

## **EXPLORING MATERNAL SOCIAL PERCEPTIONS AND CHILD AGGRESSION AMONG URBAN AMERICAN INDIANS**

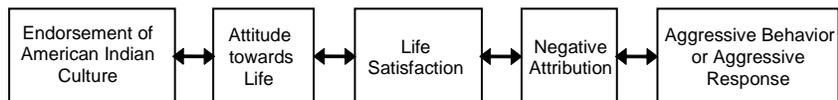
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*Abstract: Currently, the majority of American Indian families live in urban areas. A number of statistics demonstrate that urban American Indian families deal with a variety of stressors such as poverty and isolation. However, very little is known about how these families perceive their lives. This report provides an exploratory study examining the status of 20 urban American Indian mother/child dyads. Mothers were asked about the role of American Indian culture in their lives, their views of life in general, and their attributions for their child's mild misbehavior. Two measures of child aggression were collected as well. The links between maternal perceptions and child aggression were complex, indicating the need for more studies of urban American Indian families.*

Social cognitive models of parenting emphasize the importance of perceptions about parenting on the development of children's externalizing problems such as aggression (Bugental & Johnston, 2000; Sigel, McGillicuddy-DeLisi, & Goodnow, 1992). The impact that culture has on social cognition is being increasingly recognized (Bugental & Happaney, 2002; Sigel et al., 1992), as is the role of acculturation on cultural and parental cognitions (Cote & Bornstein, 2003; Harwood, Schoelmerich, Ventura-Cook, Schulze, & Wilson, 1996; Leyendecker, Harwood, Lamb, & Schoelmerich, 2002). American Indian (AI) families have largely been absent from this literature. Currently, the majority (66%) of AI families live in urban areas (the total population of AIs is 4.3 million according to the U.S. Census Bureau, 2003). Very little is known about how these families perceive their lives, and even less is known about how these perceptions might influence the development of

aggressive behavior in their children. We present a first attempt to fill this gap in the literature by examining potential links between mothers' perceptions of the importance of AI culture in their lives, their attitude towards life, life satisfaction, negative attributions for their child's behavior, and the child's aggressive behavior and aggressive responses, as illustrated in Figure 1. We caution that our small sample size and lack of experimental manipulations preclude making any causal inferences; thus, the conceptual model is for illustrative purposes only.

**Figure 1**  
**Conceptual Model of Links between Maternal Perceptions and Children's Aggressive Behavior and Aggressive Response**



### American Indian Families

The current report represents an exploratory study of 20 urban AI mothers who had at least one child between the ages of 6 and 9 years. We begin by presenting some of the statistics on urban AIs, along with a brief summary of AI history which helps to put the current study in context. The statistics that characterize urban AI families are alarming. Urban AIs have higher rates of poverty, lower levels of formal education, and higher rates of unemployment than African Americans, Hispanic Americans, and European Americans in the U.S. (Urban Indian Health Institute, 2004).<sup>1</sup> In addition, the number of AI mothers under the age of 18 was 80% higher than the percentage of all non-AI mothers under the age of 18 across the country (Urban Indian Health Institute, 2004). The incidence of single mothers was found to be 73% higher for urban AIs as well (Urban Indian Health Institute, 2004). Off-reservation AI children are involved in 5.7 child abuse and neglect cases per 1,000 children per year, in comparison to a rate of 4.2 per 1,000 per year for the total U.S. population (Earle, 2000). Despite these statistics, AIs continue to move from reservations and rural areas into metropolitan areas in the U.S.: 50% of all AIs lived in metropolitan areas in 1990, and 66% of all AIs lived in metropolitan areas in 2000 (U.S. Census Bureau, 2002).

Most descriptions of AI parenting have been primarily qualitative, focusing on AI beliefs rather than numbers. For example, Cross (1998) stated that AI parenting attitudes result from a “relational worldview” in which all relationships are interdependent (p. 143). In order to understand AI parenting beliefs, all relationships that parents have must be considered. These relationships include spiritual, contextual, psychological, and physical components. In another personal reflection, Stauss (1995) related that AI families comprise not only what is considered the nuclear family in American culture but also various extended family members that may not always be related by blood, such as cousins and close family friends. Furthermore, it is from within these extended family systems that AI culture is primarily maintained and understood (Stauss, 1995).

Some investigators have attributed the strength or weakness of cultural transmission to the importance of AI culture in the mother’s life (Kawamoto & Cheshire, 1999; Ward, Hinckley, & Sawyer, 1995). These researchers commented on the many difficulties that AI families have encountered in maintaining their cultural beliefs while parenting their children. Forced assimilation by the U.S. government from the early 1800s until the passage of the Indian Child Welfare Act in 1978 led to many children being raised in boarding schools, by foster families, and in urban settings away from their families (Harjo, 1999; Kawamoto & Cheshire, 1999; Sixkiller-Clark, 1997). These separations left many AI children without parental role models and stripped them of their cultural knowledge. Thus, it is currently unknown to what extent urban AI families affiliate with or acknowledge their culture. Although little is known about how parental perceptions of culture and life in general might relate to child aggression in urban AI families, research on other ethnic groups suggests that parental perceptions are important influences on the development of aggressive behavior in children. We examine this literature next.

### **Maternal Social Perceptions and Child Aggression**

Studies of parenting from a social cognitive perspective have found that parental perceptions are related to parental behavior and child behavior (e.g., Daggett, O’Brien, Zanolli, & Peyton, 2000; Iverson & Segal, 1992; McGillicuddy-DeLisi, 1992). An important area of research in parenting has been guided by attribution theory. Attribution is the process through which an individual infers the perceived cause of a behavior or event (Weary, Stanley & Harvey, 1989). Parents form

attributions for their children's behavior as a part of understanding why their children behave as they do. A mother shows a positive attribution bias when she believes that her child's misbehavior is caused by factors that are unintentional, not in the child's control, and not stable or global (Dix, 1991). For example, a mother who attributed her child's misbehavior at school to the fact that the teacher was not well organized that day would be viewed as having a positive attribution bias. A negative attribution bias is evident when a mother views her child's misbehavior as intentional, internal, controllable, stable, and global (Dix, 1991). An example of this would be a mother who attributes her child's noncompliance to a deliberate attempt to annoy her.

Attributional biases have been found to influence the behavior of mothers towards their children (Bugental & Johnston, 2000; Daggett et al, 2000; Dix, 1993; Iverson & Segal, 1992; Nix et al., 1999). Specifically, negative or hostile attributions for a child's behavior are associated with harsh discipline practices (Joiner & Wagner, 1996; Nix et al., 1999). Negative attributions have been found to be more common in parents who are stressed due to increased difficulty in managing the task of child rearing; these parents attribute their difficulties in part to characteristics of the child (Dix, 1991).

Parental attributions have been found to have an impact on children's behavior as well. Bugental and Johnston (2000) found that the causal beliefs of caregivers affected their expressive behavior, which in turn influenced the child's behavior. Dix (1993) found a strong interdependence between parental attributions for a child's behavior and the child's own attributions for the behavior of others. And, Nix et al. (1999) reported that mothers' hostile attribution tendencies were related to children's development of externalizing behavior problems at school. Thus, in the current study we focus on externalizing problem behaviors. Specifically, we examined whether mothers' social perceptions and negative attributions for their child's mild misbehaviors were associated with aggressive behavior or aggressive responses in children.

### **Current Study**

Given the paucity of empirical studies on urban AI mothers' social perceptions and child aggression, the focus of this study is exploratory in nature. Our primary goals were to explore the perceptions of urban AI mothers in order to address the following questions: First, do urban AI mothers endorse AI culture as important in their lives? Second, how do they characterize their lives, how do they view their children's behavior,

and do their children behave aggressively? Third, are there any links between family demographics, maternal endorsement of AI culture, maternal perceptions of life and child behavior, and child aggression? Our final goal was to examine if maternal social perceptions explained aggressive behavior or aggressive responses in their children.

### **Method**

*Participants.* Twenty mother/child dyads (one child per family in the target age range of 6 to 9 years) participated in this study. The mothers represented 13 AI tribes or nations and all lived in a midsized, Midwestern town. The participants were recruited by placing fliers at a university and a tribal college, and by soliciting mothers of children who participated in an AI dance troupe to participate. Additionally, an advertisement was placed in a student newspaper, referrals from past participants were solicited, and two mothers were recruited while attending an elementary school function. Forty percent of the participating children were boys.

### **Procedure**

When mothers agreed to participate, they selected a setting for the interview (their home, the researcher's office, or a location convenient for them). Informed consent was obtained from the mother and then she was interviewed by the researcher and asked to fill out questionnaires about the behavior of her 6- to 9-year-old child (if the mother had more than one child in the target age range, she was asked to respond to the questionnaires with only one child in mind). Each mother received a \$20 gift certificate to Target as a token of appreciation for her participation, and the children were given a small gift.

### **Measures**

*Demographic and child factors.* General information about the family was collected by questionnaire. Demographic data on participating families are shown in Table 1. An income-to-needs ratio was calculated for each family by dividing family income by the poverty index for that family size. An income-to-needs ratio of 1.0 indicates that the family is at poverty level, with the poverty threshold for a family of four equivalent to an annual income of \$16,700 (U.S. Department of Health and Human Services, 1999)<sup>2</sup>. The participating families were generally low income, with 50% living at or below the poverty level. All of the married

mothers (40%) reported that their partners were also of AI heritage. Most of the mothers reported having completed some college (75%), with 50% of the mothers enrolled in school at the time of assessment. Mothers who were enrolled in school at the time of assessment had an average income-to-needs ratio of .99 ( $SD = .50$ ) and mothers who were not enrolled in school had an average income-to-needs ratio of 1.43 ( $SD = .60$ ). For mothers enrolled in school without a husband (35%), the average income-to-needs ratio was even lower ( $M = .80$ ,  $SD = .42$ ). Of the mothers enrolled in school, two were not employed, five had part-time jobs, and three were working full-time. In comparison, the median family income of the county where these mothers resided was \$53,991 and 42.7% of the residents had a bachelor's degrees or higher (24.4% of all U.S. citizens have a bachelor's degrees or higher) (U.S. Census Bureau, 2000). Six percent of all families in this county live in poverty (U.S. Census Bureau, 2000). The mothers ranged in age from 23 to 45 years old, and the mothers enrolled in school ranged in age from 26 to 45 years old.

**Table 1**  
**Demographic Information**  
**for Mothers (N = 20)**

|                                   |            |
|-----------------------------------|------------|
| <b>Mean Mother Age</b>            | 32.85      |
| ( <i>SD</i> )                     | (6.14)     |
| Range                             | 23 – 45    |
| <b>Work Status</b>                |            |
| Not working                       | 35%        |
| Part-time                         | 30%        |
| Full-time                         | 35%        |
| <b>Student Status</b>             |            |
| Enrolled in school                | 50%        |
| Not enrolled in school            | 50%        |
| <b>Education</b>                  |            |
| High school graduate              | 10%        |
| Attended some college             | 75%        |
| College graduate                  | 5%         |
| Post-graduate work                | 5%         |
| Graduate degree                   | 5%         |
| <b>Marital Status</b>             |            |
| Married living together           | 40%        |
| Separated or divorced             | 35%        |
| Not married, living with partner  | 15%        |
| Single, never married             | 10%        |
| <b>Mean Income to Needs Ratio</b> | 1.21       |
| ( <i>SD</i> )                     | (.57)      |
| Range                             | .39 – 2.33 |
| Median                            | 1.03       |

*Perception of American Indian culture.* A 10-item questionnaire was designed by the first author and administered to the mothers in order to assess the degree to which the mothers endorsed AI cultural practices and values in their lives and in their parenting. The items were

based on qualitative studies by Cross (1998) and Stauss (1995) that presented models of AI parenting as “relational,” in that extended family members are included and traditional spiritual values embraced. Mothers were asked to rate their agreement with statements such as, “Extended family is important in my life.” The items were scored using a 6-point scale that ranged from *disagree strongly* to *agree strongly*. Cronbach’s alpha for this scale was .85. The mean of the scores on the ten items was used to form a composite variable entitled Endorsement of American Indian Culture (EAIC). The means, standard deviations, and percentage of mothers strongly agreeing for each item are presented in Table 2.

**Table 2**  
**Descriptive Statistics and Percent Strongly Agree by Item**  
**for the American Indian Questionnaire**

|     | Question  | Mean (SD)   | % Strongly Agree |
|-----|---|-------------|------------------|
| 1.  | My American Indian heritage is important to me.   | 5.60 (.68)  | 70%              |
| 2.  | It is important to preserve my American Indian Heritage by speaking our language at home and in my community. | 4.75 (1.07) | 30%              |
| 3.  | Maintaining knowledge of traditional arts and crafts is important to me.                                      | 4.75 (1.29) | 35%              |
| 4.  | Listening to American Indian music is something I enjoy.  | 5.00 (1.10) | 45%              |
| 5.  | I am proud of my American Indian heritage.  | 5.75 (.55)  | 80%              |
| 6.  | Extended family is important in my life.  | 5.40 (.94)  | 65%              |
| 7.  | I teach my children to be proud of their American Indian heritage.  | 5.55 (.69)  | 65%              |
| 8.  | It is important for my children to know traditional arts and crafts.  | 4.80 (.95)  | 30%              |
| 9.  | Extended family members are important in the lives of my children.  | 5.20 (.89)  | 45%              |
| 10. | I use traditional American Indian beliefs in parenting my children.   | 4.40 (1.47) | 35%              |

Note: Items are scored from 1 to 6 with 1 representing *strongly disagree* and 6 representing *strongly agree*.

*Perceptions of life.* Mothers’ Attitude Towards Life was measured using a 10-item measure from Campbell, Converse, and Rodgers (1976) to assess attitudes about life and their relationships with other people. Items asked about respondents’ life plans, happiness, and views of other people’s motivations: for example, “Do you think that most people: (a) would try to take advantage of you if they got the chance or (b) would they try to be fair?” Items were scored 1 for a positive sentence completion and 0 for a negative sentence completion. The mean of the ten items was used as a measure of the mother’s overall attitude towards life, with a score of 1 representing positive sentence completions for all

ten items. Cronbach's alpha for this measure was .66, which is somewhat low given the recommended standard of .70 (Henson, 2001); however, the number of items in a scale affects the calculation of alpha, with fewer items frequently resulting in an underestimation of the coefficient alpha (Cortina, 1993). Given that this scale only asked the mothers to respond to 10 statements, it could be that the coefficient alpha was underestimated and could have reached an adequate level of internal consistency if the questionnaire had included more items. Given the exploratory purpose of this study, the internal consistency was deemed adequate.

Maternal perception of *Life Satisfaction* was measured using a modified version of a questionnaire developed by Andrews and Withey (1976), which contained 18 items about satisfaction with various aspects of the respondent's life, including her role as a mother and the conditions of her life in general. For example, mothers were asked how they felt about "The way they spent their spare time, when not working." Mothers responded using a 7 point Likert-type scale with 1 representing *terrible* and 7 representing *delighted*. Scores were averaged across all items with higher scores representing greater life satisfaction. Cronbach's alpha for this scale was .87.

*Maternal perception of their child's behavior.* Mothers' attributions for their child's misbehavior were measured with the Attributional Style Measure for Parents (ASMP; O'Brien & Peyton, 2002). This questionnaire measures eight dimensions of attribution for six instances of mild misbehavior from the child. For example, the researcher asked the mother to think of a time when her child "Didn't pay attention when you talked to him or her." Once the mother had this situation in mind, she was asked to describe it to the researcher and then to rate the cause of the child's behavior on a 6-point scale that ranged from *disagree strongly* to *agree strongly* on the dimensions of purposefulness ("My child doesn't pay attention to me on purpose rather than unintentionally"), motivation ("My child doesn't pay attention to me because he or she is motivated by selfish rather than unselfish concerns"), blame ("My child deserved to be disciplined for not paying attention to me"), negative intent ("My child doesn't pay attention to me mainly just to annoy me"), globality ("The reason my child doesn't pay attention to me when I talk is something that comes up often in my family"), stability ("The reason my child does not pay attention to me is not likely to change"), locus ("My child's behavior is due to something about him or her; for example the mood he or she was in, or his or her personality"), and control ("My child is able to control whether or not he or she pays attention to me"). The mean of all 8 dimensions across the 6 situations was used as a measure of *Negative*

*Attribution*, with higher scores indicating more negative attributions. Cronbach's alpha for the negative attribution subscale was .95.

*Child Aggression.* Two measures were used to index aggression: the mothers' reports on their child's aggressive behaviors and the child's responses to hypothetical peer situations involving conflict were scored for aggressive responses. Mothers completed the Child Behavior Checklist (CBCL, Achenbach, 1991) to assess social problem behavior. The CBCL lists 113 problem behavior items, each scored on a 3-point scale where 0 = *not true*, 1 = *somewhat or sometimes true*, and 2 = *very true or often true*. For the purposes of this study, the Aggressive Behavior subscale score, which consists of behaviors such as arguing and fighting, was used as a measure of the child's *Aggressive Behavior*. This subscale has been shown to have good psychometric properties, including adequate levels of internal consistency, test-retest reliability, and interparent agreement (Achenbach). We followed Achenbach's recommendation that raw scores, rather than *T*-scores, be used for research purposes. Cronbach's alpha computed on the current data indicated acceptable internal consistency for the Aggressive Behavior subscale ( $\alpha = .73$ ).

The children were administered the Attribution Bias Interview (Dodge, Pettit, McClasky, & Brown, 1986), a narrative-based activity in which four child-peer social situations involving potential conflict were presented to the children by the researcher who used small dolls and props to demonstrate the situation (rather than the stick-figure drawings utilized in the original measure). This was done to engage the children in the task and to allow the children to demonstrate non-verbal actions such as pushing the peer doll or hitting it. All of the situations involved provocation by the peer (i.e., a peer bumped into the child causing his/her books to go flying across the floor). For each situation, the children were asked how they would respond to the peer. The children were administered this activity in an area where their mothers would not be able to hear their responses. The measure was audiotaped for later coding.

The audiotapes were coded by an undergraduate research assistant who was unfamiliar with the families and the purpose of the study, using a modified version of the codes developed by Dodge et al. (1986). Children's responses regarding what they would do in response to the peer's behavior were coded for the level of aggression, with 0 representing *don't know* or *no response* and scores from 1 to 5 escalating from *doing nothing* to *retaliating aggressively*. The scores were summed and divided by the total number of situations to obtain an average *Aggressive Response* score for the children. Scores could range from 0

to 5. Cronbach's alpha indicated acceptable internal consistency for the aggressive responses variable ( $\alpha = .71$ ). In addition, a second coder independently scored 25% of the tapes, with exact inter-observer agreement for the children's aggressive responses at 83%.

To our knowledge, none of these measures have been used in urban AI communities in prior studies. Consequently, the mothers were encouraged to ask questions about the items on the measures, and all questions were answered before the mothers rated the items. In addition, mothers were told that they could refuse to answer any items that they felt were not culturally relevant or might be misinterpreted given their cultural beliefs. None of the mothers refused to rate any of the items once questions were answered.

## Results

### **Do urban American Indian mothers endorse American Indian culture as important in their lives?**

The items on the questionnaire provide interesting insights into maternal views of the importance of AI culture in this set of mothers' lives (see Table 2 for a listing of descriptive statistics and the percent of mothers who strongly agreed for each item). There was some variability in the percentage of mothers who strongly agreed with some of the statements. For example, only 30% of the mothers strongly agreed that preserving their AI language was important. In contrast, 80% of the mothers agreed strongly that they were proud of their AI heritage. On average, the mothers mostly agreed that they endorsed AI culture in their lives, with one mother disagreeing somewhat with some of the statements and three mothers strongly agreeing with all of the statements. Table 3 provides the descriptive statistics for the Endorsement of American Indian Culture composite variable.

### **How do they characterize their lives, how do they view their children's behavior, and do their children behave aggressively?**

Table 3 presents descriptive statistics for the measures of maternal perceptions of life and child behavior, and the measures of child aggression. Overall it appeared that the mothers were "OK" with their lives; on average they positively completed 6 out of the ten statements assessing their attitude towards life, and they rated their life

satisfaction as somewhat good. On average, the mothers had somewhat positive views of their children's misbehaviors with the average score representing that they disagreed somewhat with the statements of negative attribution.

Regarding the measures of child social aggression, none of the children scored in the clinical range on the measure of Aggressive Behavior. The highest score recorded, 14, indicated that one child expressed 14 of the 20 possible aggressive behaviors *somewhat* or *sometimes*. On the Attribution Bias Interview the responses to the question, "What would you do if this happened to you?" reflected an average response of 2.05, which would be equivalent to a tendency to ask in non-threatening manner why the peer did it. However, some children did respond aggressively, with one child indicating that she/he would have used physical or verbal retaliation for 3 out of the 4 peer provocation situations.

**Table 3**  
**Descriptive Statistics for Measures of Maternal Perceptions of Life and Child Behavior, and Measures of Child Aggression**

|   | Mean ( <i>SD</i> ) | Minimum | Maximum |
|---|--------------------|---------|---------|
| Maternal Perception Variables                 |                    |         |         |
| Endorsement of American Indian Culture (EAIC) | 5.13 (.74)         | 3.60    | 6.00    |
| Attitude towards Life                         | .61 (.23)          | .10     | 1.00    |
| Life Satisfaction                             | 4.93 (.72)         | 3.83    | 6.29    |
| Negative Attribution                          | 3.26 (.14)         | 2.02    | 4.44    |
| Children's Aggression Variables               |                    |         |         |
| Aggressive Behavior                           | 4.90 (3.91)        | 0.00    | 14.00   |
| Aggressive Response                           | 2.05 (.75)         | .75     | 4.00    |
| Aggressive Response                           | 1.75 (.48)         | .88     | 2.50    |

### **Are there any links between family demographics, maternal endorsement of American Indian culture, maternal perceptions of life and child behavior, and child aggression?**

Intercorrelations were used to examine the associations between the demographic variables, maternal perception variables, and children's aggression as reported in Table 4. Prior to running the correlational analyses, the researchers examined the variables for normality and univariate outliers using the guidelines recommended by Tabachnick and Fidell (2007). None of the measures of skewness and kurtosis were significantly different from 0 and there were no univariate outliers.

Only one of the demographic factors was statistically correlated with the measures of maternal perceptions of life. Married mothers reported higher life satisfaction than mothers who were not married. Regarding intercorrelations within the maternal perception variables,

one interesting association was found. Mothers who more highly endorsed the value of AI culture in their lives tended to have more positive attitudes towards life than mothers with lower levels of endorsement. Three significant correlations were found between the demographic, maternal perception, and child aggression variables. Older mothers had children who reported fewer aggressive responses to peer provocation in comparison to the more aggressive responses of children with younger mothers. Mothers who reported more negative attributions for children's misbehavior also reported higher numbers of aggressive behaviors, but had children who reported less aggressive responses to peer provocation.

**Table 4**  
**Correlations between Demographic Variables, Maternal Perception Variables, and Measures of Children's Aggression (N = 20)**

|                          | 1.   | 2.   | 3.    | 4.   | 5.   | 6.    | 7.   | 8.   | 9.    | 10.  | 11. |
|--------------------------|------|------|-------|------|------|-------|------|------|-------|------|-----|
| Demographics             |      |      |       |      |      |       |      |      |       |      |     |
| 1. Child Age             | ---  |      |       |      |      |       |      |      |       |      |     |
| 2. Child Gender          | -.00 | ---  |       |      |      |       |      |      |       |      |     |
| 3. Mother Age            | -.05 | -.06 | ---   |      |      |       |      |      |       |      |     |
| 4. Marital Status        | -.07 | -.17 | -.08  | ---  |      |       |      |      |       |      |     |
| 5. Income-to-Needs       | .16  | -.34 | -.16  | .21  | ---  |       |      |      |       |      |     |
| Maternal Perceptions     |      |      |       |      |      |       |      |      |       |      |     |
| 6. EAIC                  | -.03 | -.27 | .19   | .17  | -.17 | ---   |      |      |       |      |     |
| 7. Attitude towards Life | -.15 | .06  | .17   | .06  | -.17 | .66** | ---  |      |       |      |     |
| 8. Life Satisfaction     | .13  | .10  | .15   | .47* | .20  | .21   | .28  | ---  |       |      |     |
| 9. Negative Attribution  | .44  | -.08 | -.05  | .03  | .25  | -.08  | -.11 | .39  | ---   |      |     |
| Children's Aggression    |      |      |       |      |      |       |      |      |       |      |     |
| 10. Aggressive Behavior  | .35  | -.16 | -.21  | -.03 | .10  | -.02  | -.13 | -.13 | .55*  | ---  |     |
| 11. Aggressive Response  | -.12 | .23  | -.47* | .36  | -.21 | -.01  | -.05 | -.18 | -.52* | -.25 | --- |

Note: For child gender 0 = Male, 1 = Female; for marital status 0 = Not married, 1 = Married; EAIC = Endorsement of American Indian Culture; \*  $p < .05$ , \*\*  $p < .01$ .

Given the large number of correlations examined despite our small sample size, it could be that the few significant correlations we found might not be replicated in another sample. However, examination of the effect sizes reveals that the significant relationships found all had moderate effect sizes indicating substantial relationships between the variables, with  $r$  ranging from .47 to .66. (According to Guilford [1956], an  $r$  value of .40 to .70 represents a medium or moderate effect size or a

substantial relationship.) Consequently, it is unlikely that the significant relationships reported were due to error. Moreover, given the small sample size, it is more likely that some substantial relationships were overlooked as the effect sizes simply were not large enough, given the  $N$  of 20, to reach statistical significance. Indeed, there were two moderately sized correlations of .39 and .44 that did not reach statistical significance. First, mothers of older children viewed their children's behaviors more negatively than mothers of younger children. And second, mothers who rated their satisfaction with life more highly viewed their children's misbehaviors more negatively than mothers who provided lower ratings of their satisfaction with life.

### **Do maternal social perceptions explain the presence of aggressive behaviors in their children?**

Multiple linear regression analyses were conducted on the children's aggressive behavior and children's aggressive response variables. Prior to running these analyses, the data were screened for multivariate outliers using recommendations provided by Tabachnick and Fidell (2007). No multivariate outliers were found, and no violations of normality or linearity were discovered. The results are presented in Table 5. Two separate models were analyzed with Endorsement of American Indian Culture, Attitude towards Life, Life Satisfaction, and Negative Attribution entered as one block. The findings confirm the significant correlations found between Negative Attribution and Aggressive Behavior, and Negative Attribution and Aggressive Responses (see Table 4). However, only the overall model for Aggressive Behavior was statistically significant. Forty-seven percent of the variance in responses on the aggressive behavior subscale was explained by the maternal perception variables, with Negative Attribution accounting for 43% of the variance in maternal ratings of aggressive behavior.

Although the overall model predicting children's aggressive responses was not statistically significant, the beta value for Negative Attribution was statistically significant. Negative Attribution accounted for 26% of the variance in children's Aggressive Response scores. Specifically, children whose mothers made more negative attributions for their behavior reported fewer aggressive responses to hypothetical situations involving peer provocation than did children whose mothers made fewer negative attributions for their behavior. This information,

taken together with the significant zero-order correlation between Negative Attribution and Aggressive Response, makes it is unlikely that this relationship was spurious.

**Table 5**  
**Regressions on Aggressive Behavior and Aggressive Response by EAIC, Attitude towards Life, Life Satisfaction, and Negative Attribution (N = 20)**

|                       | Aggressive Behavior |        | Aggressive Response |        |
|-----------------------|---------------------|--------|---------------------|--------|
|                       | $\beta$             | $sr^2$ | $\beta$             | $sr^2$ |
| EAIC                  | .15                 | .01    | .03                 | .00    |
| Attitude towards Life | -.02                | .00    | -.16                | .01    |
| Life Satisfaction     | -.45                | .15    | .08                 | .00    |
| Negative Attribution  | .74**               | .43    | -.57*               | .26    |
| Model R <sup>2</sup>  | .47                 |        | .29                 |        |
| F (4,15)              | 3.29*               |        | 1.55                |        |

Note: EAIC = Endorsement of American Indian Culture;  $sr^2$  = unique variance in dependent variable contributed by the independent variable; \*  $p < .05$ , \*\*  $p < .01$ .

## Discussion

Despite the exploratory nature of this study in examining a small group of urban AI mothers and their children, the results provide interesting insights into their lives. Although the current study is limited in its generalizability and no statements of causality can be inferred from any of the relationships found, our findings provide some topics for discussion. Results from the analyses of demographic factors and the mothers' perceptions of their lives provide an area for commentary on the status of AI women in urban communities. The results from the correlational analyses provide a picture of the links between demographic factors and maternal perceptions and demonstrate that maintaining a sense of culture in an urban setting is related to a more positive attitude towards life. Finally, the results of the regression analyses both confirm and confound prior research findings, thereby providing an area ripe for future inquiry.

### Exploring Urban American Indian Mother's Status and Perceptions of Life

The incomes of the families we interviewed replicate the statistics reported earlier, in that half of the families were living in poverty. However, the relatively high education level of the mothers in this sample

does not conform to the literature that has attributed the poverty level of AIs to low levels of education as well as a lack of job skills (Hoff-Ginsberg, & Tardif, 1995). Although 50% of the mothers were enrolled in school at the time of our assessment, finding that the majority of these mothers were raising their children in poverty in order to attend school (perhaps to get out of poverty) is important. Given that the typical tribal college student is 30 years old and a mother (Shirley, 2004), this result points to the importance of providing AI women with more financial support so that they can attend school without worrying about how to feed and clothe their children. In addition, the fact that the mothers who were not enrolled in school at the time of our assessment were living just above the poverty line is consistent with other reports on the status of AI women. In particular, Sinzdak reported in 2004 that AI women have lower social and economic status than White women throughout the U.S. Thus, the economic status of the mothers in our study appears to confirm Wilkin's (1993) observation that "domination and exploitation still characterize the socioeconomic status of urban and non-reservation Indians" (p. 406).

The association between higher levels of maternal endorsement of AI cultural activities and beliefs with a more positive attitude towards life demonstrates the importance of cultural congruence in an urban setting. The link between a strong sense of cultural identity in the mother's life and a more optimistic attitude towards life is consistent with prior studies on enculturation (i.e., the process by which individuals learn about and identify with their culture) (Constantine & Sue, 2006; LaFromboise, Hoyt, Oliver, & Whitbeck, 2006; Zimmerman, Ramirez, Washienko, Walter, & Dyer, 1998). For example, Zimmerman and colleagues found that AI youth who strongly identified with their culture were more likely to maintain high self-esteem in urban settings. Thus, it could be that the maintenance of a strong sense of cultural identity within their urban setting resulted in a more positive outlook on life for these mothers.

### **Exploring the links between Maternal Perceptions and Child Aggression**

Discovering that maternal negative attributions predicted their children's aggressive behaviors and aggressive responses both confirms and confounds previous findings of studies conducted in primarily middle-class communities. The finding that mothers who made more negative attributions for their child's misbehavior also rated their child as

demonstrating more aggressive problem behaviors could be dismissed as a result of the mother being the respondent on both measures. However, this finding is consistent with results from other studies. For example, Nix and colleagues (1999) reported that mothers' hostile attribution tendencies were linked to teachers' reports of children's externalizing problem behaviors (including aggressive behavior at school). They also reported that a large proportion of this association was mediated by mothers' harsh discipline practices. Naturally, maternal perceptions can only influence child aggression through the mediators of parental behavior. In this study, we did not examine parenting practices or observe interactions between the mothers and their children; thus, we cannot determine the ways in which the mothers communicated their perceptions to their children. Given the correlational nature of this study, we also cannot rule out the likelihood that the children's aggressive behaviors contributed to the mothers' negative attributions. Despite these limitations, it is important for AI mothers to be aware that making more negative attributions for their child's behavior was statistically related to a higher number of reported aggressive problem behaviors.

The association between mothers' negative attributions for child behavior and the child's report of aggressive responses to provocation by a peer is a perplexing result of this study. Prior research has demonstrated that mothers who made more negative attributions for their children's behavior also had children who utilized more aggressive responses in situations involving peer conflict (Dodge, Bates, & Pettit, 1990). Despite the association between maternal negative attributions and increased aggressive problem behaviors found in this study, when it came to the children's reports of their own aggressive behavior, children whose mothers made more negative attributions for their misbehavior actually reported that they were more likely to do nothing or simply ask for an explanation rather than retaliate. Of course, this finding might be due to the fact that hypothetical stories were used instead of real-life observations of the child with a peer. However, this type of hypothetical scenario is widely used in research with children, particularly in the social information-processing literature, and the procedure has been shown to generate results that were similar to children's naturally occurring behavioral responses in comparable real-life contexts (e.g., Dodge, Laird, Lochman, & Zelli, 2002; Dodge, Pettit, McClasky, & Brown, 1986).

Another potential explanation for this finding might be differences in context (home vs. school). It could be that urban AI children are less likely to respond aggressively to conflict with a peer because they attribute blame to themselves rather than to the peer. Thus, although they

might act out aggressively at home with family members, they are not responding in an aggressive manner with peers. Research by Duran and Duran (1995) offers some support for this hypothesis. Duran and Duran speculated that constant oppression has led many AIs to “internalize the oppressor,” thereby casting the blame for their problems onto themselves (p.29). It might also be that urban AI children view their environments as dangerous. That is, they might think that any aggressive responses they make away from the protection of their parents will be met with retaliation. Given that rates of violent victimization are significantly higher for AIs than for any other race – and 70% of these violent crimes are committed by a member of a different race – (U.S. Department of Justice, 1999), such a viewpoint makes sense. Unfortunately, this study does not have the capacity to address the possible reasons for this result meaningfully. Consequently, the possibility of investigating this finding in future research is anticipated.

### **Conclusion**

We examined a small subset of urban AI mothers and their children in an urban setting with the goal of gaining insight into the status of urban AI families. As Jacqueline Johnson (National Congress of American Indians Executive Director) stated in 2004, “It is critically important to support and fund new research with AI women. In order to adequately address the problems facing Indian women we need reliable statistics to describe the quality of AI women’s lives and experiences” (as cited in Sinzdak, 2004, December 15, pp. 5). Although our findings come from examining the social perceptions of a small sample of urban AI women, the results are an important first step towards meeting Ms. Johnson’s call for more research on AI women.

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### Footnotes

- <sup>1</sup> The statistics from the Urban Indian Health Institute were derived from information from 82 counties in the United States reported by the United States Census and the National Center for Health Statistics in 1990 and 2000.
- <sup>2</sup> The data for this study were collected in 1999 and 2000.

### Authors' Notes

The data in this manuscript were collected in accordance with the ethical standards of APA and with the approval of the Human Subjects Committee Review Board of the University of Kansas.

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