The same pattern of urban youths listing more strengths than reservation youths occurred with questions about family. Urban youths were more likely than reservation youths to report that their families were dependable, loving, fun, and had good communication. Reservation youths did mention one strength more than the urban youths, and that was participation in family activities. But, once again, four times as many reservation youths as urban youths stated that they did not know what the best things were about their family. And three times as many reservation as urban youths reported no familial strengths.

## Environmental strengths

### *Peers*

The youths' responses to friend strengths were very similar to their responses for familial strengths. They averaged 1.3 responses about friend strengths, with a range of none to four. Categories mentioned included dependability, communication, fun, love and support, peer

activities, just staying together, being accepting, and not engaging in drugs or illicit activities. Almost half of the youths from the urban and reservation areas reported that the best thing about their friends was their dependability. Although more than one in three urban youths listed "communication" as the best thing about their friends, only one in four reservation youths did so. Also, although one in three urban youths stated that their friends were fun, only one in six reservation youths did so.

*Neighborhood*

The youths averaged only one positive response to the neighborhood strength questions, with a very truncated range of zero to three. Categories included parks/playgrounds, safety, youth services (clubs, youth programs, etc.), friends, cleanliness, fun, public services (police force, etc.), churches, and schools. The responses the youths gave to neighborhood strengths largely reflected the topography and programs in the community in which they lived. For example, one in three urban youths compared to one in 10 reservation youths nominated "parks" as the best things for youths in their neighborhood. The existence of parks may be less necessary for the reservation youths who have more land associated with home. "Safety" was also a big item for one in five urban youths, but only for one in twelve reservation youths. This might reflect the greater diversity in safe neighborhoods in an urban setting. In contrast, one in three reservation youths compared to one in eight urban youths mentioned youth programs. (Note that "youth programs" had been a major programmatic push by the American Indian reservation.) One in five of both urban and reservation youths mentioned "friends" in their neighborhood. Once again, reservation youths were less likely to give any positive response at all; with four times as many reservation youths as urban youths reporting that they did not know what was the best in their neighborhood, and twice as many saying "nothing."

*School*

The youths averaged 1.1 responses to the school strength question, with a range from zero to four. Categories mentioned included clubs, sports, ROTC, teachers, academics, helpful, friends, safety, diversity, friendly/fun. The youths most frequently nominated clubs, sports, and ROTC as the best things about their schools, with more urban than reservation youths listing each of those categories. Urban youths were twice as likely to list teachers and twice as likely to say that their school was helpful or that "friends" was a strength. Again, more than twice as many reservation youths as urban youths stated that they did not know what was best about their school, but both groups were equally likely to say that nothing was best.

*Tribal*

The youths were least likely to produce a response for the tribal community questions, with an average of .75, and a range from zero to four. Categories included cultural activities (pow wows, dances, language, ceremonies, etc.), programs (after-school, youth services, etc.), tribal support and care, traditional spiritual activities, security (police, safety from gangs, laws, etc.), or tribal financial disbursements. Although the urban youths did not live within a tribal community, most had access to either their home reservation on a regular basis (the majority lived within a 4–8 hour drive of their tribes' reservations) or intertribal programming in the urban area. Unlike their responses to the other categories, reservation youths were more likely to respond that "tribal cultural activities" was a strength, although tribal cultural activities were almost equally mentioned as best by urban and reservation

youths. Approximately one in three reservation youths and one in eight urban youths stated that tribal programs were the best things about their tribal community. Almost twice as many urban as reservation youths reported a sense of support and caring as the best thing about their tribal communities, perhaps reflecting their situations as minorities. This result seemed logical because if one has an elemental sense of belonging as a state of being (which is possible for a reservation youth), one probably would not recognize it as a strength as much as an urban youth would who was visiting his or her tribe for summers or holidays. For the first time, more urban (almost one in two) than reservation youths (one in three) stated that they didn't know what was best about their tribal communities.

## Relationship between strengths and location

Because the urban youths were more likely to mention a strength in response to each question, we examined potential reasons for this difference. It might have been attributable to either of two reasons: 1) they were reporting actual strengths, or 2) regardless of any strengths, reservation youths verbalize less. We first compared the presence of a report of a defined strength (as opposed to responses denying any strengths like "none" or "nothing," or mentioning a weakness) offered by youths from the two locations. For each question, with the exceptions of peer strengths and tribal strengths, urban youths were more likely to respond by describing a strength (Table 1). Almost all of the youths (90%) listed at least one peer strength, but only slightly more than half of the youths listed a "tribal" strength. Since this variance also occurred for responses concerning their community strengths, it appears to indicate the likelihood of an actual difference in strengths rather than just a response propensity.

In addition to examining the presence or absence of a strength response, we also examined the total number of strengths that each youth volunteered (as if their responses were a strength scale). A similar comparison of the number of strengths the youths volunteered in response to each strength question showed that urban youths volunteered more

**Table 1** Urban/reservation differences in proportion of youth nominating different strengths categories

| Positive answer to | Urban ($n = 196$) % | Reservation ($n = 205$) % | Chi-square |
|---|---|---|---|
| Personal strengths | | | |
| Personal strong point | 88.0 | 73.1 | 13.7** |
| What best at | 98.6 | 90.0 | 10.3** |
| Biggest accomplishment | 94.6 | 80.4 | 17.1*** |
| Familial strengths | | | |
| Familial strengths | 94.6 | 86.4 | 7.4* |
| Environmental strengths | | | |
| Neighborhood | 86.2 | 67.4 | 18.6*** |
| School | 86.8 | 75.6 | 8.0* |
| Any positive response | 100 | 98.7 | 3.8 |

*Note*. n.s.-peers (about 90% answered), tribe (slightly more than half answered).

*$p < .01$, **$p < 001$, ***$p < .0001$.

**Table 2** Correlation of open-ended strengths scales with structured personal strength/functioning measures

| Numbers of | Grade point average | Functioning | Ethnic identity |
|---|---|---|---|
| Personal strengths | .13** | .15** | ns |
| Familial strengths | .19*** | .10* | ns |
| Environmental strengths | | | |
| Neighborhood | .15** | ns | .17*** |
| School | .24*** | ns | ns |

*Note*. ns = friend.

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

responses to each question except for one on tribal strengths, where there was no significant difference.

How did the open-ended strengths scales relate to the structured personal strength measures?

The youths' grade point averages were significantly positively correlated with personal ($r = .13$), familial ($r = .19$), and environmental (neighborhood, $r = .15$; school, $r = .24$) strengths (Table 2). Analyses of variance to further explore the nature of the correlation showed that the majority of differences were between those whose grades were largely failing or "Ds" and those with better grades. This difference might exist because youths who do well in school are better able to articulate their thoughts. Similarly, both counts of personal strengths and total strengths were significantly correlated with the youth's functioning scores on the WHO-DAS ($r = .15$ and $r = .13$, respectively). Although the correlations are weak, they indicate that youths who listed more personal strengths were functioning better. In addition, the counts of neighborhood strengths and tribal strengths were correlated with the structured scale for the youths' ethnic identity ($r = .17$).

Correlations between strengths measures and related problem measures

To examine the relationships between strengths and problems, we correlated familial strengths, environmental strengths, and school with the youths' structured reports of the negative qualities of each. The only significant association was between the count of familial strengths and the structured scales of family dissatisfaction ($r = -.20$) and family mental health ($r = -.12$).

Strengths as resilience

Because ecological theory states that personal resilience is related to environmental resilience, we also examined the relationship of the familial and environmental (friends, family, neighborhood, school, and tribal) strengths scales to personal problems (Table 3). Familial strengths were less important than environmental strengths in relationship to youth outcome. The more school strengths the youths listed, the fewer conduct disorder symptoms ($r = -.16$), alcohol abuse symptoms ($r = -.15$), and drug abuse symptoms ($r = -.13$) there were. In contrast, the more tribal strengths that the youths listed, the more symptoms of alcohol abuse ($r = .15$), depression ($r = .10$), and conduct disorder ($r = .12$) there were.

**Table 3** Correlation of open-ended strengths scales with structured personal and environmental scales and ethnic identity

| | Structured family strengths | | Structured personal problems | | | |
|---|---|---|---|---|---|---|
| Number of | Family dissatisfaction | Number family members with mental health problems | Alcohol abuse or dependence symptoms | Drug abuse or dependence symptoms | Depression symptoms | Conduct disorder symptoms |
| Familial strengths | −.20**** | −.12** | ns | ns | ns | ns |
| Environmental strengths | | | | | | |
| School strengths | ns | | −.15** | −.13* | ns | −.16** |
| Sribal strengths | ns | | .15** | ns | .10* | .12* |

*$p < .05$, **$p < .01$, ***$p > .001$, ****$p < .0001$.

## Discussion

Our results open two avenues of discussion: one concerns our methodology of examining strengths, and the other concerns the characteristics of personal, familial and environmental strengths. Concerning the meaningfulness and validity of our methodology, one evident pattern was that reservation youths were less likely to report strengths than urban youths. Had all of the responses, regardless of the type of strength, been more numerous for the urban youths, we would conclude that the differences reflected cultural patterns regarding disclosure. However, reservation youths gave more responses for positive tribal strengths than the urban youths did. Our reservation advisors explain this as a function of the greater presence of a tribal community on a reservation and the importance of the community as an extended/greater family for reservation youths, as compared to an urban setting. Therefore, this distinct response indicates that, when there was a lack of response, it may have been due to an absence of perceived strengths.

Another methodological issue concerns whether our strength responses can be accurately counted for use as a strength scale. The significant relationships between the personal strengths count and the structured personal strengths scales (such as the youths' grade point average and functioning); between familial strengths and the family scales; and between the count of tribal strengths and ethnic identity supports the convergent validity of the count of strengths.

The major focus of our study is on the characteristics of personal, familial, and environmental strengths. The results from our study shed new light on strength and resilience characteristics among American Indian youths. They also help us to compare the similarities and differences between what the youths report and what the literature identifies as pan-tribal American Indian strengths (Bullerdick, 2000) The strengths reported by the American Indian youths in our study largely fall into the same areas as those posited in several American Indian theoretical treatises: the personal characteristics of friendliness, independence and humor (Bullerdick, 2000); the familial strengths of dependability, humor and love (Garwick & Auger, 2000; LaFramboise & Dixon, 2003; Red Horse, 1997) and the tribal strength of traditions (Stubben, 1997; Garroutte et al., 2003). The literature doesn't discuss general environmental strengths, so we have no comparison for our study.

Like prior research (Hawkins et al., 2004; Mitchell & Beals, 1997), our findings point to a complex relationship in which strengths and problems are not opposite ends of a continuum, and appear to be largely independent of one another. Because the resilience theories posit a complex relationship between strengths and weaknesses, the lack of a negative relationship between strengths and problems emphasizes the necessity to assess familial, environmental, and personal strengths, as they constitute independent constructs. It may also indicate that the specific types of strengths (like safety in the neighborhood category), not the count of strengths in a generic category, might be most important.

The various types of strengths were relatively independent of one another. Open-ended familial strengths were not related to the scales of neighborhood, school or friends, indicating that family can be strong in an adverse environment. However, the results for one environmental strength (school strengths) appear to support, albeit weakly, the ecological explanations of a relationship between the environment and personal resilience in the areas of alcohol abuse, drug abuse, and conduct disorder. In contrast, youths who listed more tribal strengths had more alcohol, drug, and conduct disorder symptoms. This finding was similar to results in the studies of others (Hawkins, 2002; Mail et al., 2002; Petoskey et al., 1998; Yu, Stiffman, & Freedenthal, 2005). Given the high rates of alcohol and behavioral issues in the American Indian community and on reservations (Rhoades, 2003), this might indicate

an enhanced modeling effect within youths who are more positively attracted to the tribal community.

The findings are obviously complex and further complicated by the preliminary state of strengths research and measurement in general, as well as this study's inherent limitations. This study is confined to only one reservation and one urban area. Further, the reservation and urban youths are both from acculturated populations with relatively easy access to urban centers rather than from isolated, more traditional American Indian communities. Nevertheless, because 39% of American Indians and Alaska Natives are under the age of 20, and most belong to mid- to small-size peri-urban reservations (U.S. Census, 2002), the similarities enhance the potential generalizability of results. The foremost drawback to our approach to measuring strengths is that, by the nature of the open-ended questions, the youths probably offered only a few strengths. This provides a more restricted range of variance than we might have obtained had we presented them with a list of strengths to respond to.

Regardless of any limitations, this paper presents results with a number of implications for service provision and future research. Certainly, strengths are an important component of a youth's personal and environmental transactions, and have complex relationships with other life factors. More research is needed to examine the replicability of our findings and to determine the relationship between these different types of strengths. It may be that manipulating particular familial and environmental strengths, or at least the perception of such strengths, is important in developing ways to prevent youth problems.

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