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## Grandmothers' Familism Values, Adolescent Mothers' Parenting Efficacy, and Children's Well-Being

Katharine H. Zeiders<sup>1</sup>, Adriana J. Umaña-Taylor<sup>2</sup>, Laudan B. Jahromi<sup>3</sup>, and Kimberly A. Updegraff<sup>2</sup>

<sup>1</sup>University of Missouri

<sup>2</sup>Arizona State University

<sup>3</sup>Teachers College, Columbia University

### Abstract

The current study examined intergenerational processes related to familism values among grandmothers, adolescent mothers, and their children. Mexican-origin families ( $N = 180$ ) participated in in-home interviews during adolescent mothers' third trimester of pregnancy and 10-, 24-, 48-, and 60-months postpartum. Using longitudinal path analyses, we linked grandmothers' familism values and behaviors to adolescent mothers' parenting processes and, in turn, their child's well-being, taking into account developmentally relevant needs of adolescent mothers. Results revealed that grandmothers' familism values before the birth of the baby predicted child-rearing support and communication within the grandmother-adolescent mother dyad after the birth of the baby. Support, but not communication, was in turn predictive of adolescent mothers' parenting self-efficacy, but only at high levels of autonomy granting within the grandmother-adolescent mother dyad. Finally, adolescent mothers' parenting self-efficacy predicted children's greater social competence (48 months old), which in turn, predicted greater academic functioning (60 months old). Our findings shed light on the behavioral correlates of familism values within Mexican-origin families with adolescent mothers and highlight the need to consider factors that are developmentally salient (e.g., autonomy) when understanding how familism behaviors benefit adolescent mothers and their children.

### Keywords

adolescent mothers; familism values; Mexican-origin families; parenting efficacy

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Within the U.S., teenage pregnancy has declined by nearly 40 percent since 1990 (National Vital Statistics, 2012). Despite this decline, teenage birthrates remain high, especially among Latinas (National Vital Statistics, 2012). Adolescent motherhood is associated with a number of known risk factors (e.g., economic hardship, poor mental health; Deal & Holt, 1998; Miller-Johnson et al., 1999; Moore & Brooks-Gunn, 2002); there remains, however, noted variation in adolescent mothers' parenting processes and their children's outcomes (Brooks-Gunn & Furstenburg, 1986). General models of parenting suggest that parenting

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processes and parenting competence are influenced by the availability of resources and the social context in which the parent-child relationship is embedded (e.g., Belsky, 1984). Models specific to Latina adolescent mothers within the U.S. have further highlighted the role of culture-specific behaviors and values in adolescent mothers' parenting processes (Contreras, Narang, Ikhlas, & Teichman, 2002). *Familism*, which refers to behaviors and values related to the identification with and attachment to family, is important among Latino cultures (Sabogal, Marín, Otero-Sabogal, Marín & Perez-Stable, 1987). Latina mothers often rely upon family members during the transition to parenthood (e.g., Campos et al., 2008), and among adolescent mothers specifically, *grandmothers* (i.e., the adolescent's mother) play an especially prominent role (Contreras et al., 2002). Familism *values* are thought to relate to specific child-rearing supportive behaviors within Latino families (Calzada, Tamis-LeMonda, & Yoshikawa, 2013; Contreras et al., 2002).

The current longitudinal study explored the processes by which familism values and behaviors of grandmothers related to an aspect of adolescent mothers' parenting competence, perceived *parenting self-efficacy*, and in turn, their children's well-being (see Figure 1). We focus on Mexican-origin adolescent mothers, who have the highest birth rate of all ethnic groups in the U.S. (Martin et al., 2012), and are part of the largest ethnic subgroup of the U.S. Latino population (U.S. Census Bureau, 2012). Identifying the processes by which grandmothers' familism values and behaviors foster Mexican-origin adolescent mothers' parenting efficacy and, in turn, predict their children's well-being can further our knowledge of the intergenerational processes related to familism among a high-risk population.

## The Importance of Familism Values and Behaviors Among Adolescent Mothers

Contreras and colleagues' (2002) model of the determinants of parenting among Latina adolescent mothers posits that cultural values and norms inform parenting processes and competence of Latina adolescent mothers, and in turn, their children's well-being. Derived from Belsky's model of parenting (1984), the model suggests that values and norms central to mothers' ethnicities of origin may influence adolescent mothers' definitions of optimal parenting, the parenting behaviors and strategies they employ, and the extent of adolescent mothers' social support networks (Contreras et al., 2002; Calzada et al., 2013). One specific cultural value relevant to Latina adolescent mothers' parenting processes is *familism*. Whereas, familism values are evident across many ethnic and racial groups in the U.S. (e.g., Schwartz, 2007), research suggests that they are particularly relevant among Latinos as Latino adults and adolescents report higher levels of familism compared to individuals of other ethnic/racial backgrounds (Hardway & Fuligni, 2006; Sabogal et al., 1987).

Given the relevance of familism values within Latino families, Contreras and colleagues posit that these values may encourage the involvement of grandmothers in Latina adolescent mothers' transition to parenthood (Contreras et al., 2002). Further, familism values may influence adolescent mothers' parenting processes by prompting supportive *behaviors* within the family (Calzada et al., 2013; Contreras et al., 2002; Roosa, Morgan-Lopez, Cree, & Specter, 2002); within highly familistic families, parents may be more attuned to family

members' needs, and in turn, employ parenting behaviors that offer support and increase family connectedness. Qualitative work among low-income Dominican and Mexican-origin adult mothers suggests that mothers perceive high levels of support from extended family members and rely heavily upon these individuals for advice and child care (Calzada et al., 2013). Similarly, among Mexican American families with non-parenting adolescents, parents' familism values have been found to relate to warm parenting behaviors (White, Roosa, & Zeiders, 2012), family cohesion (White & Roosa, 2012), and nurturance and involvement within the parent-adolescent relationship, via lower levels of marital conflict (Taylor, Larsen-Rife, Conger, & Widaman, 2012). Specific to adolescent mothers, East and Chien (2010) examined Latino families with a pregnant adolescent and explored the relation between familism values and family members' reports of family cohesion and conflict in the first year after the child's birth. Grandmothers' familism values predicted her own reports of lower levels of conflict and higher levels of family cohesion within the family. Together, these findings suggest that familism values may promote supportive parenting behaviors; however, no longitudinal studies have examined how grandmothers' familism values and supportive behaviors are linked to aspects of adolescent mothers' parenting competence (e.g., efficacy) and, in turn, their children's well-being over time.

### **Grandmothers' Supportive Behaviors, Adolescent Mothers' Parenting Efficacy, and the Developmental Needs of Adolescent Mothers**

Experiencing support in the context of parenting is beneficial to mothers' psychological functioning and aspects of their parenting competence (Belsky, 1984). One aspect of parenting competence is *parenting self-efficacy*, parents' belief in their ability to positively influence the development of their child (Coleman & Karraker, 2000). Parenting self-efficacy has been linked to several dimensions of children's developmental outcomes, including their *social competence* (Coleman & Karraker, 2000), an indicator of children's social-emotional functioning in early childhood. Children's social competence with peers has, in turn, been found to predict children's academic functioning (Malecki & Elliott, 2002). Specifically, children who engage in more prosocial interactions with peers have been shown to display more positive attitudes about learning, greater motivation for academic competence, and greater task persistence (Coolahan, Fantuzoo, Mendez, & McDermott, 2000). It is believed that through exposure to peers' ideas, feelings, and opinions, children gain better perspective-taking capacities that facilitate their problem-solving and cooperative learning skills (Guralnick, 1993). Given this, understanding predictors of parenting self-efficacy in mothers, particularly adolescent mothers, is needed.

The current study examined the role of grandmothers' supportive behaviors in adolescent mothers' parenting self-efficacy. Supportive behaviors and communication among family members have been found to predict greater parenting self-efficacy among adult mothers (Izzo, Weiss, Shanahan, & Rodriguez-Brown, 2000), and positive maternal-infant interactions (Huth-Bocks, Levendosky, Bogat, & von Eye, 2004). Adolescent mothers are no exception; Contreras et al.'s (2002) model posits that supportive behaviors and close relationships predict Latina adolescent mothers' parenting functioning and competence. There is empirical evidence to support this theoretical notion among ethnically diverse

samples of adolescent mothers (e.g., Brown, Harris, Woods, Buman, & Cox, 2012). For instance, among African American and Puerto Rican adolescent mothers, support from grandmothers predicted better adolescent mother mental health functioning (i.e., lower depressive symptoms) concurrently, and declines in symptoms across time (Leadbeater & Linares, 1992). Adolescent mothers' mental health has been found to predict parenting competence (Sadler, Anderson, & Sabatelli, 2001).

Not all studies, however, have suggested positive benefits of grandmothers' support. For instance, among White and African American adolescent mothers, grandmothers' support (as perceived by adolescent mothers) was positively related to grandmothers' involvement in child care, but negatively related to adolescent mothers' nurturing behaviors with their children (Oyserman, Radin, & Saltz, 1994). Relatedly, among Latina adolescent mothers, the overall size of the adolescent mothers' support network positively predicted maternal expressivity and sensitivity with the child, but grandmothers' support was negatively associated. That is, greater grandmother support related to *lower* levels of adolescent mothers' maternal sensitivity with the child during unstructured tasks (Contreras, Mangelsdorf, Rhodes, Diener, & Brunson, 1999).

Explanations of these findings have focused on the developmental needs of the adolescent mother and the relationship dynamics of the grandmother-adolescent mother dyad (Caldwell et al., 1998; Contreras et al., 2002; Contreras et al., 1999; Nadeem & Romo, 2008). During adolescence, individuals undergo the process of individuation; while attempting to maintain a connection to parents, adolescents increasingly distance themselves from parents and pursue their own autonomy (McElhaney, Allen, Stephenson, & Hare, 2009). Whereas beliefs and values within collectivistic-based cultures (e.g., Latino culture) may relate to less autonomy granting within families (Montemayor, 2000), evidence suggests that within Latino families, similar to their European American counterparts, there is an expectation (by both mothers and adolescents) of greater autonomy during this developmental period (Bámaca-Colbert, Umaña-Taylor, Espinosa-Hernández, & Brown, 2012; Romo, Mireles-Rios, & Lopez-Tello, 2014).

Among adolescent mothers, a similar developmental need for autonomy is occurring, but is coupled with the need for support and assistance specific to the transition to parenthood (Caldwell et al., 1998; Contreras et al., 2002; Nadeem & Romo, 2008). Thus, adolescent mothers are faced with relying upon their parent (i.e., the child's grandmother) for help with child-care related activities, while simultaneously pursuing the process of individuation. Adolescents who receive this support and involvement from grandmothers could feel ambivalent about it. On one hand, the support is necessary and useful to meet the demands of parenthood; however, it may also feel as though the adolescent's own pursuit of independence is jeopardized. Thus, support from grandmothers may undermine adolescent mothers' parenting self-efficacy (Caldwell et al., 1998; Contreras et al., 2002). As Contreras and colleagues suggest, the benefits of grandmothers' support likely depend upon "expectations regarding the development of independence during adolescence" (2002, p. 168). That is, the extent to which adolescent mothers' parenting efficacy benefits from grandmothers' supportive behaviors is likely dependent upon aspects of the grandmother-adolescent mother relationship that include autonomy granting. Adolescent mothers'

parenting efficacy may be enhanced when grandmothers simultaneously provide high levels of support and autonomy.

## The Current Study

The current study examined the longitudinal processes by which grandmothers' familism values and parenting behaviors informed Mexican-origin adolescent mothers' perceived parenting efficacy and their children's well-being. We utilized five waves of data that spanned from before the birth of the baby to 60-months postpartum, and relied upon data from both grandmothers and adolescent mothers and direct assessments of their children. Guided by theoretical discussions positing the importance of familism values in parenting processes (Calzada et al., 2013; Roosa et al., 2002), and the prominent role of grandmothers in adolescent mothers' lives (Contreras et al., 2002), we hypothesized that grandmothers' familism values *before* the birth of the baby would predict greater parenting support of the adolescent mother and greater communication between the grandmother and adolescent mother *after* the birth of the baby (10-months postpartum). Further, we examined the moderating role of autonomy, hypothesizing that grandmothers' parenting support and communication at 10-months postpartum would positively predict adolescent mothers' parenting efficacy at 24-months postpartum, especially under conditions of high autonomy. Finally, guided by general models of parenting (Belsky, 1984) and empirical work suggesting that parenting efficacy positively predicts children's development, we hypothesized that adolescent mothers' parenting efficacy at 24-months postpartum would predict a salient indicator of children's development at 48-months of age, *social competence*, which in turn, would predict academic functioning at 60-months of age. Given that the model's hypothesized relations occur within a larger context of other individual and contextual considerations, we included a number of covariates. Specifically, we account for grandmothers' country of origin (i.e., foreign-born vs. U.S.-born), family income, and co-residency between grandmothers and adolescent mothers; these have been found to be important in understanding Latino multi-generational households (Nadeem & Romo, 2008). Further, we included child characteristics (i.e., temperamental effortful control) when examining how supportive behaviors relate to adolescent mothers' parenting efficacy, as work with Mexican-origin adolescent mothers and their infants suggests that early aspects of temperamental effortful control relate to mothers' perceptions of self-efficacy (Jahromi, Umaña-Taylor, Updegraff, & Lara, 2012). Finally, we considered if children were in preschool settings when predicting children's social competence as children within these settings may have more opportunities for interactive play with peers.

## Method

### Procedures and Participants

Data for the current study came from five waves (W1, W2, W3, W5, and W6) of a larger longitudinal project focused on Mexican-origin adolescent mothers ( $N = 204$ ), their mother figures, and their infants (Umaña-Taylor, Guimond, Updegraff, & Jahromi, 2013). Adolescent mothers were recruited from high schools, health centers, and community resource centers in a Southwestern metropolitan area. To be eligible for study participation, adolescent mothers had to be of Mexican-origin, between the ages of 15 and 18 years old,

unmarried, in the third-trimester of pregnancy, and have a mother figure that was willing to participate with them in the study. A majority of mother figures were the adolescents' own biological mothers (88.2%). Other nominated figures included adolescents' grandmothers (2.9%), aunts (2.0%), boyfriend's mother (3.4%), and other kin (3.5%). Families participated in six waves of data collection; the initial data collect (W1) occurred when the adolescent mother was in her third trimester of pregnancy ( $M_{weeks\ of\ pregnancy} = 30.86$ ,  $SD = 4.52$ ). Waves 2, 3, 4, 5, and 6 occurred when the adolescent mothers' children were on average 10.13 months ( $SD = .25$ ), 24.14 months ( $SD = .23$ ), 36.21 months old ( $SD = .45$ ), 48.39 months old ( $SD = 1.33$ ), and 60.41 months old ( $SD = .50$ ), respectively. At each wave, families participated in an in-home semi-structured interview that was conducted by a female interviewer and lasted approximately 2.5 hours. All participants were interviewed in their language of choice (i.e., English or Spanish). At W1, parental consent and youth assent were obtained for participants who were younger than 18 years old, and informed consent was obtained for participants who were 18 years and older. Grandmothers and adolescent mothers each received \$25 for their participation in W1, \$30 for W2, \$35 for W3, \$50 for W5, and \$60 for W6. Retention rates across the study were 91% (W2), 82% (W3), 81% (W4), 84% (W5), and 82% (W6) for grandmothers and 96% (W2), 85% (W3), 84% (W4), 85% (W5) and 84% (W6) for adolescent mothers.

Given our interest in the grandmother and adolescent mother relationship, the current study focused on families in which the mother figure was the adolescent's biological mother ( $N = 180$ ). Within these families, a majority of adolescent mothers were born in the U.S. (66.1%) and were interviewed in English at W1 (62.2%). A majority of grandmothers were born in Mexico (67.2%) and were interviewed in Spanish at W1 (68.9%). Adolescent mothers were 16.77, 17.73, 18.89, 19.91, 20.91 and 21.92 years old at W1, W2, W3, W4, W5, and W6, respectively with a standard deviation of 1 year at all waves; their mother figures were 40.76, 41.76, 42.93, 43.96, 44.94, and 45.95 years old at W1, W2, W3, W4, W5, and W6, respectively, with a standard deviation of approximately 5 years at each wave. At W1, most adolescent mothers resided with their mothers (grandmothers; 89.4%). Across the study the percentage dropped to 74.3% (W2), 63.5% (W3), 54.4% (W4), 49.7% (W5) and 40.9% (W6). As for romantic relationship status of adolescent mothers, at W1 66.1% of adolescent mothers reported a relationship with the biological father of their child; this percentage decreased from W2 to W6 (56.3%, 51.0%, 45.6%, 38.4%, 34%, respectively). At W1, 3.3% of adolescent mothers reported a relationship with someone other than the biological father; this percentage increased from W2 to W6 (9.8%, 19.2%, 30.2%, 36.4 and 41.3%, respectively). Median family income was \$22,000 ( $SD = \$19,991$ ) at W1, \$20,000 ( $SD = \$18,553$ ) at W2, \$20,000 ( $SD = \$19,359$ ) at W3, \$19,720 ( $SD = \$19,555$ ) at W4, \$19,660 ( $SD = \$17,321$ ) at W5, and \$23,050 ( $SD = \$19,366$ ) at W6.

## Measures

All measures were translated from English to Spanish by one individual and then back-translated from Spanish to English by a second individual. Final translations were reviewed by Mexican-origin individuals and discrepancies were resolved by the research team (Knight, Roosa, & Umaña-Taylor, 2009).

**Grandmothers' familism values (W1)**—Familism values were assessed using the Mexican American Cultural Values Scale (Knight et al., 2010). At W1, grandmothers reported on three aspects of familism values in the past year, support and emotional closeness (6 items, e.g., “It is always important to be united as a family.”), obligations (5 items, e.g., “Parents should be willing to make great sacrifices to make sure their children have a better life.”) and family as a referent (5 items, e.g., “A person should always think about their family when making important decisions.”). Items were rated on a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). An average familism score was computed across the three subscales, with higher scores indicating greater familism values. The scale has demonstrated good reliability and evidence of validity in prior studies of Mexican-origin adult females (Calderón-Tena, Knight, & Carlo, 2011). For the current study, the Cronbach's alpha was .80.

**Grandmothers' parenting support (W2)**—Grandmothers' parenting support was assessed using the Global Support from Mother Figure Postpartum scale (Toomey, Umaña-Taylor, Jahromi, & Updegraff, 2013). Using 6 items, grandmothers reported on their supportive behaviors since the baby was born (e.g., “I give (mothers' name) helpful information about parenting;” “(Mothers' name) feels comfortable confiding in me about parenting issues”). Responses ranged from 1 (*not at all*) to 5 (*very much*). An average score was computed, with higher scores indicating greater parenting support. The scale demonstrated adequate reliability in the current sample ( $\alpha = .76$ ) and evidence of validity in related samples (Toomey et al., 2013).

**Grandmother-adolescent mother communication (W2)**—To assess the frequency of communication around childrearing issues between the grandmother and the adolescent mother, the current study used the co-parental interaction scale (Ahrns, 1981). Using 7 items, grandmothers reported on how often they talked to the adolescent mother about childrearing issues since the baby was born (e.g., Medical issues or problems related to child; Daily decisions regarding the child's life). Grandmothers' responses ranged from 1 (*never*) to 5 (*always*). An average score was computed, with higher scores indicating more communication between grandmothers and the adolescent mother. The scale has demonstrated adequate reliability ( $\alpha = .96$ ) and evidence of validity in prior work among Latina adolescent mothers (Herzog, Umaña-Taylor, Madden-Derdich, & Leonard, 2007). In the current study, the Cronbach's alpha was .87.

**Adolescent mothers' autonomy (W2)**—Using a revised version of the Behavioral Autonomy Scale (Peterson, Bush, & Supple, 1999), grandmothers reported on the extent to which they allowed adolescent mothers to make their own decisions and engage in activities without excessive parental intrusion within the past year.. The scale includes 10 items (e.g., “I allow her to decide what is right and wrong without interfering too much.”) with responses ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Items were averaged with higher scores indicating greater autonomy. The scale has demonstrated good reliability and evidence of validity among Mexican-origin adolescents (Supple, Ghazarian, Peterson, & Bush, 2009). For the current study, the Cronbach's alpha was .75.

**Adolescent mothers' perceived parenting efficacy (W2, W3)**—To assess adolescent mothers' perceived parenting efficacy at W2 (when the infant was approximately 10 months old), the 25-item Parental Expectations Survey (Reece, 1992; Reece & Harkless, 1998) was used. The measure assessed the degree to which mothers believed they were managing the tasks of parenthood. Adolescent mothers responded to items (e.g., “I can manage the feeding of my baby”) using a 5-point Likert scale ranging from 1 (*not at all sure*) to 5 (*very sure*). A mean score was computed with higher scores indicating higher levels of perceived parenting efficacy. The scale has demonstrated good reliability ( $\alpha = .90$ ) and evidence of validity in other samples of Mexican-origin mothers (Hernandez, 2014). In this sample, Cronbach's alpha was .91.

At W3 (when the infant was approximately 24-months old), parenting efficacy was assessed using the Toddler Care Questionnaire (TCQ; Gross & Rocissano, 1988). The TCQ is a 38-item scale that assesses efficacy of tasks associated with raising a toddler (e.g., toilet training, behavior issues). Adolescent mothers responded to statements (e.g., know how to help your child learn how to talk; know how to help your child become toilet trained) using a 5-point Likert scale with responses ranging from 1 (You do not feel confident about this with your child) to 5 (*You feel very confident about this with your child*). Items were averaged, with higher scores indicating greater confidence in parenting ( $\alpha = .94$ ).

**Children's social competence (W5)**—To assess children's social competence with peers, the Play Interaction subscale of the Penn Interactive Peer Play Scale–Parent Preschool Version (PIPPS-P; Fantuzzo, Mendez, & Tighe, 1998) was used. The Play Interaction subscale consists of 10 items and assesses play behaviors that include comforting and helping others (e.g., helps other children, shares toys with children). Adolescent mothers reported on their child's interactive play at W5 (when the child's age was approximately 48-months) using a response range from 1 (*never*) to 4 (*always*). A sum score was taken with higher scores indicating higher instances of interactive play. The subscale has demonstrated adequate reliability and evidence of validity in prior work (Fantuzzo, Mendez, & Tighe, 1998) and good reliability in the current study ( $\alpha = .81$ ).

**Children's academic functioning (W6)**—The Woodcock Johnson III Tests of Achievement (Woodcock, McGrew, & Mather, 2001) were used to assess academic functioning among children for whom English was their primary language (70% of participating children). The Bateria III Woodcock-Muñoz (Bateria-III; Muñoz-Sandoval, Woodcock, McGrew, & Mather, 2005) was used to assess academic functioning among children for whom Spanish was their primary language (30% of participating children). Both tests are designed to be administered to respondents older than 2 years of age and provide a standardized normative score. We examined four subtests: Passage Comprehension; Picture Vocabulary; Letter-word Identification, and Applied Problems. A latent construct with the standard scores of the four academic subtest scores was created to represent children's academic functioning at 60 months.

**Other demographic and contextual covariates**—The current analyses controlled for grandmothers' country of origin, W1 family income, W1 and W2 grandmother-adolescent mother coresidency status, W2 infants' effortful control and W5 preschool attendance.



Adolescent mothers reported on W1 and W2 co-residency with the grandmother (0 = Do not live together, 1 = Live together). Grandmothers reported on their place of birth (0 = Foreign-born, 1 = U.S.-born) and annual family income. Adolescent mothers' reports of infants' effortful control at W2 was assessed using the Infant Behavioral Questionnaire- Revised (IBQ – R; Gartstein & Rothbart, 2003). Adolescent mothers described their children's behavior in the context of sleeping, bathing, dressing, playing, and daily activities in the past week, as well as general behaviors (e.g., soothing techniques) over the past two weeks. Items were scored on a Likert scale from 1 (*never*) to 7 (*always*). An average score was computed, with higher scores indicating greater effortful control ( $\alpha = .90$ ). For W5 preschool attendance, adolescent mothers first reported if their child was currently in preschool, childcare, or being regularly cared for by family. Children who were in preschools or childcare were coded as 1; children who were being cared for by the adolescent mother or family members (within the home context) were coded 0.

## Results

### Analytic Approach

To examine the hypothesized model, we used path analysis in Mplus 7.2 (Muthén & Muthén, 1998 - 2012). Specifically, we examined the processes by which W1 grandmothers' familism values related to W2 parenting support and W2 grandmother-adolescent mother communication, which in turn predicted W3 adolescent mothers' perceived parenting self-efficacy, W5 children's social competence, and W6 children's academic functioning. Grandmothers' country of origin, W1 family income, and W1 grandmother-adolescent mother (G-AM) co-residency status were included as control variables on W2 parenting support and W2 G-AM communication. W2 children's effortful control, W2 parenting efficacy, and W2 G-AM co-residency status were included as control variables on W3 parenting efficacy. W5 child care arrangement was included as a control variable on W5 children's play interactions. Given our hypothesis that the benefits of grandmothers' supportive behaviors depend upon autonomy granting within the grandmother-adolescent mother relationship, we examined W2 autonomy as a moderator of the paths linking W2 G-AM parenting support and W2 G-AM communication to W3 adolescent mothers' perceived parenting competence. Moderation was examined by including the main effect of W2 autonomy and interaction effects (i.e., W2 G-AM parenting support X W2 autonomy; W2 G-AM communication X W2 autonomy) on W3 adolescent mothers' parenting efficacy. All variables (with the exception of W6 children's WJ academic scores) were standardized and interaction terms were created by multiplying standardized variables. Significant interactions were probed according to Aiken and West (1991). Missing data were accounted for using full information maximum likelihood (FIML; Enders, 2010).

Mediation was tested using the bias-corrected bootstrap method recommended by Taylor, Mackinnon, and Tein (2008). This approach creates confidence intervals for all mediational chains; if the confidence interval of the mediational chain does not contain zero, mediation is considered significant ( $p < .05$ ). We utilized 500 bootstrapping samples to compute confidence intervals. Given that our mediational process included a moderating variable (i.e., adolescent mothers' autonomy), we examined the possibility that mediation occurred

differently based on levels of the moderator (*moderated mediation*). This was done by examining mediation using the bias-corrected bootstrapping method at mean levels of the moderator, low levels of the moderator (1 *SD* below the mean), and high levels of the moderator (1*SD* above the mean; Tein, Sandler, MacKinnon & Wolchik, 2004). To examine the fit of the model, multiple fit indices (chi-square test, CFI, RMSEA, and SRMR) were used; good (acceptable) model fit is reflected by a non-significant chi-square test, CFI greater than .95 (.90), RMSEA less than .05 (.08), and SRMR less than .05 (.08; Hu & Bentler, 1999; Kline, 2005).

## Results of Hypothesized Model

Table 1 presents means, standard deviations (SD), and inter-correlations among study variables and Figure 2 presents the results of the mediational model linking grandmothers' familism values and behaviors to adolescents' parenting self-efficacy, children's social competence, and children's academic functioning. Model fit indices indicated adequate fit [ $\eta^2(89) = 113.30, p = .04$ ; CFI = .91, RMSEA = .04, SRMR = .07]. Results indicated that W1 grandmothers' familism values positively predicted both W2 G-AM parenting support and W2 G-AM communication, taking into account grandmothers' country of origin, W1 family income, and W1 co-residency status. W2 G-AM parenting support and W2 G-AM communication did not predict adolescent mothers' perceived parenting self-efficacy at W3. However, W2 G-AM parenting support and W2 autonomy granting of the adolescent interacted to predict W3 parenting efficacy<sup>1</sup>. As seen in Figure 3, probing of the interaction revealed that at high levels of autonomy (grandmother report), a positive relation emerged between W2 grandmothers' parenting support and W3 adolescent mothers' perceived parenting efficacy,  $b = .33$  (standard error; SE) = .12,  $p < .01$ . At low levels of autonomy (grandmother report), no association emerged between W2 parenting support and W3 adolescent mothers' perceived parenting efficacy,  $b = -.11$ , (SE = .13), *ns*. The interaction between W2 adolescent autonomy and W2 G-AM communication, however, was not significant. Finally, W3 adolescent mothers' perceived parenting efficacy positively predicted W5 children's social competence (48 months of age), which in turn, predicted W6 children's academic functioning (60 months of age).

Bias-corrected bootstrap method was used to examine mediation in the current study (Taylor et al., 2008). Significant mediation is evident when the confidence interval (CI) of the mediated effect does not include zero. Our first mediational test examined the following mediational pathway: W1 familism values, W2 G-AM parenting support, W3 parenting efficacy, W5 play interactions, and W6 academic functioning. The confidence interval suggested that mediation was not significant [95% CI:  $-.001, .107$ ]. Similarly, the mediational pathway including W2 G-AM communication was not significant [95% CI:  $-.076, .008$ ]. Given that a significant interaction emerged between W2 G-AM parenting support and W2 autonomy, we examined the mediated effects at high (1*SD* above the mean) and low (1 *SD* below the mean) levels of W2 autonomy. Mediational tests revealed significant mediation (evidence by a CI that did not contain zero) in the following

<sup>1</sup>Additional analyses were conducted to examine whether adolescents' reports of autonomy moderated the associations of interest. No significant interactions emerged (support X autonomy; communication X autonomy) using adolescent reports.

mediational chain, but *only* when W2 autonomy was high: W1 familism values, W2 G-AM parenting support, W3 parenting efficacy, W5 children's play interactions, and W6 children's academic functioning [95% CI: .003, .199]. This mediational chain was not significant at low levels of autonomy [95% CI: -.11, .008].

## Discussion

Guided by theory on parenting processes of Latina adolescent mothers (Contreras et al., 2002), the current study examined the role of grandmothers' familism values and behaviors in adolescent mothers' parenting efficacy and, in turn, children's well-being. We focused on Mexican-origin adolescent mothers, a group with the highest teenage birthrates in the U.S. (Martin et al., 2012), and examined these associations across the transition to parenthood through 60-months postpartum. Our findings suggested that grandmothers' familism values predicted greater parenting support of, and communication with, adolescent mothers during the transition to parenthood. This support was then found to be beneficial among adolescent mothers, predicting greater parenting efficacy, but only in the context of high autonomy granting. The benefits of adolescent mothers' parenting efficacy were then observed two years later, as reflected by greater social competence in their children at 48 months of age, and finally, greater academic functioning at 60 months of age. Our findings are important for a number of reasons. First, they illustrate the processes related to cultural values and behaviors among Mexican-origin families with adolescent mothers. Second, they highlight the importance of considering factors that are developmentally salient (e.g., autonomy) when understanding how familism behaviors benefit adolescent mothers' parenting efficacy and, ultimately, their children's competence and academic well-being. Third, our findings highlight the intergenerational benefits that may occur when familism values are endorsed within Mexican-origin families with adolescent mothers.

### Familism Values and Behaviors

The model of determinants of parenting among Latina adolescent mothers (Contreras et al., 2002) emphasizes the importance of cultural-specific values and behaviors in understanding parenting processes of adolescent mothers. Cultural values can influence multiple aspects of processes, including sources of support that adolescent mothers draw from and receive (Contreras, 2002). Within the context of adolescent parenthood, familism values are theorized to be determinants in the social support network of adolescent mothers, relating to the availability of grandmothers during the transition to parenthood and influencing the behaviors occurring within families (Contreras, 2002). In line with these ideas, our examination of grandmothers' familism values suggested that when grandmothers placed a higher emphasis on family connectedness (high familism values) *before* the birth of the baby, they reported that *after* the birth of the baby (a) their adolescent mother could rely upon them for help with child-rearing tasks (e.g., ride to doctor, advice about problems related to baby) and (b) there was greater communication with their adolescent around issues related to the child (e.g., medical issues, child accomplishments, daily decisions regarding the baby). Together, these findings suggest that in families with adolescent mothers, familism values may enact or encourage specific supportive behaviors around issues of child-rearing. Beyond providing empirical support for Contreras and colleagues' conceptual

framework (2002), these findings also are consistent with prior work suggesting that parents' familism values are beneficial by promoting positive parenting strategies among families with non-pregnant/parenting adolescents (e.g., White, Roosa, Zeiders, 2012), and lower conflict among Mexican-origin families with adolescent mothers (East & Chien, 2010).

From a larger cultural perspective, our findings are in line with theorizing about the cultural influences on parenting processes. For instance, the developmental niche framework posits that parenting processes and children's development are influenced by parent's psychology which includes values and beliefs that are regulated by culture (Super & Harkness, 1986). Whereas familism values are not a Latino-specific value (other ethnic and cultural groups stress the importance of family), this value is considered a hallmark of Latino culture (Sabagol et al., 1987). In the current study, grandmothers' values surrounding the importance and role of family predicted their own supportive parenting behaviors with their adolescent daughters, which in turn, predicted adolescent daughters' parenting efficacy. Understanding how cultural values promote supportive contexts for adolescent mothers can inform interventions focused on aiding adolescent mothers during the transition to parenthood. That is, if we understand that specific cultural values encourage and enact supportive behaviors, we can design intervention efforts that focus on the retention of familism among Mexican-origin families with adolescent mothers.

### **The Benefits of Familism Behaviors to Adolescent Mothers**

In addition to examining how grandmothers' familism values informed specific behaviors, the current study examined how these behaviors then predicted adolescent mothers' parenting efficacy when their child was approximately 24-months old and, in turn, the child's social competence at 48-months. Consideration of developmentally salient tasks relevant during adolescent mothers' transition to parenthood and throughout the parenting process is needed (Caldwell et al., 1998; Contreras et al., 2000; Nadeem & Romo, 2008); adolescent mothers are balancing the tasks associated with parenting, as well as the normative developmental tasks of adolescence. Prior work has demonstrated mixed findings when looking at the ways in which behaviors (support and communication) within the grandmother-adolescent mother dyad relate to aspects of adolescent mothers' parenting, and these inconsistencies may have to do with developmental aspects of the grandmother-adolescent mother relationship. In the current study, findings suggested that support only promoted greater adolescent mother parenting efficacy when grandmothers' reported giving the adolescent mother high levels of autonomy. Thus, adolescent mothers reported greater confidence in their parenting when their child was 36 months old, when grandmothers' supportive behaviors were coupled with a relatively higher degree of independence a year prior. Our findings align with the notion that the benefits of support from grandmothers are amplified when other developmental considerations are taken into account (Caldwell et al., 1998; Contreras et al., 2002). Interestingly, autonomy did not moderate this association when adolescent mothers' reports of perceived autonomy were utilized (See footnote 1). Thus, the current findings suggest that the perceptions of grandmothers may carry unique information that is particularly consequential for the impact that their support has on adolescent mothers' parenting efficacy. It will be useful for future studies to further evaluate

what factors may underlie the different perceptions of grandmothers versus adolescents with regard to autonomy granting and to consider additional approaches to assess autonomy granting that account for these potentially unique but important perspectives of multiple family members.

Also note that the communication within the grandmother-adolescent mother around child-rearing tasks did not predict adolescent mothers' parenting efficacy, nor did autonomy moderate this association. One explanation for the null finding could center around the differences between the support and communication as measured in the current study. Our measure of support assessed the degree to which grandmothers acted upon, in a positive manner, the parenting needs of the adolescent (e.g., the degree of help the grandmother provided related to transporting the child, emotional support given to the adolescent around child-rearing problems). Communication assessed the frequency of conversations (seemingly positive or negative) between the grandmother and the adolescent mother around child-focused factors (e.g., children's accomplishments, medical issues). Given that support assessed primarily positive interactions and communication captured the frequency of interactions (both positive *and* negative), it could be that adolescent mothers' efficacy was most responsive to behaviors of primarily *positive* valiance. Future work examining the emotional tone and/or content of communication could help to clarify these links.

### **Intergenerational Benefits of Familism Values in Families with Adolescent Mothers**

The current study assessed mediational processes linking familism values to adolescent mothers' behaviors, and ultimately, the well-being of their child. Grandmothers' familism values prior to the baby's birth predicted greater parenting support after the birth of the baby, which in turn, predicted greater adolescent-mother parenting efficacy (in the context of high autonomy) 24-months postpartum, and ultimately, higher levels of children's positive play interactions with peers when they were approximately 48-months old and academic functioning at 60-months old. Our findings support the notion that familism values are important for Latina adolescent mothers' parenting processes; grandmothers' familism values provided a context in which adolescent mothers felt more supported. Viewed in light of our larger understanding of familism values, our findings provide support for the intergenerational benefits of familism values (Contreras et al., 2002); the emphasis of family interdependence among less acculturated generations may trickle down to impact familial processes and children's well-being.

### **Limitations and Future Directions**

The current study contributes to our understanding of familial processes around a particularly important cultural value for Mexican-origin families, familism, and delineates ways in which familism values and behaviors inform our understanding of adolescent mothers' parenting and their children's social competence over time. Despite its contribution, the current study has noted limitations. First, related to the behaviors associated with familism values, we focused on those specific to parenting (support and communication around child-rearing). Familism values likely inform a number of other family behaviors that are not specific to parenting, that could play out to influence adolescent mothers' psychosocial functioning and their parenting processes (Contreras et al.,

2002). For instance, grandmothers' familism values could inform the ways in which adolescent mothers spend their time and the ways in which grandmothers restrict or monitor their adolescents' behaviors. Adolescents who spend more time at home could be awarded more opportunities to feel efficacious as a parent. Future work focusing on additional behavioral correlates could expand upon our understanding of the ways in which values play out to influence adolescent mothers' parenting processes.

Related to the sample and study design, we focused on processes within families of Mexican origin, and during a specific developmental period. Other Latino groups have been found to have similar values to Mexican-origin families (Sabogal et al., 1987), so the extension of our findings to processes in Latino families more broadly is needed. Additionally, we examined the role of autonomy during a particularly important developmental period for independence, late adolescence (age 18). Examining how these processes may differ at other developmental stages is necessary. For instance, the benefits of grandmothers' support may be less dependent upon autonomy granting at different stages of adolescence. During early adolescence, grandmothers' supportive behaviors may be viewed as positive regardless of autonomy granting, given that girls may find themselves at a developmental period where they are less focused on autonomy. Similarly, as adolescents enter young adulthood, autonomy granting may become less relevant in the association linking support and parenting efficacy, as these girls transition to adulthood and the process of individuation is much further along. Future studies focused on other Latino groups and different developmental stages are needed.

Finally, the current study relied upon multiple informants and an objective assessment of children's academic functioning to examine our research questions. We view this as strength of the current study, but believe that our findings could still be influenced by same-reporter bias (e.g., grandmothers' reporting on their familism values and supportive behaviors). Thus, future work focused on combining self-report measures of values to objective indicators of supportive behaviors could provide a stronger test of the links between familism values and behaviors.

In sum, the current study contributes to our understanding of the processes related to familism values within grandmother-adolescent mother dyads. Grandmothers' values and behaviors predict aspects of adolescent mothers' parenting competence, and ultimately, their children's development. Understanding familism processes are important in furthering our knowledge of resilience among Mexican-origin adolescent mothers.

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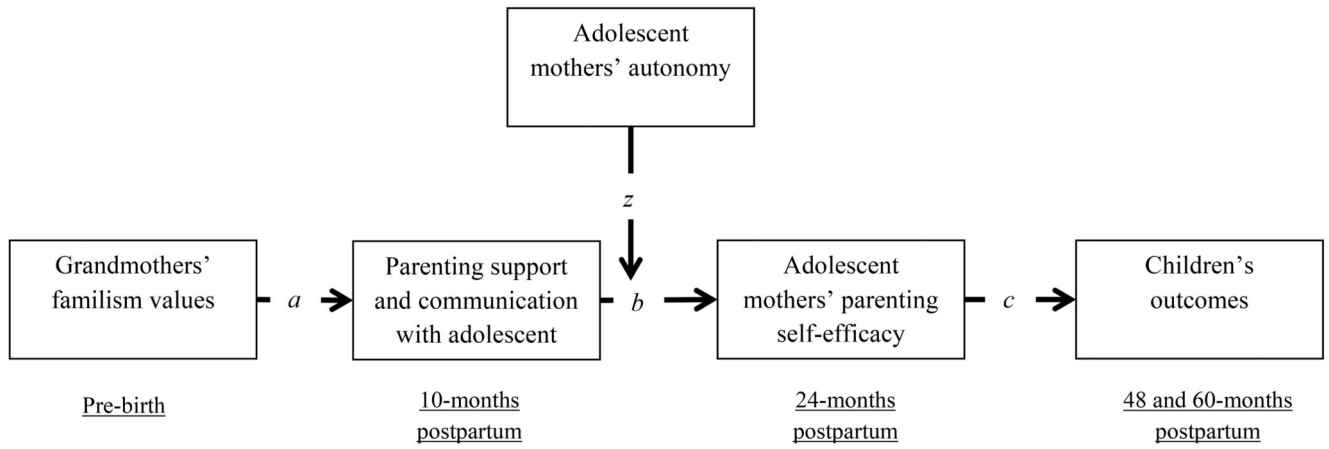
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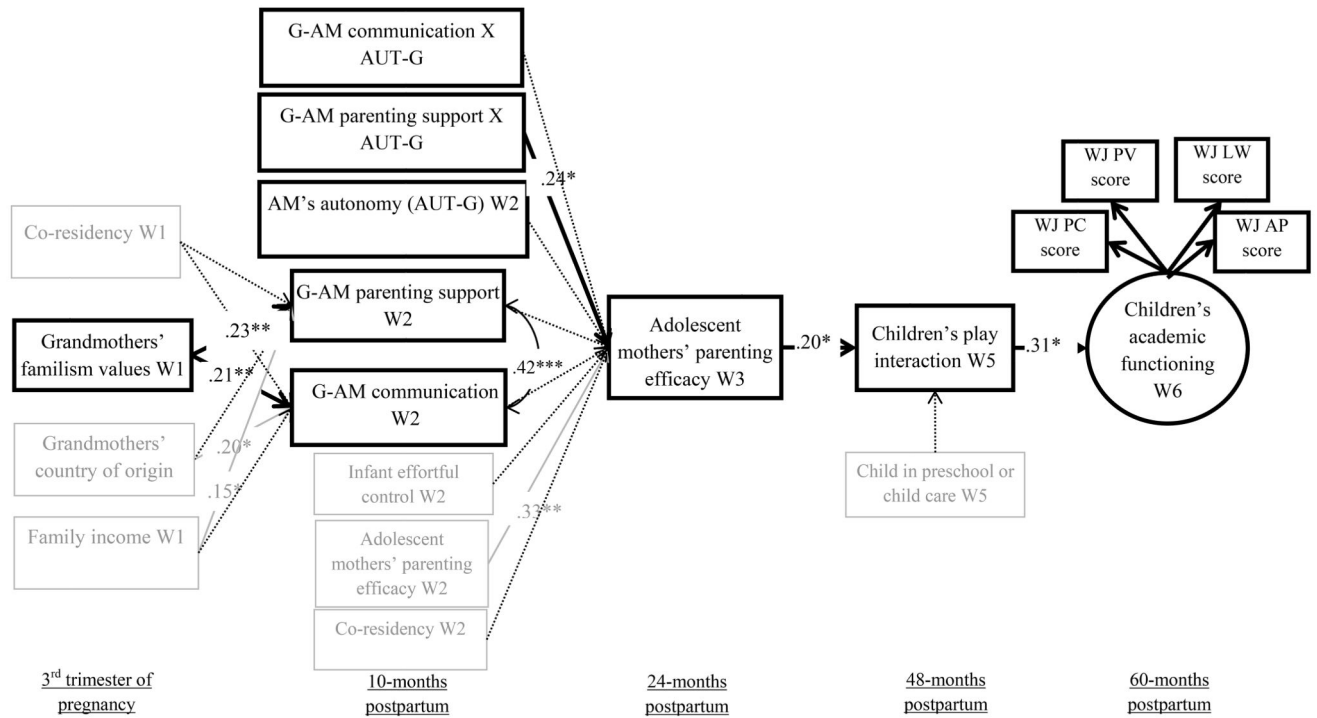


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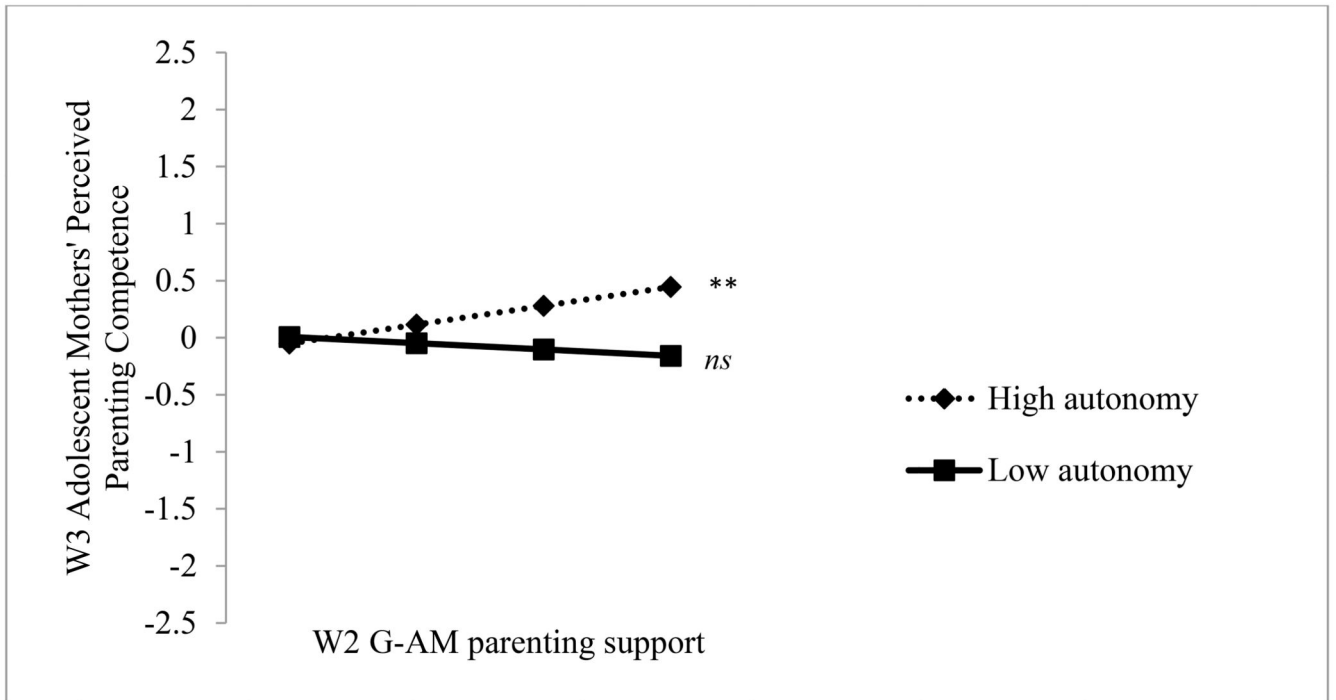
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**Figure 1.** Conceptual model linking grandmothers' familism values, parenting processes, and children's outcomes.



**Figure 2.** Path model results (standardized beta coefficients) linking grandmothers' familism values, grandmother-adolescent mother support and communication, adolescent mothers' parenting self-efficacy, and children's social competence and academic functioning ( $N = 180$ ). Model fit:  $\eta^2(89) = .113$ ,  $p = .04$ , CFI = .91, RMSEA = .04, SRMR = .07; \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ . W1 = Wave 1; W2 = Wave 2; W3 = Wave 3; W5 = Wave 5; W6 = Wave 6; WJ = Woodcock Johnson; PC = Passage comprehension; PV = Picture vocabulary; LW = Letter-word; AP = Applied problems. Grandmothers' country of origin coded (0 = foreign-born, 1 = U.S.-born).



**Figure 3.** Interaction between W2 grandmother-adolescent mother (G-AM) parenting support and W2 grandmothers' report on adolescent mothers' autonomy on W3 adolescent mothers' perceived parenting efficacy. \*\* slope is significant,  $p < .01$ , *ns* slope is non-significant.

**Table 1**  
**Means, Standard Deviations, and Correlations among Study Variables (N = 180)**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. G familism values W1	--													
2. Family income W1	-.14	--												
3. G country of origin	-.14	.25***	--											
4. Co-residency W1	-.03	.07	-.08	--										
5. Co-residency W2	.05	.06	-.12	.20**	--									
6. G-AM P-support W2	.18*	.18*	.14	.19*	.11	--								
7. G-AM comm W2	.17*	.11	.18*	.10	.13	.48***	--							
8. Autonomy granting W2	.01	.26***	.12	-.05	.06	.13	.05	--						
9. C effortful control W2	.02	.00	.05	-.02	.00	.01	.05	-.05	--					
10. A Parenting efficacy W2	-.00	.12	.26***	.02	-.11	.05	.12	.10	.37***	--				
11. A Parenting efficacy W3	.01	.07	.24**	-.06	-.03	.11	.03	.01	.23*	.36***	--			
12. C Social competence W5	-.09	.02	.27***	-.10	-.11	.05	-.02	.20*	.21*	.31***	.20*	--		
13. C Childcare arrangement	.03	-.10	.15	.06	.06	-.07	.13	-.03	-.08	-.03	-.02	.05	--	
14. C academic func W6	-.14	.18*	.19*	-.21*	.04	.05	-.10	.26**	-.05	.00	.01	.31***	.14	--
Mean	4.50	\$27,335	.32	.89	.74	4.38	3.74	3.02	4.61	4.53	4.33	1.92	.23	91.63
Standard deviation	.36	\$19,904	.46	.31	.44	.50	.86	.43	.61	.42	.46	.55	.43	9.84

*Note.* W1 = Wave 1; W2 = Wave 2; W3 = Wave 3; W4 = Wave 4; G = Grandmother; G-AM = Grandmother-adolescent mother; P-support = parental support; comm = communication; C = Children's; A = Adolescent mothers; func = functioning. Grandmothers' country of origin coded (0 = foreign-born, 1 = U.S.-born). Means, standard deviations, and correlations were computed in MPLUS accounting for missing data using full information maximum likelihood.

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$ .