# Sibling Influences on Adolescents' Educational Expectations and Preferences in Mexican American Families

Sue Annie Rodríguez, McNair Scholar, Penn State University

Faculty Research Adviser: Dr. Susan McHale Professor and Director of the Social Science Research Institute Department of Human Development and Family Studies College of Health and Human Development Penn State University

#### Abstract

Siblings are important, often lifelong relationships. This study focused on sibling relationships of adolescents in Mexican American families. First I studied similarities and differences between older and younger sisters' and brothers' educational expectations and preferences, and between mothers' and fathers' educational preferences for their daughters and sons. Second, I analyzed the links between older and younger sibling educational expectations and values. The data came from a longitudinal study of family relationships, The Juntos "Together" Project. Participants were older and younger adolescent siblings from 246 Mexican origin families that were recruited through schools of a southwest metropolitan city. Analyses revealed parental differences in educational preferences as a function of parent and child gender. In addition, there were sex differences in youths' in educational preferences and expectations. Finally, siblings' educational expectations and preferences were correlated, but only in same sex dyads.

## Sibling Influences on Adolescents' Educational Expectations and Preferences in Mexican American Families

Immigrants are the fastest growing group in the United States, and it is estimated that, by the year 2020, approximately 30% of all children will have at least one immigrant parent (Capps, Fix, Ost, Anderson, & Passel, 2004). Mexican American families comprise a substantial part of United States population, and they constitute 29% of the foreign born population in the United States (Waldinger, & Reichl, 2006). Mexican immigrants also have the highest birth rate among all the ethnic/racial groups in the United States, representing 39% of births in the United States (Capps, et al. 2004).

Mexican Americans represent the largest minority group in the United States, but their educational attainment is the lowest among all ethnic groups (Waldinger, & Reichl, 2006). In 1970, the rate of high school graduating for Mexican Americans was eight out of ten but this rate dropped in 2004 to six out of ten (Waldinger, & Reichl, 2006). Research also reveals that currently 30% of Mexican Americans twenty-five years of age and older have not obtained their high school degrees (President's Advisory Commission, 2003).

This rate compares to the 11% of non-Latino Whites that has not received diplomas (President's Advisory Commission, 2003). Further, 11% of Mexican Americans have bachelor's degrees, compared to 29% of non-Latino White American (President's Advisory Commission, 2003).

There are several factors that may influence low educational attainment among Mexican Americans. These include: parents' and youth's educational values, and family relationships including those with siblings.

When discussing children's development and their educational aspirations it is important to consider their relationships with their parents and their parents' values. First, children may be influenced by their interactions with their parents (McHale, Crouter, & Whiteman, 2003). For example, parents may treat their children differently because of their gender. For example, parents of boys may promote activities such as sports and outdoors activities such as camping and hiking, whereas parents of girls may not consider such activities (McHale et al., 2003). These patterns of activities, in turn, may have implications for girls' well being and development. For example, in some studies, girls have been demonstrated to be less confident and less interested in the subjects of mathematics and sciences (Updegraff, McHale, & Crouter, 1996). In addition, girls have been less likely to pursue careers in male dominated fields (Updegraff et al., 1996). Even with, these gender differences in activities and support for interest in mathematics, in 2004 Mexican American girls had a lower (4.3%) rate of dropping out of high school than boys (5.1%) (Laird, DeBell, & Chapman, 2006).

Parents not only have an impact on their children's educational success by virtue of their parenting and family roles, but their own educational level and their social economic status may relate to their children's educational expectations and educational attainment (Wigfield, Eccles, Shiefele, Roeser, and Davis-Kean, 2006). It has been observed that immigrant parents and their children highly value education (Wigfield et al, 2006). Among Latino adolescents, the main motivation for school success is youth wanting to make parents proud of their accomplishments. (Wigfield et al, 2006).

Although parents are an essential part of the children's life and their development, other family members, such as siblings, may have an influence as well. Mexican families, and Latino families more generally, tend to have larger families than Anglo families (Updegraff, McHale, Whitman, 2005) making siblings an especially important focus of study. It is also important to evaluate siblings' roles because siblings are frequent companions during childhood and early adolescence (Tucker, Updegraff, McHale, & Crouter, 1999), and because sibling interactions can have a significant impact. According to one study, older siblings served as models for their younger siblings' social cognitive development (Tucker et al., 1999). At the same time, the interactions that older and younger siblings engage in have an impact on the older sibling. For example, older siblings who engage in the education of their younger siblings not only help their younger siblings' educational development, but older siblings learn from this experience as well (Smith, 1993).

Whereas the influence of sibling relationships has been receiving increasing attention in the past decades, there has not been research about Mexican American siblings in relation to academic achievement. Accordingly, the first goal of this study was to measure the educational expectations and preferences of older and younger sisters and brothers in Mexican American families. The second goal was to determine whether there were differences in mothers' and fathers' preferences for their sons' and daughters' education. The last goal explores the links between older and younger siblings' educational expectations and preferences.

### Methods

#### *Participants*

The data used in this study came from the Juntos ("Together") Project. The study focused on 246 Mexican origin families. For these families to be selected they needed to fulfill certain requirements, specifically to have a non-learning disabled child in the seventh grade and a non-disabled older child living at home who was under twenty-one years old. Parents also needed to be living at home and have intact marriages. Further, the mothers needed to be of Mexican origin, although 93% of fathers also were of Mexican origin. In general, mothers were more likely to have been born in Mexico than fathers. Mothers who emigrated from Mexico had been in the United State an average of 12.38 years, while fathers who emigrated had been in the United States longer, an average of 15.18 years. The last participation criterion was that fathers were employed a minimum of twenty hours per week.

The mean income among these Mexican families was \$53,183 with a standard deviation of \$45,381 (McHale, Updegraff, Shanahan, Crouter, Killoren, 2005). A total of 18.3% of the families in this study met the federal poverty level which is determined by the Department of Health and Human Services (McHale, 2005). According to the new poverty guidelines from 2006, a family of four falls below the poverty line if their income does not surpass \$20,000 (Department of Health and Human Services, 2006).

The participants were recruited through the public school districts in a southwestern metropolitan area. Students of Hispanic descent who did not have a learning disability were identified in five different school districts. Information about the project was mailed to a total of 1,856 families with seventh graders. During the following week, families were telephoned. The call served as a way to screen families in order to be certain that they could participate in the project and to encourage participation as well. Of 1,856 families, 241 families did not agree to be screened or did not want to participate in the study. A total of 438 families were not reachable. Almost half (48%) of the families that were approached were not eligible to participate in the project. A total of 246 families completed both the screening process and the interviews.

## Procedure

Mothers, fathers, older sibling and younger sibling participated in home interviews. The surveys were available in English and Spanish, and it was up to the participant to choose the language in which she or he wanted to be interviewed. All families received \$100 compensation for their participation in the home interviews.

## Measures

For the purposes of this study we used youth ratings of their expectations and preferences for education. The surveys addressed different topics such as individual adjustment, family relations, parental work, youth school experiences, sibling relationships, parent/child relationships, and educational values and expectations, among other topics. Specifically adolescents answered two questions: "How far would you like to go in school?" refer to their preferences and "How far do you really think you will go in school?" refer to their expectations. The response scale represented how many years of schooling youth wanted and expected. The education rated on 21 point scale in were 12 represented a high school graduate and a 16 refer to be a college graduate. A similar version of this scale that was developed in order to asses the parents' preferences. In this measure parents were asked about their preferences for each of their children.

#### Results

The first goal was focused on difference in the educational expectations and preferences of older and younger sisters and brothers. This question was addressed using a 2 (older sibling gender) X 2 (younger sibling gender) X 2 (sibling: older vs. younger) mixed model ANOVA. The results showed that in general, younger siblings expected to go further in school than their older siblings, except in the case of older-sister and younger-brother pairs. In addition, on average, older sisters expected to go further in school than older brothers (see Figures 1 and 2). Overall, youth from girl-girl families had higher mean educational expectations than youth from boy-boy families. Further, girls wanted to go further in school than their brothers (older and younger).

The second goal was directed at measuring mothers' and fathers' educational preferences for older and younger daughters and sons. I tested the same type of model as already mentioned, a 2 X 2 X 2 mixed model ANOVA. In general, the mothers' means were higher for younger siblings, except for older girl-younger boy pairs, where the mean was lower for younger brothers. The fathers' means were slightly higher for younger siblings with the exception of older girl-younger boy pairs. This finding is similar to the results for mothers' preferences. The was a difference between parents' opinions in the older boy-younger boy pairs; here fathers' average educational preference for boy-boy pairs is 16.20, compared to mothers' average preference which is higher, 16.80 (see Figures 3 and 4). The last goal of this study was focused on whether there were any links between older and younger siblings' educational expectations and preferences. We used conducted correlations by gender dyad composition, in order to study the relation between siblings' reports of educational values and preferences for same sex versus opposite sex sibling dyads. For the first set of correlations some significant findings were found: (see Figure 5) older siblings' preferences and expectations were significantly and positively associated with younger sibling preferences and expectations in same but not opposite sex dyad. For opposite sex dyads, in contrast, correlations are lower, and even negative.

#### Discussion

These data are precious because this one of a few studies that examines, in depth, the Mexican culture in the United States. The study focused on sibling influences on adolescents' educational expectations and preferences in Mexican American families. Overall, the analyses revealed that there were sex differences in youths' educational preferences and expectations, favoring girls. Further, there were parental differences in educational preferences and gender differences: mothers had high preferences for sons, but fathers did not. Also, we found that siblings' educational expectations and preferences correlated, but only in same sex dyads.

These results have some significant implications for Mexican American youth. For instance, boys' poorer educational goals may be grounded in their family experiences. According to our study, brothers and sisters from the same family differed in their educational expectation as well as their preferences. This may be related to parental differences in preferences for their children depending on gender.

Some limitations of this study were that there were single items used to measure educational preferences and expectations. In addition, there was no measure of actual school achievement of the participants. Also, participants were assessed at only one time. There is currently a follow up with these families, however, that will assess actual school achievement. Further, the sample for this study was not representative, but it allowed for in-depth study of the families. There are some areas that must be studied in further research such as factors that may be linked to gender differences in education goals for youth from ethnic minority families. Another aspect that must be studied in a more detailed manner is how schools and communities better support and promote Mexican American boys' educational achievement.

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Figure 1. Means for How Far Youth Expect to go in School by Sibling Dyad Gender Composition.

Education rated on 21 point scale: 12 = high school graduate; 16=college graduate





Education rated on 21 point scale: 12 = high school graduate; 16=college graduate

Figure 3. Means for Mothers' Reports of How Far They Want Their Children to go in School by Sibling Dyad Gender Composition.



Education rated on 21 point scale: 12 = high school graduate; 16=college graduate





Education rated on 21 point scale: 12 = high school graduate; 16=college graduate



Figure 5. Correlations Between Siblings' Reports of Educational Values for Same and Opposite Sex Sibling Dyads.