EMPIRICAL RESEARCH

Father- and Mother-Adolescent Decision-Making in Mexican-Origin Families

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Abstract Understanding the prevalence and correlates of decisional autonomy within specific cultural contexts is necessary to fully comprehend how family processes are embedded within culture. The goals of this study were to describe mothers' and fathers' decision-making with adolescents (M = 12.51 years, SD = 0.58; 51% female), including parent-unilateral, joint, and youth-unilateral decision-making, and to examine the socio-cultural and family characteristics associated with these different types of decision-making in 246 Mexican-origin families. Mothers reported more joint and youth-unilateral decisionmaking and less parent-unilateral decision-making than did fathers. Fathers reported more youth-unilateral decisionmaking with sons than with daughters. Further, for mothers, more traditional gender role attitudes and higher levels of mother-adolescent conflict were associated with more parent-unilateral and less joint decision-making. In contrast, for fathers, lower levels of respect values were associated with more youth-unilateral decision-making with sons, and higher levels of parent-adolescent warmth were associated with more youth-unilateral decision-making with daughters. The importance of understanding the different correlates of

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mothers' and fathers' decision-making with sons versus daughters is discussed.

Keywords Adolescence · Decision-making · Gender · Mexican-origin · Parent–adolescent relationships

Introduction

Increases in autonomy during adolescence have been viewed as a necessary developmental process for the transition to adulthood (Erikson 1968; Steinberg and Silverberg 1986). In early adolescence, one of the first ways in which parents grant autonomy is through more independence in decision-making over aspects of youths' daily lives, such as their appearance or how they spend their free time (Goossens 2006). Further, the age in which parents begin to grant decisional autonomy as well as how much support parents give to help youth make good decisions has been linked to youths' academic success (Ceballo 2004; Dornbush et al. 1990) and positive well being (Bush et al. 2004). Although early research on adolescent autonomy has focused primarily on European American families (e.g., Dornbusch et al. 1985; Smetana 1988; Steinberg and Silverberg 1986), ethnic comparative research has revealed group differences in adolescents' and parents' expectations for granting decisional autonomy (e.g., Fuligni 1998; Phinney et al. 2005). However, the conceptualization of autonomy processes is culturally embedded (Kagitcibasi 2005) and, for this reason, it is necessary to systematically explore the prevalence and correlates of decisional autonomy within specific cultural contexts.

Our study was designed to extend ethnic-comparative work by exploring the variability in mother- and fatheradolescent decision-making in Mexican-origin families using an ethnic-homogenous design. Our first goal was to describe the prevalence of three different patterns of parent-adolescent decision making among Mexican-origin mothers versus fathers: parent-unilateral (i.e., parents make decisions without youth input), youth-unilateral (i.e., youth make decisions without parent input), and joint (parents and youth make decisions together; Dornbusch et al. 1985). Informed by a cultural-ecological perspective (García Coll et al. 1996), our second goal was to explore the socio-cultural and family characteristics associated with Mexican-origin mothers' and fathers' decision-making. In particular, we examined whether parents' socioeconomic resources and cultural values and the emotional qualities of the parent-adolescent relationship were linked to mothers' and fathers' decision-making. For both goals, we considered the moderating role of adolescents' gender as theory and research on gender socialization processes in early adolescence points to the salience of gender in shaping family dynamics (Crouter et al. 1995; Hill and Lynch 1983), and gender is thought to be a particularly salient feature of Mexican families (Cauce and Domenech Rodríguez 2002).

The process through which parents and adolescents make decisions about adolescents' daily lives has been conceptualized as an indicator of behavioral or decisional autonomy (e.g., Dornbusch et al. 1985; Goossens 2006). This has typically been operationalized as reflecting one of three types of decision-making: parent-unilateral, joint, and youth-unilateral. Parent-unilateral decision-making is most common in childhood and early adolescence when parents typically exhibit high levels of control over their children's behavior. As part of the transition into and through adolescence, parents and children often negotiate expectations for autonomy and independence and joint decision-making becomes more common. Finally, youthunilateral decision-making occurs most often when parents rescind all control and youth are able to make decisions on their own. All three types of decision-making may be present at any developmental stage (Daddis and Smetana 2005; Wray-Lake et al. 2010), although a particular style may dominate at different points in development. For example, parent-unilateral decision-making is most common in early adolescence when parents have most control over their children's behavior, but parents may allow some joint or youth-unilateral decision-making on social domains associated with youths' self-expression (e.g., their appearance, or how they spend their allowance) or leisure pursuits (Daddis and Smetana 2005). As adolescents get older and parents increasingly transition more control over to their children, parents may report more joint and youth-unilateral decision-making in a larger variety of domains (Lamborn et al. 1996; Wray-Lake et al. 2010). How much parentunilateral, joint, or youth-unilateral decision-making occurs within the parent-child relationship at each developmental period, we suspect, will vary based on the family and cultural context.

The Role of Parents' and Adolescents' Gender in Parent-Adolescent Decision-Making

Perspectives on gender socialization in adolescence (Crouter et al. 1995; Hill and Lynch 1983) highlight the potentially different dynamics in mothers' versus fathers' relationships with girls versus boys. More specifically, the gender intensification hypothesis (Hill and Lynch 1983) posits that early adolescence is a period when parents and youth experience increased pressures for youth to learn and behave in accordance with sex-typed role expectations. In European American families, there is evidence that family socialization processes become more gender-typed in early adolescence, with mothers and fathers becoming more involved with their same-sex offspring over time (Crouter et al. 1995).

Researchers interested in behavioral autonomy have further suggested differences in mothers' versus fathers' autonomy-granting and decision-making with adolescents (Bush et al. 2004; Turner et al. 1993). For example, in European American (Bumpus et al. 2001) and Mexican-American (Crockett et al. 2007) families, fathers have been characterized as more restrictive than mothers, a parentchild process related to autonomy-granting. Researchers interested in autonomy-granting and decision-making also have noted differences for adolescent girls versus boys (Brown and Mann 1990; Bumpus et al. 2001), such that girls report later expectations for behavioral autonomy and independence from their parents than do boys (Fuligni 1998; Qin-Hilliard 2003). From a gender socialization perspective, these findings are consistent with the idea that parents become more protective of girls who are perceived as more vulnerable after the onset of puberty, while allowing boys more independence during this same developmental period (Hill and Lynch 1983). Research on Latino family dynamics suggests that parents are more involved in making decisions in girls' daily lives as a strategy to protect their daughters from dangerous environments (Crockett et al. 2007; Parke and Buriel 1998; Raffaelli and Ontai 2004). This difference in treatment of sons versus daughters is particularly apparent for Mexican-American fathers, who have been described as being more protective of their daughters than sons after puberty (Crockett et al. 2007).

Drawing on evidence of the distinct roles of mothers versus fathers (Parke and Buriel 1998) and distinct parent—child relationship dynamics with sons and daughters in Mexican—American families (Crockett et al. 2007), we compared mothers' and fathers' decision—making and tested the moderating role of adolescents' gender.



We anticipated that, overall, fathers would describe more parent-unilateral and less joint and youth-unilateral decision-making than mothers. In addition, we anticipated that parents of girls would describe more parent-unilateral and less joint and youth-unilateral decision-making than parents of boys and that this pattern may be most pronounced in father-daughter dyads.

Correlates of Parent-Adolescent Decision-Making: Socioeconomic Background, Cultural Values, and Parent-Adolescent Relationship Qualities

Drawing on an ecological systems framework (Bronfenbrenner 1979) and cultural-ecological adaptations of this model (García Coll et al. 1996), our second goal was to examine how father- and mother-adolescent decisionmaking were linked to family characteristics, cultural values, and parent-child relationship qualities. Ecological systems perspectives highlight the importance of understanding human and family dynamics within the context in which individuals and families reside. One's unique characteristics (e.g., gender, ethnicity), socioeconomic resources, cultural experiences, and family characteristics are some of the many components in one's life that interact to create a unique social context for development. As researchers have noted, the vast heterogeneity among individuals who classify themselves as Mexican and Mexican-American in terms of socioeconomic resources, internalization of cultural values, and family dynamics highlights the importance of examining how variability within cultural groups is linked to parenting processes, including parent-adolescent decision-making (Saracho and Spodek 2007).

Socioeconomic Status

Socioeconomic status and family background are important to examine given the variability that exists in Mexicanorigin families' economic resources and educational attainment (Saracho and Spodek 2007). Furthermore, socioeconomic status has been shown to account for some of the variability in parent-child dynamics originally attributed to ethnic group differences (Fox and Camara 1997), indicating that differences may come, in part, as a result of the access or barriers to resources and not solely due to differences in cultural or ethnic background. For example, families who belong to lower SES households tend to have higher work demands and less work flexibility; further, high work demands have been associated with parents spending less time with their children (Almeida 2004) and less awareness of children's whereabouts (Bumpus et al. 2006). Research focused specifically on parent-adolescent decision-making has found lower family income and education to be associated with lower levels of joint decision-making in European American families (Dornbusch et al. 1985). In research on behavioral autonomy in Mexican-origin and Latino families, the links between socioeconomic resources and autonomy have not been examined. Therefore, we explored whether SES was associated with mothers' and fathers' decision-making with sons versus daughters.

Cultural Values

Cultural values are another important dimension that varies within Mexican and Latino families and are linked to parenting processes (Knight et al. 2010; Roosa et al. 2002). We focus on two cultural values that are salient in Mexican-American families and may be particularly pertinent to decision-making processes: traditional gender role attitudes and respect. Although researchers have long been interested in Latino families' gender role dynamics (Cauce and Domenech Rodríguez 2002), little is known about how traditional gender role attitudes are associated with behavioral autonomy in this cultural context. Research on European American youth may provide some insights into this association. In Bumpus and colleagues' (2001) study of European American families, mothers with more traditional gender role attitudes reported that their children had less decision-making input than less traditional mothers, but when adolescents' gender was considered, the researchers found that this association was only significant for mothers with daughters. Drawing on this research, we anticipated that mothers with more traditional gender role attitudes would report more parent-unilateral decision-making, especially mothers of daughters who may feel the strongest responsibility to socialize their youth in gender appropriate ways. Although similar research has not been conducted with fathers (Saracho and Spodek 2007), we anticipated that a similar association may emerge for fathers, particularly fathers of daughters, given the greater protection of girls in Latino families (e.g., Raffaelli and Ontai 2004).

Another cultural value of interest is the value of respect. Researchers have noted that Latino families are characterized by strong age-related hierarchies, as youth are expected to respect their elders in order to have defined family roles and to promote harmony within the family (Harrison et al. 1990; Knight et al. 2010). Further, Okagaki and Frensch (1998) have noted that Latino parents emphasize adolescent compliance and conformity more than European American and Asian American parents, suggesting that they endorse hierarchical parent—child dynamics more so than other families. Given such research, we expected that parents who more strongly endorse the value of respecting one's elders also will report that they are more involved in youths' daily decisions (i.e., more



parent-unilateral decision-making and less joint and youthunilateral decision-making). Because researchers have not examined gender differences, our examination of parents' and adolescents' gender differences was exploratory.

Parent-Adolescent Relationship

To understand decision-making within the context of the parent-adolescent relationship, we also examined whether decision-making was linked to adolescents' perceptions of warmth/acceptance and conflict with parents. In combination, these dimensions provide a sense of the emotional quality of the parent-adolescent relationship. With respect to warmth/acceptance, researchers have consistently suggested a positive relation between behavioral autonomy and parental warmth/acceptance (Fuligni 1998; Turner et al. 1993). In Turner et al.'s (1993) research on Asian, Black, Hispanic, and White young adolescents, youth who described higher levels of behavioral autonomy indicated higher levels of acceptance and cohesion with their parents. Thus, we expected that when parents reported less parentunilateral and more joint and youth-unilateral decision making, adolescent boys and girls would report more warmth/acceptance with their parents.

In contrast to parent-child warmth/acceptance, parentchild conflict is negatively associated with behavioral autonomy. Among European American youth, more conflict in the parent-adolescent relationship during early adolescence may occur as parents and adolescents increasingly disagree on the amount of or domains in which adolescents deserve autonomy (Smetana 1988; Silverberg and Gondoli 1996). That is, young adolescents who report having more conflicting parent-child relationships may be having such conflict because their parents do not want to rescind control over their adolescents' lives (Goossens 2006; Hill and Holmbeck 1987; Laursen et al. 1998). In a study of Mexican, Chinese, Filipino, and European American youth (Fuligni 1998), findings revealed that youth who reported that their mothers should have less authority over their daily lives also reported more conflict with mothers. This association was not significant for adolescents' reports of their relationships with fathers, however. Thus, we anticipated that more parent-unilateral and less joint and youth-unilateral decision-making would be associated with more conflict with mothers, and possibly with fathers.

Present Study

The present study aimed to systematically explore the variability in mothers' and fathers' reports of decision-making with their adolescents, and to explore the correlates associated with such variability in an ethnic-homogonous

sample of Mexican-origin families. Our first goal was to describe the prevalence of three different types of parent-adolescent decision-making among Mexican-origin mothers and fathers, and to test adolescents' gender as a moderator of decision-making. We hypothesized that fathers would report more parental involvement in decision-making (high parent-unilateral and low joint and youth-unilateral decision-making) than mothers, and that this mother-father difference would be greater in families of girls as compared to families of boys. Our second goal was to explore the socio-cultural and family correlates associated with mothers' and fathers' decision-making, and once again, we tested adolescents' gender as a moderator of these associations. We anticipated that more parentunilateral and less joint and youth-unilateral decision making would be associated with parents' stronger endorsement of traditional gender role attitudes and values for respect. Finally, we expected that parents' endorsement of more parent-unilateral decision-making would be associated with adolescents' perceptions of lower warmth and higher conflict in the parent-adolescent relationship.

Method

Participants

Participants were mothers, fathers, target adolescents and older siblings in 246 Mexican-origin families who were part of the first wave of an ongoing project on family socialization and adolescent development (Updegraff et al. 2005). Given the goals of the study, to examine the role of family, cultural, and gender socialization processes, the 246 participating families met the following criteria: (1) mothers were of Mexican-origin; (2) target adolescents were living in the home with an older sibling and were not learning disabled; (3) biological mothers and biological or long-term adoptive fathers (i.e., more than 10 years) lived at home; and (4) fathers worked at least 20 h/week. Although not required, most fathers (93%) were of Mexican-origin.

At the onset of the study, mothers' average age was 39 years (SD = 4.63) and fathers' average age was 41 years (SD = 5.77). Most parents were born outside of the U.S. (71% of mothers and 69% of fathers) and completed the interview in Spanish (66% of mothers, and 67% of fathers). Parents reported an average of 10 years of education (M = 10.34; SD = 3.74 for mothers, and M = 9.88, SD = 4.37 for fathers). Families represented a range of socioeconomic levels, with the percentage of families meeting federal poverty guidelines (18.3%) being similar to two-parent Mexican-origin families in poverty in the county where the sample was drawn (i.e., 18.6%; U.S.



Census Bureau 2000). Median household income was \$41,000 (SD = \$45,222; range = \$5,000 to over \$100,000). Parents reported being married an average of 17.57 years (SD = 5.42). Target adolescents were 12.51 years of age (SD = 0.58) and 51% were female, predominantly US-born (62%) and English-speaking (i.e., 83% completed the interview in English). This study focused on mothers, fathers, and target adolescents as the decision-making scale was not collected for older siblings.

Procedure

Mexican-origin families with seventh graders were recruited from schools in a southwestern metropolitan area. To recruit families, letters and brochures describing the study in both English and Spanish were sent to families, and bilingual staff conducted follow-up phone calls to assess eligibility and interest in participation. Families' names and contact information were obtained from junior high schools in five school districts and from five parochial schools. Schools were selected to represent a range of socioeconomic situations, with the proportion of students receiving free/reduced lunch varying from 8 to 82%. Of 421 families who were eligible, 284 (67%) agreed to participate, 95 (23%) refused, and we were unable to re-contact the remaining 42 families (10%). Interviews were completed by 246 families. Those who agreed but did not participate in the final sample (n = 38) were families that we were unable to locate or with whom we were unable to complete a home interview after repeated attempts.

Families participated in structured in-home interviews lasting two to three hours. Parents and adolescents gave informed consent and reported on parent-adolescent relationship qualities, cultural backgrounds and values, and adjustment. Interviews were conducted separately with each family member using laptop computers. Bilingual interviewers read the questions aloud due to variability in participants' reading levels. Families received a \$100 honorarium for the participation of all four family members in the home interview.

Measures

All measures were forward and back-translated into Spanish for local Mexican dialect (Foster and Martinez 1995). All final translations were reviewed by a third native Mexican–American translator and discrepancies were resolved by the research team. Focus groups and pilot work were conducted to ensure the cross-ethnic and language equivalence of existing measures. Cronbach's alphas for all measures were acceptable for English- and Spanish-speaking participants (alphas ranged from .68 to .89 for Spanish-speaking participants); and .61–.89 for English-speaking participants);

thus for efficiency, all alphas are reported for the overall sample rather than separately by language.

Parent-Adolescent Decision-Making

To measure parent-adolescent decision-making we used a 9-item measure based on work by Dornbusch et al. (1985, 1990) and Bumpus et al. (2001). Mothers and fathers reported the person or persons who typically made decisions for the adolescent during the past year in eight domains (i.e., chores, appearance, money, friends, romantic relationship, free-time activities, curfew/bedtime, and schoolwork). A ninth item ("family time") was included because of the salience of family interdependence in Mexican-origin families (Sabogal et al. 1987). Parents used a parallel 9-point scale (1 = Youth alone, 2 = Mother, 3 = Father, 4 = Both parents, 5 = Father and Youth, 6 = Mother and Youth, 7 = Parents and Youth, 8 = Other person, and 9 = Nobody).

Following Dornbusch et al. (1985, 1990), each item was re-coded to reflect a 3-point response scale. A score of 1 was given if parents reported parent-unilateral decisionmaking in a domain (i.e., if parents responded that "mother", "father", or "both parents" made the decisions). A score of 2 reflected joint decision-making and indicated that one or both parents made decisions along with adolescents in a domain (i.e., parents indicated "mother and youth", "father and youth", or "parents and youth" made decisions). A score of 3 was given when parents reported that adolescents made independent decisions (i.e., parents indicated that "youth alone" makes decisions), referred to as youth-unilateral decision-making. Table 1 provides the percentage of mothers and fathers who reported parent-unilateral, joint, or youth-unilateral decision-making for each of the nine decision-making domains. Three proportion scores were calculated for each parent (i.e., mother and father) based on the proportion of items that mothers and fathers endorsed for the parentunilateral, joint, and youth-unilateral decision-making responses. The KR-20 estimates of reliability (a special form of Cronbach's alpha; Furr and Bacharach 2008) were .78 and .83 for mothers' and fathers' reports of parentunilateral decision-making, .78 and .83 for mothers' and fathers' reports of joint decision-making, and .60 and .72 for mothers' and fathers' reports of youth-unilateral decision-making.

Socioeconomic Status

Parents reported on their educational levels and their annual incomes. Families' socioeconomic status (SES) was measured by standardizing the log of household income (to



Table 1 Percentage of mothers and fathers who reported using parent-unilateral, joint, or youth-unilateral decision-making strategies by domain

	Parent- unilater	al	Joint		Youth- unilateral		
	Mother	Father	Mother	Father	Mother	Father	
Chores	87	90	12	9	1	1	
Appearance	53 _a	70_a	23	16	24 _a	14 _a	
Schoolwork	60_a	73 _a	28 _a	17 _a	12	10	
Bedtime and curfew	86	87	10	10	5	3	
Friends	80	78	15	18	5	4	
Romantic relationships	80	84	16 _a	9 _a	4	7	
Free time	73 _a	81 _a	20_a	13 _a	7	6	
Family time	71 _a	80_a	25 _a	15 _a	5	5	
Money	46 _a	66 _a	27 _a	15 _a	27 _a	19 _a	

Within each model, subscripts indicate mothers and fathers significantly differed in the percentage of parents who reported that decision-making strategy for the dimension of interest, at the p < .05 level

correct for skewness), mothers' education level, and fathers' education level. The three variables were then averaged to create SES, with higher scores indicating higher SES. Cronbach's alpha was .78.

Cultural Values

Mothers and fathers reported on their traditional gender role values and respect for elders values.

Traditional Gender Roles Traditional gender role values were measured using Hoffman and Kloska's (1995) 13-item scale. Each item was rated on a 4-point (1 = strongly disagree to 4 = strongly agree) scale. This scale has been validated with Mexican–Americans (Adams et al. 2007) and psychometric analyses on this sample revealed that all but three items loaded on a single factor reflecting traditional gender role attitudes (e.g., "A husband's job is more important than a wife's"). Therefore, ten items from the original scale were averaged to create a scale score, with higher scores indicating stronger endorsement of traditional gender role attitudes. Cronbach's alphas were .89 for mothers and .86 for fathers.

Respect for Elders A subscale from the Mexican-American Cultural Values Scale (Knight et al. 2010) was used to measure parents' respect for elders values (8 items). Mothers and fathers rated the items on a 5-point scale (1 = strongly disagree to 5 = strongly agree) and items were averaged to create subscale scores. A sample item is "No matter what, children should always treat their parents with respect." Cronbach's alphas were .68 for mothers and .69 for fathers.

Parent-Adolescent Relationship

Adolescents reported on warmth/acceptance and frequency of conflict with their mothers and their fathers at separate points in the home interviews.

Warmth/Acceptance Adolescents completed the short form of the Children's Report of Parental Behavior Inventory (Schwarz et al. 1985) to describe their warmth/acceptance with their mothers and fathers. Each of eight items was rated on a 5-point scale (1 = almost never to 5 = almost always), such that higher scores represented greater warmth/acceptance. This scale has been shown to be reliable and valid with Latinos in English and Spanish (Knight et al. 1994). Cronbach's alphas were .84 and .89 for adolescents' reports of their relationships with their mothers and fathers, respectively.

Conflict Adolescents reported on the frequency of conflict with their mothers and fathers (Harris 1992; Smetana 1988) during the past year (ranging from 1 = Not at all, to 6 = Several times a day) regarding 12 topics (e.g., chores, bedtime/curfew, family obligations). A sample item is "How often do you have disagreements or differences of opinion with your (mother/father) about how late you stay up or stay out?" Cronbach's alphas were .80 and .86 for adolescents' reports of conflict with their mothers and fathers, respectively.

Maternal Work Characteristics

We also asked mothers to report on the amount of hours they worked per week and how much occupational selfdirection they had in their job. These measures were used for additional analyses to further understand associations between SES and maternal decision-making.

Mothers' Occupational Self-Direction Mothers' occupational self-direction was measured using a subscale of Lennon's (1994) work dimensions scale. Twenty items were rated on a 4-point scale (1 = not at all to 4 = very much) to assess mothers' autonomy in their jobs (e.g., "You decide when to come to work and when to leave"). Scores were averaged and a higher score indicated more self-direction ($\alpha = .87$).

Results

This study had two main goals. The first goal was to examine the prevalence of joint, parent-unilateral, and youth-unilateral decision making patterns in Mexicanorigin families, with a focus on exploring differences



between mothers and fathers, and between parents of daughters versus parents of sons (see Table 2 for correlations among study variables). Our second goal was to explore how mother- and father-adolescent decision-making (parent-unilateral, joint and youth-unilateral) varied as a function of family socioeconomic status, parents' cultural values (i.e., gender role attitudes, respect for elders), and parent-adolescent relationship qualities (i.e., warmth/acceptance, conflict), and how these associations were moderated by adolescents' gender.

Analytic Plan

Because mothers and fathers are embedded within families, the autocorrelation between their responses would violate the independence assumption for ordinary least squares regression, potentially affecting the estimation of standard errors and increasing the likelihood of a Type 1 error. Using Kenny et al.'s (2006) suggestion for testing nonindependence among distinguishable dyads (i.e., mothers and fathers), we computed Pearson product-moment correlation coefficients between mothers' and fathers' reports of parent-unilateral, r = .11, t(241) = 1.75, p < .05, joint, r = .17, t(241) = 2.63, p < .01, and youth-unilateral decision-making, r = .16, t(241) = 2.52, p < .01. Because the correlations were significantly different from zero, it was necessary to account for the non-independence of mothers' and fathers' reports by using a multi-level model (MLM) framework to address our two study goals.

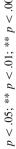
PROC MIXED in SAS 9.2 was used to estimate a twointercept model that allowed us to test the associations among family demographics, cultural values, and parentadolescent relationship qualities on decision-making for mothers and fathers while accounting for the non-independence in the data (Kenny et al. 2006). In the twointercept model, the common one-intercept model is replaced by adding dummy codes for mothers and fathers and modeling intercepts for each separately. This allowed us to model our Level 1 equation to represent the true score plus measurement error for each dyad member. In the Level 1 equation we included variables unique to mothers and fathers (i.e., mothers' and fathers' traditional gender role attitudes and values for respect, adolescents' reports of warmth and conflict with mothers and fathers). The Level 2 equation modeled between-family differences (i.e., SES, adolescents' gender). All variables were centered at the grand mean (Enders and Tofighi 2007; Kenny et al. 2006).

Maximum likelihood estimation was used for all models. To ensure good fit, we built the model in the following steps: (Model 1) estimating a model with the two intercepts for mothers and fathers; (Model 2) estimating a model that also included the Level 1 (cultural values, parent–adolescent relationship qualities) and Level 2 (SES, adolescents'

 Table 2
 Descriptive statistics for all independent and dependent variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Parent-unilateral	ı	85***	45***	.02	11	.21***	.17**	.05	.14*
2. Joint	84***	ı	09	02	.21**	24**	13*	.01	12
3. Youth-unilateral	53***	02	ı	01	13*	00.	09	11	07
4. Gender $(0 = girls \ 1 = boys)$	08	.02	.12*	I	08	60.	01	05	80.
5. Socioeconomic status	13*	.27***	19**	09	I	44**	15*	90.	13*
6. Traditional gender roles	.07	12	90:	00.	49***	1	.32***	.02	.10
7. Respect for elders	.12	12	03	.12	29***	.25***	I	.01	60.
8. Warmth/acceptance	19**	.18**	.07	90:	60.	09	09	ı	26***
9. Conflict	.12	12	03	.16**	20**	.14*	.10	16***	1
Mothers $(n = 239)$									
Mean (SD)	0.70 (0.27)	0.20 (0.24)	0.10 (0.14)	0.49 (0.50)	0.03 (0.82)	2.02 (0.66)	4.31 (0.52)	3.96 (0.69)	2.70 (0.88)
Fathers $(n = 243)$									
Mean (SD)	0.79 (0.26)	0.13 (0.22)	0.08 (0.14)	0.49 (0.50)	0.01 (0.83)	2.06 (0.57)	4.35 (0.54)	3.84 (0.77)	2.68 (1.00)

Correlations for mothers are above the diagonal and correlations for fathers are below the diagonal





gender) main effects; and finally (Model 3) estimating a model that also included the cross-level interactions (e.g., gender \times parent–adolescent relationship quality). A series of Likelihood ratio tests were used to determine model fit and establish final models. Once our final models were established, follow up analyses were run to test the differences between mothers' and fathers' estimates to assess whether the associations between decision-making and the correlates (i.e., cultural values, parent–adolescent relationship qualities) differed for mothers versus fathers. Finally, the proportion of variance explained was estimated for mothers and fathers separately by comparing the true score variance for mothers and fathers in the intercept models and in the final models. This estimate can be interpreted in the same manner as an R^2 statistic (Kenny et al. 2006).

Parent-Unilateral Decision-Making

For parent-unilateral decision-making, a likelihood ratio test indicated that Model 2 (the main effects model) was a significantly better fit than Model 1 (the intercept model), χ^2 (12) = 36.80, p < .00, and Model 3 (the cross-level interactions model) did not improve fit from Model 2, χ^2 (10) = 9.50, ns; therefore, Model 2 was considered the best fitting model. As summarized in Table 3, parent-unilateral decision-making was used 70 and 78% of the time by mothers and fathers, respectively, and this effect differed significantly for mothers versus fathers, t(227) = 3.55, p < .00. However, adolescents' gender did not moderate the prevalence of parent-unilateral decision-making for mothers or fathers.

Next, the associations between decision-making and socio-cultural and family correlates differed for mothers and fathers. Mothers described more parent-unilateral decision-making when they endorsed more traditional gender role attitudes and when adolescents reported more mother-adolescent conflict. For fathers, more parent-unilateral decision-making was associated with lower levels of adolescent reported warmth/acceptance, and this association differed for fathers versus mothers, t(227) = -2.70, p < .00.

Joint Decision-Making

Model 2 was the best fitting model predicting joint decision-making (Table 3), as it demonstrated a significant improvement in fit compared to Model 1, $\chi^2(12) = 44.40$, p < .00, and Model 3 did not improve in fit compared to Model 2, $\chi^2(10) = 9.20$, ns. Findings indicated that mothers and fathers used joint decision-making 20 and 14% of the time, respectively, and this estimate differed significantly for mothers versus fathers, t(227) = -2.58, p < .01. The prevalence of joint decision-making was not moderated by adolescents' gender.

Turning to the family and socio-cultural correlates, fathers from higher SES families reported more joint decision-making. When exploring the role of cultural values and parent—child relationship qualities, we found mothers reported more joint decision-making when they endorsed less traditional gender role attitudes. Fathers, in contrast, reported more joint decision-making when adolescents reported higher levels of warmth/acceptance. The associations for traditional gender roles, t(227) = 1.97, p < .05, and parent-adolescent warmth/acceptance, t(227) = 1.94, p < .05, significantly differed for mothers versus fathers.

Youth-Unilateral Decision-Making

For the model predicting youth-unilateral decision-making, Model 3 was the best fitting model as it demonstrated significantly better fit than Model 1, $\chi^2(22) = 44.25$, p < .00, and Model 2, $\chi^2(10) = 20.67$, p < .05. Because the likelihood ratio test indicated that a model including gender moderation improved fit over a main effects model, the model predicting youth-unilateral decision-making included the two-intercept model with Level 1 (cultural values and parent-child relationship qualities) and Level 2 (adolescents' gender, SES) main effects, along with cross-level interactions (gender × SES, gender × cultural values, gender × parent-child relationship qualities). By including estimates of gender moderation, the main effects must be interpreted as estimates for families with girls. The estimates for gender and for the interaction terms involving gender must be interpreted as the difference in estimates for families with boys as compared to families with girls.

Looking to the intercept and gender estimates, we are able to understand how parents of girls responded (intercept) and how parents of boys (gender) differed from parents of girls. Mothers did not differ in how much they used youth-unilateral decision-making with girls versus boys (10% vs. 9%, respectively). However, fathers of girls used youth-unilateral decision-making significantly less than fathers of boys (7% vs. 11%), t(214) = -2.01, p < .05. In addition, the follow up analysis indicated fathers of girls reported using youth-unilateral decision-making significantly less than mothers of girls, t(218) = -2.19, p < .05 (i.e., 7 and 10%, respectively).

Next, we explored how SES, respect values, and gender role attitudes were associated with parents' reports of youth-unilateral decision-making and whether parents of boys differed from parents of girls in these associations. Mothers of girls reported more youth-unilateral decision-making when they belonged to lower SES families, ($\gamma = -.05, p < .01$). This relation did not significantly differ for mothers of girls as compared to mothers of boys or for fathers. To understand how SES may be associated with



Table 3 Two-intercept multi-level models predicting parent-adolescent decision-making

	Parent-unilateral			Joint				Youth-unilateral				
	Mother		Father		Mother		Father		Mother		Father	
	γ	SE	γ	SE	γ	SE	γ	SE	γ	SE	γ	SE
Goal 1												
Intercept	.70***	(.02)	.78***	(.02)	.20***	(.01)	.14***	(.01)	.10***	(.01)	.07***	(.01)
Gender $(0 = girls \ 1 = boys)$.00	(.03)	06	(.03)	.01	(.03)	.02	(.03)	01	(.02)	.04*	(.02)
Goal 2												
Socioeconomic status	.00	(.02)	03	(.02)	.03	(.02)	.07***	(.02)	05**	(.02)	03	(.02)
Cultural values												
Traditional gender roles	.06*	(.03)	01	(.03)	06*	(.03)	.02	(.03)	01	(.02)	.00	(.02)
Respect for elders	.06	(.04)	.05	(.04)	03	(.03)	02	(.03)	04	(.03)	.01	(.03)
Parent-adolescent relationship												
Warmth/acceptance	.03	(.02)	05**	(.02)	01	(.02)	.04**	(.02)	02	(.02)	.03*	(.02)
Conflict	.04*	(.02)	.02	(.02)	03	(.02)	01	(.01)	04**	(.01)	.00	(.01)
Gender moderation												
Gender \times SES ^a									.04	(.02)	03	(.03)
Gender × TGR ^b									.00	(.03)	02	(.04)
Gender × respect for elders									.02	(.04)	09*	(.04)
Gender × warmth/acceptance									.01	(.03)	05*	(.02)
Gender × conflict									.04	(.02)	02	(.02)
R^2	.07		.09		.12		.09		.09		.09	

Within each model, bolded rows indicate mothers and fathers differed at the p < .05 level

youth-unilateral decision-making, we examined the correlation between SES and mothers' occupational characteristics. We found that SES was positively associated with occupational self-direction, r = .43, p < .00, but not associated with work hours, r = .14, ns.

In addition, we found that the association between youth-unilateral decision-making and fathers' respect for elders values was significantly different for boys versus girls, t(214) = -2.27, p < .05, and for mothers versus fathers (Fig. 1), t(218) = -2.05, p < .05. However, follow up analyses indicated that the association between youth-unilateral decision-making and respect for elders values was significant only for fathers of boys ($\gamma = -.09$, p < .01). Specifically, when fathers of boys highly endorsed the value of respecting one's elders, they reported less youth-unilateral decision-making. No significant association was found between mothers' or fathers' traditional gender role attitudes and youth-unilateral decision-making.

Turning to parent–child relationship qualities, fathers reported more youth-unilateral decision-making when their daughters perceived them as more warm/accepting ($\gamma = .03$, p < .05), and this association differed significantly for fathers of girls versus boys, t(214) = -2.19, p < .05 (for fathers of boys, $\gamma = -.02$, ns). This association

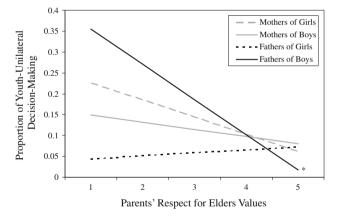


Fig. 1 The association between the proportion of youth-unilateral decision-making and parents' endorsement of respect for elders. *p < .05

significantly differed from mothers, t(218) = 2.52, p < .01, such that mothers' reports of youth-unilateral decision-making were not associated with adolescents' reports of mother-adolescent warmth/acceptance for girls or for boys. Next, an association between decision-making and parent-child conflict emerged for mothers. Mothers reported more youth-unilateral decision-making when



^{*} p < .05; ** p < .01; *** p < .001

^a Socioeconomic status, ^b Traditional gender roles

daughters reported less mother-adolescent conflict ($\gamma = -.04$, p < .01). Although a similar significant association did not emerge for mothers of sons, there was not a significant difference in the strength of this association for mothers of girls versus mothers of boys ($\gamma = .04$, ns). Finally, mothers and fathers significantly differed in this association, t(218) = 1.96, p < .05, as decision-making for fathers of girls was not associated with parent-adolescent conflict ($\gamma = .00$, ns).

Discussion

Mothers' and fathers' involvement in the decision-making of adolescents' daily lives is a process of granting or restricting behavioral autonomy and an indicator of parent-child relationship dynamics (Dornbusch et al. 1985; Goossens 2006). With Mexican-origin families, researchers have noted that parents are largely involved in restrictive parenting styles, and grant less autonomy to their youth as compared to parents from European American families (Crockett et al. 2007; Fuligni 1998). However, how Mexican-origin parents vary within their own cultural group is not well known and variations among Mexican-origin fathers are even less well understood (Saracho and Spodek 2007). In this study, we aimed to explore variations in mother-adolescent and father-adolescent decision-making and to examine the role of adolescents' gender and sociocultural and family characteristics as predictors of decision-making patterns.

Our first goal was to investigate the role of parents' and adolescents' gender in decision-making. Overall, as expected, mothers reported more joint and less parentunilateral decision-making than fathers, regardless of whether they had daughters or sons. Such findings coincide with previous quantitative and qualitative research in European American and Mexican-origin families showing that fathers grant less behavioral autonomy than mothers (Bumpus et al. 2001; Crockett et al. 2007). Further, our results showed that mothers and fathers did not differ in how much parent-unilateral decision-making they reported when the decisions were related to family rules (i.e., curfew and chores) or with whom youth socialized (i.e., friends and romantic partners), but mothers reported less parent-unilateral and more joint decision-making when decisions were related to youths' personal appearance, money, schoolwork, and time.

For youth-unilateral decision-making, in contrast, we found variations as a function of the gender constellation of the parent-adolescent dyad. That is, fathers, but not mothers, reported more *youth-unilateral* decision-making with sons than with daughters. These findings highlight the nuanced role of parents' and adolescents' gender in

decision-making processes, with evidence of fathers' differentiation with sons versus daughters in one aspect of decision-making (youth-unilateral) but not others (i.e., joint, parent-unilateral). It will be important to replicate these findings in future work, as well as link them to indices of adjustment (e.g., depressive symptoms, risky behaviors), as the different relationship dynamics between fathers of sons and fathers of daughters may serve as a protective or risk factors in later adolescence.

Our second goal, guided by a cultural ecological approach, was to explore the associations between parentadolescent decision-making and socio-cultural and family factors and to investigate differences for parents of sons versus daughters. We found that fathers reported more joint decision-making when they belonged to higher SES households, an association that is consistent with previous research on European American families (Brown and Mann 1990; Dornbusch et al. 1985). We also found that mothers who belonged to higher SES households reported less youth-unilateral decision-making than mothers from lower SES households. To the extent that mothers in high SES households have more flexibility in their occupational demands and more educational and economic resources, they may be better able to be involved (thus, lower youthunilateral decision-making) in adolescents' daily lives. As cultural ecological frameworks suggest, the context within which families reside as well as the unique roles of the individuals within the family interact to create unique experiences and outcomes for family members; therefore, it was not surprising that mothers' and fathers' reports of decision-making were associated differently to SES. However, it will be important to explore the potential mechanisms linking SES and decision-making to better understand how these processes differ for mothers and fathers in future work.

Turning to the associations between decision-making and parents' cultural values, a number of differences between mothers and fathers emerged and suggest how parents' roles complement each other. Consistent with previous research on European American mothers (Bumpus et al. 2001), mothers who reported more traditional gender role attitudes also described more parentunilateral and less joint decision-making as compared to mothers with less traditional gender role attitudes. In contrast to mothers' decision-making, fathers' decisionmaking with sons was associated with fathers' value of respecting one's elders, such that fathers of sons who strongly endorsed values for respecting ones' elders also reported less youth-unilateral decision-making. Previous theoretical and empirical research on Mexican family dynamics suggests that families' strong endorsement of hierarchical family and gender roles aid to clearly define family roles (Fuligni 1998). Our findings are consistent,



indicating mothers with more traditional attitudes report more hierarchical parent-child dynamics where mothers are more likely to make decisions for their youth (i.e., more parent-unilateral decision-making). Fathers who endorse strong age-related hierarchies may supplement mothers' authority when socializing their adolescent sons by limiting boys' youth-unilateral decision-making.

Mothers' and fathers' decision-making also were differentially associated with adolescents' reports of warmth/ acceptance and conflict. Mothers reported more parentunilateral decision-making with sons and daughters when youth reported more mother-adolescent conflict; fathers, on the other hand, reported being less involved in decisionmaking when youth perceived them to be more warm/ accepting. It is possible that mothers' more direct involvement in caretaking may lead to more conflict about negotiating parent-child dynamics (Coltrane and Adams 2008). In particular, conflict may be associated with negotiating for more behavioral autonomy (Goossens 2006; Laursen et al. 1998). Fathers, on the other hand, spend more time participating in leisure activities with children (Coltrane and Adams 2008). Granting more behavioral autonomy may reflect positive father-adolescent relationship dynamics.

Finally, when the gender constellation of the parent-adolescent dyad was considered in predicting youth-unilateral decision-making, the results suggest that family-relationship qualities were only significant for families with daughters. Mothers reported less youth-unilateral decision-making with daughters when daughters reported more mother-adolescent conflict. Also, fathers reported more youth-unilateral decision-making when daughters reported more father-daughter warmth/acceptance. Theoretical work on gender socialization (Hill and Lynch 1983) suggests that the association between mother-daughter conflict and decision-making may be most striking, especially as compared to the associations for fathers of daughters or mothers of sons, as mothers are most involved in daughters' development during the transition to adolescence (Crouter et al. 1995). Fathers may not be as involved in the socialization of daughters during this period, and therefore, their involvement may reflect more leisurely interactions and continuing to grant behavioral autonomy may serve to strengthen the positive fatherdaughter bonds.

Strengths and Limitations

The strengths of our study were our multi-informant approach, our ethnic-homogenous design, and our systematic exploration of the correlates associated with three forms of parent-adolescent decision-making. First, by including mothers' and fathers' reports of decision-making and socio-cultural correlates, and adolescents' reports of

parent-adolescent relationship qualities, we were able to gain a more accurate picture of family life in Mexicanorigin families. Most notably, the inclusion of fathers in our research allowed us to explore how socio-cultural factors were associated with variations in the father-adolescent relationship, a topic that is underrepresented in research on Mexican-origin families (Saracho and Spodek 2007). Second, our within-ethnic group design allowed us to understand variations among Mexican-origin families of different socio-cultural and family characteristics as well as variations within families (i.e., mothers versus fathers). Third, our focus on parent-unilateral, joint, and youthunilateral decision-making allowed us to identify the correlates of these different decision-making styles. Because research on mother- and father-adolescent decision-making processes in Mexican-origin families is a novel topic, our systematic exploration of the correlates associated with such processes helps disentangle the family and cultural factors associated with differences in decision-making.

Despite the strengths of our study, we must acknowledge several limitations, including our focus only on parents' reports of decision-making, our cross-sectional design, and our lack of consideration of adolescent adjustment. The first limitation of our study was that we did not ask adolescents to report on daily decision-making. As Dornbusch et al. (1985) have found, youth report more joint decision-making than parents; thus, it will be important to examine the prevalence of joint, parent-unilateral, and youth-unilateral decision-making from youths' perspective in future research. A second limitation was our focus on a single time point. Research focused on longitudinal trajectories in decision-making has been conducted with European American (Wray-Lake et al. 2010) and African American families (Smetana et al. 2004), but we know little about changes in Mexican-origin families. As youth transition through adolescence, differences in parents' roles and parent-adolescent relationship dynamics are further differentiated as developmental changes elicit differences in mothers' and fathers' interactions with their same-sex versus opposite-sex offspring (Hill and Lynch 1983). By utilizing longitudinal methods, we will better understand changes in mothers' and fathers' decisionmaking with sons versus daughters as youth progress through adolescence and into young adulthood. Related to our third limitation, future research should focus on how decision-making is linked to Mexican-origin adolescents' adjustment. As previous research has linked the age in which parents grant decisional autonomy to academic success (Ceballo 2004; Dornbusch et al. 1990) and selfesteem (Bush et al. 2004), it will be helpful to understand how changes in decision-making are associated with Mexican-origin youths' psychosocial and academic adjustment over time.



Conclusion

Taken together, the findings of this study suggest that socio-cultural and family-relationship characteristics linked to parent-adolescent decision-making differed for Mexican-origin mothers versus fathers and for parents of sons versus daughters. Our findings build on previous theoretical and empirical work suggesting that maternal and paternal roles are generally defined as different yet complimentary (Coltrane and Adams 2008) and, thus, may be associated with different characteristics of the sociocultural and family context. By understanding what sociocultural correlates and family relationship qualities are associated with mothers' and fathers' decision-making with their sons and daughters, we were able to gain a more nuanced understanding of these family dynamics in Mexican-origin families. Having a more precise understanding of gender family dynamics within this cultural context, not only can aid empirical work but also can have important program implications for intervention and prevention work focused on Mexican-origin families.

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