COPARENTING DYADS AMONG LATINX ADOLESCENT PARENT FAMILIES

by

Priscilla L. Zambrano, B.S.

A thesis submitted to the Graduate Council of
Texas State University in partial fulfillment
of the requirements for the degree of
Master of Science
with a Major in Human Development and Family Sciences
May 2021

Committee Members:

Norma Perez-Brena, Chair

Jeneé C. Duncan

Nicholas Bishop

FAIR USE AND AUTHOR'S PERMISSION STATEMENT

Fair Use

Duplication Permission

ACKNOWLEDGEMENTS

Sometimes it only takes one person to believe in you to succeed, and I am lucky to have many believers in my life.

First, I want to express my deep and sincere gratitude to my committee chair, Norma Perez-Brena, who has provided me with invaluable guidance throughout the research process. Without her mentorship, this work would not have been possible. I want to thank my committee members, Jeneé C. Duncan and Nicholas Bishop, for sharing their time, expertise, and thoughtful feedback.

I would also like to acknowledge my biggest fans: my husband, daughter, mother, siblings, and nieces. Thank you for your support, patience, and for reminding me of who I am on this journey. Finally, thank you to my abuelita, who continues to be a source of inspiration in everything I create.

TABLE OF CONTENTS

Page

I. INTRODUCTION

In 2017, 194,377 children were born to mothers between the ages of 15 and 19 (Centers for Disease Control and Prevention [CDC], 2019) and 11 percent of fathers (15-49 years old) had a child before 20 years of age (CDC, 2017). Although adolescent pregnancy rates are declining in the U.S. (Martin et al., 2018), they remain higher than other western industrialized countries (Sedgh et al.,2015); thus, adolescent-headed households remain a significant family system to study. Embedded in the adolescent-headed family system are coparenting dyads that include the adolescent mother-father (M-F) and adolescent parent-mother figure (hence forward grandmother; P-G) coparenting relationships (Derlan et al., 2018; Rhein et al. 1997). The coparenting relationship reflects the shared responsibility between parents/or parental figures in their childrearing roles (Feinberg, 2003), and these coparenting relationships can include coparental conflict (Ahrons, 1981) and involvement (Cabrera et al., 2009). Studying these coparental subsystems are important because past research on adolescent parents has shown that having positive M-F and P-G coparental relationships are linked to more positive parental and child outcomes (Fagan & Lee, 2011; Krishnakumar & Black, 2003; Perez-Brena et al., 2015). However, few have studied how these two essential sources of coparenting inform one another. For example, one study of adolescent mothers, analyzing conflict and communication, noted that M-F coparenting conflict predicted M-G conflict over time, but interrelated associations did not exist for communication (Derlan et al., 2018). A second body of research also suggests that M-G relationship dynamics informed the M-F coparenting relationship across a variety of coparenting dimensions, including involvement (Fagan et al., 2007; Krishnakumar & Black, 2003). Guided by a family

systems perspective (Cox & Paley, 1997), I aim to expand on prior research by assessing the interrelationship between Latinx adolescent coparenting subsystems (i.e., mother-father, parent-grandmother) in the areas of conflict and involvement across two time points.

I focus on Latinx adolescent parents because, in the United States, Latinxs make up the largest population of ethnic minority groups (Krogstad, 2020) with individuals of Mexican origin representing the largest subgroup of Latinxs (Noe-Bustamante, 2019). Adding significance to these trends are the high rates of teen pregnancy among adolescents of Mexican origin with a rate of teen pregnancy double (9%) that of the national average rate (CDC, 2011). In addition, differences exist among Latinx families when compared to the larger U.S. population (Sabogal et al., 1987; Knight et al., 2010) due to cultural values and experiences with acculturation that lead to unique developmental processes for the family (Garcia Coll et al., 1996). For example, in Latinx families, familism is a central cultural value encompassing familial obligations, perceived family support, and family as referents (Cupito et al., 2015). Sabogal et al. (1987) noted that despite acculturation, these dimensions remained higher than European American populations with perceived family support having no change in relation to levels of acculturation.

Family Systems Theory as a Framework for Understanding Adolescent Coparenting Dyads

Family systems theory (Cox & Paley, 1997) allows us to understand the adolescent family as a hierarchically organized system made up of interconnected subsystems that include the M-F and P-G coparenting dyads. In this context, families are

experiencing reorganizations due to an early transition to parenthood and the addition of a new family member, the child's other parent (Pittman & Colley, 2011). Cox and Paley (1997) suggest that these disruptions have a bidirectional influence within and across subsystems through family functions and interactions. To explain these processes of influence, I consider the spillover hypothesis (Erel & Burman, 1995; Nelson et al., 2009) which suggests that behavior patterns in one subsystem transfer to another subsystem (Erel & Burman, 1995; Nelson et al., 2009). This hypothesis provides a framework for examining how coparenting dynamics in the interparental subsystem (e.g., M-F conflict) may inform other aspects of coparenting (e.g., involvement) that impact the parent-child subsystem, or how coparenting dynamics within one coparenting subsystem (e.g., M-F coparenting conflict) influence the coparenting dynamics of a second coparenting subsystem (e.g., P-G coparenting conflict). This theoretical basis informs my primary and secondary goals of assessing the interrelationships between Latinx adolescent coparenting conflict and involvement (Goal 1) and assessing the interrelationships between Latinx adolescent M-F and P-G subsystems (Goal 2) across two time points.

Coparenting Conflict and Involvement

This study focuses on the frequency of coparenting conflict and involvement among dyads. Coparenting conflict is defined as interpersonal disagreement as it relates to parenting issues (Ahrons, 1981), and involvement is the engagement of parents and coparents in activities with their child (Cabrera et al., 2009). A pattern of equal/high involvement and low conflict has been associated with positive coparenting among adolescent mothers and grandmothers (Perez-Brena et al., 2015). Moreover, positive M-F and M-G coparenting relationships have been associated with adolescent mother's greater

parental efficacy (Krishnakumar & Black, 2003; Oberlander et al., 2007; Umaña -Taylor et al., 2013; Zeiders et al., 2015) and wellbeing (Pittman & Colley, 2011), an increase in father engagement (Fagan & Lee, 2011), and positive child development (Pittman & Colley, 2011).

When evaluating how coparenting conflict and involvement relate to each other, a study with Mexican American families revealed that more coparenting conflict reported by fathers decreased their involvement in warmth and literacy activities, but not caregiving (Cabrera et al., 2009). In comparison, mothers' reports of high coparenting conflict were associated with less positive and responsive mother-infant interactions (Cabrera et al., 2009). Also, evidence of reverse causality between coparenting dynamics has been found among samples of mostly non-Hispanic white two-parent families (Fagan & Cabrera, 2012; Jia & Schoppe-Sullivan, 2011). For instance, a longitudinal study using a sample of mostly married (90.3%) biological parents found a positive association between father involvement in physical care and coparenting conflict, from 9 months to 24 and 48 months (Fagan & Cabrera, 2012). However, father's increased involvement in cognitive stimulation was linked to a decrease in coparenting conflict. These results suggest reciprocal links of M-F coparenting conflict and involvement, such that high conflict is linked to reduced involvement, and high early involvement is linked to a subsequent change in the frequency of conflict. However, research on this topic is limited, and it has not been explored in P-G subsystems.

In addition to the adolescent coparenting subsystem, studies have also shown grandparents' influence on the M-F coparenting relationship across various coparenting dimensions (Fagan et al., 2007; Krishnakumar & Black, 2003; Poblete & Gee, 2018). For

example, the level of support from grandparents has been shown to impact M-F coparenting quality (e.g., support, undermining) despite the presence of partner support (Poblete & Gee, 2018). When grandmothers perceived their relationship with both coparents (mother and father) as positive, mothers also perceived their relationship with father as positive (Krishnakumar & Black, 2003). These results suggest a spillover effect such that the M-G subsystem informs the M-F subsystem (Krishnakumar & Black, 2003; Poblete & Gee, 2018). However, Derlan et al. (2018) found that adolescent M-F conflict at 10 months and 3 years postpartum predicted adolescent M-G conflict at 2 years and 4 years postpartum, respectively. Regarding within subsystem associations, high communication was associated with low conflict in both dyads, while high conflict was associated with low communications only in M-F dyads (Derlan et al., 2018). Taken together, these studies suggest the likely presence of bidirectional spillover effects such that the coparental interactions between M-F dyads may inform change in the coparental interactions between parent-grandparent dyads, and vice versa.

Current Study

This study aims to shed light on the processes of coparenting dynamics among two adolescent coparenting relationships and elucidate how these dyads are interrelated in Latinx families over time. Informed by family systems theory (Cox & Paley, 1997), my thesis had two goals. First, I aimed to assess the interrelationships between Latinx adolescent coparenting dynamics in the construct of coparenting conflict and involvement across two time points, nine months apart. Based on prior research, I hypothesize that more frequent conflict will be associated with a later decrease in involvement, and vice versa. Second, I aim to assess the interrelationships between coparenting dynamics across

Latinx adolescent coparenting subsystems (i.e., mother-father and parent-grandmother subsystems). Based on limited research, I hypothesize a bidirectional effect between dyads, such that adolescent parents' reports of coparenting conflict in the M-F dyad at Time 1 (T1) will be positively associated with change in adolescent P-G conflict at Time 2 (T2; a spillover effect), nine months later, and conversely, parents' reports of grandmother involvement will inform change in frequency of parental involvement over time.

II. METHOD

Procedure

The current study used data from a larger longitudinal study aimed at assessing the effects of an intervention program implementing healthy relationship, coparenting, and life skills education with adolescent parents (grant number 90FM0067-02-00). A total of 678 pregnant and parenting adolescents were identified across eight high schools in the Central Texas area. Schools representing urban and suburban/rural regions were selected based on their significant population of pregnant and parenting adolescents. Participants were identified by school partners serving adolescent parents in their respective schools. Eligible participants included high school students between the ages of 14–19 that were expecting or parenting, and their coparenting partners.

Recruitment was initiated at the start of the academic school year and included passing out folders with a program flyer, parental consent form, and participant assent form to identified participants. Students were then asked to return completed recruitment forms if they selected to participate. Bilingual staff members followed up in person, or through text and calls as needed, and were available to answer questions at school sites. Once all forms were returned and participants were enrolled, online survey tools were administered in person by trained research assistants using tablets at each high school. Snowball sampling techniques were used to identify and recruit adolescent fathers who were difficult to identify. Specifically, adolescent mothers were asked to identify the other biological parent of their child and asked for their consent to invite these fathers to participate in the study. A similar recruitment and consent/assent process were used for these additional participants.

Adolescent parents completed online surveys at the beginning of the school year before intervention (T1) and then again approximately nine months later after two semesters of program participation (T2). Participant responses were linked to a personal identification number to maintain confidentiality. During the administration of surveys, the research assistants reminded participants of their rights as participants and were available to answer questions. They also provided one-on-one support to participants with literacy and language barriers. Participants were compensated with a $5 gift card for completing the T1 survey and a $25 gift card for completing the T2 survey. Student retention was 71% from T1 to T2.

Participants

For this thesis, only participants who were 20 years of age or younger, and who were already parenting at T1 were included in analyses (n = 319). These participants were 83.7% (n = 267) Latinx and 71.8% (n = 229) female. The majority were in a relationship with the other biological parent (59.9%; n = 191), while around 7% (n = 22) were in a relationship with someone else and around 33% were not in a relationship at all. Two hundred and nine participants were born in the US (72.1%), and 80 were born elsewhere (27.6 %). A majority lived with their mother figure (91.1%; n = 290) and most had daily or almost daily contact (65.9%; n = 210) with the other biological parent of the infant in a typical month. Most adolescents received the coparenting curriculum as part of their participation in the larger program (59.2%; n = 189).

Measures

Each measure was translated into Spanish by a team of bilingual individuals fluent in both English and Spanish. Any discrepancies between translations were

discussed as a team, with the principal investigator making decisions on final translations. Continuous measures were normally distributed based on skewness and kurtosis falling within the accepted thresholds (+/-2; Tabachnick & Fidell, 2013). Descriptive Statistics are presented in Table 1.

Coparenting conflict. Mothers' and fathers' reports of *coparental conflict* (Ahrons, 1981) with their child's other biological parent and grandmother were assessed at T1 and T2 using a 4-item scale to assess the degree of conflict (1=never to 5=always) that emerged when coparents discussed parenting issues. More frequent coparenting conflict was indicated by higher scores. Responses to the prompt "When you and your child's other parent discuss parenting issues…" included follow-up items: "How often does it result in an argument?" and "How often are the conversations stressful and tense?". Cronbach's alpha for adolescent' reports of M-F and P-G coparenting conflict were .85 and .88 at T1, and .86 and .92 at T2, respectively.

Parental involvement. Adolescent parents' perception of *parental involvement* within their coparenting dyads was measured using Cabrera and colleagues' (2009) 11-item Parental Involvement Scale. Parents rated the frequency (1=never to 4=often) that they, the father, and their mother (the grandmother) engaged in different activities with the child within the last month. Activities included reading books to your child, changing your child's diapers, and hugging or carrying your child. Within this thesis, I will use parents' report of the other parents' involvement, and perceptions of the grandmothers' involvement as indicators of involvement. Cronbach's alpha for adolescent' reports of the other parents' involvement and grandmother's involvement were .94 and .93 at T1, and .95 and .93 at T2, respectively.

Control Variables. This study includes the following control variables: adolescent parent's age (self-reported, continuous), gender (0=female, 1=male), and ethnicity (0=not Hispanic, 1=Hispanic). I also controlled for the frequency of contact with the other biological parent within the last month (0=never to 6=daily or almost daily) and adolescents' relationship status (0=no partner or in a relationship with another person, 1=in a relationship with the other biological parent). Finally, I controlled for adolescents' who received the coparenting (CP) curriculum versus those who received other curriculum/services (0=no CP intervention, 1=CP intervention).

Analytic Plan

Preliminary analyses included computing means, standard deviations, and correlations for the main study variables measured at T1 and T2, and control variables measured at T1 (Table 1). I also ran a series of t-tests to examine whether or not differences with missing data at T2 were related to TI coparenting and control variables. Specifically, a variable noting if data were missing at T2 was used as the DV, and adolescent age, race, nativity, parenting status, relationship status, coparental conflict and grand/parental involvement at T1 were used as IVs. Results indicated no significant differences between participants who did or did not complete T2 surveys, with one exception: participant age, T (194.572) = 2.410, $p < .05$. Older participants (*Mage* = 17.25, *SD* = 1.58) were less likely to participate in T2 surveys compared to younger participants (*Mage* = 16.83, *SD* = 1.27). Such results suggested data was missing at random and, therefore, it was appropriate to use Full Information Maximum Likelihood estimation (Baraldi & Enders, 2010), including age as a control, to manage missing data.

To address my goals, a series of auto-regressive cross lag models (Cole &

Maxwell, 2003) in Mplus were used to estimate reciprocal associations between coparenting conflict and involvement among M-F dyads and P-G dyads at T1 and T2. Model 1 was specified to include autoregressive paths across timepoints for the frequency of M-F coparenting conflict, parental involvement, P-G coparenting conflict, and grandmother involvement (Figure 1) from T1 to T2, to examine the stability of coparenting dynamics over time. Model 2 included cross-lagged paths within a coparenting system, such that M-F variables at T1 predicted T2 variables, and a similar process was used for P-G coparenting variables (Figure 2). Model 3 included cross-lagged paths across subsystems were added, such that P-G coparenting variables at T1 predicted M-F coparenting variables at T2, and vice versa (Figure 3). In addition, adolescents' age, gender, ethnicity, relationship status, contact with other biological parent, and coparenting intervention participation was correlated with coparental conflict and grand/parental involvement at T1 and were used to predict coparenting variables at T2. The results for the within-dyad cross-lags will be used to address Goal 1, and the results from the between-dyad cross-lags will address Goal 2 of my thesis.

The comparative fit index (CFI) and the root mean square error of approximation (RMSEA) indices was used to examine overall model fit. The model is considered acceptable if CFI is greater than or equal to .95, and the RMSEA is less than or equal to 0.05 (Hu & Bentler, 1999). Log-likelihood difference tests were used to compare model fit when building this model. In Mplus, "Type = complex" will be used in the model with "Cluster = Family ID" to account for potential nestedness. Two additional follow-up analyses were run to assess how these patterns differed for females and males, and for students who had some versus no contact with the other biological parent.

III. RESULTS

Log-likelihood testing showed that Model 2 significantly improved fit compared to Model 1, while Model 3 did not improve fit from Model 2 (See Table 2). Model 2 resulted in acceptable model fit $\chi 2(df=46)=202.675$, $p <.001$; CFI=1.00; RMSEA=0.00 (90% confidence interval [0.00–0.05]) and thus this model was used to address my primary goals.

Primary Results

Results for the autoregressive path model (Figure 4) showed significant stability over time for both dyads and all variables, such that M-F coparenting conflict at T1 was associated with M-F coparenting conflict at T2 and involvement at T1 was associated with involvement at T2. In addition, P-G coparenting conflict at T1 was associated with P-G conflict at T2 and involvement at T1 was associated with involvement at T2. Results for the cross-lag path models (Figure 4) demonstrated one within-dyad cross-lag effect, such that grandmother involvement at T1 was associated with a decrease in P-G conflict from T1 to T2 (goal 1), and no other within-dyad cross-lags were significant. After running the model results, there were no between-dyad cross-lag effects confirming Model 3 did not improve model fit as indicated by log-likelihood testing.

Gender Moderation

As a follow up to my primary analyses, I assessed whether gender moderated the hypothesized associations. First, I ran similar models as above (Model 1-3), but I separated the models by gender. Then I built up the model by comparing the log-likelihood model fit for Model 1 to Model 2, and Model 2 to Model 3. Model 3 (Figure 5) was the best fitting model suggesting that when the model was separated by gender, the

model that accounts for between- and within-dyad associations fit the data best. Next, path coefficients were tested one at a time by comparing the fit of the resulting unconstrained model with a model where a specific path was constrained to be equal across genders. Moderation was evident when the constrained model did not show a significant improvement in model fit, as evidence by a non-significant Chi-square test (Kline, 1998).

The final model notes that the stability effects for M-F conflict at T1 to T2, and parental involvement from T1 to T2 remained significant for females and males; however, the stability paths for P-G coparenting conflict from T1 to T2 and grandmother involvement from T1 to T2 were only significant for females but not males (Figure 5). The single within-dyad cross-lag between grandmother involvement at T1 and P-G conflict at T2 was only significant for females. Two significant cross-lag effects emerged for M-F coparenting conflict at T2. The cross-lag coefficient from P-G coparenting conflict at T1 to M-F coparenting conflict at T2 was moderated by gender, with a negative association for males and non-significant association for females. A second cross-lag coefficient from grandmother involvement at T1 to M-F coparenting conflict at T2 was also moderated by gender with a negative association for males and a non-significant association for females.

Sensitivity Analysis

I ran an alternate model excluding participants that reported no contact with biological parent. In this additional model, the results remained stable, suggesting it was appropriate to keep participants who had no contact with the biological parent in the model.

IV. DISCUSSION

Adolescent pregnancies remain high among Latinx families (CDC, 2011), and given the developmental context, adolescent parents are engaged in multiple coparenting relationships that include the child's other parent and their own parents (Derlan et al., 2018; Rhein et al., 1997). The quality of these relationships has implications for parenting outcomes and child development (Fagan & Lee, 2011; Pittman & Colley, 2011; Zeiders et al., 2015). The present study used longitudinal data and included father and mother reports to assess the interrelationships between coparenting dynamics and adolescent coparenting dyads. When examining stability, my primary results indicated consistency of parents' reports of coparenting conflict and involvement over a 9-month period within both coparenting dyads. The stability of parents' reports emphasizes the value for early intervention that addresses maladaptive characteristics. In addition to stability effects, only one within-dyad effect resulted, and no between-dyad effects emerged; however, gender moderation may have masked important associations. In this section, I will discuss findings in terms of associations among coparenting constructs, adolescent coparenting dyads, and the moderating role of gender.

Coparenting Conflict and Involvement

My study was guided by a family systems perspective, which views the family system as a unit of interconnected subsystems (Cox & Paley, 1997), and the spillover hypothesis to explain the transfer of behavior patterns from one subsystem to another subsystem (Erel & Burman, 1995; Nelson et al., 2009). Literature on M-F dyad coparenting dynamics suggests reciprocal links between coparenting conflict and involvement, such that a high frequency in one coparenting dynamic predicts changes in

the frequency of another coparenting dynamic over time (Cabrera et al., 2009; Fagan & Cabrera, 2012). Based on this theoretical framework and research, my first goal was to evaluate coparenting processes among Latinx adolescent parent families by focusing on the association between coparenting conflict and involvement over time. I hypothesized that a higher degree of conflict would predict a decrease in the frequency of involvement at Time 2, and that high involvement at T1 would predict changes in conflict at T2. My results partially support this hypothesis because the only cross-lag effect to emerge indicated a high frequency of involvement predicted a decrease in the degree of conflict within the parent-grandmother dyad. It is possible the current study did not demonstrate a link between parental involvement and M-F conflict because I did not examine involvement subscales, as has been done in previous work. Past research using parents' reports of fathers' involvement in specific activities showed that, in particular, fathers' increased involvement in cognitive stimulation predicted a decrease in coparenting conflict (Fagan & Cabrera, 2012). Yet this research also showed that increased involvement in physical care predicted an increase in coparenting conflict (Fagan & Cabrera, 2012). Due to these nuanced differences of involvement, future research should consider evaluating involvement subscales separately.

Adolescent Coparenting Dyads

My second goal was also informed by the family systems perspective and the limited research on coparenting subsystems, suggesting bidirectional spillover effects between parents' reports of coparenting dynamics across two subsystems (Derlan et al., 2018; Krishnakumar & Black, 2003). I aimed to assess this aspect of coparenting processes by testing for a spillover effect, and I hypothesized that parents' reports of

coparenting conflict in the M-F dyad would predict reports of conflict in the P-G dyad, and vice versa, and that parents' reports of parental involvement would predict reports of grandmother involvement, and vice versa. The hypothesized model where both genders were included did not result in any cross-lag associations between dyads. This contradicts a past study conducted by Derlan and colleagues (2018), which found that mothers' report of high M-F coparenting conflict predicted high P-G conflict over time, supporting a spillover effect. This study analyzed how coparenting conflict and communication were related, while my thesis analyzed conflict and involvement. The difference in results may be linked to how these different coparenting dynamics inform each other over time. Also, Derlan et al. (2018) focused on mothers' reports to examine coparenting dynamics among dyads, and to build off this study, my thesis incorporated fathers' reports with mothers' reports. How these different sources of coparenting inform each other is another explanation for the absence of cross-lag associations and suggest the possible role of gender in moderating the hypothesized associations.

Moderating Role of Gender

To further understand why my initial hypotheses were not supported by the data and contradicted past research, I decided to test for possible gender moderation. Such an approach was appropriate since the majority of existing research has only used adolescent mother reports, and their relationship dynamics may differ to fathers' reports. Also, this strategy was in line with the family systems perspective which suggests subsystems are defined by boundaries of patterns and rules that guide behavior within and across subsystems (Cox & Paley, 1997). An aspect relevant to this idea is the prominence of gender socialization within Latinx families (Cupito, 2015; Raffaelli & Ontai, 2004). For

example, Raffaelli and Ontai (2004) found parents' gender role attitudes, as reported by their adult children, were associated with differential gender socialization behaviors and experiences (i.e., household activities, socialization of gender-typed behavior, freedom to pursue social activities and gain access to privileges), which included females reporting more limits than males. Further, findings revealed that participants' stereotypical gender behaviors were encouraged by their same-sex parent than their cross-sex parent (Raffaelli & Ontai, 2004). These variations in gender align with other research demonstrating gender plays a role in areas such as decisional autonomy (Perez-Brena, 2012), familism (Cupito, 2015), and coparenting (Lindsey, 2018) among Latinx family systems. It is possible that gender could also play a role in coparenting dynamics.

Informed by the literature on gender socialization, I tested for gender moderation to assess the possibility of concealed associations. Indeed, evidence of significant moderation by gender emerged, implying variation in the processes by which adolescent mothers' and fathers' reports of coparenting dynamics with coparents were associated. All main stability effects remained significant for mothers, reflecting past research with mothers and grandmothers that has found stability effects over five years (Derlan et al., 2018). In contrast, fathers' reports of coparenting dynamics remained stable only within the M-F dyad, pointing to a possibility that within the father-grandmother (F-G) dyad, fathers' experiences are more malleable. However, this idea is speculative since the F-G dyad is not as well defined as the M-G dyad within the literature. Another possibility for this result is the lack of power to detect associations due to the small male sample size. Despite differences, findings of mutual stability across genders further underscore the need for early intervention.

Furthermore, the single within P-G dyad cross-lag path remained significant for mothers such that mothers' report of more grandmother involvement predicted less conflict with grandmother at T2. More frequent grandmother involvement could be indicative of the adolescent mother's acceptance of grandmother's participation in childrearing and likewise may be more receptive of their judgment when discussing issues regarding the child, leading to a decrease in coparental conflict. These findings support research on the M-G dyad, which has found a pattern of equal or high involvement and low conflict associated with positive coparenting (Perez-Brena et al., 2015).

Of note, two significant between-dyad cross-lag paths emerged for males and none for females. Results revealed that fathers' reports of the father-grandmother coparenting relationship predicted changes in fathers' reports of the mother-father coparenting relationship over time. Specifically, results showed that for adolescent fathers, their reports of a higher degree of conflict with grandmother and their reports of a higher frequency of grandmother involvement predicted a decrease in the degree of conflict with mother.

To explain the negative association between father-grandmother conflict and mother-father conflict, I consider the compensatory hypothesis. The compensatory hypothesis has been used by family systems theorists as a contrast to the spillover hypothesis. It suggests that an individual dissatisfied within one subsystem compensates for deficiencies within another subsystem (Erel & Burman, 1995; Nelson et al., 2009). It is possible that fathers compensated for the high conflict in their father-grandmother coparenting relationship by decreasing conflict in their mother-father coparenting

relationship. This finding might also indicate an acculturation gap between parent and adolescent which can lead to disagreements when discussing parenting and childrearing issues. That is, fathers' parenting expectations might align more with mothers' than grandmothers' expectations. Considering fathers' reports of conflict have been associated with a decrease in involvement (Cabrera et al., 2009), future studies should examine how a difference in acculturation levels between coparents may impact expectations and consequently the degree of conflict among coparenting dyads.

Regarding the second cross-lag path for males, the outcome is consistent with a spillover effect such that fathers' reports of a higher frequency of grandmother involvement was associated with a lower degree of M-F conflict at T2. It could be that higher grandmother involvement could reduce the pressures on the father, thus reducing stress and leading to less conflict with the child's biological mother. More research is needed to understand the F-G dyad within the coparenting family system.

Overall, the associations that were moderated by gender highlight the F-G coparenting relationship as an essential subsystem influencing other subsystems. Specifically, fathers' reports are sensitive to grandmothers' role and have implications for the adolescent coparenting relationship. Likewise, associations suggest grandmothers are a critical source of support and significantly influence the various adolescent parent family subsystems. In all cross-lag paths, adolescents' reports of coparenting constructs with grandmother were linked to conflict at Time 2. That is, grandmothers likely play a significant role in the degree of conflict within the mother-grandmother dyad and the mother-father dyad. These results support previous work showing that the level of support from grandparents' impact M-F coparenting quality (e.g., support, undermining;

Poblete & Gee, 2018) and highlight the importance of considering grandmothers' role when addressing mother-father coparenting conflict.

Limitations and Future Directions

In addition to strengths, this study has limitations that can provide directions for future research. First, due to the sample population being primarily Latinx, results are not considered generalizable to other U.S. populations, and future research should try to replicate this work to see how patterns may vary in different samples. Also affecting generalizability is the fact that there were a limited number of fathers (n=90) in the study compared to the number of mothers (n=229). This poses a problem when trying to capture nuanced and gendered coparenting dynamics and will require future researchers to obtain more even sample sizes. Although this study added to research by including fathers' reports which address an understudied population, it did not include grandmothers' reports. Little is known of the F-G subsystem and measuring grandparents' perspectives on their coparenting relationship with their adolescent son would provide a more comprehensive understanding of this relationship. Forthcoming studies should not limit work to these identified coparents, and studies would be strengthened by assessing other family members as well (e.g., grandfathers, aunts, uncles).

V. CONCLUSION

Despite its limitations, the current study contributes to coparenting research by examining within-family coparenting processes among adolescent parents and their coparents over time. It builds on previous work by including fathers' reports in addition to mothers' reports. It also contributes to the coparenting literature by introducing an additional subsystem, the F-G subsystem. In addition, this study explored the role of gender, and as a result, highlighted coparenting processes that differed by parents' gender, which is important to consider among cultural contexts that reinforce gendered roles. The current study is among the first to assess coparenting relationship qualities within and across two separate dyads, and the only study to focus on involvement in addition to coparenting conflict in its design. Given that coparenting dynamics in the father-grandmother dyad predicted coparenting dynamics within the mother-father dyad, findings underscore that a critical subsystem to examine involves adolescent fathers and their mothers because this relationship has implications for other subsystems within the family. Finally, these outcomes support opportunities for interventions to extend their services to additional significant coparents and meet the needs of families transitioning to parenthood as a unit.

APPENDIX SECTION

Table 1. *Descriptives of T1 and T2 Coparenting (CP) Between Mother-Father (MF) and Parent-Grandparent (PG) and Control Variables*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Age T1	—													
2. Ethnicity T1	.02	—												
3. Gender T1	**.26**	-.06	—											
4. Relationship Status T1	.09	.11	**.22**	—										
5. Contact with Other Bio Parent T1	**.15**	.01	**.21**	**.57**	—									
6. CP Intervention T1	**-.25**	**.12**	**-.36**	-.05	-.09	—								
7. CP Conflict with MF T1	-.02	-.03	-.03	**-.23**	**-.12**	.07	—							
8. CP Conflict with MF T2	**-.15**	-.06	**-.24**	**-.20**	**-.16**	.01	**.40**	—						
9. CP Conflict with PG T1	-.11	-.07	-.03	**-.15**	**-.16**	.06	**.40**	.11	—					
10.CP Conflict with PG T2	**-.14**	-.11	**-.13**	**-.20**	**-.20**	.08	**.17**	**.22**	**.48**	—				
11. Parental Involvement T1	**.19**	-.05	**.41**	**.41**	**.48**	**-.17**	**-.17**	**-.27**	**-.23**	**-.16**	—			
12. Parental Involvement T2	.11	.01	**.45**	**.35**	**.26**	**-.12**	**-.19**	**-.50**	**-.17**	**-.19**	**.58**	—		
13. Grandmother Involvement T1	-.04	-.05	**-.21**	**-.16**	-.07	-.02	-.08	.11	-.04	**-.12**	.01	-.04	—	
14. Grandmother Involvement T2	-.07	-.07	**-.14**	-.04	-.00	-.05	**-.14**	-.10	**-.14**	**-.12**	.02	**.18**	**.40**	—
M	16.98	0.84	0.28	0.60	4.64	0.59	2.15	2.14	1.79	1.84	3.04	3.13	3.09	3.08
(SD)	(1.40)	(0.37)	(0.45)	(0.49)	(2.24)	(0.49)	(0.86)	(0.88)	(0.87)	(0.97)	(0.88)	(0.83)	(0.74)	(0.76)

Note. Ethnicity was coded as 0 = other, 1= Hispanic. Gender was coded as 0=Female, 1=Male. Relationship status was coded as 0= not in relationship with biological parent, 1= in relationship with biological parent. T1=Time 1; T2=Time 2; *p< .05, $^{**}p < .01$, $^{***}p < .001$

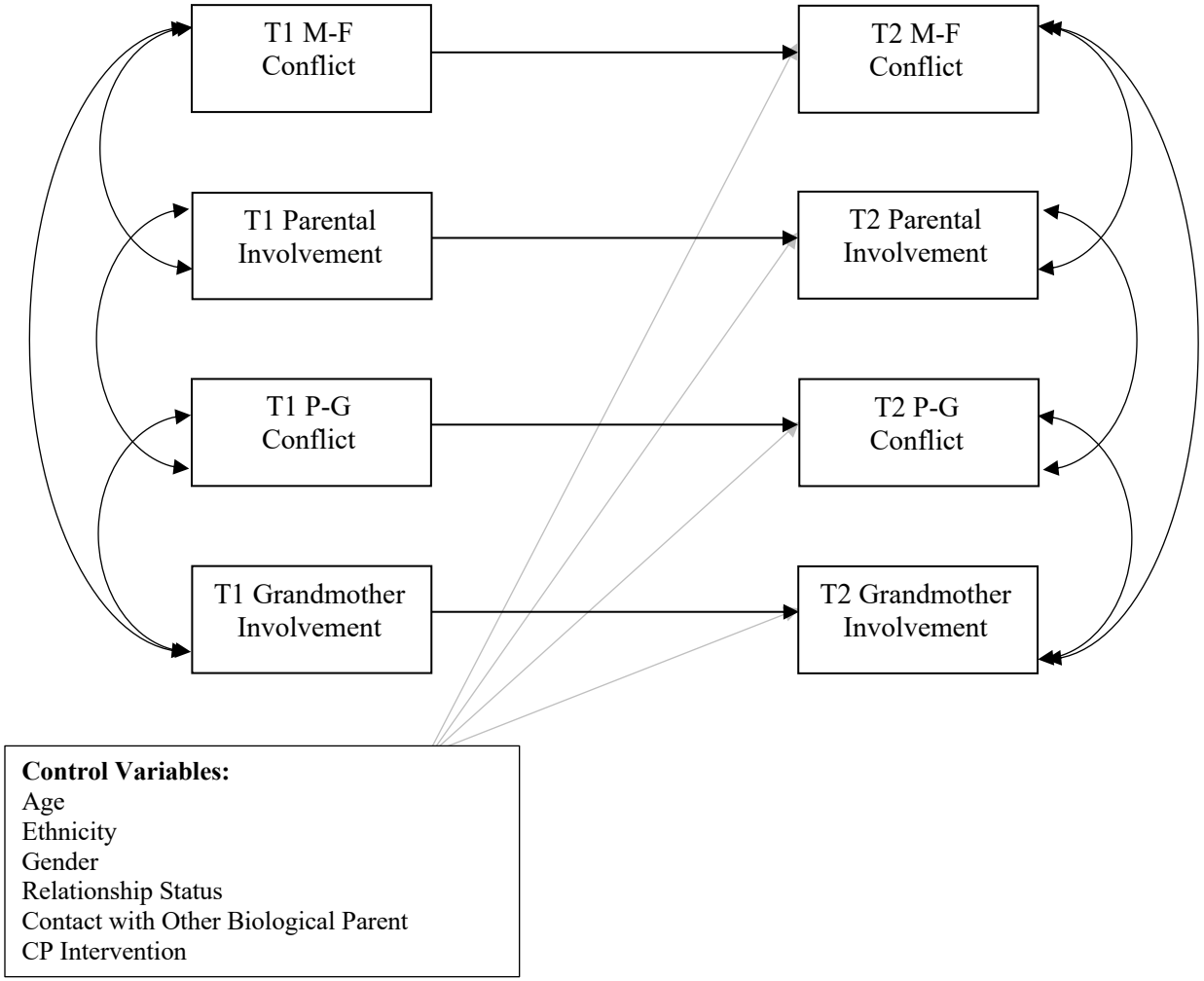
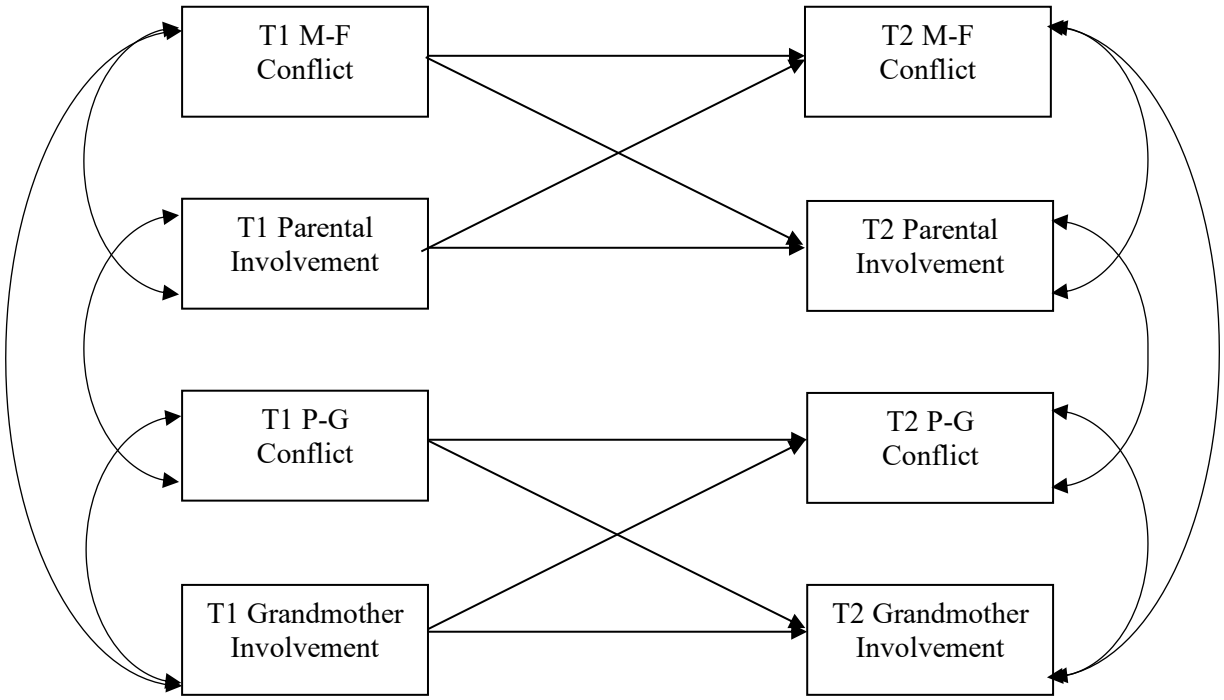


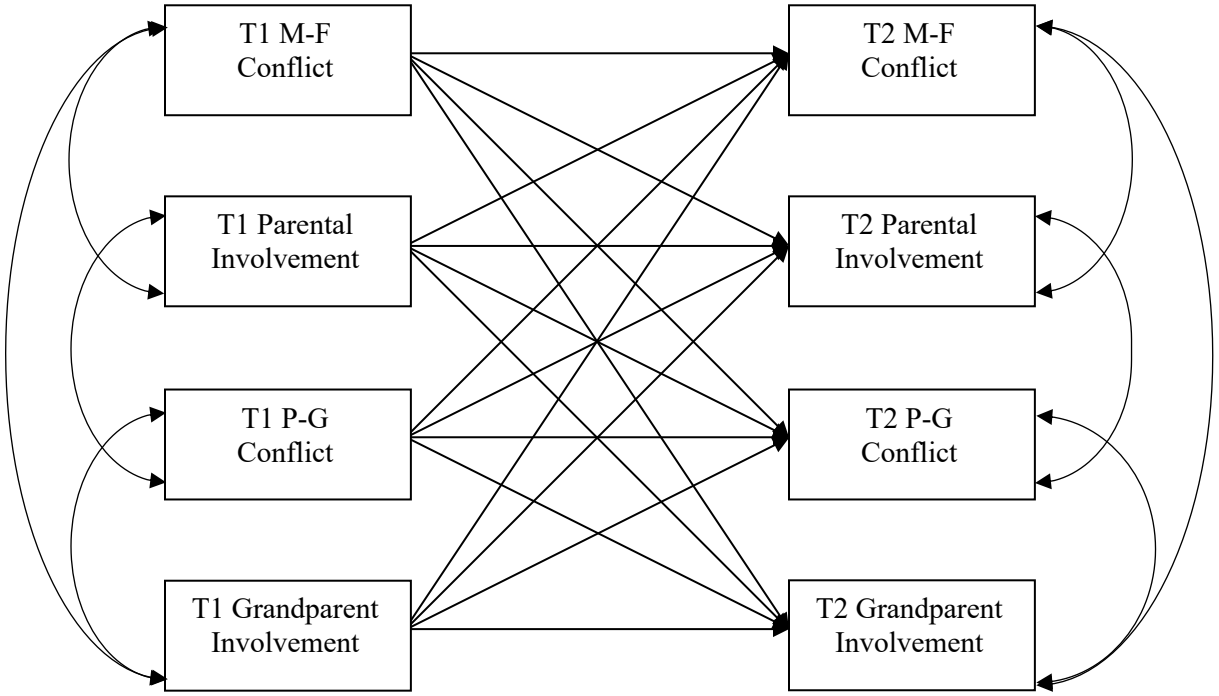
Figure 1. Conceptual model for autoregressive paths within mother-father and parent-grandmother dyads in conflict and involvement (Model 1).

Note. T1=Time 1; T2=Time 2. M-F=Mother-Father. P-G=Parent-Grandmother. CP=Coparenting. Control variables used to predict T1 and T2 variables as indicated by arrows.



Control Variables:
Age
Ethnicity
Gender
Relationship Status
Contact with Other Biological Parent
CP Intervention

Figure 2. Conceptual model including cross-lag paths within mother-father and parent-grandmother dyads (Model 2).
Note. T1=Time 1; T2=Time 2. M-F=Mother-Father. P-G=Parent-Grandmother. CP=Coparenting. For clarity arrows from control variables to variables were omitted.



Control Variables:
Age
Ethnicity
Gender
Relationship Status
Contact with Other Biological Parent
CP Intervention

Figure 3. Conceptual model including cross-lag paths across mother-father and parent-grandmother dyads (Model 3).
Note. T1=Time 1; T2=Time 2. M-F= Mother-Father. P-G= Parent-Grandmother. CP=Coparenting. For clarity arrows from control variables to variables were omitted.

Table 2. *Log Likelihood Model Caparisons*

	log likelihood	-2 X log likelihood	# Model Paths	diff Log	diff DF	p-value
Model 1	-3899.313	7798.626	4			
Model 2	-3894.411	7788.822	8	9.804	4	0.04
Model 3	-3891.302	7782.604	16	6.218	8	0.62

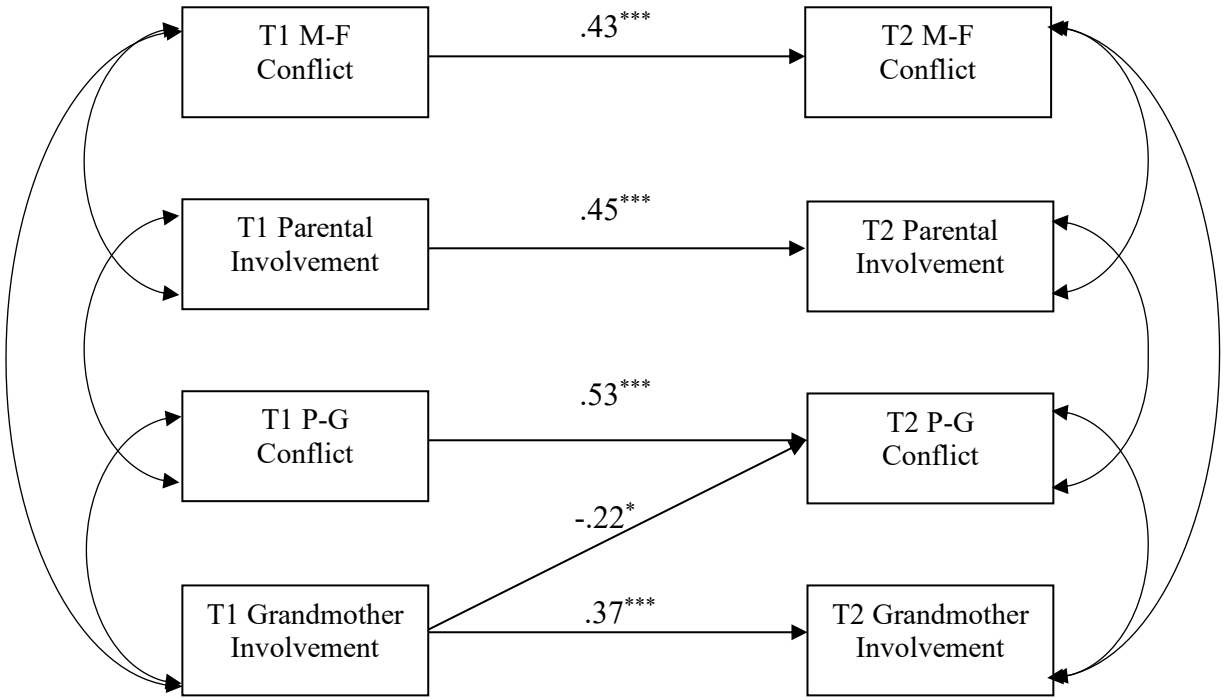


Figure 4. Final model with significant estimates.

Note. T1=Time 1; T2=Time 2. M-F= Mother-Father. P-G= Parent-Grandmother. CP=Coparenting. $^{*}p< .05$, $^{**}p < .01$, $^{***}p < .001$.

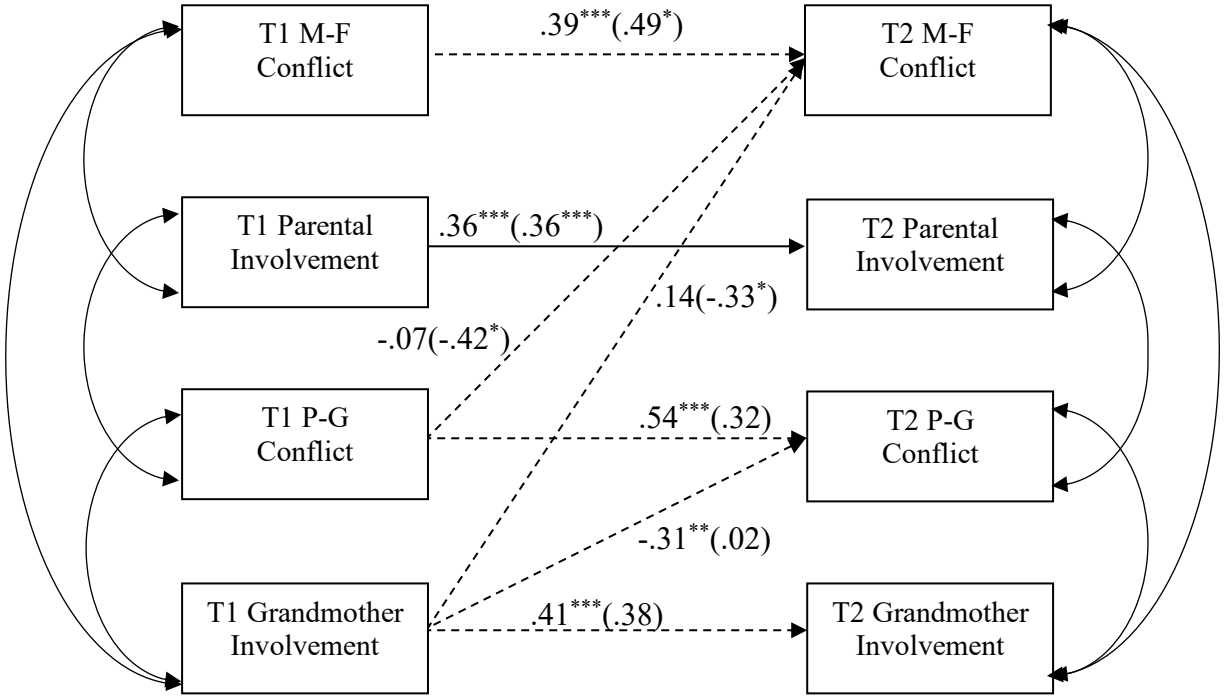


Figure 5. Gender moderation model.

Note. Estimates for females are outside of the parentheses (estimates for the males are inside of the parentheses). Dashed lines indicate significant moderation. T1=Time 1; T2=Time 2. M-F= Mother-Father. P-G= Parent-Grandmother. CP=Coparenting. $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$.

REFERENCES

Ahrons, C. R. (1981). The continuing coparental relationship between divorced spouses. *American Journal of Orthopsychiatry*, *51*(3), 415-428. http://doi.org/10.1111/j.1939-0025.1981.tb01390.x

Baraldi, A. N., & Enders, C. K. (2010). An introduction to modern missing data analyses. Journal of School Psychology, 48(1), 5-37. https://doi.org/10.1016/j.jsp.2009.10.001

Cabrera, N. J., Shannon, J. D., & La Taillade, J. J. (2009). Predictors of co-parenting in Mexican American families and direct effects on parenting and child social emotional development. *Infant Mental Health Journal*, *30*(5), 523-548. https://doi.org/10.1002/imhj.20227

Centers for Disease Control and Prevention (2011). Adolescent pregnancy and childbirth – United States, 1991-2008. *Morbity and Mortality Weekly Report, 60*(1), 105-108. Retrieved November 19, 2020, from https://www.cdc.gov/mmwr/preview/mmwrhtml/su6001a23.htm

Centers for Disease Control and Preventions (2017). *Key statistics from the national survey of family growth.* Retrieved November 19, 2020, from https://www.cdc.gov/nchs/nsfg/key_statistics/b_2015-2017.htm#age20

Centers for Disease Control and Prevention. (2019). *About teen pregnancy*. Retrieved November 19, 2020, from https://www.cdc.gov/teenpregnancy/about/index.htm

Cole, D. A., & Maxwell, S. E. (2003). Testing mediational models with longitudinal data: Questions and tips in the use of structural equation modeling. *Journal of Abnormal Psychology, 112,* 558–577. https://doi.org/10.1037/0021-843X.112.4.558

Cox, M. J., & Paley, B. (1997). Families as systems. *Annual Review of Psychology, 48*(1), 243–267. https://doi.org/10.1146/annurev.psych.48.1.243

Cupito, A. M., Stein, G. L., Gonzalez, L. M. (2015). Familial cultural values, depressive symptoms, school belonging and grades in Latino adolescents: Does gender matter? *Journal of Child & Family Studies, 24*(6)*,* 1638-1649. https://doi.org/10.1007/s10826-014-9967-7

Derlan, C. L., Umaña-Taylor, A. J., Updegraff, K. A., & Jahromi, L. B. (2018). Mother–grandmother and mother–father coparenting across time among Mexican-origin adolescent mothers and their families. *Journal of Marriage & Family, 80*(2), 349-366. https://doi.org/10.1111/jomf.12462

Erel, O., & Burman, B. (1995). Interrelatedness of marital relations and parent-child relations: A meta-analytic review. *Psychological Bulletin, 118*(1), 108-132. https://doi.org/10.1037/0033-2909.118.1.108

Fagan, J., Bernd, E., & Whiteman, V. (2007). Adolescent fathers' parenting stress, social support, and involvement with infants. *Journal of Research on Adolescence, 17*(1), 1-22. https://doi.org/10.1111/j.1532-7795.2007.00510.x

Fagan, J., & Lee, Y. (2011). Do coparenting and social support have a greater effect on adolescent fathers than adult fathers? *Family Relations, 60*(1), 247-258. https://doi.org/10.1111/j.1741-3729.2011.00651.x

Fagan, J., & Cabrera, N. (2012). Longitudinal and reciprocal association between coparenting conflict and father engagement. *Journal of Family Psychology, 26*(6), 1004-1011. https://doi.org/ 10.1037/a0029998

Feinberg, M. E., (2003). The internal structure and ecological context of coparenting: A framework for research and intervention. *Parenting Science and Practice, 3*(2), 95-131. https://doi.org/10.1207/S15327922PAR0302_01

García Coll, C., Crnic, K., Lamberty, G., Wasik, B. H., Jenkins, R., García, H. V., & McAdoo, H. P. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development, 67*(5), 1891-1914. https://doi.org/10.2307/1131600

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indices in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling, 6, 1–55. https://doi.org/10.1080/10705519909540118

Jia, R. & Schoppe-Sullivan, S. J. (2011). Relations between coparenting and father involvement in families with preschool-age children. *Developmental Psychology, 47,* 106-118. https://doi.org/10.1037/a0020802

Kline, R. B. (1998). *Principles and practice of structural equation modeling*. New York: Guilford.

Knight, G.P., Gonzales, N.A., Saenz, D.S., Bonds, D.D., German, M., Deardorff, J., Roosa, M.W., & Updegraff, K.A. (2010). The Mexican American cultural values scales for adolescents and adults. *Journal of Early Adolescence, 30*(3), 444-481. https://dx.doi.org/10.1177%2F0272431609338178

Krishnakumar, A., & Black, M. M. (2003). Family processes within three-generation households and adolescent mothers' satisfaction with father involvement. *Journal of Family Psychology, 17*(4), 488-498. https://doi.org/10.1037/0893-3200.17.4.488

Krogstad, J. M. (2020). Hispanics have accounted for more than half of total U.S. population growth since 2010. *Pew Research Center,* https://www.pewresearch.org/fact-tank/2020/07/10/hispanics-have-accounted-for-more-than-half-of-total-u-s-population-growth-since-2010/

Lindsey, E. W. (2018). Cultural values and coparenting quality in families of Mexican origin. *Journal of Cross-Cultural Psychology, 49*(10), 1523-1538. https://doi.org/10.1177/0022022118803182

Martin J. A, Hamilton B. E, Osterman M. J. K. (2018). Births in the United States, 2017. NCHS Data Brief, no 318. Hyattsville, MD: National Center for Health Statistics. Retrieved April 16, 2021, from https://www.cdc.gov/nchs/products/databriefs/db318.htm#Suggested_citation

Nelson, J. A., O'Brien, M., Blankson, A. N., Calkins, S. D., & Keane, S. P. (2009). Family stress and parental responses to children's negative emotions: Tests of the spillover, crossover, and compensatory hypotheses. *Journal of Family Psychology, 23*(5), 671-679. https://doi.org/10.1037/a0015977

Noe-Bustamante, L. (2019). Key facts about Hispanics and the diverse culture. *Pew Research Center*, https://www.pewresearch.org/fact-tank/2019/09/16/key-facts-about-u-s-hispanics/

Oberlander, S. E., Black, M. M., & Star, R. H. (2007). African American adolescent mothers and grandmothers: A multigenerational approach to parenting. *American Journal of Community Psychology, 39*(1-2), 37-46. https://doi.org/10.1007/s10464-007-9087-2

Perez-Brena, N., Updegraff, K. A., & Umaña-Taylor, A. J. (2012). Father-and-mother-adolescent decision-making in Mexican-origin families. *Journal of Youth & Adolescence., 41*(4), 460-473. https://doi.org/10.1007/s10964-011-9660-8

Perez-Brena, N. J., Updegraff, K. A., Umaña-Taylor, A. J., Jahromi, L., & Guimond, A. (2015). Coparenting profiles in the context of Mexican-origin teen pregnancy: Links to mother-daughter relationship quality and adjustment. *Family Process, 54*(2), 263-279. https://doi.org/10.1111/famp.12115

Pittman, L. D., & Coley, R. L. (2011). Coparenting in families with adolescent mothers. In J. P. McHale & K. M. Lindahl (Eds.). *Coparenting: A conceptual and clinical examination of family systems* (pp. 105-126). American Psychological Association. https://doi.org/10.1037/12328-000

Poblete, A. T., & Gee, C. B. (2018). Partner support and grandparent support as predictors of change in coparenting quality. *Journal of Child and Family Studies, 27*(7), 2295-2304. https://doi.org/10.1007/s10826-018-1056-x

Raffaelli, M., & Ontai, L. L. (2004). Gender socialization in Latino/a families: Results from two retrospective studies. *Sex Roles: A Journal of Research, 50*(5/6), 287-299. https://doi.org/10.1023/B:SERS.0000018886.58945.06

Rhein, L. M., Ginsburg, K. R., Schwarz, D. F., Pinto-Martin, J. A., Zhao, H., Morgan, A. P., & Slap, G. B. (1997). Teen father participation in child rearing: Family perspectives. *Journal of Adolescent Health, 21*(4), 244-252. https://doi.org/10.1016/S1054-139X(97)00115-8

Sabogal, F., Marín, G., Otero-Sabogal, R., Marín, B. V., & Perez-Stable, E. J. (1987). Hispanic familism and acculturation: What changes and what doesn't? *Hispanic Journal of Behavioral Sciences, 9*(4), 397-412. https://doi.org/10.1177/07399863870094003

Sedgh, G., Finer, L. B., Bankole, A., Eilers, M. A., & Singh, S. (2015). Adolescent pregnancy, birth, and abortion rates across countries: Levels and recent trends. *The Journal of adolescent health: Official publication of the Society for Adolescent Medicine*, *56*(2), 223–230. https://doi.org/10.1016/j.jadohealth.2014.09.007

Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2013). *Using multivariate statistics* (6th edition.). Pearson Education.

Umaña-Taylor, A. J., Guimond, A. B., Updegraff, K. A., & Jahromi, L. B. (2013). A longitudinal examination of support, self-esteem, and Mexican-origin adolescent mothers' parenting efficacy. *Journal of Marriage and Family, 75*(3), 746-759. https://doi.org/10.1111/jomf.12019

Zeiders, K. H., Umaña-Taylor, A. J., Jahromi, L. B., & Updegraff, K. A. (2015). Grandmothers' familism values, adolescent mothers' parenting efficacy, and children's well-being. *Journal of Family Psychology, 29*(4), 624-634. https://doi.org/10.1037/fam0000103