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Mexican-American Adolescents' Gender-Typed Characteristics: The Role of Sibling and Friend Characteristics

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Abstract

This study examined the role of sibling and friend characteristics in Mexican-American youth's gender-typed characteristics (i.e., attitudes, interests, and leisure activities) in early versus middle adolescence using a sibling design. Mexican-American 7th graders ($M = 12.51$ years; $SD = .58$) and their older siblings ($M = 15.48$ years; $SD = 1.57$) from 246 families participated in home interviews and a series of seven nightly phone calls. Results revealed that younger/early adolescent siblings reported more traditional gender role attitudes than their older/middle adolescent siblings and older brothers were more traditional in their attitudes than older sisters. When comparing siblings' gender-typed interests and leisure activities, boys reported more masculine orientations than girls and girls reported more feminine orientations than boys. Older brothers' gender-typed characteristics were associated with the amount of time spent with and gender characteristics of their friendship group, but for younger brothers, sibling characteristics were associated with their gender-typed characteristics. In contrast, both sibling and friendship characteristics were significantly associated with older and younger sisters' gender-typed characteristics. The discussion addressed the different correlates of older and younger sisters' and brothers' gender-typed characteristics.

Keywords

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Introduction

Adolescence is an important developmental period to study youth's gender-typed characteristics, as cognitive and biological maturation as well as expanded opportunities for social interaction have significant implications for gender development (Galambos, Berenbaum, & McHale, 2009). Among ethnically and racially diverse samples of youth, gender-typed characteristics are associated with individual differences in psychosocial well-being and engagement in risk behaviors (e.g., Kulis, Marsiglia, & Hecht, 2002; Pleck & O'Donnell, 2001). The study of gendered characteristics is particularly important for Mexican-American youth's development. First, Mexican-American culture is characterized by traditional gender role attitudes and beliefs, on average, making it a potentially unique sociocultural context to study youth's gender-linked characteristics. Second, flexibility in gender-typed characteristics have been linked to Mexican-American youths' adjustment, such that less traditional gender role attitudes have been linked to girls' higher education and career expectations (McWhirter, Hackett, & Bandalos, 1998; Valenzuela, 1993) and boys' lower risky behavior (Updegraff, Umaña-Taylor, McHale, Wheeler, & Perez-Brena, 2012). These findings are important in light of the size and rapid growth of the Mexican-origin youth population in the U.S. (U.S. Census Bureau, 2014). Despite the evidence suggesting the importance of gender characteristics influencing Mexican-American youths' development ,we know surprisingly little about Mexican-American adolescents' gender-typed characteristics. The present study advances the literature by investigating developmental differences in and correlates of Mexican-American adolescents' gender-typed characteristics with data from adolescent sibling pairs.

Importantly, gender development occurs within the larger cultural and family contexts of youth's daily lives (McHale, Crouter, & Tucker, 1999). Parents' gender socialization has received substantial attention in the literature, but siblings (McHale, Crouter, & Whiteman, 2003) and friends (Blakemore, Berenbaum, & Liben, 2009) have often been overlooked as influences on adolescents' gender development. In Mexican-American families, adolescents spend more of their non-school time in shared activities with their siblings than they spend with parents or extended family members, underscoring the prominence of siblings in youth's daily lives (Updegraff, McHale, Killoren, & Rodriguez, 2011). Adolescence is also a developmental period when youth extend their social networks beyond the family and spend considerable amounts of time interacting with non-familial peers (Berndt, 2004). Theoretically grounded in a bio ecological systems model (Bronfenbrenner & Morris, 2006), the primary purpose of this study was to investigate the links between Mexican-American younger and older siblings' gender-typed characteristics and characteristics of their sibling and friendship networks.

Adolescents' Gender-Typed Characteristics and the Role of Siblings and Friends

Gender development is multidimensional and encompasses adolescents' attitudes regarding prescribed roles of males and females, gender-typed interests, and gender-typed behaviors (Ruble, Martin, & Berenbaum, 2006). Adolescents' adherence to gender-typed characteristics manifest themselves in boys' more masculine or girls' more feminine interests and behaviors, and in youth's more traditional gender role attitudes. In contrast, a

mixture of masculine and feminine interests and behaviors and less traditional gender role attitudes reflects more flexible gender orientations (Perry & Pauletti, 2011). In the current study, we conceptualized adolescents' gender-typed characteristics as comprised of gender role attitudes, and participation and interests in masculine and feminine activities.

Bioecological systems theory (Bronfenbrenner & Morris, 2006) posits that the association between an environment and youth's development is dependent on the combination of the contextual characteristics of an environment, (e.g., family socioeconomic status, parents' gender-typed characteristics, sibling context, friendship context), the amount of time spent within an environment, and youths' characteristics (e.g., gender, biological development, cultural background). The most direct set of social contexts in which youth reside are youth's microsystems, a collection of social networks in which youth are directly involved, such as the family and friend environments. Siblings are important as demographic data reveal that 77 % of Latino youth grow up with at least one sibling (U.S. Census, 2011) and time-use data provide evidence that Mexican-American youth spend a substantial portion of their non-school time with siblings (Updegraff et al., 2011). Second, friends are significant in adolescence as youth increase their time spent in the company of their friends (Berndt, 2004; Updegraff, McHale, Whiteman, Thayer, & Crouter, 2006), and friends increase in their influence over adolescents' gendered attitudes and behaviors (Blakemore et al., 2009). Thus, it is important to understand how the social contexts of siblings and friends are associated with gender role development as youth are increasing their involvement within such contexts, and, as a result, the potential to be influenced by such contexts increases.

In addition to the amount of time spent within a social context, the gender composition (i.e., the ratio of girls relative to boys) of the sibling and friendship network is also a salient group characteristic associated with youth's own gender-typed characteristics. Among siblings, research suggests that youth are more likely to look up to (Buhrmester & Furman, 1990) and spend time with their same-gender siblings (Updegraff, McHale, Whiteman, Thayer, & Delgado, 2005). Further, the gender composition of a sibling dyad (e.g., older brother with a younger sister) has been associated with youth's gender-typed characteristics (Crouter, Whiteman, McHale, & Osgood, 2007; McHale et al., 1999). Turning to the role of gender in friendship dynamics, researchers find youth increase their time spent with friends, and especially same-gender friends, in early to middle adolescence (Berndt, 2004). The increase in time spent with friends leads to the increasing influence of friends. Relatedly, less variability in the gender characteristics of friendship groups is associated with more gender-typed behaviors (Banerjee & Lintern, 2000). Such research suggests that the gendered composition of the sibling and friend-ship networks and the amount of time spent within such groups may be associated with youth's gender-typed characteristics.

Moderating Roles of Developmental Status/Birth Order and Adolescent Gender

Finally, we consider how sibling and friendship group characteristics may be differentially associated with Mexican-American adolescents' gender-typed characteristics for early adolescent/younger siblings versus middle adolescent/older siblings and for boys versus girls. Research suggests that younger siblings are more likely to look up to and model their older siblings than vice versa, and older siblings are more likely to look to parents and peers

as potential models and confidants (Furman & Burhmester, 1992; McHale et al., 2003). For example, older siblings' gender role attitudes have been shown to uniquely influence younger siblings' gender role attitudes, after accounting for parent influences, whereas younger siblings' attitudes did not influence older siblings (McHale et al., 2003). When looking at friendship networks, we found that younger and older siblings differed in the amount of time they spent with their family versus their friends. Research with the current sample showed that while early adolescents (i.e., younger siblings) spent more time with parents than with peers, middle adolescents (i.e., older siblings) reported more involvement with friends than with parents (Updegraff et al., 2006).

Research on Latino families suggests that gender influences family norms and social expectations and boundaries outside the home. In particular, research has highlighted gender differences in friendship involvement, such that parents report granting boys more freedom to spend time with friends, as compared to girls who are more often expected to stay home for their protection (Raffaeli & Ontai, 2004). Further, Latino parents are more likely to assign caretaking responsibilities to girls, specifically older girls (Orellana, 2003; Qin-Hilliard, 2003). Therefore, older girls may spend more time with siblings as compared to older boys and, consequently, younger boys and girls may spend more time with their older sisters than their older brothers—highlighting a unique context created by the gender and birth-order combination.

Current Study

The purpose of this study was to link (1) the gender characteristics of the sibling and friendship networks, (2) the amount of time spent within these networks, and (3) the interaction between (1) and (2) to adolescents' gender-typed characteristics. We hypothesized that two patterns would characterize our findings. First, because younger siblings generally spend more time in the home setting as compared to their older siblings who spend more time with their friends, we expected younger siblings' gender-typed characteristics to be more strongly associated with sibling network characteristics, and older siblings' gender-typed characteristics to be more strongly associated with friendship network characteristics. Second, given the research showing that Mexican-American girls are often given more caretaking duties at home and less freedom to spend time with friends as compared to boys, we expected girls' gender-typed characteristics to be more strongly associated with their sibling network characteristics; in contrast, we expected boys' gender-typed characteristics to be more strongly associated with their friendship network characteristics. We also explored the possibility of gender by developmental status/birth order interactions, capitalizing on our sibling design.

Individual and family characteristics linked to gender-typed characteristics were accounted for in our study. First, pubertal status was included as a control variable in our analysis because gender socialization processes are expected to intensify during puberty (Hill & Lynch, 1983). Second, as non-immigrant individuals and households of higher socioeconomic (SES) status have been found to report less traditional gender-typed preferences and attitudes than immigrant individuals (Leaper & Valin, 1996) and lower SES households (Serbin, Powlishta, Gulko, Martin, & Lockheed, 1993), we controlled for parent

immigrant status and family SES. Third, we accounted for parents' traditional gender role attitudes and division of household labor to examine the role of sibling and friend characteristics beyond the role of parents.

Method

Participants

Participants included target adolescents, older siblings, mothers, and fathers in 246 Mexican-origin families who were part of a study on family socialization and adolescent development (Updegraff et al., 2005). Inline with the larger goal of the study, families met the following four recruitment criteria: (1) mothers were of Mexican origin, (2) a 7th grader and an older sibling were living in the home 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 it was not required, most fathers (93 %) also were of Mexican origin.

To recruit families, names of Latino 7th-graders were obtained from five junior high and five parochial schools in and around a large southwestern city. Letters (in English and Spanish) describing the study were sent to families of these adolescents($N = 1,856$) and then follow-up telephone calls were made by bilingual staff to determine eligibility and interest in participation. Of those who were eligible ($n = 421$), 284 families (67 %) agreed to participate, 95 (23 %) refused, and 42 (10 %) were unable to be re-contacted to determine if they would participate. In total, 246 families completed interviews (87 % of those who were eligible and who agreed to participate). The remaining 38 families that agreed to participate could not be located at the time of scheduling, were unwilling to participate when the interview team arrived at their home, or were not home for repeated interview attempts.

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 spoke Spanish (66 % of mothers and 67 % of fathers). Parents reported an average of 10 years of education ($M = 10.33$, $SD = 3.73$ for mothers and $M = 9.87$, $SD = 4.37$ for fathers). Parents came from 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 (from $5,000 to over $100,000). Parents reported being married an average of 17.57 years ($SD = 5.42$) and having on average 3.78 children($SD = 1.60$).Over 51 % of younger siblings and 50 %of older siblings were female. Most adolescents were born in the U.S.(62 %) and completed the interview in English (83 %). Younger siblings were 12.51 years ($SD = 0.58$) and older siblings were 15.48 years ($SD = 1.57$). The gender composition of the sibling-pairs was comprised of older sister-younger sister ($n = 68$), older sister-younger brother ($n = 55$), older brother-younger sister ($n = 57$), and older brother-younger brother ($n = 66$) dyads.

Procedure

Data were collected using two procedures. First, participants completed in-home interviews, lasting an average of 3 h for parents and 2 h for adolescents. Interviews were conducted individually using laptop computers by bilingual interviewers who read questions aloud due to variability in parents' and adolescents' reading levels. During the three to four weeks following the home interviews, family members reported on their activities over a 24-hour period (5 pm to 5 pm) via the telephone on seven evenings (five weekday evenings and two weekend evenings). Adolescents participated in all seven calls, and parents participated in four calls each. Using a cued-recall strategy (McHale, Crouter, & Bartko, 1992), adolescents reported on their involvement in 86 daily activities, including how long each event lasted and who else participated. From these data, we calculated adolescents' and older siblings' time spent in masculine and feminine leisure activities and time spent with their siblings and their friends. Informed consent was obtained prior to the interview. For the participation of all four family members, families were paid a $100 honorarium for the home interview and an additional $100 for the phone interviews. All study procedures were approved by the University's Human Subject Review Board.

Measures

Two translators familiar with the local Spanish dialect using the method outlined by Foster and Martinez (1995) forward- and back-translated all measures. Cronbach's alphas for all measures were acceptable for English- and Spanish-speaking parents and adolescents; thus, all alphas are reported for the overall sample for efficiency.

Background Characteristics—Mothers and fathers reported on their education level and annual income. A composite score of the standardized reports of family income (logged to correct for skew) and mothers' and fathers' education level were used to create an indicator of family SES ($\alpha = .78$). Mothers also reported on the birth place of siblings (i.e., U.S. or Mexico). We recoded these responses to represent siblings' immigrant status (i.e., 0 = born in U.S., 1 = immigrant). Youth reported on a 4-point scale (1 = no change to 4 = change seems complete) their current level of physical development using the 5-item Pubertal Development Scale (e.g., "Have you noticed any skin changes, especially pimples?") (Peterson, Crockett, Richards, & Boxer, 1988; $\alpha = .70$ for younger siblings, $\alpha = .59$ for older siblings).

Traditional Gender-Typed Characteristics—We used three measures to capture youth's gender-typed characteristics (i.e., traditional gender role attitudes, gender-typed interests, and gender-typed leisure activities). We asked mothers, fathers, younger siblings, and older siblings to report on their *traditional gender role attitudes* (Hoffman & Kloska, 1995), and recent work has validated this scale for Mexican-Americans (Adams, Coltrane, & Parke, 2007). Psychometric analyses on this sample revealed that 10 of the original 13 items of the 4-point scale (1 = strongly disagree to 4 = strongly agree) loaded on a single factor reflecting traditional gender role attitudes (e.g., "A husband's job is more important than a wife's"). These items were averaged for each family member, with higher scores indicating a stronger adherence to traditional gender role attitudes. Mothers' and fathers' gender role attitudes were then averaged together to create an estimate of parents' gender role attitudes

to include as a control variable for all models. Cronbach's alphas were above .85 for all four family members.

Adolescents' *feminine and masculine interests* were measured by asking younger and older siblings to rate their level of interest in 36 activities. This scale was based on previous research focused on gender development in middle childhood and adolescence (McHale et al., 1999) for the purpose of testing whether youth's interests were gender-typed. Each item was rated from 1 "not at all interested" to 4 "very interested." Psychometric analyses showed three dimensions: feminine (e.g., gymnastics, fashion, literary arts), masculine (e.g., working out, hunting, building things), and neutral (e.g., swimming, pets, television) interests. Items were averaged with higher scores indicating more interest each dimension. For these analyses, we only used the feminine (17 items) and masculine (8 items) interest subscales (α's>.71 for both subscales and siblings).

Adolescents' *masculine and feminine leisure* activities were assessed using data acquired through the 7 nightly phone calls. Youth's reports of the activities in which they participated were classified as feminine and masculine activities based on previous literature (McHale, Updegraff, Helms-Erikson, & Crouter, 2001). The amount of minutes spent in masculine (7 items; e.g., playing computer games, practicing sports) and feminine activities (14 items; e.g., shopping for fun, gymnastics, and cheerleading) were aggregated across the seven phone calls and divided by 60 to reflect the number of hours youth spent participating in masculine and feminine leisure activities. Responses ranged from 0 to 29.75 h for masculine activities and 0–28.33 h for feminine activities for older and younger siblings. To correct for skew, a natural log transformation was applied to these two variables.

Lastly, parents' *division of household labor* was assessed as a family background characteristic using data acquired during the nightly phone calls. Parents reported on the amount of time in minutes spent doing household tasks alone and jointly. The amount of minutes were aggregated across the phone calls, then mothers' minutes (minus half the joint tasks) were divided by the total number of mothers' and fathers' minutes (minus the total joint tasks) to create a continuous variable representing the percentage of total household tasks that were performed by mothers. Values greater than .5 indicated that mothers performed more housework than fathers, whereas values less than .5 indicated that fathers performed more housework than mothers. Responses ranged from .21 to 1.

Sibling and Friend Network Characteristics—To assess the gendered characteristics of the sibling network, we asked mothers to provide information on the structure of the family by reporting on family size (how many children they had) and the gender of each child. To calculate the *proportion of females in the sibling network,* we totaled the number of girls and boys in the sibling group (including the older or younger siblings) and calculated the proportion of girls in each family for the younger and older siblings separately. To measure *the proportion of females in the friend network*, adolescents were asked to nominate one same-sex best friend and up to five close friends of either sex and describe each friend's background characteristics (i.e., gender, ethnicity, age). The number of girls was divided by the total number of friends listed to calculate the proportion of females in the friend network. A higher score indicated a higher proportion of females in the social networks.

Finally, the *proportion of adolescents' free time spent with siblings and friends* was assessed by daily activity data collected during the phone interviews. Specifically, during each phone call, adolescents reported on the durations (in minutes) and companions (e.g., friends, siblings) in 86 daily activities. The number of minutes that adolescents reported participating in activities with siblings was aggregated across the seven phone calls to measure time spent with siblings and, similarly, minutes spent in activities with friends were aggregated to measure time spent with friends. The amount of time spent with siblings and with friends was then divided by the total amount of time reported in all calls to create measures of youth's proportion of time spent with siblings and with friends, respectively. Younger and older siblings' reports of their time spent together were highly correlated, $r = .90$, $p<.001$, indicating strong reliability for adolescents' time estimates.

Results

The goals of this study were to link (1) the gender characteristics of the sibling and friendship networks, (2) the amount of time spent within these networks, and (3) the interaction between (1) and (2) to adolescents' gender-typed characteristics while exploring the moderating role of gender and developmental status/birth order among early and middle adolescent sibling pairs (see Tables 1, 2 for descriptive information on all variables). Our data include information on two siblings, and the correlations between siblings' responses may violate the independence assumption for ordinary least squares regression; therefore, before addressing our goals, we confirmed that it was necessary to account for the nested nature of the data. Using Kenny, Kashy, and Cook's (2006) suggestion for testing non-independence among distinguishable dyads (i.e., in this case, younger and older siblings), we calculated Pearson product-moment correlation coefficients between younger and older siblings for the dependent variables: gender role attitudes, $r = .29$, $t(246) = 4.84$, $p<.001$, feminine interests, $r = .22$, $t(246) = 3.46$, $p<.001$, masculine interests, $r = .10$, $t(246) = 1.63$, feminine leisure activities, $r = .51$, $t(234) = 9.05$, $p<.001$, and masculine leisure activities, $r = .25$, $t(234) = 3.90$, $p<.001$. With the exception of the correlation for masculine interests, all correlations between older and younger siblings were significant. For this reason, we took the conservative approach of accounting for the non-independence among siblings by using a multilevel modeling approach.

Analytic Strategy

PROC MIXED in SAS 9.2 was used to estimate a series of two-intercept models that allowed us to account for the nested nature of the sibling data (Kenny et al., 2006). In this analysis, the common intercept was replaced with a dummy code for each sibling. This allowed us to estimate different equations for each sibling within the same model, thus estimating patterns of associations that were unique to each sibling. The Level 1 equation included variables unique to each sibling (i.e., pubertal development, youth's gender, gender composition of the sibling and friend networks, time spent with siblings and friends, and the associated interactions), and the Level 2 equation included control variables which were shared by siblings (i.e., family SES, parents' gender role attitudes). All variables were grand mean centered.

To address each hypothesis, our baseline models (estimated separately for the five unique dimensions of gender-typed characteristics) included the two intercepts for younger and older siblings, Level 1 (adolescents' gender, sibling and friendship network characteristics) main effects, Level 2 (family SES, parents' traditional gender role attitudes) controls, and estimates of gender moderation (e.g., adolescent gender X social network characteristics) to examine if adolescents' gender moderated the associations between social network characteristics and gender-typed characteristics. Only significant interactions (and their related lower-order terms) were retained in the final models as retaining interactions that were not significant contributes to an increase in SE (Aiken & West, 1991).

All significant interactions were probed per Aiken and West (1991) such that in the formula $Y = b_0 + b_1(X) + b_2(Z) + b_3(XZ)$, the moderator variable Z (e.g., time spent with friends) of an XZ interaction (e.g., percentage of female siblings X time spent with friends) was estimated at one SD above and below the mean. Two models were estimated, with Z_{high} and Z_{low} included in the interaction term to identify the moderating effect of Z on the relationship between X and Y (i.e., gender-typed characteristic). To test for developmental status/ birth order moderation, we used a second set of models with younger siblings as the comparison group to estimate any significant differences between older and younger siblings. The proportion of Level 1 variance explained was estimated for younger and older siblings separately by comparing the Level 1 variance for younger and older siblings in empty models (i.e., model including only the dependent variable) versus the final models. These estimates can be interpreted in the same manner as R^2 statistics (Kenny et al., 2006). For ease of interpretation, we note if a significant finding supports (S) or rejects (R) our first (H1: sibling differences) or second (H2: gender differences) hypotheses, or if the findings support a more nuanced gender by developmental status/birth order interaction (GXDS).

Sibling and Friendship Network and Adolescents' Gender Typed Orientations

Traditional Gender Role Attitudes—For adolescents' reports of their *traditional gender role attitudes*, there were no significant interactions related to gender moderation; therefore, the more parsimonious main effects model is reported (Table 3). First, we found that the percentage of free time spent with siblings was positively associated with older siblings'(but not younger siblings') traditional gender role attitudes, such that more time spent with siblings was associated with more traditional attitudes (H1-R). For younger siblings, the interaction between the percentage of female friends and the percentage of free time spent with friends was a significant predictor of traditional gender role attitudes (H1-R). Follow up analysis indicated that for younger siblings who had a high proportion of female friends, more time spent with friends was associated with *less* traditional gender role attitudes, $\gamma = -.69$, $p<.05$ (see Fig. 1). This association was not significant for younger siblings with a low percentage of female friends, $\gamma = .35$.

Masculine Interests and Activities—For adolescents' reports of masculine gender-typed characteristics, there were significant gender moderation effects for younger and older siblings. By including estimates of gender as a moderator of the associations between social network characteristics and masculine interests and leisure activities, the main effects are interpreted as estimates for girls and the gender and gender moderation estimates are

interpreted as the difference for boys as compared to girls (i.e., gender was coded as 0 = girls, 1 = boys; Table 3). For boys' estimates, the reference group was changed (0 = boys, 1 = girls) and these estimates are presented only in text and not in Table 3.

For masculine interests, the association between time spent with siblings and masculine interests was significantly different for older girls versus older boys, such that there was a positive association for older girls, but not for older boys, $\gamma = -.34$. In addition, the interaction between the percentage of female siblings and the percentage of free time spent with siblings was a significant predictor of older girls' masculine interests (H1-R, H2-S, GXDS). Follow up analysis indicated that for older girls who had a low proportion of female siblings, more time spent with siblings was associated with more masculine interests, $\gamma = 1.37$, $p<.001$ (see Fig. 2). This association was not significant for older girls with a high percentage of female siblings, $\gamma = .41$. For younger siblings, the association between time spent with peers and masculine interests was significantly different for younger girls versus boys, such that there was a positive association for girls, but not for boys, $\gamma = -.13$ (H2-R).

Turning to masculine leisure activities, there were no significant inter actions related to gender moderation (H2-R);there-fore, the more parsimonious main effects model is reported (Table 3). We found older siblings' masculine leisure activities were positively associated with the amount of time they spent within the sibling (H1-R) and peer (H1-S) network. For younger siblings, their masculine leisure activities were only positively associated with the amount of time they spent within the peer network (H1-R).

Feminine Interests and Activities—For adolescents' reports of their feminine interests, there were no significant interactions related to gender moderation (H2-R); therefore, the main effects model is reported (Table 4). For feminine interests, the higher amounts of time spent with in the sibling network were associated with older siblings' higher levels of feminine interests (H1-R). For younger siblings, there were no significant associations between feminine interests and sibling or friendship network characteristics. Turning to feminine leisure activities, there were significant gender moderation effects for younger and older siblings (Table 4). For older siblings, we found a significant interaction including gender × time spent with friends × proportion of female friends. Follow ups indicated that the time spent with friends × proportion of female friends interaction was only significant for older boys, $\gamma = -7.42$, $p<.05$ (H1-S, H2-S). For older boys who spent a low proportion of free time with friends, there was a positive association between the proportion of girls in the friendship group and the amount of time boys spent in feminine leisure activities (Fig. 3). For older boys who spent a high proportion of free time with friends, there was no significant association between the gender of their friendship group and feminine leisure activities. Turning to younger siblings, the association between time spent with siblings and time spent in feminine leisure activities was significantly different for younger girls versus boys, such that there was a positive association for boys, $\gamma = 1.21$, $p<.001$, but not for girls (H1-S, H2-R, GXDS).

Summary

Overall, our findings provided partial support for our first hypothesized pattern in terms of older and younger boys' leisure activities, such that friend characteristics predicted for older boys and sibling characteristics predicted for younger boys. In terms of the second hypothesized pattern of sibling characteristics being more salient for females and friendship characteristics being more salient for males, we found support for older siblings only. In addition, a number of interactions between youth gender and birth order emerged, highlighting the complex associations across different dimensions of gender development.

Discussion

Mexican-origin youth are a large and rapidly growing segment of the U.S. population (U.S. Census Bureau, 2010), whose normative developmental processes are under researched (Umaña-Taylor, 2009). Further, flexible gender-typed characteristics have been associated with higher psychosocial well-being, lower engagement in risk behaviors, and higher educational and occupational aspirations (Kulis et al., 2002; McWhirter et al., 1998; Pleck & O'Donnell, 2001). Thus, studying the nature and correlates of gender-typed characteristics among Mexican-origin youth is an important research topic.

In this study, we used a multilevel design to investigate how characteristics of and involvement in two key microsystems, the sibling and friend networks, were associated with adolescents' gender-typed characteristics and whether developmental/birth-order differences emerged for younger/early adolescent versus older/middle adolescent siblings. Second, we explored three dimensions of adolescents' gender-typed characteristics—attitudes, interests, and behaviors—recognizing the multidimensional nature of gender development (Galambos et al., 2009). Overall, our findings suggest that spending time in mixed-gender sibling and friend contexts was associated with less traditional gender role attitudes and less gender-typed behaviors and interests. Further, our study highlighted important differences between younger/ early adolescent versus older/middle adolescent siblings and boys versus girls, suggesting a complex pattern of association when accounting for youths' gender *and* stage of development/ birth order.

Across multiple gender-typed characteristics, a common pattern emerged suggesting the importance of accounting for the time spent and gendered context of youth's social networks. Specifically, for younger siblings spending more time within a mostly female friendship network was associated with less traditional gender role attitudes. For older sisters, spending more time within a mostly male sibling network was associated with more masculine interests. For older brothers, having more female friends was associated with spending more time in feminine leisure activities. Our findings complement Banerjee and Lintern's (2000) work, which suggests that less gender variability in the friendship group, enforces more gender-typed behaviors. In our study, we found that exposure to opposite-gender peers or siblings was linked to less traditional and gender-typed characteristics. An alternate interpretation is that less traditional gender role attitudes are associated with interacting with more opposite gender peers.

Moderating Role of Developmental Status/Birth Order and Adolescent Gender

Our first hypothesis, that younger/early adolescent siblings' gender-typed characteristics would be strongly associated with sibling network characteristics as compared to their older/ middle adolescent siblings, whose gender-typed orientation were expected to be associated with the friendship network, was partially confirmed by older and younger boys' leisure behaviors. For younger boys, their feminine leisure activities were associated with the characteristics of their sibling networks, but not their friendship networks. In contrast, for older boys, friendship network characteristics were associated with their feminine leisure activities. The remaining associations highlighted the important role siblings play in older siblings' lives. Specifically, for older siblings, more time spent in the sibling network was an important predictor of older siblings', especially older sisters', gender orientations; whereas, younger siblings' time with friends was an important predictor of their gender orientations. Such findings are consistent with research on birth order and family gender dynamics in Mexican-American families (Orellana, 2003; Qin-Hilliard, 2003; Updegraff et al., 2005), such that older siblings, especially older sisters, are given caretaker responsibilities and, as a consequence, spend more time within the sibling network than younger siblings. Possibly, by spending time within the home, older siblings learn about brothers' and sisters' interests, thus increasing older siblings' masculine and feminine interests and activities.

Our second hypothesis, that girls' gender-typed orientation would be associated with sibling network characteristics and boys' gender-typed characteristics would be associated with the friendship network characteristics, was also partially confirmed. For older girls, more time spent with siblings was associated with interests that were more masculine. For older boys, spending more time with friends was associated with less feminine activities. Such findings are consistent with previous research suggesting that boys are given more freedom than girls to spend time outside the home and with friends (Raffaeli & Ontai, 2004). However, the fact that these patterns only emerged for older siblings also suggest the importance of accounting for the developmental status/birth order of the siblings. That is, our results were consistent with research suggesting that older sisters are not only given less freedom but are also given more household responsibilities (Orellana, 2003; Qin-Hilliard, 2003; Updegraff et al., 2005) increasing their time spent within the home, as compared to other siblings. For older brothers, not only are they given more freedom because of family gender dynamics but they may also receive more freedom because of their age and/or status as an older sibling (McHale, Updegraff, Shanahan, Crouter, & Killoren, 2005) so their time spent with friends is increased as compared to other siblings. Taken together, these findings suggest a multiplicative effect of gender and stage of development/birth order, explaining why our findings emerged for older but not younger siblings.

When exploring gender differences in younger siblings' gender-typed characteristics, an opposite pattern emerged: younger boys' feminine activities were predicted by more time spent with siblings and younger girls' masculine interests were predicted by more time spent with friends. It may be that younger brothers, who were 12.5 years of age, on average, have not been granted the freedom to spend much time with friends. Instead, they may increase their time spent at home and in the company of their siblings, potentially increasing siblings' influence on their gendered orientations. Alternatively, birth order may explain these

different patterns for older versus younger brothers, as younger siblings typically look up to and are influenced by their older siblings (McHale et al., 2003). It is less clear why younger girls' masculine interests were associated with their time with friends. It is possible girls who are reporting more time with friends may be spending more time with male friends to increase their knowledge of masculine activities as girls within this age group are becoming increasingly interested in romantic relationships (Feiring, 1999). Such an interpretation is speculative, however, and future research should explore what predicts girls' increased involvement in friendship networks, and what activities, within those networks, help inform and enforce gender-typed characteristics.

Strengths and Limitations

This study benefitted from an ethnic-homogenous, multilevel, and multidimensional design. First, our focus on normative developmental processes among Mexican-American families allowed us to identify how current understandings of gender role and norm development, which is primarily informed by European American samples (Berndt, 2004; Buhrmester & Furman, 1990; McHale et al., 2003), differs for Mexican-American youth. Our current findings help us move beyond a Eurocentric understanding of normative development that may unintentionally promote a deficit perspective of minority youth development (Garcial Coll et al., 1996). Instead, by understanding the nuances that exist for minority youth, in this case Mexican-American youth, we help to highlight the strengths present within diverse cultural contexts. Second, our focus on two siblings in each family allowed us to explore how friend and sibling networks were associated with the gender-typed characteristics of two individuals who were growing up in the same house hold, but differed in their stage of development and their place in the family. Such data allowed us to show how older girls, who may take on major caretaking roles, may experience more involvement with their sibling network as compared to older boys; and younger brothers, who may be cared for by the same older sisters, may be more heavily exposed to feminine leisure activities than older brothers. Third, our focus on the broader social network as opposed to dyadic or triadic relationships allowed us to explore how the overall gender composition of a network was associated with youth's gender orientations as opposed to the role of one or two key individuals. Such an approach provides a more holistic picture of how different social networks (e.g., microsystems) are associated with youth's gender-typed characteristics. Fourth, our multidimensional exploration of gender-typed characteristics allowed us to explore how friend and sibling characteristics were uniquely associated with boys' and girls' attitudes, interests, and behaviors. Thus, we were able to paint a more precise picture of how social networks are associated with youth's gender-typed characteristics.

Nevertheless, the lack of longitudinal information and process-oriented measures limits our findings. First, the correlational nature of our study and the use of a single wave of data prevented us from inferring causality between network characteristics and gender orientations. Therefore, it is not clear whether youth's gender orientations are leading them to pick certain friends or spend a certain amount of time within sibling and friend networks, or vice versa. Promising longitudinal research methodologies have been incorporated in the study of preschooler children (Martin et al., 2013) which showcase a bi-directional association between gender-typed activity and peer-network preference. Possibly, similar

methods can be adapted in adolescent samples. Second, although this study explored the role of birth order/developmental status, it did not discern where birth order versus developmental status was the contributing factor to divergent gender dynamics. Future research should explore the contributions of birth order versus developmental status by using longitudinal designs that assess the gender-typed characteristics of sibling pairs across time and allow for comparisons of siblings' gender-typed characteristics when they are the same age (using different time-points of data). This type of design has the potential to begin to explore whether sibling differences may be due to developmental status versus birth order. Third, our study primarily focused on observable characteristics of the friend and sibling network (i.e., gender) and this did not allow us to explore how siblings and peers interact with one another. Understanding how youth interact with one another and exchange ideas will help us understand how the sibling and friend networks show different associations with youth's gender-typed characteristics. For example, youth who report having more intimate relationships may engage in more idea sharing with their siblings or friends, and this may help to introduce youth to different gender roles and interests. Future research should focus on how friends and siblings introduce and enforce gender-typed characteristics through their interactions with one another.

Conclusion

Gender socialization is an important developmental task during adolescence (Hill & Lynch, 1983; Ruble et al., 2006) as youth begin to establish social role and behavior preferences that have implications for their future identity and psychosocial functioning, such as career and educational goals(McWhirter et al., 1998) and participation in risky behaviors (Kulis et al., 2002). Our study explored how key social networks were associated with more or less gender-typed role orientations for older and younger brothers and sisters. Such findings helped illustrate how different aspects of sibling and friend networks uniquely relate to distinct dimensions of gender development. The fact that older and younger brothers and sisters showed different patterns of gender-typing and social influence also illustrates how youth's family roles prime them to act out their gender differently based on their unique experiences in their family and friendship networks. Thus, the current study provides questions for future studies and highlight how we should consider the overall context of youth's social life when exploring gender and adolescent development.

Acknowledgments

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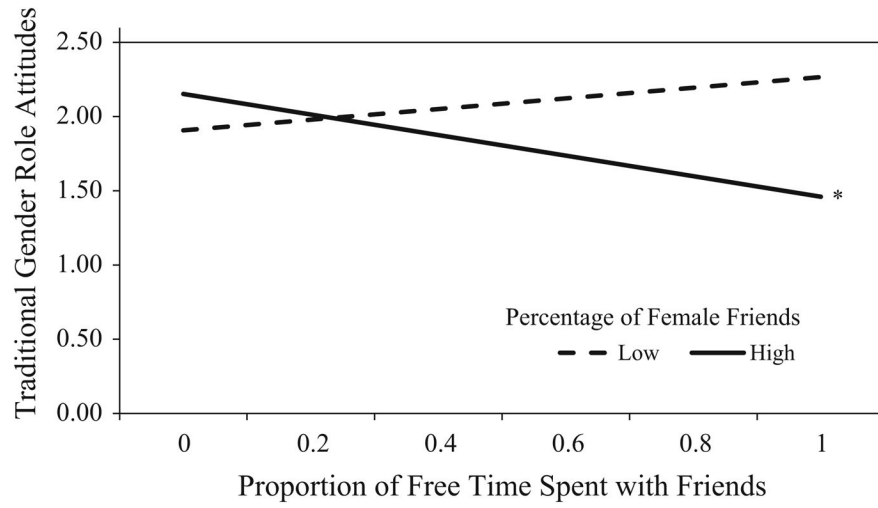
Fig. 1.
Younger siblings' traditional gender role attitudes as predicted by the percentage of female friends and the proportion of free time spent in their friendship network. *p<.05

Fig. 2.
Older girls' masculine interests as predicted by the percentage of female siblings and the proportion of free time spent in their sibling network ***$p<.001$

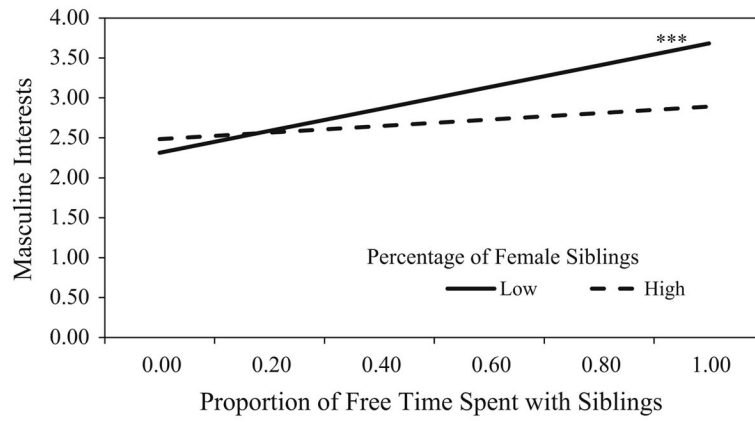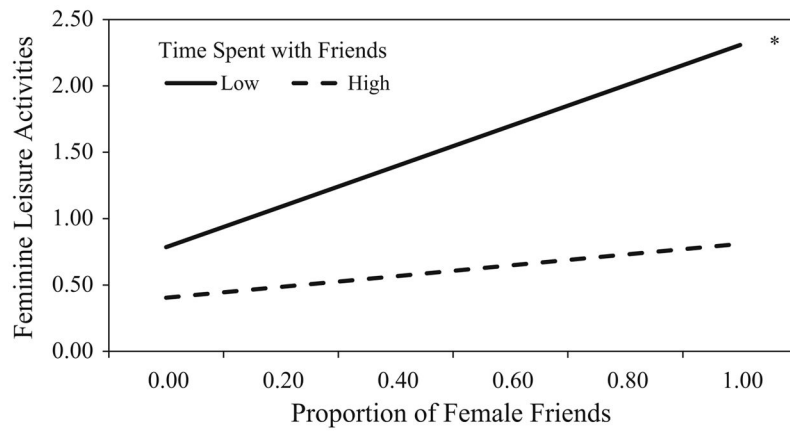**Fig. 3.**
Older boys' feminine leisure activities as predicted by the percentage of female friends and the proportion of free time spent in their friendship network *p<.05

Table 1

Bivariate correlations, means, and SD for all study variables for younger (above the diagonal) and older (below the diagonal) siblings

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
1. Traditional GRA	–	.01	.15*	.01	–.10	–.08	.14*	–.15*	–.10	.14*	–.04	.25*	–.34*	.32*	.07
2. Feminine interests	–.15*	–	.08	.32*	–.30*	.17*	.06	.47*	–.05	–.48*	.21*	.00	.02	.05	.06
3. Masculine interests	.17*	.05	–	–.03	.27*	–.23*	.05	–.50*	.13*	.52*	–.29*	.03	–.11	.09	.05
4. Feminine leisure activities	–.05	.19*	–.10	–	–.06	.08	.16*	.21*	.10	–.20*	.04	–.06	.16*	–.04	.08
5. Masculine leisure activities	–.04	–.14*	.42*	–.16*	–	–.23*	–.13*	–.40*	.34*	.45*	–.22*	–.12	.18*	–.13*	–.06
6. % Females siblings	–.17*	.34*	–.23*	.07	.24*	–	.04	.41*	–.02	–.48*	.16*	–.01	.13*	–.10	.03
7. % Free time with siblings	.28*	.14*	.07	.05	.02	.03	–	–.04	–.25*	–.04	–.10	.12	–.15*	.12	.01
8. % Females friends	–.18*	.52*	–.52	.16	.45	.45	.07	–	–.12	–.89*	.43*	–.08	.05	–.06	–.01
9. % Free time with siblings	–.18*	.01	.02	.08	.18*	–.01	–.42*	–.06	–	.03	–.06	–.11	.17*	–.11	.04
10. Gender	.17*	–.53*	.57*	–.16*	.49*	–.44*	–.01	–.91*	.15*	–	–.47*	.04	–.09	.06	.00
11. Pubertal development	–.23*	.19*	–.29*	.13	–.24*	.22*	–.24*	.46*	.13	–.51*	–	–.01	–.01	–.04	–.01
12. Immigration status	.22*	–.06	–.12	–.10	–.17*	–.06	.08	.06	–.15*	–.08	–.04	–	–.39*	.32*	.14*
13. Socioeconomic status	–.36*	.08	–.01	.15*	.10	.11	–.25*	.12	.18*	–.02	.11	–.44	–	–.55*	–.14*
14. Parents' traditional GRA	.38*	–.03	.09	.03	.11	–.09	.23*	–.07	–.06	.01	–.05	.31*	–.55*	–	.23*
15. Parents' division of labor	.11	.02	–.04	.12	–.14*	–.01	.02	.01	.05	–.07	.01	.17*	–.14*	.23*	–
Younger sibling															
M	2.21	2.70	2.76	3.90	4.50	0.51	0.45	0.50	0.19	0.49	2.45	0.38	–0.01	2.03	0.68
SD	0.50	0.50	0.56	3.75	4.77	0.31	0.19	0.45	0.14	0.50	0.64	0.49	0.83	0.50	0.19
Range (Min.)	1.00	1.41	1.50	0.00	0.00	0.00	0.01	0.00	0.00	0.00	1.00	0.00	–2.12	1.00	0.21
Range (Max)	3.40	4.00	4.00	24.33	28.00	1.00	0.87	1.00	0.65	1.00	3.80	1.00	2.12	3.40	1.00
Older sibling															
M	2.09	2.65	2.71	4.90	4.49	0.51	0.35	0.49	0.24	0.50	2.95	0.46	–0.01	2.03	0.68
SD	0.56	0.51	0.59	5.35	4.98	0.31	0.28	0.42	0.16	0.50	0.50	0.50	0.83	0.50	0.19
Range (Min.)	1.00	1.29	1.38	0.00	0.00	0.00	0.02	0.00	0.00	0.00	1.40	0.00	–2.12	1.00	0.21
Range (Max)	3.60	3.94	4.00	28.33	29.75	1.00	0.83	1.00	0.75	1.00	4.00	1.00	2.12	3.40	1.00

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Younger siblings' correlations are located above the diagonal, older siblings' correlations are located below the diagonal. Gender coded as 0 = Girls, 1 = Boys. Immigration status coded as 0 = born in the U.S., 1 = immigrant. Range indicates the sample's minimum and maximum responses.

*
p<.05

GRA gender role attitudes

Table 2

Bivariate correlations, means, and SD for all study variables for male (above the diagonal) and female (below the diagonal) siblings

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
1. Traditional GRA	–	.04	.13*	-.07	-.14*	-.03	.16*	-.12	-.04	.10	.17*	-.14*	-.32*	.32*	.12
2. Feminine interests	-.02	–	.50*	.17*	.01	.09	.11	.05	.04	.08	.06	-.13*	-.01	.08	.09
3. Masculine interests	.07	.44*	–	-.03	.13*	.08	.08	-.09	.02	.01	.05	.00	-.10	.19*	.01
4. Feminine leisure activities	.03	.18*	.07	–	-.03	.03	.10	.08	.08	-.11	.04	.02	.15*	-.11	.11
5. Masculine leisure activities	-.20*	.03	.13*	-.07	–	-.05	-.07	-.02	.32*	-.03	-.15*	.03	.13*	-.11	-.09
6. % Females siblings	-.09	-.04	-.01	-.03	.02	–	-.12	-.04	.02	.00	-.02	-.05	.09	-.05	.08
7. % Free time with siblings	.30*	.11	.12	.02	-.01	.15*	–	-.12	-.37*	.29*	.13*	-.30*	-.21*	.26*	.01
8. % Females friends	.00	.17*	-.01	.00	.01	.11	.09	–	.07	-.07	-.04	.10	.14*	-.09	.00
9. % Free time with siblings	-.29*	.00	.02	.16*	.15*	.04	-.36*	-.13*	–	-.12	-.10	.10	.08	-.10	.05
10. Sibling	.13*	.01	.11	-.11	.06	-.03	.24*	.11	-.22*	–	-.03	-.41*	-.03	.02	.04
11. Pubertal development	.27*	-.16*	-.15*	-.17*	-.22*	-.09	.02	-.09	-.13*	-.15*	–	-.01	-.32*	.28*	.10
12. Immigration status	-.10	.00	-.13*	.07	-.06	-.01	-.28*	-.09	.19*	-.45*	.01	–	.03	-.07	-.06
13. Socioeconomic status	-.37*	.06	.04	.14*	.32*	.12	-.18*	.04	.26*	.03	-.51*	.02	–	-.55*	-.09
14. Parents' traditional GRA	.37*	-.01	-.02	.11	-.28*	-.12*	.09	-.01	-.08	-.02	.34*	.02	-.55*	–	.17*
15. Parents' division of labor	.09	-.04	.04	.09	-.10	-.08	.02	-.14*	.05	-.04	.21*	.02	-.19*	.29*	–
Male sibling															
M	2.23	2.42	3.05	3.57	6.81	0.37	0.40	0.10	0.23	0.50	0.41	2.41	-0.05	2.05	0.67
SD	0.48	0.44	0.50	4.09	5.37	0.27	0.19	0.19	0.15	0.50	0.49	0.62	0.81	0.51	0.19
Range (Min.)	1.00	1.41	1.38	0.00	0.00	0.20	0.02	0.17	0.00	0.00	0.00	1.20	-2.12	1.00	0.21
Range (Max.)	3.50	4.00	3.63	26.50	20.87	1.00	0.83	1.00	0.65	1.00	1.00	4.00	2.12	3.40	1.00
Female sibling															
M	2.07	2.93	2.42	5.19	2.24	0.65	0.41	0.88	0.21	0.50	0.43	2.99	0.04	2.02	0.68
SD	0.58	0.43	0.47	4.99	2.92	0.28	0.20	0.19	0.15	0.50	0.50	0.56	0.86	0.50	0.19
Range (Min.)	1.00	1.29	1.38	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	1.00	-1.93	1.00	0.22
Range (Max.)	3.60	3.76	4.00	28.33	29.75	0.88	0.87	0.83	0.75	1.00	1.00	4.00	1.71	3.40	1.00

Female siblings' correlations are located above the diagonal, male siblings' correlations are located below the diagonal. Sibling is coded as 0 = Older, 1 = Younger. Immigration status coded as 0 = born in the U.S., 1 = immigrant. Range indicates the sample's minimum and maximum responses.

*
p<.05

GRA gender role attitudes

Table 3

Two-intercept multilevel moderation models predicting younger and older adolescents' traditional gender role attitudes (GRA) and masculine role orientations

	Traditional GRA				Masculine Interests				Masculine leisure activities			
	Younger sibling		Older sibling		Younger sibling		Older sibling		Younger sibling		Older sibling	
	γ	SE	γ	SE	γ	SE	γ	SE	γ	SE	γ	SE
Intercept	2.00***	(0.20)	2.32***	(0.27)	2.66***	(0.22)	2.58***	(0.26)	0.90***	(0.31)	1.15**	(0.41)
Individual level controls												
Gender (0 = Girls, 1 = Boys)	0.19	(0.15)	0.02	(0.14)	0.40**	(0.16)	0.47***	(0.15)	0.70***	(0.23)	0.70***	(0.22)
Immigrant (0 = US-born 1 = Immigrant)	0.15*	(0.07)	0.04	(0.07)	−0.01	(0.07)	−0.10	(0.07)	−0.09	(0.10)	−0.09	(0.11)
Pubertal development	0.03	(0.05)	−0.09	(0.07)	−0.06	(0.06)	−0.02	(0.07)	0.03	(0.08)	0.00	(0.11)
Family level controls												
Socioeconomic status	−0.09*	(0.05)	−0.06	(0.05)	−0.05	(0.05)	−0.01	(0.05)	0.16*	(0.07)	0.10	(0.08)
Parents' traditional GRA	0.20**	(0.07)	0.31***	(0.08)	0.03	(0.08)	0.12	(0.08)	−0.07	(0.11)	−0.12	(0.12)
Parents' division of labor	−0.05	(0.16)	0.08	(0.18)	0.10	(0.17)	0.01	(0.17)	0.16	(0.24)	−0.22	(0.27)
Sibling network characteristics												
% Females in sibling network	0.01	(0.11)	−0.07	(0.12)	−0.02	(0.11)	−0.04	(0.13)	−0.06	(0.16)	−0.27	(0.19)
% Free time spent with siblings	0.09	(0.17)	0.64***	(0.20)	0.09	(0.18)	0.89***	(0.28)	0.09	(0.25)	0.77**	(0.31)
% Female sibs × time with sibs							−1.57*	(0.67)				
Gender × female sibs												
Gender × time with sibs							−1.24**	(0.43)				
Gender × female sibs × time with sibs												
Friendship network characteristics												
% Females in friend network	0.04	(0.16)	−0.14	(0.16)	−0.11	(0.17)	−0.21	(0.16)	−0.15	(0.24)	−0.35	(0.25)
% free time spent with friends	−0.17	(0.22)	−0.20	(0.23)	0.86*	(0.34)	0.35	(0.22)	0.99***	(0.33)	0.87*	(0.36)
% Female friends × time with friends	−1.21**	(0.47)										
Gender × female friends												
Gender × time with friends					−0.99*	(0.45)						
Gender × female friends × time with friends												

| | Traditional GRA | | | | Masculine Interests | | | | Masculine leisure activities | | | |
| | Younger sibling | | Older sibling | | Younger sibling | | Older sibling | | Younger sibling | | Older sibling | |
	γ	SE	γ	SE	γ	SE	γ	SE	γ	SE	γ	SE
R^2	.17		.25		.26		.37		.31		.34	

Gender estimates indicate the difference between girls' (the reference group) and boys' estimates. Bolded estimates indicate younger and older siblings significantly differed at the *p*<.05 level. Models estimated separately by outcome variable

*
p<.05,

**
p<.01,

***
p<.001

GRA gender role attitudes

Table 4

Two-intercept multilevel moderation models predicting younger and older adolescents' feminine role orientations

	Feminine interests				Feminine leisure activities			
	Younger sibling		Older sibling		Younger sibling		Older sibling	
	γ	SE	γ	SE	γ	SE	γ	SE
Intercept	2.77***	(0.20)	3.03***	(0.23)	1.04***	(0.29)	1.17**	(0.44)
Individual level controls								
Gender (0 = Girls, 1 = Boys)	-0.30*	(0.15)	-0.40***	(0.12)	-0.36	(0.21)	-0.10	(0.23)
Immigrant (0 = US-born 1 = Immigrant)	0.02	(0.06)	-0.11	(0.06)	0.00	(0.10)	-0.03	(0.12)
Pubertal development	-0.02	(0.05)	-0.05	(0.06)	0.04	(0.07)	0.02	(0.10)
Family level controls								
Socioeconomic status	0.01	(0.04)	0.00	(0.04)	0.18**	(0.07)	0.16	(0.09)
Parents' traditional GRA	0.05	(0.07)	0.00	(0.07)	-0.02	(0.11)	0.08	(0.14)
Parents' division of labor	0.14	(0.16)	0.07	(0.15)	0.51*	(0.25)	0.57*	(0.30)
Sibling network characteristics								
% Females in sibling network	-0.15	(0.11)	0.11	(0.10)	-0.15	(0.16)	0.14	(0.20)
% Free time spent with siblings	0.16	(0.16)	0.35*	(0.17)	0.35	(0.31)	0.60	(0.32)
% Female sibs × time with sSibs								
Gender × female Sibs								
Gender × time with sibs					0.85*	(0.43)		
Gender × female sibs × time with sibs								
Friendship network characteristics								
% Females in friend network	0.29	(0.16)	0.16	(0.14)	0.09	(0.22)	-0.21	(0.37)
% Free time spent with friends	0.08	(0.21)	0.27	(0.20)	0.48	(0.31)	0.60	(0.87)
% Female friends × time with friends							0.43	(1.98)
Gender × female friends							0.60	(0.51)
Gender × time with friends							-3.68*	(1.61)
Gender × female friends × time with friends							-7.85*	(3.74)
R^2	.21		.32		.14		.05	

Gender moderation estimates indicate the difference between girls' (the reference group) and boys' estimates. Bolded estimates indicate younger and older siblings significantly differed at the *p*<.05 level. Models estimated separately by outcome variable

*
p<.05,

**
p<.01,

***
p<.001

GRA gender role attitudes