

Parenting and Child Rearing Attitudes of Unmarried Hispanic Teenage Mothers

Matthew Lee Smith^{1,2} · Alethea L. Chiappone³ · Kelly L. Wilson⁴

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Abstract This study describes the personal characteristics and child rearing attitudes of unmarried, Hispanic teenage mothers and compares their risk for negative parenting attributes associated with child maltreatment. Data were analyzed from 111 participants enrolled in an in-home case management initiative. The Adult Adolescent Parenting Inventory-2 (AAPI-2) was used to assess parenting-related risk on five constructs. Responses for each construct were converted to standardized ‘sten’ scores ranging from 1 to 10. Paired *t*-tests were utilized to examine mean differences between AAPI-2 construct sten scores, and Pearson’s *r* correlation coefficients were calculated to examine the strength and direction of construct relationships. Most AAPI-2 constructs were positively inter-correlated. Participants reported highest risk scores for Use of Corporal Punishment, Inappropriate Expectations of Children, and Oppressing Children’s Power and Independence. Findings indicate the need for parenting education programs to offset child maltreatment risk among Hispanic teenage mothers.

Keywords Pregnancy prevention · Parenting · Child rearing · Teenage pregnancy · Social services

Introduction

Teenage pregnancy and the delay of subsequent pregnancies among adolescent mothers is a public health issue (Langille 2007). Over the past two decades, disproportionately higher rates of teenage pregnancy have been reported among Hispanics, and this population has the highest teenage birthrate of any racial or ethnic group in the United States (Guttmacher Institute 2010; Hamilton and Ventura 2012; Martin et al. 2007). It is estimated that more than half (53 %) of Hispanic females in the United States will become pregnant at least once before age 20 (Martin et al. 2010; Ventura et al. 2008).

Complications and burdens associated with adolescent pregnancy and parenting impact teenage mothers and their ability to meet their children’s needs (SmithBattle 2007). Relative to adults, teenagers who become pregnant often encounter increased difficulties because they are more likely to be emotionally immature (Koniak-Griffin et al. 2000). This is due, in part, to their young age and lack of personal responsibilities, such as holding a job or completing school (Perper et al. 2010). In addition to these difficulties, teenage mothers tend to have inadequate social and economic support (SmithBattle 2007), which may contribute to their lack of knowledge and skills to parent effectively (Koniak-Griffin et al. 2000; Smith et al. 2013; Smith and Wilson 2014a). Even when teenage mothers have financial support from family members, some still battle increased stress levels because of time constraints related to balancing

✉ Matthew Lee Smith
health@uga.edu

¹ Department of Health Promotion and Behavior, The University of Georgia College of Public Health, #101 Hudson Hall, Athens, GA 30602, USA

² Department of Health Promotion and Community Health Sciences, Texas A&M School of Public Health, Health Science Center, College Station, TX, USA

³ Department of Health Promotion, Social and Behavioral Health, University of Nebraska Medical Center College of Public Health, Omaha, NE, USA

⁴ Department of Health and Kinesiology, Texas A&M University, College Station, TX, USA

school, work, and parenting. This situation can be complicated further depending on the nature of the teenage mothers' relationship with the father of their child (Kalil et al. 2005). Additionally, teenage mothers are often stigmatized by peers and adults in their community, which can impact their ability to develop ideal parenting and child rearing skills (Hanna 2001).

While a variety of measures exist to assess parenting quality and risk, the Adult Adolescent Parenting Inventory – Version 2 (AAPI-2) (Bavolek and Keene 2005) was included in this study to quantify the parenting and child rearing attitudes of a sample of Hispanic teenage mothers. The AAPI-2's intended purpose is to enable practitioners to generate a risk index of parents' abusive or negligent behaviors. More specifically, AAPI-2 includes measures for the following five constructs: (A) inappropriate expectations of children; (B) parental lack of empathy for children's needs; (C) strong belief in the use of corporal punishment as a means of discipline; (D) reversing parent-child role responsibilities; and (E) oppressing child's power and independence (Bavolek and Keene 1999). Each construct is associated with potential risks that can impact the overall health of the young child. For example, children raised in homes where corporal punishment is common place may have increased odds of issues including depression, bullying, aggression, and substance abuse (Chung et al. 2009; Ferguson 2013; Lansford et al. 2014; Lee et al. 2013; Simons et al. 2013). Based on the risk identified by this assessment tool, we believe it has utility to identify possible parenting deficiencies, which can guide practitioners to link teenage mothers to services and resources based on their specific needs. Although the AAPI-2 is a well-validated instrument (Bavolek and Keene 2005) and has potential to guide practitioners when developing culturally tailored interventions, its application to young Hispanic parents is limited.

In the United States, social programs exist to provide financial assistance to low-income Americans, which were created based on an observed population-based need (Hacker 2002; Social Security Administration 1997). For example, the disproportionate frequency of impoverished teenage mothers facing disadvantaged economic situations contributed to the United States Department of Agriculture (USDA) developing the Women Infants Children (WIC) federal assistance program in 1972 (USDA 2014a). WIC offsets the effects of having limited finances, support, resources, and other hardships by offering subsidized services to low-income mothers and those nutritionally at risk (USDA 2014b). Although a variety of valuable programs and services are made available to teenage mothers through WIC and other social programs, these subsidized services may not specifically teach parents proper parenting and child rearing techniques. Teenage

mothers receiving subsidized services could benefit from additional parenting skills, in part, because they typically have low socioeconomic status, minimal social and financial supports, and higher stress (Mollborn and Dennis 2012). Despite efforts of subsidized services to be more culturally appropriate (e.g., expansion of WIC offerings to include culturally-appropriate foods (USDA, 2014b)), such services may not specifically address other unique characteristics and needs of Hispanic teenage mother subpopulation.

While there are a myriad of factors associated with parenting and child rearing skills (Pinzon and Jones 2012) and studies suggest programs can be implemented to improve these skills for teenage mothers (Woods et al. 2003; Seitz and Apfel 1999), there is a need for greater understanding about Hispanic teenage mothers and their families as they enter into programs designed to improve the health of their family unit. The purposes of this study were to: (1) identify the parenting risk of Hispanic teenage mothers upon enrollment of a parenting program; (2) examine the relationships between AAPI-2 parenting constructs to assess and prioritize participant needs; and (3) provide recommendations about how Hispanic teenage mothers can be guided to receive services and resources that best fit their needs.

Method

Participants

Participants in this study ($n = 111$) were drawn from a larger in-home case management initiative in San Antonio, Texas, the Project Mothers and Schools (PMAS) program, that assists teenage mothers to: (1) create nurturing, positive, safe, and supportive environments for their children; (2) remain current with their school work; (3) increase social support linkages; and (4) support self-sufficiency. PMAS participants enrolled in the program after giving birth and received services for 12 months.

Procedure

Program services were offered to parenting teenage mothers residing in the San Antonio Independent School District (San Antonio, Texas). Participation in the program was voluntary and mothers could withdraw at any time. Only baseline data collected from program participants at the time of enrollment were used in this study. Additional details about the program offerings and activities can be found elsewhere (Smith and Wilson 2014a, b).

Measures

Adult Adolescent Parenting Inventory-Version 2 (AAPI-2)

To assess risk of negative parenting attributes, participants were asked to complete the Adult Adolescent Parenting Inventory-Version 2 (AAPI-2) (Bavolek and Keene 2005). The AAPI-2, a revised form of the index originally developed in 1979, measures parenting and child rearing attitudes used to assign risk scores for engaging in behaviors associated with child maltreatment (i.e., neglect and abuse) (Bavolek 1984; Bavolek and Keene 2005). The AAPI-2 consists of 40 items, which uses five subscales intended to measure distinct parenting risk constructs: (A) Inappropriate Expectations of Children [Construct A]; (B) Parental Lack of Empathy towards Child's Needs [Construct B]; (C) Strong Belief in the Use of Corporal Punishment [Construct C]; (D) Reversing Parent-Child Roles [Construct D]; and (E) Oppressing Children's Power and Independence [Construct E]. Responses were scored using a 5-point Likert-type scale with categories of "strongly agree," "agree," "disagree," "strongly disagree," and "uncertain." The following are examples of items used to measure each of the five AAPI-2 constructs: Construct A (Inappropriate Expectations): "Children should know what their parents need without being told;" Construct B (Lack of Empathy): "Parents who encourage their children to talk to them only end up listening to complaints;" Construct C (Corporal Punishment): "Spanking teaches children right from wrong" or "Hitting a child out of love is different than hitting a child out of anger;" Construct D (Reversing Roles): "Children should be responsible for the well-being of their parents;" and Construct E (Oppressing Power and Independence): "There is nothing worse than a strong-willed two-year-old."

After completing the AAPI-2, participant responses were shared with the index's licensing agency for scoring. Using a proprietary algorithm, responses were converted to sten scores (i.e., "standardized ten scores"), which are standardized units of measurement with normal frequency distribution. Sten scores range from 1 to 10, with higher scores indicating higher risk.

Services and Support Received

To describe the types of services and supports received by participants, study variables included: (1) types of governmental assistance received [i.e., WIC, Medicaid, Food Stamps, Temporary Assistance for Needy Families (TANF)]; and (2) sources of where participants received money [i.e., Social Security, unemployment/workers' compensation, child support, employment, parents, current partner, other public or private sources]. The number of reported sources of assistance and support received were

summed and utilized for analyses as a continuous variable ranging from 0 to 11.

Relationship with Child's Father

To determine the romantic nature of the mother's relationship with their child's father, participants were asked, "which of these statements best describes your relationship with your child's father?" Response choices included: (a) "we do not see or talk to each other;" (b) "we hardly ever see or talk to each other;" (c) "we are just friends;" (d) "we are involved in an on-again, off-again relationship;" (e) "we are romantically involved on a steady basis but are not married;" and (f) "we are married."

Restricted by Being a Parent

To describe feelings about being restricted by their parenting status, participants were asked to respond to the following statement: "In the last month, I have felt trapped by the things I have to do as a parent." Response categories used a 5-point Likert-type scale ranging from "Strongly Agree" to "Strongly Disagree." Based on the frequency distribution, responses were trichotomized into disagree (i.e., strongly disagree, disagree), undecided, and agree (i.e., strongly agree, agree).

Personal Characteristics

To describe the demographic characteristics of unmarried Hispanic teenage mother participants, study variables included: age; number of children, school status (i.e., enrolled, graduated, dropped out, homebound); work status (employed, unemployed); and whether or not the participant lived with one or more of their parents (yes, no).

Data Analyses

Institutional Review Board approval was obtained for this secondary data analysis. All statistical analyses for this descriptive study were performed using SPSS (version 22). Data were collected from 175 female participants. Because of the focus of this study, participants were excluded from the final sample analyses if they self-identified being non-Hispanic ($n = 27$); age 20 years or older ($n = 2$); having no children ($n = 5$); and/or providing incomplete survey data ($n = 34$). Some participants cited more than one of these exclusionary responses, thus the final analytic sample consisted of 111 unmarried Hispanic teenage mothers. Descriptive statistics were calculated for personal characteristics of interest at baseline. Paired t -tests were utilized to examine mean differences between each of the AAPI-2 construct sten scores. Pearson's r bivariate correlation

coefficients were calculated for each set of AAPI-2 construct scores to indicate the strength and direction of the relationships. A Bonferroni correction was applied to account for the potential occurrence of Type I Error because of the large number of bivariate analyses in this study (i.e., alpha divided by the number of analyses to be performed). Mean differences and correlations were considered statistically significant at the $\alpha < 0.005$ level (i.e., $0.05/10 = 0.005$).

Results

Personal characteristics of study participants at program baseline are presented in Table 1. The average age of participants was 16.71 years (± 1.11 ; ages ranged from 15 to 19). Approximately 77 % of participants reported having one child, 89.2 % reported being enrolled in school, 91.9 % reported having no job, and 80.2 % reported living with one or more of their parents. When asked about the father of their child, 73.9 % reported being romantically involved with the father, but not married to them (another 12.6 % reported not seeing or talking to the father of their child). On average, participants reported receiving 3.37 (± 1.14) types of financial support. The leading five types of reported support sources included WIC (91.0 %), Medicaid (85.6 %), their parents (62.2 %), their partner (46.8 %), and food stamps (30.6 %). Approximately 22 % of participants reported feeling trapped by being a parent (another 21.6 % were undecided about whether or not they felt trapped).

Pearson's r correlation coefficients between AAPI-2 construct scores are presented in Table 2. Risk of Inappropriate Expectations of Children was positively correlated with Risk of Parental Lack of Empathy towards Child's Needs ($r = 0.56$, $P < 0.001$), Risk of Strong Belief in the Use of Corporal Punishment ($r = 0.36$, $P < 0.001$), and Risk of Reversing Parent-Child Roles ($r = 0.58$, $P < 0.001$). Risk of Parental Lack of Empathy towards Child's Needs was positively correlated with Risk of Strong Belief in the Use of Corporal Punishment ($r = 0.35$, $P < 0.001$) and Risk of Reversing Parent-Child Roles ($r = 0.69$, $P < 0.001$). Risk of Strong Belief in the Use of Corporal Punishment was positively correlated with Reversing Parent-Child Roles ($r = 0.47$, $P < 0.001$) and Risk of Oppressing Children's Power and Independence ($r = 0.29$, $P = 0.002$).

Table 2 also contains participants' mean AAPI-2 construct scores and paired t -test comparisons to examine mean score differences. On average, Risk of Inappropriate Expectations of Children scores were significantly higher than Parental Lack of Empathy towards Child's Needs ($t = 6.46$, $P < 0.001$) and Risk of Reversing Parent-Child Roles ($t = 6.69$, $P < 0.001$) scores. On average, Risk of Strong Belief in the Use of Corporal Punishment scores were significantly higher than all other construct scores except Risk of

Table 1 Sample characteristics ($n = 111$)

| | |
|--|----------------------|
| Age (range: 15–19) | 16.71 (± 1.11) |
| Number of children | |
| One | 76.6 % |
| Two | 23.4 % |
| School status | |
| Currently enrolled | 89.2 % |
| Graduated | 6.3 % |
| Dropped out | 3.6 % |
| Homebound | 0.9 % |
| Work status | |
| Unemployed | 91.9 % |
| Employed | 8.1 % |
| Lives with a parent | |
| No | 19.8 % |
| Yes | 80.2 % |
| Relationship with child's father | |
| Do not see or talk to each other | 12.6 % |
| Just friends | 6.3 % |
| On-again, off-again relationship | 7.2 % |
| Romantically involved but not married | 73.9 % |
| Married | 0.0 % |
| Number of support sources (range: 1–7) | 3.37 (± 1.14) |
| WIC | 91.0 % |
| Medicaid | 85.6 % |
| Parents | 62.2 % |
| Partner | 46.8 % |
| Food stamps | 30.6 % |
| Social security | 8.1 % |
| Job/Employment | 6.3 % |
| Child support | 3.6 % |
| TANF | 1.8 % |
| General assistance from others | 0.9 % |
| Unemployment/Workers compensation | 0.0 % |
| Feel trapped by being a parent | |
| Disagree | 56.8 % |
| Undecided | 21.6 % |
| Agree | 21.6 % |

Inappropriate Expectations of Children scores. On average, Parental Lack of Empathy towards Child's Needs ($t = -3.81$, $P < 0.001$) and Risk of Reversing Parent-Child Roles scores ($t = -3.86$, $P < 0.001$) were significantly lower than Risk of Oppressing Children's Power and Independence scores.

Discussion

This study was designed to provide insight about parenting characteristics related to child abuse and maltreatment

Table 2 Correlations and paired *t*-tests among AAPI construct sten scores (*n* = 111)

| | Mean (SD) | AAPI Sten A | AAPI Sten B | AAPI Sten C | AAPI Sten D | AAPI Sten E |
|--|--------------|-------------|--|---|--|--|
| AAPI Sten A: Risk of inappropriate expectations of children | 5.93 (±1.67) | | <i>r</i> = 0.56 (<i>P</i> < 0.001) <i>t</i> = 6.46 (<i>P</i> < 0.001) | <i>r</i> = 0.36 (<i>P</i> < 0.001) <i>t</i> = -2.53 (<i>P</i> = 0.013) | <i>r</i> = 0.58 (<i>P</i> < 0.001) <i>t</i> = 6.69 (<i>P</i> < 0.001) | <i>r</i> = 0.03 (<i>P</i> = 0.745) <i>t</i> = 0.95 (<i>P</i> = 0.342) |
| AAPI Sten B: Risk of parental lack of empathy | 4.91 (±1.97) | | | <i>r</i> = 0.35 (<i>P</i> < 0.001) <i>t</i> = -7.60 (<i>P</i> < 0.001) | <i>r</i> = 0.69 (<i>P</i> < 0.001) <i>t</i> = 1.17 (<i>P</i> = 0.245) | <i>r</i> = 0.14 (<i>P</i> = 0.145) <i>t</i> = -3.81 (<i>P</i> < 0.001) |
| AAPI Sten C: Risk of strong belief in the use of corporal punishment | 6.43 (±1.73) | | | | <i>r</i> = 0.47 (<i>P</i> < 0.001) <i>t</i> = 8.20 (<i>P</i> < 0.001) | <i>r</i> = 0.29 (<i>P</i> = 0.002) <i>t</i> = 3.53 (<i>P</i> = 0.001) |
| AAPI Sten D: Risk of reversing parent-child roles | 4.71 (±2.42) | | | | | <i>r</i> = -0.02 (<i>P</i> = 0.818) <i>t</i> = -3.86 (<i>P</i> < 0.001) |
| AAPI Sten E: Risk of oppressing children's power and independence | 5.77 (±1.62) | | | | | |

among unmarried Hispanic teenage mothers. The five AAPI-2 constructs were used to identify parenting and child rearing risk factors exhibited by these teenage mothers and illustrate the relationships between AAPI-2 constructs for the purposes of assessing new mothers' needs upon entering a community program. Findings from this study indicate that risk profiles for Hispanic teenage mothers included strong beliefs in corporal punishment as a use of discipline (Construct C), inappropriate expectations of children (Construct A), and oppression of children's power and independence (Construct E). By ranking AAPI-2 constructs by the level of potential risk and showing the high correlations between constructs, findings from this study can offer program developers and evaluators recommendations about the AAPI-2 constructs to target for the purposes of achieving outcomes in other constructs.

In this study, Hispanic teenage mothers were most at risk for strong beliefs in corporal punishment as a use of discipline (Construct C) and inappropriate expectations of children (Construct A). The high risk of corporal punishment in this sample is consistent with previous studies. Prior research indicates adolescent mothers are at higher risk for harsh parenting behavior than older adult mothers (Lee and Guterman 2010). Research suggests parental motives for corporal punishment are primarily for discipline as opposed to frustration or impulsivity (Bavolek and Keene 1999; Lorber et al. 2011). MacKenzie et al. (2011) reported first-born children are more likely to be spanked by their parents, and families with lower socioeconomic status are more

likely to adopt spanking behaviors. Our study sample only included unmarried Hispanic teenage mothers with one or two children. Further, participants had a low socioeconomic status, with 91 % of participants receiving WIC and participants receiving an average of 3.37 types of governmental assistance. Cross-cultural comparative research indicates parenting characteristics are culturally informed and patterned (Keller et al. 2006). While research about the use of corporal punishment among Hispanic parents is inconsistent, researchers have attributed differences in these behaviors to diverse origins and acculturation status among the Hispanic population (Ispa et al. 2004). For example, one study found less acculturated Hispanic parents are less likely to spank relative to those more acculturated parents (Berlin et al. 2009). Additionally, another study found that foreign-born Hispanic parents were more likely to spank their children relative to U.S.-born parents (MacKenzie et al. 2011). These findings highlight the importance of examining acculturation status among parents in future studies as well as the acculturation status of household residents and family members who are likely to play a larger role in the lives of teenage mothers (Contreras et al. 1999).

The high risk of inappropriate expectations of their children in this sample is consistent with previous studies and may also explain their high risk of corporal punishment. Abusive parents may inaccurately perceive the skills and abilities of their children beginning early in the infant's life (Haskett et al. 2003). Mothers who are knowledgeable about child development can respond more sensitively and

accurately to their child's needs (Huang et al. 2005); whereas, mothers who have inappropriate expectations are more likely to respond harshly (Huang et al. 2005). Hispanic mothers' expectations may differ according to acculturation. First generation parents were more likely to hold higher expectations than second and third generation parents (Glick and White 2004). For example, less acculturated, Spanish-speaking mothers displayed lower levels of nurturing, disciplining, and developmental expectations when compared to English-speaking or bilingual mothers (Kolobe 2004). These older studies remain relevant in the context of this study because views about child development may differ based on parents' acculturation level. Further, teenage mothers may not have the knowledge needed to understand child development and developmental milestones. This may place them at increased risk for responding harshly to their child because they have inappropriate expectations (Tamis-leMonda et al. 2002).

In this study, Hispanic teenage mothers were least at risk for reversing parent-child roles (Construct D) and parental lack of empathy for the child's needs (Construct B). These risk factors, although present, may have lower in this sample because the role of family as a protective factor (80.2 % of participants lived with their parents), which has been also identified generally in the Hispanic culture (Leidy et al. 2012). These mothers' empathy about the needs of their child may be protective factors because showing warmth and being responsive to their child are pro-social behaviors that help to enhance the child's well-being (Knafo et al. 2008).

In this sample, the risk of oppressing children's power and independence (Construct E) was the median (i.e., ranking 3rd of the 5 constructs) and was not significantly correlated with constructs except the strong belief in corporal punishment (Construct C). This finding indicates oppressing power and independence is of potential concern among this population; however, it is not directly related to the other highly inter-correlated constructs. However, the correlation between Construct E and Construct C confirms previous findings that describe oppressing power and independence as being closely aligned with the value of physical punishment and the lack of empathetic awareness of children's needs (Bavolek and Keene 1999). During certain developmental phases children have a need to assert their power and independence; however, some parents may view this developmental process as disrespectful (Bavolek and Keene 1999), especially teenage mothers who may not be educated about the timing and relevance of this developmental milestone. In an effort to offset this potential disrespect, parents may oppress the child's power and independence. The ways in which this battle for power may manifest in the Hispanic population may be unique because traditional Hispanic culture places emphasis on

respecting authority (Halgunseth et al. 2006). Such interpretations are supported by previous studies examining parenting styles among Hispanic and Anglo-American mothers, where Hispanic mothers of young children were more likely to report an authoritarian parenting style (Cardona et al. 2000; Martinez 1988). Higher levels of authoritarian parenting have been further observed within Hispanic families of lower socioeconomic status and acculturation levels (Cardona et al. 2000; Varela et al. 2004). Parenting styles in the context of acculturation may influence and interactions between Hispanic parents and their children because of issues surrounding adherence to cultural traditions and ways in which the children will assimilate to mainstream American culture (Cort 2010; Dixon et al. 2008).

Many of these study findings have implications for program development and expansion of services and resource offerings available to Hispanic teenage mothers. However, study findings also highlight the importance of considering acculturation and assimilation among this population, especially because over 80 % of these mothers resided with their parents, which indicates parenting styles and treatment of the children are influenced by characteristics of this multigenerational household.

The influence of core cultural values must be recognized when tailoring interventions for Hispanic teenage mothers. In the Hispanic culture, immediate and extended family members are involved in the teenage mother's lives and the lives of their child (Erickson 2003; Russell 2004). Given approximately 89 % of teenage mothers in this study were currently enrolled in school and 80 % reside with parents, there is vast opportunity for other family members (e.g., the child's grandmother) to help raise the child. Because of this high-level involvement, the parents, siblings, and extended family members should be targeted in parenting interventions for teenage mothers (Sanders 2008) to ensure consistent messaging and practices exist in the household.

Programs targeting Hispanic parenting teenagers should also extend services to include the child's father. In our study, 73.9 % of teenage mothers were in a romantic relationship with the father of the child (with an additional 6.3 % being friends with the father and 7.2 % being in on-and off-again relationships), indicating these males likely share parenting responsibilities and exhibit parenting behavior, which may influence the child's wellbeing. Consistent with the discussion above, the parenting role may include this father as well as his parents and extended family.

To effectively provide teenage mothers and their family members with skills and techniques to avoid abuse and neglect, program curricula should be developed to include aspects of appropriate childhood development, positive reinforcement, and non-physical forms of discipline. Program curricula should teach teenage mothers and their

families to be empathetic of the child's needs based on their age and level of development. Growth models used with a sample of American teenage mothers of Mexican-origin indicate significant growth in autonomy from mid- to late-adolescence (Umaña-Taylor et al. 2015). Umaña-Taylor et al. (2015) suggest although teenage mothers experience different transitions than their peers, they also engage a normative development process. Engagement in this process is linked to better with better adjustment. Parents and other family members of teenage mothers should learn how to avoid being overprotective of the teenage mother and recognize the importance of autonomy (Jacobvitz et al. 2006). Motivating participation in community-based prevention programs is a common challenge, especially among racial and ethnic minority groups (Lopez and Castro 2006). To reduce barriers towards participation, such interventions should be delivered geographically close to the home to increase regular attendance and in non-threatening locations such as faith-based organizations or school facilities.

Parenting programs for teenage mothers provide resources to participants and link them to services. This enables them to meet their basic needs (and the needs of their children) and increase financial independence and security. This is especially true in populations like those in this sample where most received support from at least one subsidized service (i.e., indicating a lower socioeconomic status). Programs can include case workers and other professionals who can work with participants and their families to identify programs for which they are eligible and help them to complete necessary paperwork and processing procedures. With these services included in program curricula, the stressors and frustrations placed on teenage mothers may be diminished, thus encouraging them to adopt healthy parenting and child rearing skills, graduate high school, and secure gainful employment. Further, programs can be tailored for the populations they serve. Hispanic cultural values, acculturation status, and parenting characteristics of the population need to be considered while implementing these programs.

There were limitations that must be acknowledged. Data were collected from a sample of unmarried, Hispanic teenage mothers at the time of enrollment in an in-home case management initiative. Because their participation was voluntary, recruitment or selection bias may be present because these mothers may not be representative of the larger population. Further, data were self-reported and information potentially important to contextualize study findings was not collected. For example, the influences of acculturation and assimilation on parenting behavior was assumed in this study; however, the data collection instrument did not directly measure acculturation status of the teenage mother, their parents or extended family members,

or the father of the child. The self-reported nature of these data may have also introduced social desirability bias for sensitive questions. For example, social desirability may have influence item responses about the mothers' relationship with the fathers of their children or feelings of being restricted by being a parent. Other than asking whether or not the teenage mother resided with their parents, no other information was obtained about the household composition, quality of relationships in the household, or the amount of time spent or care provided by those other than the teenage mother. While this study attempted to assess parenting risk for abuse and neglect, actual measures of poor parenting behavior were not obtained. Further, the risk of the child's father was not measured, which may have been important given the large proportion of teenage mother participants who were in a romantic relationship with the child's father. Moreover, this study discussed Hispanic core values; particularly how these values might have impacted our results. However, participants' adherence to these values was not measured and thus we cannot draw conclusions. Lastly, this study used only baseline data and did not evaluate the effectiveness of the intervention or program components from baseline to post-intervention. As such, the data were cross-sectional, thus causal relationships were unable to be identified or examined.

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Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no competing interests.

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