NIH Public Access
Author Manuscript
Sex Roles. Author manuscript; available in PMC 2011 July 1.

Published in final edited form as:
Sex Roles. 2009 April ; 60(7-8): 588–599. doi:10.1007/s11199-008-9518-z.

Academic Success of Mexican Origin Adolescent Boys and Girls: The Role of Mothers' and Fathers' Parenting and Cultural Orientation

Larry E. Dumka[1], **Nancy A. Gonzales**[2], **Darya Bonds**[3], and **Roger E. Millsap**[2]

[1] School of Social and Family Dynamics, Arizona State University

[2] Department of Psychology, Arizona State University

[3] Prevention Research Center, Arizona State University

Abstract

To understand the role that Mexican origin parents play in their children's academic success, this study used structural equation modeling to evaluate the associations of parents' parenting practices (warmth, monitoring, harshness, and academic involvement) and cultural orientations (enculturation and acculturation) with their adolescents' grades, classroom behavior, and association with peers who get into trouble at school. Data were obtained from teachers, mothers, fathers, and male and female adolescents in 560 Mexican origin families living in the southwest U.S. Results indicated that mothers' and fathers' parenting practices and cultural orientations were linked to adolescents' academic outcomes. However, there were differences for boys and girls. Results are discussed in relation to parent and adolescent gender roles and implications for intervention.

Keywords

Mexican American; parenting; adolescents; acculturation; enculturation; academic performance

Introduction

Developmental contextual theories have emphasized parents' roles in determining children's proximal developmental contexts (e.g., Lerner, Castellino, Terry, Vilarruel, & McKinney, 1995). Developmental contexts include social and physical settings (e.g., family interactions, peer exposure, neighborhood residence, school environments), culturally influenced interactions (e.g., parents' language use, customs, gender roles), and caretaker characteristics (e.g., parents' education, income). In addition, cultural adaptation theories have highlighted the ways in which family members' cultural orientations may influence children's adjustment (e.g., Szapocznik & Kurtines, 1993). The purpose of this study was to evaluate the relations between processes operating in Mexican origin adolescents' families living in the U.S. (parenting practices, parents' cultural orientations, parents' SES) and adolescents' academic outcomes (grades, classroom behavior, and association with peers who get in trouble at school). These relations were assessed when adolescents were in 7th grade and had just made the transition to middle school, a time of heightened risk for disengagement from school (Rumberger, 1995).

This article may not exactly replicate the final version published in the journal. It is not the copy of record.

NIH-PA Author Manuscript
NIH-PA Author Manuscript
NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

Latinos represent the largest ethnic minority group in the U.S. (14.5%) and by 2050 are estimated to comprise 24% of the U.S. population (Pew Hispanic Center, 2007). Unfortunately, Latino youth in the U.S. drop out of school at substantially higher rates than other groups (22% as compared to 10% for African Americans and 6% for White non-Latinos; U.S. Department of Education, 2007). Approximately 64% of Latinos in the U.S. are of Mexican origin (Pew Hispanic Center, 2007). The term *Mexican origin* is used here to refer to those of Mexican national origin living in the U.S. including both immigrants and those born in the U.S. Given the significant growth in the Mexican origin population in the U.S. and the enormous negative effects of dropout on human capital and mental health, it is critical to identify modifiable influences on academic success for Mexican origin adolescents (Hess, 2000). Results of such studies also may inform research in other countries experiencing similar demographic and education trends.

Mexican origin parents' influence on their children's school performance may be diminished due to a number of circumstances. For instance, Mexican origin parents, many of whom are immigrants, are more likely to be poor and live in low-income neighborhoods with greater exposure to deviant peers and schools lacking resources to meet their children's needs (U.S. Census Bureau, 2002). They also are more likely to have lower education levels and fewer resources to promote their children's academic achievement including knowledge of school dynamics in the U.S. and effective school involvement strategies. In the face of heightened risks for school failure, it is critical to understand the role that Mexican origin parents play in their children's academic success.

Parenting and Academic Performance

Research has indicated possible links between parenting and adolescents' academic performance through a number of processes. Poor quality parenting (e.g., harshness, low warmth and inadequate monitoring) increases the likelihood of children developing uncooperative and antisocial behavior (Patterson, Reid, & Dishion, 1992). When problem behavior is exhibited in the classroom, it has been linked to deficient grades and increased association with peers who also have problems at school. Association with problem peers, in turn, influences classroom behavior and academic performance likely through peer social constraints and negative academic modeling (Santor, Messervyey, & Kusumakar, 2002).

The majority of previous research on the relationship between parenting and adolescents' academic performance has focused on aggregates of parenting practices (DeBaryshe, Patterson, Capaldi, 1993) and parenting styles (Dornbusch, Ritter, Leiderman, Roberts, & Fraliegh, 1987) rather than on specific parenting practices. Some research has indicated possible differences in the links between aggregate parenting styles and academic outcomes for various ethnic groups. Dornbusch et al. (1987), for example, found that an authoritarian parenting style (emphasizing strictness, unquestioned respect for parental authority, and obedience) and permissive parenting (with its low demands and behavioral control) had significant negative relations with grades for Whites. However, for Hispanics, authoritarian and permissive parenting styles were not significantly related to grades. Consequently, studying specific parenting practices may be especially important for Mexican origin families because such research has the potential to identify practices that are most facilitative of processes related to their adolescents' academic success.

Interestingly, when specific practices comprising parenting styles have been studied, these practices sometimes have been found to make unique contributions to different aspects of adolescent adjustment. For example, Gray and Steinberg (1999) found that, of the three components of an authoritative parenting style, parental acceptance-involvement (components of the warmth dimension of parenting) and psychological autonomy granting had stronger relationships to adolescents' academic competence (measured as an aggregate

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

of academic self-competence and self-reported GPA) than parents' behavioral control practices (e.g., consistent discipline). On the other hand, the behavior control practices component had the strongest relations with adolescents' behavior problems.

Only a few studies have examined links between specific parenting practices and Mexican origin adolescents' academic performance. DeGarmo and Martinez (2006) found a positive relationship between parents' supportiveness (a component of parental warmth) and adolescents' GPAs. Parenting acceptance (also similar to warmth) has been found to be related to higher student GPAs and lower levels of risky behavior and peer delinquency (Updegraff, McHale, Whiteman, Thayer, & Crouter, 2006). Results of a study by Rodriguez (2002) indicated that Mexican origin parents' monitoring and involvement in schooling was positively linked to students' self-reported grades. Also, Keith and Lichtman (1994) found a positive relationship between parents' involvement in schooling and 8th graders' achievement test scores. Although harsh parenting has been linked to behavior problems in Mexican origin youth (Hill, Bush, & Roosa, 2003; Caples & Barrera, 2006), no studies were found linking harsh parenting to adolescents' grades or association with deviant peers.

Parents' Cultural Orientation, Education, and Income

Cultural orientation refers to "the degree to which a person is oriented or connected to the members, beliefs, and values of a particular cultural group and to the members of other groups with which they have contact" (Phinney et al., 1990). Cultural orientation is increasingly viewed as being comprised of two distinct processes. *Acculturation* refers to the processes of immigrants' adapting to the host majority culture whereas *enculturation* refers to maintaining aspects of one's culture of origin (Gonzales, Knight, Morgan-Lopez, Saenz, & Sirolli, 2002). Thus, Mexican origin parents can be characterized as having differing levels of adaptation to both their ethnic culture and to the majority U.S. culture (Cuellar, Arnold, & Maldonado, 1995). This contributes to significant diversity among Mexican origin families.

To date, most research studying the relationship between cultural orientations and adolescent adjustment in Mexican origin families has focused on adolescents' cultural orientations. However, parents' cultural orientations may influence their children's academic performance in a number of ways (Fuligni & Fuligni, 2007). More highly enculturated Mexican origin parents in the U.S. may be more likely to promote child characteristics valued in their culture of origin including hierarchical parent-child relations, respect, and politeness. Such parents may also be more likely to maintain a deferential distance from teachers, refraining from questioning teachers' authority or trying to do the teacher's job. On the other hand, more highly acculturated parents may integrate more child centered attitudes indicative of the majority culture including greater tolerance of adolescent independence. More highly acculturated parents may also be more likely to speak English at home and be more responsive to teachers' expectations for parental involvement in adolescents' education. Thus, parents' enculturation and acculturation levels may influence adolescents' in-class behavior, peer associations, and grade performance in a variety of ways. However, the impact of both enculturation and acculturation on adolescents' academic performance is highly understudied. This study extends the literature by examining these relations.

Previous research has consistently linked parents' low socioeconomic status, such as education level and income, to children's poor academic performance. Parents' with lower educational levels and income have fewer resources to support children's academic performance (Fuligni & Yoshikawa, 2003). Mexican origin parents, many of whom are immigrants, are more likely to have lower education levels and work at lower wage jobs than U.S. born parents (Updegraff et al., 2006). They are also more likely to work longer and non-standard hours at jobs that are physically demanding. Low education and

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

unfavorable work conditions may reduce parents' ability to positively influence their adolescents' school related behavior.

Gender

Gender may be an especially important factor in structuring parents' and children's roles and responsibilities in Mexican origin families (Bulcroft, Carmody, & Bulcroft, 1996; Valenzuela, 1999). For example, although gender- based divisions of family labor exist in both U.S. and Mexican cultures, Latino families are more likely to regard parenting primarily as the mothers' sphere (Toth & Xu, 1999). To the degree that mothers are more involved in parenting, they may have more opportunity to influence both daughters' and sons' academic outcomes than fathers. At the same time, mothers and fathers appear to exercise an increased sense of responsibility for the socialization of their same-sex children, especially during the transition to adolescence (Crouter, Manke & McHale, 1995). Moreover, at this developmental stage, sons and daughters also may be more receptive to their same-sex parent's involvement and may actively discourage their opposite-sex parent's involvement (Crouter et al., 1995). Fathers, in particular, are more involved in parenting their sons than their daughters (Pleck, 1997). This evidence suggests that fathers' parenting might be more strongly related to sons' academic outcomes than to daughters'.

With regard to gender role socialization, Mexican origin families have been shown to have greater gender differentiation in children's chores than European American families (Azmitia, Cooper, Garcia & Dunbar, 1996). Also, Mexican origin parents, especially fathers, tend to grant greater autonomy to sons than daughters (Formoso, Ruiz, & Gonzales, 1997; Updegraff, 2000). Sons' greater autonomy may permit more latitude for exposure to deviant peer models and the development problem behavior. In fact, previous research with Mexican origin adolescents (Dumka et al., 1997; Updegraff et al., 2006) has found that girls tend to exhibit lower levels of problem behavior and achieve higher grades compared to boys. In sum, previous research indicates a need to evaluate how mothers' and fathers' parenting practices and cultural characteristics may be related differently to academic outcomes for Mexican origin boys and girls.

The hypotheses for the present study are based on developmental and cultural theories, and the very limited empirical research with Mexican origin families, that for the most part has not accounted for parent or adolescent gender. We hypothesized that mothers' and fathers' warmth would be positively linked to adolescents' GPA and negatively related to problem classroom behavior and problem peer association; parental harshness would be positively related to problem classroom behavior; and parents' academic involvement would be positively related to GPA. Additional paths included in the hypothesized model in Figure 1 were inferred from research with non Mexican origin families or from propositions in the literature. Finally, we expected that fathers' parenting practices and cultural orientations might show more significant relations with sons' academic outcomes than with daughters'.

Method

Participants

Participants were 560 Mexican origin 7th graders and their parents recruited in three cohorts (2003, 2004, 2005). Students were attending five middle schools located in the central Phoenix area. These schools served families who were primarily Mexican origin (82%) and lower income (80% were enrolled in free or reduced lunch programs). Both English dominant and Spanish dominant families were randomly selected from school rosters. To be eligible, the 7th grader and at least one parent figure had to identify as Mexican origin and be

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

able to participate in assessments in the same preferred language. Of eligible families, 75% agreed to enroll in the study.

Regarding the adolescents, 50.2% were female; 49.8% were male. Their ages ranged from 11 to 14 years, with an average age of 12.3 years (SD= .55). Of these adolescents, 78.2% were born in the U.S. and 21.8% were born in Mexico (average years of residence in the U.S. was 7.0, SD= 3.7); 53.4% were assessed in Spanish and 46.6% in English; 82.8% lived in two-parent families and 17.2% lived in one-parent families.

Only Mexican origin parents were included in analyses (560 mothers and 318 fathers who completed assessments). In 97.3% of the two-parent families, both parents were of Mexican origin (2.3% of mothers and 3.5% of fathers were paired with non-Mexican origin partners). Only 5.7% (n= 32) of the mother figures were not the adolescents' biological mother (9 stepmothers, 2 sisters, 8 maternal grandmothers, 7 paternal grandmothers, and 6 aunts). Of the mothers, 37.3% were born in the U.S., 62.0% in Mexico, and 0.7% in another foreign country (average years of foreign born mothers in the U.S was 14.7; SD= 8.0); 54.8% were assessed in Spanish; 45.2% in English. The average age of mothers was 37.5 years (SD= 6.7). Mothers' mean education level was 9.8 years (SD= 3.6; 59.3% did not graduate high school; 16.8% were high school graduates, 13.1% had some college or vocational school experience, 10.8% held vocational, associate, college, or advanced degrees). Of the fathers, 26.5% were born in the U.S.; 71.7% were born in Mexico and 1.8% in another foreign country (average years of foreign born fathers in the U.S was 19.0; SD= 10.1); 60.4% were assessed in Spanish and 39.6% in English. Of the father figures, 17.9% (n= 57) were not the adolescents' biological father (49 stepfathers, 1 brother, 1 brother-in-law, 3 maternal grandfathers, and 3 uncles). The average age of fathers was 39.3 years (SD= 7.3); mean education level was 9.9 years (SD= 3.7); 56.1% did not graduate high school, 19.4% were high school graduates, 14.8% had some college or vocational experience, 9.6% held vocational, associate, college, or advanced degrees. The median household income was $32,698 (English dominant $38,488; Spanish dominant $30,000).

Procedures

Families were recruited via mail and telephone from school rosters. In-home assessments were scheduled and conducted by staff using laptop computers. Parent and adolescent assessments were conducted in separate rooms or out of the hearing of other family members. Project staff read each question and possible responses aloud to reduce problems associated with variation in literacy levels. Each family member who completed an assessment received $30. In two-parent households, some second parents chose not to participate in the study. Teachers were mailed questionnaires regarding students' behavior and paid $5 for each completed survey. Response rates were over 90% for teachers' reports.

Measures

Measures with no or inadequate Spanish versions were translated and back translated by separate bilingual, Mexican origin native Spanish speakers in accordance with current recommendations by Foster and Martinez (1995). Inconsistencies were resolved by a panel of experts. Teachers completed measures in English. To maximize equivalence when combining English and Spanish assessments, measures were evaluated statistically for invariance across the language groups. Following guidelines by Meredith (1993), we conducted a sequence of nested multiple-group confirmatory factor analyses (using Mplus Version 3.1; Muthén & Muthén, 1998) to meet increasingly constrained levels of invariance (configural, metric, strong, and strict). Items that did not at least fulfill metric invariance (i.e., invariant loadings) were dropped.

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

Education and income—Male and female parent figures reported on their highest level of educational attainment level (approximate years of education ranging from 0 -no schooling to 20 - advanced graduate degrees). Parents' reported the cumulative annual income of their household.

Cultural orientation—Mexican origin parents reported on their Mexican and American orientations using the Acculturation Rating Scale for Mexican Americans – II (Cuellar, Arnold, & Maldonado, 1995). The instrument is composed of a 17-item Mexican orientation subscale (α = .89 for mothers; α = .87 for fathers) and a 13-item Anglo orientation subscale (α = .95 for mothers; α = .93 for fathers) with items reflecting primarily behavioral indicators of *acculturation* and *enculturation* such as language use and ethnic behavioral practices. Respondents indicated on a 5-point scale (1 not at all to 5 extremely often or almost always) how often they do things in English and Spanish and participate in activities with people of American and Mexican origin.

Warmth—Parents reported on four parenting practices (*warmth, monitoring, harsh parenting, and academic involvement*) using a frequency scale ranging from 1 (almost never or never) to 5 (almost always or always). Warmth was assessed by aggregating items from four subscales due to the high intercorrelations between these scales. The first subscale, Acceptance (8 items), was adapted from the Acceptance subscale of the original Children's Reports of Parents' Behavior Inventory developed by Schaefer (1965). An example item is "I saw [target child's] good points more than his/her faults". The second subscale, Attachment (7 items), was adapted from the parent items of the Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987). An example item is "I respected [target child's] feelings". The third subscale, Reinforcement (11-items) was developed for the present study to assess verbal expressions of appreciation, affection, encouragement, and giving tangible rewards. An example item is "I complimented [target child]) for doing something well". The fourth subscale, Personal Involvement (4 items), was adapted from the Parent Solicitation subscale developed by Stattin and Kerr (2000). An example item is "I spent time with [target child] or did things with him/her alone". Reliabilities for the composite scale were α = .96 for mothers and α = .97 for fathers.

Monitoring was assessed with 7 items adapted from Small and Kern's (1993) Parental Monitoring scale and primarily assessed parents' knowledge of their adolescents' activities. An example item is "I knew what [target child] was doing after school" (α = .78 for mothers; α = .82 for fathers).

Harsh parenting (5 items) was drawn from a scale used by Caples and Barerra (2006) to measure harsh or punitive actions aimed at demonstrating parents' superior position. Example items are "I spanked or slapped [target child's name] when he/she did something wrong"; "I got so mad at [target child's name] I called him/her names" (α = .67 for mothers; α = .63 for fathers).

Academic involvement was assessed with a 4-item At-Home Emphasis scale, developed for this study. The scale assesses parents' focusing on the importance of adequate school performance at home. An example item is "I told [target child] that doing well in school was important". Reliabilities were α = .63 for mothers and α = .76 for fathers.

Problem classroom behavior—Math and language arts teachers reported on adolescents' disruptive behavior using the Non-Participatory Behavior subscale (4-items; α = .88) of the Student Participation Questionnaire developed by Finn, Folger, and Cox (1991). Teachers rated items on a frequency scale ranging from 1 (never) to 5 (always). Items included: "Needs to be reprimanded", "Annoys or interferes with peers' work", "Acts

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

restless, is often unable to sit still", and "Talks with classmates too much". To maximize measurement validity, each teacher's report was treated as an indicator of a latent variable.

Problem peer association—A 4-item scale (α = .81), adapted from instruments used by Dishion, Patterson, Stoolmiller, and Skinner (1991) and Huizinga, Esbensen, and Weiher (1991), was employed to assess the degree to which adolescents associated with peers who misbehaved or got into trouble at school. Adolescents reported on the number of their peers who had "Cheated on school tests"; "Got suspended from school"; "Missed school without an excuse"; and "Got in trouble at school". Responses ranged from 1 (none) to 5 (almost all).

Grade point average—School districts reported students' GPAs on a 13-point scale (ranging from 1 Fail to 13 A+). GPAs were calculated by averaging grades from the first two quarters of the 7th grade year.

Results

Bivariate relations between study variables, means, and standard deviations are displayed in Table 1 for mothers and Table 2 for fathers (each separated for boys and girls). We used Mplus 3.1 (Muthén & Muthén, 1998) to test the hypothesized model using the structural equation modeling approach to path analysis with observed and latent variables (Schumacker & Lomax, 1996). The advantage of simultaneous regression analyses using SEM is that this strategy estimates paths between variables after the effects of all other paths in the model have been accounted for. Thus, significant paths are salient in the context of the entire model. Missing data were assumed to be Missing at Random (MAR), thus, we used the FIML estimator. FIML uses all available data to calculate maximum likelihood-based means and covariance matrices.

Preliminary Analyses

Based on previous evidence showing gender differences in academic outcomes (Updegraff et al., 2006), we first evaluated the relationship of adolescent gender to the dependent variables and found that gender was significantly related to classroom behavior problems in both mothers' and fathers' models. We followed up by testing for moderation of the model by gender using a multiple group analysis to test the equivalence of the models for boys and girls. Results indicated the models were non equivalent justifying testing separate models for boys and girls. We also tested for interactions between each of the four parenting practices and enculturation, acculturation, and parent education predicting each of the three academic outcomes. Out of the total of 144 interaction terms tested in the four models, only seven were significant at $p < .05$ (i.e., less than 5%), a rate indicating these interactions could have been significant by chance. Also, the few significant interactions were scattered across variables with no discernable trends meriting the inclusion of any particular term in any of the models. Finally, we tested whether one- and two-parent status, legally married vs. cohabitation, and (for mothers' models only) father participating vs. not participating were related to adolescents' academic outcomes in the models. None of these was found to be significant and so these variables were not included in the final models.

Tests of Models

We conducted two multiple group SEM analyses to test the hypothesized model for mothers of boys and girls, and fathers of boys and girls separately. The results of the model for mothers' parenting for girls and boys are depicted in Figure 2 (χ^2 (20) = 20.11, p = .45; CFI = 1.00; RMSEA = .01; SRMR = .02); the results of the model for fathers' parenting for girls and boys are presented in Figure 3 (χ^2 (20) = 29.02, p = .09; CFI = .94; RMSEA = .05;

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

SRMR = .03). The independent variables were permitted to intercorrelate, as were the dependent variables. The paths between all independent and dependent variables were estimated. For ease of interpretation, Figures 2 and 3 show only the paths with significant standardized path coefficients ($p < .05$) after the effects of all other paths in the model were accounted for. Overall, after accounting for parents' education and income, various parenting practices and cultural orientations of Mexican origin mothers and fathers showed significant relations with boys' and girls' academic outcomes. The model for mothers demonstrated significant paths for both girls and boys whereas the model for fathers showed significant paths only for boys. Fathers' models accounted for more variation in boys' problem classroom behavior and problem peer association compared to girls' classroom behavior. Also, the fathers' models accounted for more variation in boys' GPAs, problem classroom behavior and association with problem peers than did the mothers' model.

The results provided partial support for proposed hypotheses pertaining to parenting. We had hypothesized that parental warmth would be related to all three academic outcomes for both parents. After accounting for all other parenting practices and parent characteristics in the models, the only significant path was between fathers' warmth and lower problem classroom behavior for boys. Only fathers' monitoring was related to less problem classroom behavior for boys. As hypothesized, for both mothers and fathers, harshness was related to higher levels of problem classroom behavior but only for boys. Fathers' harshness was also related to more association with problem peers for boys. For girls, mothers' harshness was related to higher levels of problem peer association but also, surprisingly, to better GPA's. There were also no significant paths linking academic involvement with any of the academic outcomes.

Regarding parents' cultural orientations, mothers' enculturation was associated with girls' higher GPA's, whereas both mothers' and fathers acculturation was related to boys' greater problem classroom behavior and association with problem peers. Mothers' reports of higher family income were related to less problem peer association for boys, whereas fathers' higher education levels were related to less problem classroom behavior for boys.

Discussion

The purpose of this study was to evaluate links between Mexican origin mothers' and fathers' parenting practices and cultural orientations, and adolescents' academic success. This study also examined differences in these links related to parent and adolescent gender. Our results point to factors that may contribute to academic success within this ethnic group. Our analysis strategy estimated paths over and above other processes operating in the models, including parents' education and income levels.

Our results indicate that Mexican origin mothers *and* fathers have potentially important roles to play in influencing their teens' school success. At the same time, there were differences in the patterns of these relations for girls and boys. One notable difference was that there were significant paths between mothers' parenting (specifically harshness) and academic outcomes for both girls' and boys' whereas the significant paths for fathers were entirely for boys. These results could reflect Mexican origin mothers' greater day to day responsibility for parenting compared to fathers (Toth and Xu, 1999). Also, fathers' models accounted for more variation in all three academic outcomes for sons' compared to mothers' models and fathers' models accounted for more variation in sons' problem behavior and problem peer association compared to daughters'. These results may be a function of fathers' greater involvement in parenting sons compared to daughters at this developmental stage (Pleck, 1997). It is also possible that boys may have been more inviting and girls more discouraging of fathers' involvement at this stage (Crouter et al., 1995).

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

Parenting Practices

In the context of the other parenting practices, it seems that mothers' and fathers' harshness may have played a particularly influential role in turning Mexican origin adolescents towards problematic school behavior and relationships with problem peers. At the same time, it is noteworthy that a significant positive association was found between mothers' harshness and girls' higher school grades. In the context of the other parenting practices, perhaps harshness signaled that mothers were serious in expecting their daughters to apply themselves in school. Alternatively, mothers' harshness may have been perceived by some daughters as evidence of caring about their future and functioned to increase girls' academic conscientiousness. This unexpected result reveals how parenting practices may operate differently for Mexican origin families living in higher risk circumstances. This result also indicates the need for future research to examine more fine-grained and culturally informed distinctions among parental harshness, strictness, caring, and academic motivational practices.

In the context of other parenting practices, fathers' warmth appeared to be particularly salient for boys' classroom behavior. From a social learning perspective (Bandura, 1985), fathers' prosocial modeling of warmth may have shaped their sons' prosocial classroom behavior. Also, fathers' warmth may have contributed to a positive emotional bond with their sons which, in turn, may have increased sons' motivation to fulfill their fathers' prosocial expectations.

Our findings also support the potential positive influence of fathers' monitoring (in terms of parents' knowledge of adolescents activities) on sons' association with problem peers. Fathers' relationships with their sons have been characterized as more peer-like and leisure oriented than mothers' (Parke & Buriel, 1998) and so fathers' may have been particularly attuned to monitoring their sons' peer relations. At this developmental stage, fathers' admonitions regarding peers also may be more credible and influential with boys compared to similar warning from mothers.

Contrary to expectation, school involvement was not linked to academic outcomes in any of the models. Meta-analyses have indicated an overall small to moderate positive relationship between parental school involvement and adolescents' academic achievement (Fan & Chen, 2001; Jeynes, 2003). However, some studies have found a negative relationship perhaps because parents' school involvement was instigated in response to students' school problems (Catsambis, 2001; Sui-chu Ho & Willms, 1996). Unfortunately, the measure of school involvement used in this study did not distinguish parents' reasons for their involvement. It is also possible that in the context of other, more critical parenting practices (e.g., warmth, harshness, and monitoring) school involvement does not have a significant impact on academic outcomes in Mexican origin families.

Parents' Cultural Orientations

Our analyses permitted simultaneous evaluation of the unique relations of parents' enculturation *and* acculturation to academic outcomes. This was an important strength of the study as it helps to clarify how the dual processes of adapting to U.S. majority culture and retaining traditional Mexican culture may operate simultaneously to influence adolescents' school success.

Our results indicated that mothers' enculturation was related to daughters' higher grades. Clearly, mothers' greater use of Spanish and orientation toward traditional Mexican culture did not undermine daughters' school success, as has sometimes been suggested, but rather appears to have functioned as a promotive influence. One explanation for this link pertains to the importance that traditional Mexican origin parents place on supporting, assisting, and

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

taking into account the needs and wishes of the family (Fuligni, 2001). This emphasis on family obligation has been linked to increased academic motivation among immigrant youth perhaps because these youth are likely to view their school success as a way to honor their parents' investment and a means by which they can eventually support and assist the family (Suárez-Orozco & Suárez-Orozco, 1995). Also, when mothers retain a strong orientation towards traditional family values, adolescent girls might spend more time focused on family needs and activities and less time in peer-oriented activities that increase their susceptibility to influence by deviant peers (Fridrich & Flannery, 1995; Samaniego & Gonzales, 1999).

More noteworthy was that, after accounting for enculturation levels and parenting practices, mothers' and fathers' higher acculturation levels were related to more problem classroom behavior and problem peer association for both boys and girls. Although most prior research has focused on the acculturation levels of adolescents and not parents, the results of this study are consistent with accumulating evidence that acculturation to mainstream U.S. culture increases adolescents' risk for problem behavior (Gonzales et al., 2002). The mechanisms underlying this phenomenon are likely varied. For example, more acculturated parents may decrease their emphasis on respecting authority figures and *bien educado* (appropriate behavior) as they adopt American norms that promote individualism, self-direction, and assertiveness (Raffaelli, Carlo, Carranza, & Gonzalez-Kruger, in press). There is also evidence that parents' increased acculturation is associated with more family conflict and less emphasis on *simpatia* or harmonious interpersonal relationships (Flores, Tschann, VanOss Marin, & Pantoja, 2004). In addition, more acculturated parents are less likely to be immigrants and thus place less emphasis on adolescents' obligations to the family in response to parental sacrifice. Together, these parental tendencies may contribute to greater latitude for sons and daughters to engage in disruptive behaviors, associate with peers of their choosing, and, in general stray from "the good path" (Azmitia & Brown, 2002). More research is needed to examine these possible explanations given the growing number of immigrant youth at risk for diminished academic success as their families adapt to life in the U.S.

Fathers' higher education levels were associated with less problem classroom behavior for sons. Perhaps fathers with higher education were more effective in communicating the value of education to their sons. Conversely, sons may have been more open to messages regarding the value of education from fathers with higher education levels. Alternatively, fathers with higher education levels may have modeled the payoffs that higher levels of education produce which, in turn, may have increased sons' motivation to cooperate in the classroom. Finally, mothers' reports of higher family income were associated with sons' lower association with problem peers. It is possible that families with higher incomes were more likely to live in neighborhoods with a lower prevalence of problem peers.

In sum, this study makes a number of important contributions. First, it provides support for the potential role of specific parenting practices of Mexican origin mothers and fathers in adolescents' academic success. Second, the results indicate that mothers' and fathers' cultural orientations are significantly related to academic success. Third, our findings suggest that the roles mothers' and fathers' play in exercising these influences are likely different for adolescent sons compared to daughters. Confidence in these findings is increased due to the use of different reporters for key variables and employing measures refined to be invariant across language groups.

At the same time, the cross-sectional nature of the study represents a limitation. Lack of longitudinal research on the influence of parents' practices and cultural orientations on academic outcomes in Mexican origin families is a weakness in the field. Our findings, some of which are consistent with previous research, some of which are novel, are only

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

suggestive of potential causal relations and require replication and testing in longitudinal designs. Also, our sample of families was drawn from lower income neighborhoods with a high density of Mexican origin families and may not be generalizable to Mexican origin families living in different circumstances.

Despite these limitations, our results have implications for developing interventions aimed at improving the academic success of Mexican origin adolescents at risk for school disengagement. Interventionists should consider the potential benefits of recruiting Mexican origin fathers as well as mothers into parenting interventions by emphasizing the important role that fathers play, particularly with their sons. Our findings also suggest that interventions should address parents' capacities to express warmth (especially fathers' warmth with sons), provide appropriate monitoring, and especially reduce harshness. At the same time, Mexican origin parents may benefit from assistance in making culturally appropriate distinctions between adaptive strictness and maladaptive harshness and between proactive and reactive involvement in their adolescents' schooling. This study represents an important step in understanding the ways in which Mexican origin parents living in predominantly Mexican origin low-income neighborhoods can potentially contribute to their adolescents' academic success. Future longitudinal studies are needed to confirm these results and to identify additional factors and processes contributing to academic success for Mexican origin adolescents.

Acknowledgments

We are grateful to the families who participated in this project and to the following districts and middle schools who collaborated: Cartwright School District, Phoenix Elementary District #1, Marc T. Atkinson, Desert Sands, Frank Borman, Estrella, and Phoenix Preparatory Academy middle schools. This research was supported by NIMH grant R01-MH64707 to fund a randomized, controlled trial of a preventive intervention for Mexican American adolescents, NIMH grant 5-P30-MH39246-13 to fund a Preventive Intervention Research Center at Arizona State University, and the Cowden endowment to the School of Social and Family Dynamics at ASU.

References

Armsden GC, Greenberg MT. The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. Journal of Youth and Adolescence. 1987; 16:427–454.

Azmitia, M.; Brown, JR. Latino immigrant parents' beliefs about the "Path of Life" of their adolescent children. In: Contreras, JM.; Kerns, KA.; Neal-Barnett, AM., editors. Latino children and families in the United States: Current research and future directions. Westport, CT: Praeger; 2002. p. 77-105.

Azmitia M, Cooper CR, Garcia EE, Dunbar N. The ecology of family guidance in low-income Mexican-American and European-American families. Social Development. 1996; 5:1–23.

Bandura, A. Social foundations of thought and action: A social cognitive theory. NY: Prentice-Hall; 1985.

Caples H, Barrera M Jr. Conflict, support, and coping as mediators of the relation between degrading parenting and adolescent adjustment. Journal of Youth and Adolescence. 2006; 35:603–615.

Catsambis S. Expanding knowledge of parental involvement in children's secondary education: Connections with high school seniors' academic success. Social Psychology in Education. 2001; 5:149–177.

Crouter AC, Manke B, McHale SM. The family context of gender intensification in early adolescence. Child Development. 1995; 66:317–329. [PubMed: 7750368]

Cuellar I, Arnold B, Maldonado R. Acculturation Rating Scale for Mexican Americans-II: A revision of the original ARSMA scale. Hispanic Journal of Behavioral Sciences. 1995; 17:275–303.

DeBaryshe BD, Patterson GR, Capaldi DM. A performance model for academic achievement in early adolescent boys. Developmental Psychology. 1993; 29:795–804.

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

DeGarmo DS, Martinez CR. A culturally informed model of academic well-being for Latino youth: the importance of discriminatory experiences and social support. Family Relations. 2006; 70:1231–1245.

Dishion TJ, Patterson GR, Stoolmiller M, Skinner ML. Family, school, and behavioral antecedents to early adolescent involvement with antisocial peers. Developmental Psychology. 1991; 27:172–180.

Dornbusch SM, Ritter PL, Leiderman H, Roberts DF, Fraliegh MJ. The relation of parenting style to adolescent school performance. Child Development. 1987; 58:1244–1257. [PubMed: 3665643]

Dumka L, Roosa M, Jackson K. Risk, conflict, mothers' parenting, and children's adjustment in low-income Mexican immigrant and Mexican American families. Journal of Marriage and the Family. 1997; 59:309–323.

Fan X, Chen M. Parental involvement and students' academic achievement: A meta-analysis. Educational Psychology Review. 2001; 13:1–22.

Finn JD, Folger J, Cox D. Measuring participation among elementary grade students. Educational and Psychological Measurement. 1991; 51:393–402.

Flores E, Tschann JM, VanOss Marin B, Pantoja P. Marital conflict and acculturation among Mexican American husbands and wives. Cultural Diversity & Ethnic Minority Psychology. 2004; 10:39–52. [PubMed: 14992629]

Foster SL, Martinez CM Jr. Ethnicity: Conceptual and methodological issues in child clinical research. Journal of Clinical Child Psychology. 1995; 24:214–226.

Fridrich AH, Flannery DJ. The effects of ethnicity and acculturation on early adolescent delinquency. Journal of Child and Family Studies. 1995; 4:69–87.

Fuligni AJ, Tseng V, Lam M. Attitudes toward family obligations among American adolescents from Asian, Latin American, and European backgrounds. Child Development. 1999; 70:1030–1044.

Fuligni, AJ.; Fuligni, AS. Immigrant families and the educational development of their children. In: Lansford, JE.; Deater-Deckard, K.; Bornstein, MH., editors. Immigrant families in contemporary society. NY: Guilford; 2007. p. 231-249.

Fuligni, AJ.; Yoshikawa, H. Socioeconomic resources, parenting, poverty, and child development among immigrant famlies. In: Bornstein, M.; Bradley, R., editors. Socioeconomic status, parenting, and child development. Mahwah, NJ: Lawrence Erbaum; 2003. p. 107-124.

Fuligni, AJ. Family obligation and the academic motivation of adolescents from Asian and Latin American, and European backgrounds. In: Fuligni, A., editor. Family obligation and assistance during adolescence: Contextual variations and developmental implications (New Directions in Child and Adolescent Development Monograph). San Francisco: Jossey-Bass, Inc; 2001. p. 61-76.

Gonzales, NA.; Knight, GP.; Morgan-Lopez, A.; Saenz, D.; Sirolli, A. Acculturation and the mental health of Latino youths: An integration and critique of the literature. In: Contreras, JM.; Kerns, KA.; Neal-Barnett, AM., editors. Latino children and families in the United States: Current research and future directions. Westport, CT: Praeger; 2002. p. 45-74.

Gray MR, Steinberg L. Unpacking authoritative parenting: Reassessing a multidimensional construct. Journal of Marriage and the Family. 1999; 61:574–587.

Hess RS. Dropping out among Mexican American youth: Reviewing the literature through and ecological perspective. Journal of Education for Student Placed at Risk. 2000; 5:267–289.

Hill N, Bush K, Roosa M. Parenting and family socialization strategies and children's mental health: Low-income Mexican-American and Euro-American mothers and children. Child Development. 2003; 74:189–204. [PubMed: 12625445]

Huizinga D, Esbensen F, Weiher AW. Are there multiple paths to delinquency? Journal of Criminal Law and Criminology. 1991; 82:83–118.

Jeynes WH. A meta-analysis: The effects of parental involvement on minority children's academic achievement. Education and Urban Society. 2003; 35:202–218.

Keith PB, Lichtman MV. Does parental involvement influence the academic achievement of Mexican-American eighth graders?: Results from the national Educational Longitudinal Study. School Psychology Quarterly. 1994; 9:256–272.

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

Lerner, RM.; Castellino, DR.; Terry, PA.; Vilarruel, FA.; McKinney, MH. Developmental contextual perspective on parenting. In: Bornstein, M., editor. Handbook of Parenting. Vol. 2. Mahwah, NJ: Lawrence Erlbaum; 1995. p. 285-309.

Muthén, LK.; Muthén, MO. Mplus user's guide. 3. Los Angeles, CA: Muthén & Muthén; 1998.

Meredith W. Measurement invariance, factor analysis and factorial invariance. Psychometrika. 1993; 58:545–553.

Phinney JS. Ethnic identity in adolescents and adults: Review of research. Psychological Bulletin. 1990; 108:499–514. [PubMed: 2270238]

Pew Hispanic Center. Hispanics at mid-decade. 2007. Available at http://pewhispanic.org/files/other/middecade/complete.pdf

Parke, RD.; Buriel, R. Socialization in the family: Ethnic and ecological perspectives. In: Eisenberg, N., editor. Handbook of child psychology: Social, emotional and personality development. NY: John Wiley & Sons; 1998. p. 463-552.

Patterson, GR.; Reid, JB.; Dishion, TJ. Antisocial boys. Eugene, OR; Castalia: 1992.

Pew Hispanic Center. From 200 million to 300 million: The numbers behind population growth. 2006. Available at http://pewhispanic.org/factsheets/factsheet.php?FactsheetID=25

Pleck, JH. Paternal involvement: Levels, sources, and consequences. In: Lamb, ME., editor. The role of the father in child development. New York: Wiley & Sons, Inc; 1997. p. 67-103.

Rodriguez JL. Family environment and achievement among three generations of Mexican American high school students. Applied Developmental Science. 2002; 6:88–94.

Rumberger RW. Dropping out of middle school: A multilevel analysis of students and schools. American Educational Research Journal. 1995; 32:583–625.

Samaniego RY, Gonzales NA. Multiple mediators of the effects of acculturation status on delinquency for Mexican American adolescents. American Journal of Community Psychology. 1996; 27:189–210. [PubMed: 10425699]

Santor DA, Messervey D, Kusumakar V. Measuring peer pressure, popularity, and conformity in adolescent boys and girls: Predicting school performance, sexual attitudes, and substance abuse. Journal of Youth and Adolescence. 2002; 29:163–182.

Schaefer ES. Children's reports of parental behavior: An inventory. Child Development. 1965; 36:413–424. [PubMed: 14300862]

Small SA, Kerns D. Unwanted sexual activity among peers during early and middle adolescence: Incidence and risk factors. Journal of Marriage and the Family. 1993; 55:941–952.

Stattin H, Kerr M. Parental monitoring: A reinterpretation. Child-Development. 2000; 71:1072–1085. [PubMed: 11016567]

Suarez-Orozco, C.; Suarez-Orozco, M. Transformations: Immigration, family life, and achievement motivation among Latino adolescents. Palo Alto, CA: Stanford University Press; 1995.

Sui-chu Ho E, Willms JD. Effects of parental involvement on 8th grade achievement. Sociolology of Education. 1996; 69:126–141.

Szapocznik J, Kurtines WM. Family psychology and cultural diversity: Opportunities for theory, research and application. American Psychologist. 1993; 48:400–407.

Toth JF Jr, Xu X. Ethnic and cultural diversity in fathers' involvement. A racial/ethnic comparison of African American, Hispanic, and White fathers. Youth and Society. 1999; 31:76–99.

Updegraf KA, McHale SM, Whiteman SD, Thayer SM, Crouter AC. The nature and correlates of Mexican-American adolesents' time with parents and peers. Child Development. 2006; 77:1470–1486. [PubMed: 16999812]

U.S. Census Bureau. The Hispanic population in the United States: March 2002. 2002. Retrieved March 15, 2007 from http://www.census.gov/prod/2003pubs/p20-545.pdf

U.S. Department of Education. The condition of education: 2007. Washington DC: U.S. Government Printing Office; 2007. (NCES 2007-094)

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

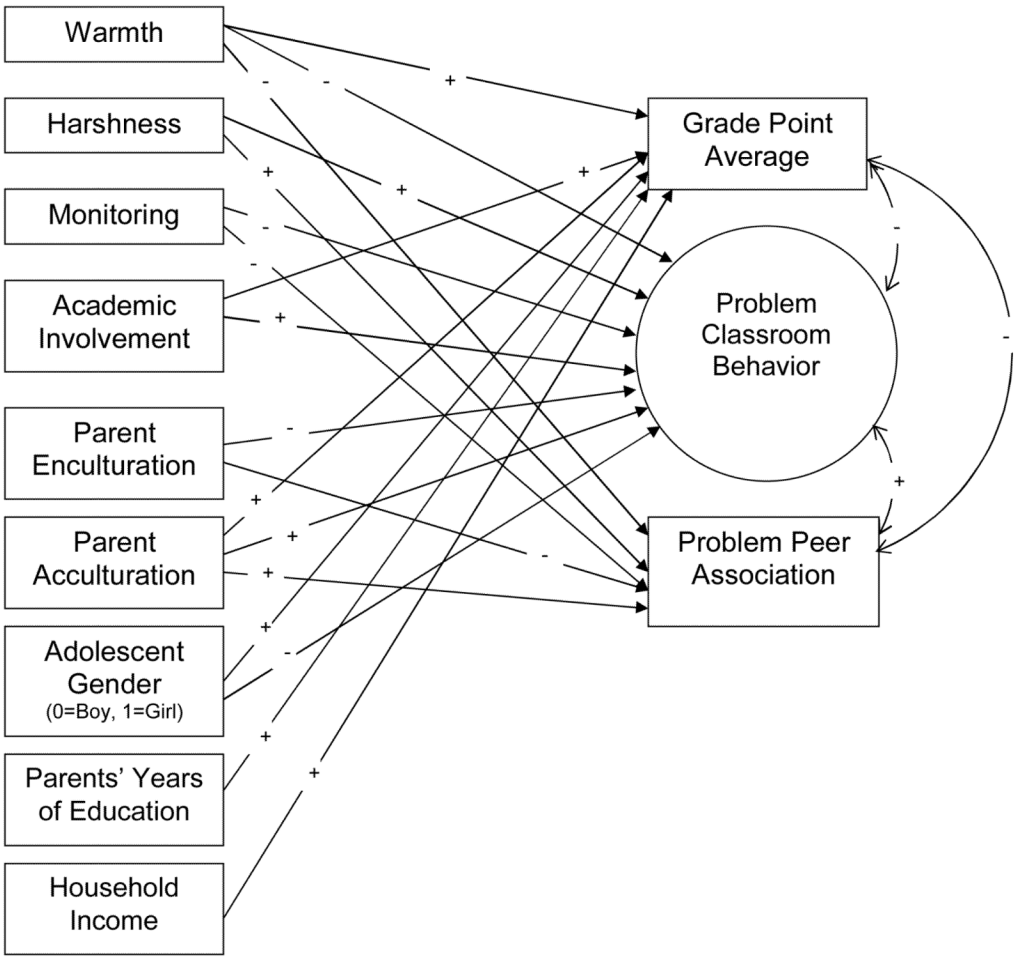

Figure 1.
Hypothesized Model

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

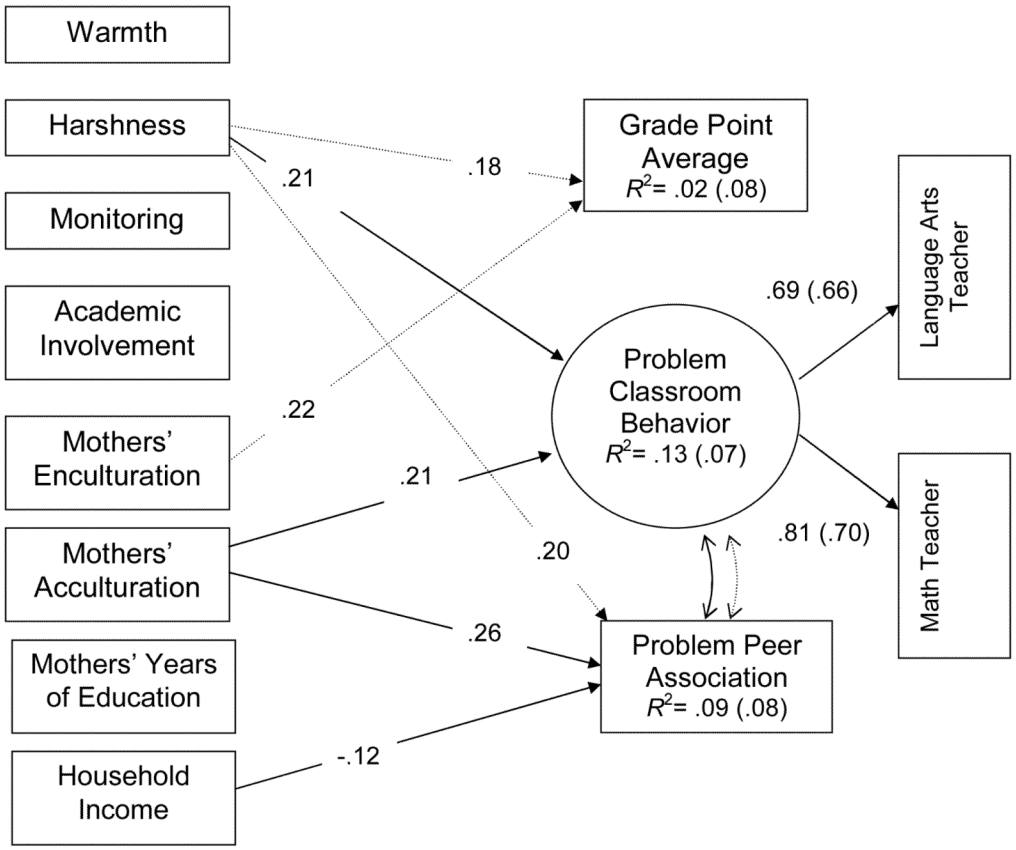

Figure 2.
Mothers' Parenting: Multiple Group Analysis by Teen Gender (n = 279 Boys; n = 281 Girls)
Note. Solid line = Boys; Dotted line = Girls; Values in parentheses are for girls.

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

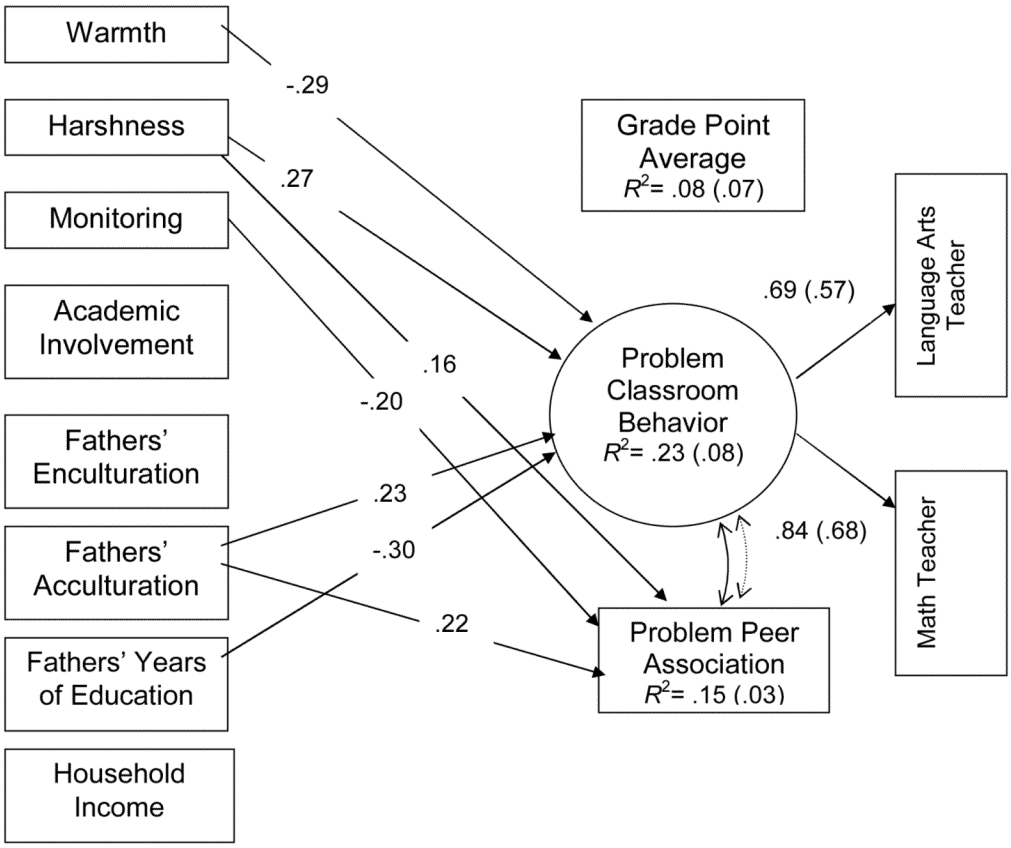

Figure 3.
Fathers' Parenting: Multiple Group Analysis by Teen Gender (n = 157 Boys; n = 161 Girls)
Note. Solid line = Boys; Dotted line = Girls; Values in parentheses are for girls.

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

Table 1

Correlations, Means, and Standard Deviations for Measured Variables including in Mothers' Parenting Models

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Warmth[1]		−.37*	.61*	.62*	.07	.16*	.19*	.13*	.10	−.05	−.05	−.11
2. Harshness[1]	−.16*		−.24*	−.20*	.01	−.04	−.09	−.04	−.19*	.07	.11	.23*
3. Monitoring[1]	.58*	−.15*		.49*	.06	.20*	.25*	.18*	.01	−.09	−.09	−.10
4. Academic[1] Involvement	.65*	−.06	.48*		.18*	−.01	.08	.07	.05	−.03	−.01	−.08
5. Mother Enculturation[1]	.13*	.03	.05	.13*		−.64*	−.22*	−.24*	.09	−.08	−.10	−.19*
6. Mother Acculturation[1]	−.01	−.03	.05	−.06	−.66*		.46*	.31*	−.21*	.16*	.19*	.13*
7. Mothers' Years of Education[2]	.02	−.13*	.10	.03	−.33*	.52*		.36*	−.03	.10	.08	.05
8. Household Income[3]	.02	−.20*	.09	.03	−.13*	.28*	.32*		−.01	.01	.02	.09
9. Grade Point Average[4]	.23*	−.13	.20*	.21*	.01	−.03	.09	.20*		−.33*	−.48*	−.28*
10. Language Teacher Non-participation[1]	−.10	.18*	−.10	−.05	−.06	.11	.06	.01	−.38*		.46*	.23*
11. Math Teacher Non-participation[1]	−.15*	.20*	−.21*	−.15*	−.02	.05	−.05	−.09	−.37*	.55*		.35*
12. Problem Peer Association[1]	−.06	.05	−.04	−.06	−.16*	.24*	.11	−.07	−.28*	.20*	.24*	
Means $_B$	4.08	2.14	4.32	4.47	3.94	3.01	10.04	3.68	6.54	2.52	2.27	1.93
Means $_G$	4.18	2.05	4.40	4.44	3.96	3.00	9.63	3.42	8.35	1.98	1.89	1.87
Standard Deviations $_B$	.61	.73	.65	.53	.78	1.16	3.49	2.11	2.66	1.20	1.02	.79
Standard Deviations $_G$	.61	.72	.63	.60	.73	1.17	3.63	1.87	2.55	.96	.91	.86

Note. Boys below the diagonal (n=279); Girls above the diagonal (n =281);

*$p < .05$; $_B$ denotes boys; $_G$ denotes girls. Possible ranges for variables with superscripts:

[1]1.00–5.00;

[2]0.00–20.00;

[3]Household income is divided by 10,000;

[4]1.00–13.00

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

Table 2

Correlations, Means, and Standard Deviations for Measured Variables including in Fathers' Parenting Models

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Warmth[1]		.17*	.66*	.63*	.04	.13	−.04	.06	.04	−.12	−.07	−.04
2. Harshness[1]	.07		.13	.25*	−.03	.09	.19*	−.04	−.18*	.09	.18*	.10
3. Monitoring[1]	.68*	−.02		.53*	−.06	.18*	.11	.06	.08	−.07	−.13	−.03
4. Academic Involvement[1]	.72*	.18*	.52*		−.01	.11	.10	.01	.01	.03	.07	.03
5. Father Enculturation[1]	.04	.07	.08	.07		−.47*	−.19*	−.15*	.03	−.03	−.05	.02
6. Father Acculturation[1]	.11	.03	.09	.10	−.55*		.32*	.34*	.01	.03	.08	.03
7. Fathers' Years of Education[2]	−.11	.11	.00	−.05	−.36*	.45*		.22*	−.03	.01	.10	.01
8. Household Income[3]	−.12	−.24*	−.06	−.07	−.22*	.27*	.20*		.11	−.03	.01	.10
9. Grade Point Average[4]	.09	−.19*	.16	−.01	.05	−.03	.11	.18*		−.32*	−.40*	−.26*
10. Language Teacher Non-participation[1]	−.11	.12	−.06	.07	−.14	.20*	.08	−.01	−.46*		.39*	.13
11. Math Teacher Non-participation[1]	−.20*	.22*	−.23*	−.02	−.05	.04	−.01	−.13	−.45*	.59*		.22*
12. Problem Peer Association[1]	−.13	.16*	−.26*	−.07	−.18*	.20*	.09	−.05	−.40*	.28*	.29*	
Means $_B$	4.03	1.97	4.08	4.11	3.91	3.01	9.58	4.01	7.01	2.39	2.11	1.81
Means $_G$	3.97	1.86	4.01	4.16	3.88	3.13	10.16	4.06	8.58	1.88	1.72	1.75
Standard Deviations $_B$	.68	.67	.74	.84	.68	.98	3.80	2.17	2.76	1.15	1.03	.73
Standard Deviations $_G$	.65	.65	.86	.73	.66	.96	3.48	2.00	2.46	.83	.83	.73

Note. Boys below the diagonal (n= 157); Girls above the diagonal (n= 161);

*$p < .05$; $_B$ denotes boys; $_G$ denotes girls. Possible ranges for variables with superscripts:

[1]1.00–5.00;

[2]0.00–20.00;

[3]Household income is divided by 10,000;

[4]1.00–13.00