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A Model of Maternal and Paternal Ethnic Socialization of Mexican American Adolescents' Self-views

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Abstract

Data from a sample of 462 Mexican American adolescents [M = 10.4 years, SD = .55; 48.1% girls], mothers, and fathers, was used to test an ethnic socialization model of ethnic identity and self-efficacy that also considered mainstream parenting styles (e.g., authoritative parenting). Findings supported the ethnic socialization model: parents' endorsement of Mexican American values were associated with ethnic socialization at 5th grade and 7th grade; maternal ethnic socialization at 5th grade and paternal ethnic socialization at 7th grade were associated with adolescents' ethnic identity exploration at 10th grade and, in turn, self-efficacy at 12th grade. The findings support ethnic socialization conceptions of how self-views of ethnicity develop from childhood across adolescence in Mexican American children.

Keywords

ethnic identity; self-efficacy; cultural values; Mexican American families

Based on theoretical models (Knight, Bernal, Cota & Garza, 1993; Umaña-Taylor & Fine, 2004) that emphasize broader cultural and contextual factors, including both familial and non-familial socialization agents that influence ethnic identity development, we longitudinally examined an ethnic socialization model of the development of both ethnic self-views and general self-views in a sample of Mexican American families. Although there are numerous factors (e.g., peers, neighborhoods) that may influence the development of ethnic identity, a plethora of research indicates that family members, and particularly parents, are the foremost source of information about ethnicity for youth (Brown, Tanner-Smith, Lesane-Brown, & Ezell, 2007; Hughes, Rodriguez, Smith, Johnson, Stevenson, &

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Spicer, 2006; Knight, Bernal, Garza, Cota, & Ocampo, 1993; Umaña-Taylor, Alfaro, et al., 2009).

Moreover, based on cultural transmission theories (see Carlo & de Guzman, 2009), our premise is that Mexican American mothers and fathers who strongly endorse values characteristic of the Mexican American population (i.e., beliefs that one should always: provide support for family members, have obligations to family members, primarily think of oneself as a part of the family, respect adults, and understand that God gives meaning to life: see Knight et al., 2010) will strive to socialize their children about their ethnic group membership. This ethnic socialization process includes the transmission of expectations, roles, and values that are associated with their ethnic culture and creates the basis for the development of ethnic identity in youth. In turn, youths' adoption of these expectations, roles, and values fosters positive familial relations which further encourages positive feelings about being a member of their ethnic group, a desire to learn more about their ethnic group, and an understanding of how their ethnic group membership plays an important role in their life. These positive familial relations within the family (and with ethnic peers) also likely create a set of self-expectations of competence (i.e., self-efficacy) for dealing with life demands (within and beyond the family) during later adolescence (Knight, Carlo, Mahrer & Davis, 2016; see Carlo & de Guzman, 2009, for a review).

Ethnic identity development is a salient and multi-dimensional aspect of ethnic minorities' self-views that change throughout the life span and may have important implications for other, more widely examined aspects of adolescents' self-views (e.g., Erikson, 1968; Marcia, 1980). Although some dimensions of ethnic identity emerge in childhood (see Knight et al., 1993), important dimensions of ethnic identity self-views develop mostly during adolescence as a result of significant advances in sociocognitive skills (e.g., Phinney, 2003; Umaña-Taylor, Gonzales-Backen, & Guimond, 2009). During adolescence, ethnic identity development includes at least three important aspects of self-views: ethnic identity affirmation (i.e., the acknowledgement that one is a member of the ethnic group and the affect one has about their membership in the ethnic group), ethnic identity exploration (i.e., the degree to which their self-view leads to attempts to learn about their ethnic group), and ethnic identity resolution (i.e., the degree to which they have come to terms with the issues created by having a self-view as a member of the ethnic group). Generalized self-efficacy is also an important feature of adolescent self-views (i.e., a set of expectations about one's abilities to mastery life demands that lead to persistence behavior), that also develops through a variety of socialization mechanisms including more typical socialization processes examined in the mainstream literature. In addition, the development of a strong ethnic identity has also been associated, albeit mostly based on concurrent assessments, with positive psychological outcomes including self-esteem and self-efficacy (e.g., Fuligni, Witkow, & Garcia, 2005; Knight et al., in press; Phinney, 1990; Supple, Ghazarian, Frabutt, Plunkett, & Sands, 2006).

Hence, the present study examines a longitudinal ethnic socialization model that suggests that maternal and paternal Mexican American values, which represent some of the specific values these parents would like to foster in their children, are associated with the parents' ethnic socialization practices. These ethnic socialization practices are, in turn, associated

with self-views related to adolescents' ethnic group membership. In attending to recent theoretical and developmental advances, we examined the associations between socialization and ethnic identity affirmation, exploration, and resolution separately (Umaña-Taylor et al., 2014). However, because much preceding work has relied on composites (e.g., combining affirmation, exploration and resolution), we did not have clear expectations regarding the specific associations with each aspect of ethnic identity. We further investigate whether the positive development of these ethnic identity constructs during middle adolescence are associated with self-efficacy in later adolescence.

Secondarily, this study is designed to evaluate the degree to which more mainstream socialization processes, defined within the broader literature on parenting styles, may impact the degree to which these Mexican American adolescents are receptive to the ethnic socialization of their mothers and fathers. There have been increasing calls for research that integrates cultural mechanisms within broader socialization processes that impact developmental outcomes (Carlo & de Guzman, 2009; Garcia-Coll et al., 1996; Knight, Bernal, Cota, & Garza, 1993). These calls have led to a modest number of studies examining the developmental outcomes of minority youth (e.g., Moilanen, Rasmussen, & Padilla-Walker, 2015; Varela et al., 2004) based on parenting styles that are often associated with optimal developmental trajectories in the more mainstream population (e.g., Galambos et al., 2003; Luyckx et al., 2011; Scaramella, Conger, & Simons, 1999). The predominant parenting styles frameworks (Baumrind, 1971; Maccoby & Martin, 1983) characterize parents as either authoritative (high responsiveness and demandingness), authoritarian (low responsiveness and high demandingness), indulgent (high responsiveness and low demandingness), or neglectful (low responsiveness and demandingness). Among those who have studied parenting in the mainstream population, the authoritative style is often associated with optimal developmental trajectories (e.g., Galambos et al., 2003; Luyckx et al., 2011; Scaramella, Conger, & Simons, 1999). However, the parenting styles identified in the present sample are somewhat different that those in more mainstream populations (White, Zeiders, Gonzales, Tein, & Roosa, 2013). Although a majority of the Mexican American mothers and fathers did display an *authoritative* parenting style (high in acceptance, consistent discipline, and monitoring; but low in harsh parenting), a modest proportion of mothers and fathers displayed a *less involved* style (i.e., similar to an *authoritative* profile but with somewhat reduced levels of acceptance, consistent discipline, and monitoring. In addition, some mothers (but no fathers) displayed a *moderately demanding* style (i.e., high on acceptance and low on harshness, with moderate levels on monitoring and consistent discipline); and some fathers (but no mothers) displayed a *no-nonsense* style (i.e., levels of acceptance, consistent discipline, and monitoring that were comparable to *authoritative* parents, but they also had elevated levels of paternal harshness).

These parenting styles characterize the broader parenting context in which other parent behaviors and parent-child interactions occur (Darling & Steinberg, 1993) and may help children to be more receptive to other aspects of parent socialization, such as their ethnic socialization. For example, Hernández, Conger, Robins, Bacher, and Widaman (2014) demonstrated that maternal and paternal ethnic socialization was prospectively associated with their young Mexican American adolescents' ethnic pride (a psychological construct that is very much akin to ethnic identity affirmation), and that this association was stronger

when the parents were higher in warmth towards the adolescent. Davis, Carlo, and Knight (in press) showed support for the notion that cultural values mediated the relations between maternal parenting styles and prosocial behaviors in Mexican American youth (for another example see Santisteban, Coatsworth, Kurtines, & Szapocznik, 2012). However, there has been relatively little longitudinal research integrating the investigation of cultural mechanisms and broader socialization processes. Hence, based on the typology presented by White et al. (2013), we hypothesized that Mexican American parents (mothers or fathers) who engage in higher levels of ethnic socialization will have adolescent children who score higher in ethnic identity and self-efficacy; particularly if in a broader parenting context that is characterized as *authoritative* rather than *less involved*, *moderately demanding*, or *no-nonsense*.

Methods

Participants

Data for the current study come from a larger longitudinal project focused on cultural and contextual factors in the lives of Mexican American adolescents (i.e., adolescents either born in Mexico or with a family origin from Mexico) and their participating parents (Roosa et al., 2008) living in the U.S. Families ($N = 749$) were recruited from schools that served ethnically and linguistically diverse communities in a metropolitan area of the U.S. Southwest. Although similar socialization studies using this dataset have been published (e.g., Knight et al., 2016), the present study is distinct to such studies in its focus on different specific predictors (e.g., different cultural values as predictors) and/or examining different outcomes (e.g., self-views as the focal outcomes). Eligible families met the following criteria at 5th grade: (a) there was a 5th grade youth who attended a sampled school, was not severely learning disabled, and was the biological child of a Mexican-origin mother and Mexican-origin father; (b) the Mexican-origin biological mother lived with the youth; and (c) no step-father figure was living in the household. Of the 749 families, 570 families were characterized as two-parent, father-present households; but only those two-parent families in which the fathers agreed to participate were included in this report (N = 462).

Although we provide a summary here, a detailed description of study procedures is published elsewhere (Roosa et al., 2008). Starting in 2004, eligible families participated in 4 waves of data collection when adolescents were in 5th, 7th, 10th, and 12th grade. At each time, family members were interviewed in their home using a Computer Assisted Personal Interview and each individual was paid $45, $50, $55, and $60 for participation at 5^{th}, 7^{th}, 10^{th}, and 12^{th} grade, respectively. Interviews were conducted in the participants' language of choice (i.e., English or Spanish). The adolescent (48.1% girls) had a mean age of 10.4 years ($SD = .55$; 48) at 5th grade and were approximately 2-, 5-, and 7-years older at 7th, 10th, and 12th grades, respectively. The majority of youth in the current study were born in the U.S. (66.9%) and completed the 5th grade interview in English (81.8%). A majority of mothers (78.6%) and fathers (79.7%) were born in Mexico, and completed the interview in Spanish (72.7% for mothers and 76.6% for fathers, respectively) when their youth were in the 5th grade. The average annual family income was between the $30,001 – $35,000 and the $35,001 – $40,000 categories.

Measures

Mothers and fathers completed the measures of Mexican American values and the measures of more mainstream socialization practices when their child was in the 5th grade, and measure of ethnic socialization when their children were in the 5th and 7th grades. Adolescents successfully completed the measures of ethnic identity for the first time when they were in the 10th grade, and the measure of general self-efficacy was first completed when they were in the 12th grade. In the analyses, the measure of Mexican American values were treated as a latent construct because it is a composite of five value subscales. The measures of more mainstream socialization practices were created as latent profiles to identify parenting styles and were assessed in the 5th grade because these were theoretically expected to impact the receptiveness of the young adolescents to the parents' ethnic socialization. These latent constructs were then used to generate observed variables (i.e. parenting style groups) to analyze differences in parenting style groups. All of the other measures were treated as observed scales because they were single scale measures and to prevent the number of paths in the models from becoming too large.

Mexican American values (5th grade)—Mothers and fathers completed the *Mexican American Cultural Values Scale* (MACVS: Knight et al, 2010) to assess Mexican American values. The MACVS was developed based upon focus groups conducted with Mexican American mothers, fathers, and adolescents about the Mexican American and mainstream American cultures. The current study used 5 subscales from this measure to form a latent construct of mothers' and fathers' Mexican American values: *Familism-Support* (6 items, e.g., "parents should teach their children that the family always comes first"); *Familism-Obligation* (5 items, e.g., "if a relative is having a hard time financially, one should help them out if possible"); *Familism-Referents* (5 items, e.g., "a person should always think about their family when making important decisions"); *Respect* (8 items, e.g., "children should always be polite when speaking to any adult"); and *Religiosity* (7 items, e.g., "one's belief in God gives inner strength and meaning to life"). Participants indicated their endorsement of each item by responding with a five-point Likert-type scale ranging from (1) *not at all* to (5) *very much*. Cronbach's α for the observed Mexican American values scale were .88 and .88 for mothers and fathers, respectively.

Ethnic socialization (5th grade and 7th grade)—Mothers' and fathers' ethnic socialization were assessed with an adaptation of the 10-item *Ethnic Socialization Scale* from the Ethnic Identity Questionnaire (e.g., Knight, Bernal, Garza, Cota, & Ocampo, 1993). This measure was designed to assess ethnic socialization about cultural traditions, values, beliefs, and ethnic group history. The adaptation was designed to eliminate items more appropriate for youth younger than those in the present study and to generate a few items specifically focused on the socialization of values associated with a Mexican heritage (Knight et al., 2010). Mothers and fathers were asked to indicate, using a five-point Likert-type scale ranging from (1) *almost never or never* to (5) *a lot of the time (frequently),* how often had they socialized their adolescent children about the Mexican American culture. Sample items included: "How often do you: "tell your child to be proud of his/her Mexican background"; "tell your child that he/she always has an obligation to help members of the family"; and "tell your child about the discrimination she/he may face because of her/his

Mexican background." Cronbach's α for mothers were .74 and .76; and for fathers .75 and .77, when their youth were in the 5th and 7th grades, respectively.

Ethnic identity self-views (10th grade)—Adolescents' ethnic identity was assessed with the 17-item Ethnic Identity Scale (EIS; Umaña-Taylor, Yazedjian, & Bamaca-Gomez, 2004), which included three subscales that measure affirmation (6 items), exploration (7 items), and resolution (4 items). Adolescents were asked to indicate how true each item was using a five-point Likert-type scale ranging from (1) *not at all true* to (5) to *very true*. Because the EIS is designed to be administered to diverse ethnic samples, items were slightly revised for the current study to be specific to individuals of Mexican origin by using each adolescents' self-selected ethnic label. Sample items included: "You have attended events that have helped you learn more about your Mexican/Mexican American background" (exploration), "You have a clear sense of what your Mexican/Mexican American background means to you" (resolution), and "You wish you were of a cultural background that was not Mexican/Mexican American" (affirmation, reverse scored). Cronbach's α for adolescents was .76, .80, and .65 for the affirmation, exploration, and resolution subscales, respectively. Although we also administered this measure of ethnic identity to the 7th grade youth, we did not use these data in this report because the psychometric properties of this data was inadequate likely because the 7th grade youth had difficulty understanding the negatively worded items in this measure, particularly when administered in Spanish (based upon an examination of the respondents questions during the administration of these items: see White, Umaña-Taylor, Knight, & Zeiders, 2011).

Self-efficacy self-views (12th grade)—Adolescents' self-efficacy was assessed using the 17-item general self-efficacy subscale of the Self-Efficacy Scale (Sherer & Maddux, 1982). Adolescents were asked to rate endorsement of items using a five-point Likert scale ranging from (1) *strongly disagree* to (5) *strongly agree*. Sample items included: "If you can't do a job the first time, you keep trying until you can," "You do not seem capable of dealing with most problems that come up in life (reverse scored)". This measure was first included in the assessment battery when adolescents were in 12th grade. Cronbach's α was .77.

Parenting styles—Adolescents' 5th grade reports of parenting were previously used to identify parenting styles from a person-centered analysis (White et al., 2013). Specifically, latent profile analyses (LPA) were conducted using adolescents' reports of mothers' and fathers' acceptance (8 items, "Your father understood your problems and worries"), harsh parenting (8 items, "Your father spanked or slapped you when you did something wrong"), consistent discipline (8 items, "When you broke a rule, your father made sure you received the punishment he said you would get") and monitoring (8 items, "Your father knew who your friends were"). Acceptance, harsh parenting, and consistent discipline were assessed using The Child Report of Parental Behavior Inventory (CRPBI; Schaefer, 1965); monitoring was assessed using Small and Kerns (1993) scale. Across all items, adolescents responded using a 5-point Likert scale ranging from 1 (*almost never or never*) to 5 (*almost always or always*). In the current study, alphas for the four parenting scales ranged from .72 to .88.

The latent profile analyses yielded a three profile solution on youths' reports of both mothers' and fathers parenting (reported in detail elsewhere, see White et al., 2013). Both mothers' and fathers' parenting produced an *authoritative* profile (high on acceptance and low harsh parenting, and high on monitoring and consistent discipline: 70.1% of mothers and 70.7% of fathers) and a *less involved* profile similar to an *authoritative* profile, but with somewhat reduced levels of acceptance, consistent discipline, and monitoring: 5.1% of mothers and 17.0% of fathers). Mothers' parenting produced a *moderately demanding* profile (high on acceptance and low on harshness, with moderate levels on monitoring and consistent discipline: 24.8% of mothers). Fathers' parenting produced a *no-nonsense* profile (levels of acceptance, consistent discipline, and monitoring that were comparable to *authoritative* parents, but they also had elevated levels of paternal harshness: 12.3% of fathers).

Results

Preliminary Analyses

The means, standard deviations, and correlations among all variables are presented in Table 1. As expected, maternal Mexican American values and paternal Mexican American values were significantly positively associated. Maternal Mexican American values were also positively associated with maternal and paternal ethnic socialization reports when adolescents were in 5th and 7th grade. Paternal Mexican American values were positively associated with paternal ethnic socialization reports in 5th and 7th grade and maternal ethnic socialization reports when adolescents were in 5th grade. Maternal ethnic socialization in 5th and 7th grade were positively associated with adolescents' ethnic identity resolution and exploration in the 10th grade. Paternal ethnic socialization in 7th grade was positively associated with adolescents' ethnic identity exploration in the 10th grade. In addition, all three 10th grade ethnic identity dimensions were positively interrelated and positively associated with adolescents' self-efficacy in 12th grade. In contrast to our expectations, the overall correlations between the maternal and paternal ethnic socialization and adolescents' ethnic identity affirmation were not significant other than the correlation between paternal ethnic socialization in 5th grade and adolescents' ethnic identity affirmation in the 10th grade which was negative in direction. Further, the overall correlation between the maternal and paternal Mexican American values at 5th grade and the adolescent's ethnic identity and self-efficacy (10th and 12th grade, respectively) were not significant.

Test of the Hypothesized Ethnic Socialization Model

Structural equation modeling using full information maximum likelihood in *Mplus* version 7.2 (Muthén & Muthén, 2010) was used to evaluate the hypothesized model. The model (see Figure 1) included direct associations between parents' Mexican American values in 5th grade and adolescents' self-efficacy in 12th grade. In addition, parental ethnic socialization in 5th and 7th grade and ethnic identity were included as mechanisms underlying these associations. Maternal and paternal Mexican American values were allowed to correlate, as were maternal and paternal ethnic socialization in 5th grade, and maternal and paternal ethnic socialization in 7th grade. Ethnic identity affirmation, exploration, and resolution in 10th grade were also allowed to correlate. Although not shown in Figure 1, maternal and

paternal Mexican American values were identified as a latent construct by using the five Mexican American values subscales as parceled indicators. All other single dimension constructs in the models were included as observed scores because treating them as latent constructs would result in a very large number of path coefficients to be estimated. Model fit is considered good if the Comparative Fit Index (CFI) is greater than or equal to .95 (adequate if greater than or equal to .90), the Root Mean Square Error of Approximation (RMSEA) is less than or equal to .06 (adequate if less than or equal to .08), and the Standardized Root Mean Squared Residual (SRMR) is less than or equal to .08 (Hu & Bentler, 1999).

The initial hypothesized model fit the data well: χ^2 (103) = 183.31; CFI = .97; RMSEA = . 04; SRMR = .04. Maternal Mexican American values were positively associated with maternal ethnic socialization practices in 5th grade (β = .42, p .001), which were in turn positively associated with maternal ethnic socialization practices in 7th grade (β = .68, p . 001). Paternal Mexican American values were positively associated with their ethnic socialization practices in 5th grade and 7th grade (β = .32, p .001), which were in turn positively associated with fathers' ethnic socialization practices in 7th grade (β = .65, p . 001). Maternal ethnic socialization in 5th grade (but not 7th) was positively associated with adolescents' ethnic identity exploration (β = .19, p .01), while paternal ethnic socialization in 7th grade (but not 5th) was positively associated with adolescents' ethnic identity exploration (β = .16, p .05). In addition, adolescents' ethnic identity exploration and resolution were positively associated with self-efficacy in 12th grade (β = .17, p .01 and β = .15, p .05, respectively). However, the overall mediational pathway from maternal Mexican American values to adolescent's self-efficacy (through maternal ethnic socialization and ethnic identity exploration) was somewhat reduced by a direct negative path to adolescents' ethnic identity exploration (β = −.13, p .05).

Given the multiple mediators in this model, we used joint significance tests to examine the mediated effects. Simulation tests have demonstrated the joint significance test to be one of the preferred methods of assessing mediation, given control over Type I error and substantial power (Taylor, MacKinnon, & Tein, 2008). In this approach, there is evidence for mediation if the each of the paths that comprise the mediated effect differs significantly from zero (Taylor et al., 2008; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). However, there were no significant mediational paths involving adolescent's ethnic identity affirmation or resolution.

The paths from maternal Mexican American values to maternal ethnic socialization in 5th grade (t = 6.05, p .001), from maternal ethnic socialization in 5th grade to 10th grade ethnic identity exploration (t = 2.68, p .01), and from 10th grade ethnic identity exploration to 12th grade self-efficacy (t = 2.42, p .01), were all significantly nonzero and provide evidence for significant mediation. However, there was a second, much more modest, set of mediational paths from maternal Mexican American values to 10th grade ethnic identity exploration (t = 1.96, p .05), and from 10th grade ethnic identity exploration to 12th grade self-efficacy (t = 2.42, p .05) were all significantly nonzero and mitigated the total effect of maternal values on adolescent self-efficacy somewhat.

The paths from paternal Mexican American values to paternal ethnic socialization in 5th grade ($t = 6.22$, p .001), from paternal socialization in 5th grade to paternal socialization in 7th grade ($t = 12.75$, p .001), from paternal socialization in 7th grade to 10th grade ethnic identity exploration ($t = 2.29$, p .05), from 10th grade ethnic identity exploration to 12th grade self-efficacy ($t = 2.42$, p .01), were all significantly nonzero and also provide evidence of significant mediation. A second, much more modest, set of mediational paths from paternal Mexican American values to 7th grade paternal ethnic socialization ($t = 2.43$,, p .05), and from 7th grade paternal socialization grade to 10th grade ethnic identity exploration ($t = 2.53$, p .05), and from 10th grade ethnic identity exploration to 12th grade self-efficacy ($t = 2.42$, p .01) were all significantly nonzero and enhanced the total effect of paternal values on adolescent self-efficacy somewhat.

Moderation by Parenting Style

Separate multi-group analyses were conducted to compare models that constrained all path coefficients to be equal across parenting style groups to partially unconstrained models that allowed the path coefficients from ethnic socialization (in 5th and 7th grade) to all three ethnic identity subscales to vary across parenting style groups, separately for each parent. For maternal parenting, mothers categorized as *authoritative* were compared to all other mothers (*moderately demanding* and *less involved*). For paternal parenting, fathers categorized as *authoritative* were compared to all other fathers (*less involved* and *no-nonsense*). A chi-square difference test (Muthén & Muthén, 2010) that the fit of the constrained and partially unconstrained models for mothers and fathers were not significantly different for any of the hypothesized paths [χ^2 (6) = 4.52, p = .61; χ^2 (6) = 5.51, p = .48; for mothers and fathers, respectively]. Follow-up tests comparing the constrained model to a series of partially unconstrained models in which individual hypothesized moderations paths (i.e., maternal 5th grade ethnic identity to adolescents' 10th grade ethnic identity exploration) were allowed to vary one at a time across parenting style groups also provided no evidence of significant moderation for either maternal or paternal parenting styles groups.

Discussion

The present study contributes significantly to our understanding of two important features of Mexican American youths' self-views, the development of ethnic identity, and general self-efficacy. The findings provide support for ethnic socialization models (e.g., Knight et al, 1993) of adolescents' self-views over a substantial developmental timeframe (i.e., 5th to 12th grade). Mothers and fathers who more highly endorse Mexican American values when their children were in the 5th grade reported higher levels of ethnic socialization (at 5th grade and 7th grade; either as a direct or mediated effect). Further, higher levels of maternal ethnic socialization at 5th grade and paternal ethnic socialization at 7th grade were associated with higher levels of adolescent ethnic identity exploration at 10th grade and, in turn, higher self-efficacy at 12th grade. In addition, these findings were generalizable across male and female Mexican American adolescents and those who were born in Mexico or the United States (see supplemental materials for relevant analyses). Hence, these longitudinal findings indicate that the ethnic socialization experiences provided by both mothers and fathers are associated

with some of the adolescents' ethnic self-views and broader (i.e., non-cultural) self-views during different developmental timeframes.

These findings enhance our understanding of the development of self-views among Mexican American adolescents in several ways. First, these findings support ethnic socialization models (e.g., Knight met al., 1993) suggesting that the development of ethnic identity exploration is a key feature of self-views that may impact a much broader feature of self-view such as self-efficacy. Indeed, there is previous compelling evidence, albeit mostly based on concurrent assessments, that the development of a strong ethnic or racial identity is associated with positive psychosocial, academic, and health outcomes in several minority groups in the United States (see Rivas-Drake et al 2014 for a review). In the present findings, the 12th grade self-efficacy of these Mexican American adolescents is associated with their ethnic identity exploration and resolution at 10th grade. Perhaps ethnic identity exploration and resolution are associated with self-efficacy because the adolescents who view themselves as trying to learn more about their ethnic group membership, and who understand how their ethnic group membership plays an important role in their life, also see themselves as more capable of dealing with the demands of living in their ethnic context. These self-views of efficacy may also generalize to the broader mainstream context in which they live.

Second, although the three features of ethnic identity development during middle adolescence are substantially correlated, the present findings indicate that maternal and paternal ethnic socialization are primarily associated with the adolescents' 10th grade ethnic identity exploration rather than affirmation or resolution. Hence, the more the mothers' and fathers' socialize their youths about their cultural heritage (albeit when their adolescents were in different grades) the more the adolescents' report seeking out and actively trying to learn more about their ethnic group membership when they are in the 10th grade. In contrast to our expectations, there was relatively little support for the socialization model when examining ethnic identity affirmation and resolution. One possibility is that the very high mean scores for these two features of ethnic identity may have led to attenuation due to the restricted range of these scores in this sample. Another possibility is that there may be some developmental sequencing that could result in ethnic socialization being more related to affirmation or resolution at a different developmental point. For example, Hernández et al. (2014) demonstrated that Mexican American parents' ethnic socialization when their youth were in the 5th grade was associated with their 7th grade adolescents' ethnic pride (a psychological construct that is very much akin to ethnic identity affirmation). Unfortunately, we could not incorporate 7th grade assessments of ethnic identity into our model.

Third, our findings suggest some interesting differences in the timing of the influence of maternal and paternal ethnic socialization. Maternal ethnic socialization in 5th grade (and not 7th grade) was associated with adolescents' 10th grade ethnic identity exploration; but paternal ethnic socialization in 7th grade (and not 5th grade) was associated with the adolescents' 10th grade ethnic identity exploration. This finding is in direct contrast to an earlier finding that observed little or no association of Mexican American fathers' ethnic socialization to a composite of youths' ethnic identity exploration and resolution (Knight, Berkel, Umaña-Taylor, Gonzales, Ettkal, Jaconis, & Boyd, 2011). However, it is important to

note that only 5th grade assessments of ethnic socialization were included in the analyses reported in this previous study. Echoing the patterns of findings in the current study, other research has also documented the importance of paternal parenting effects (over maternal parenting effects) on Mexican-origin youths' ethnic attitudes and identities during middle adolescence (Zeiders, Updegraff, Umaña-Taylor, McHale, & Padilla, 2016).

Across key developmental switchpoints (Del Giudice, Ellis, & Shirtcliff, 2011), including transitions into middle adolescence (White, Liu, Nair, & Tein, 2015), the saliences of maternal and paternal parenting for development and across contexts may wax and wane, producing developmental variability in maternal versus paternal socialization effects (Simpkins, Fredricks, & Eccles, 2015). Sociocognitive changes taking place during this developmental period accentuate the salience of extra-familial contexts of socialization, like neighborhoods and peers (Leventhal et al., 2009). Meanwhile, especially among Mexican American families espousing relatively strong traditional gender role beliefs, mothers' roles are strongly situated within the home and caretaker domains (Umaña-Taylor & Updegraff, 2013), whereas fathers' roles are often situated within extra-familial environments (e.g., work, neighborhoods; White, Roosa, Weaver, & Nair, 2009). These patterns may influence the meaning of maternal and paternal socialization for offspring and across development (White et al., in press. Maternal ethnic socialization may be more salient during developmental periods when the home and family contexts are relatively central features of the youths' developmental experiences; whereas paternal ethnic socialization may be more salient during developmental periods when extra-familial and extra-home contexts are accentuated aspects of the youths' developmental experiences. Future research should explore traditional gender role beliefs as potential moderators of maternal and paternal socialization effects on Mexican American adolescents' ethnic exploration. Additionally, research documenting patterns of maternal versus paternal socialization effects on self-views across developmental time, contexts, and groups is considered critical for advancing a broader understanding of the familial socialization of self-views.

As noted earlier, the present study did not provide evidence of the utility of integrating a cultural and more mainstream socialization perspectives. That is, the associations of maternal and paternal ethnic socialization with adolescents' ethnic identity components and self-efficacy were not stronger among authoritative parents as expected. Perhaps we selected a primary self-view outcome that may be relatively exclusively a product of ethnic socialization (i.e., ethnic identity development). Future integrative model research needs to examine a wider range of self-view outcomes that develop through socialization processes, and perhaps examine a wider set of more traditional mainstream socialization processes. For example, mainstream socialization scholars have identified socialization processes that may foster prosocial development (e.g., Eisenberg & Valiente, 2002; Hoffman, 2000), while cultural scholars have demonstrated that ethnic socialization may foster only specific types of prosocial behaviors (e. g., Knight et al., in press). Moreover, there was an unexpected direct negative relation between maternal Mexican American values and ethnic identity exploration. This finding is puzzling and could reflect a negative reactance from youth to examine their ethnic heritage when their mothers exhibit strong, traditional Mexican American values. However, given the novelty of this finding, future research will be needed.

Although these findings enhance our understanding of the development of ethnic identity and self-efficacy self-views, this research has several limitations. First, although we examine a longitudinal model, the unavailability of 7th grade assessments of the three ethnic identity components and 10th grade self-efficacy precluded the strongest tests of mediation (i.e., analyses that controlled for earlier scores on the outcomes), thereby limiting our ability to make causal inferences. However, the relatively long time between the assessments of parental Mexican American values and the adolescents' ethnic identity and self-efficacy, greatly reduces the likelihood of a reverse direction of causality. Furthermore, given that the ethnic socialization assessments occurred either before or just as the youth entered adolescence and that scholars show that ethnic identity development occurs during adolescence (Umaña-Taylor, Gonzales-Backen, & Guimond, 2009), the likelihood of reverse causal effects are greatly reduced. Second, although we have a relatively large sample, it may not be fully representative of all persons of Mexican decent living in the United States. However, the reliance on a stratified random sampling of the Mexican Americans who live in the broad Phoenix metropolitan area ensures a relatively diverse sample of Mexican American participants from a broad range of neighborhood contexts (see Roosa, Liu, Torres, Gonzales, Knight, & Saenz, 2008).

Nonetheless, our findings support cultural developmental models (e.g., Knight, Bernal, Cota & Garza, 1993) of the parental ethnic socialization of two important features of Mexican American adolescents' self-views (i.e., ethnic identity and self-efficacy) using longitudinal data over a relatively wide developmental time frame, relying on multiple reporters (i.e., adolescents, mothers, and fathers), and in a relatively diverse sample of Mexican American families. Of particular interest is the finding that earlier endorsement of cultural values and ethnically-based parenting practices of Mexican American fathers and mothers were associated with youth conceptions of self in later adolescence. These findings suggest that fathers' and mothers' cultural-based practices still exert influence on their Mexican American boys' and girls' self-views at a substantially later age. These findings yield further evidence on the usefulness of identifying and incorporating culturally-based developmental mechanisms (Carlo & de Guzman, 2009; Garcia-Coll et al., 1996; Knight, Bernal, Cota & Garza, 1993; Knight et al., 2016) to better understand the development of self-views in ethnic minority youth. Taken together with other recent findings (Knight et al., 2016) on the socialization of other developmental outcomes (such as prosocial behaviors), the findings suggest the importance of both mothers' and fathers' culture-related influences (i.e., cultural values, ethnic socialization practices) on Mexican American adolescents' development.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

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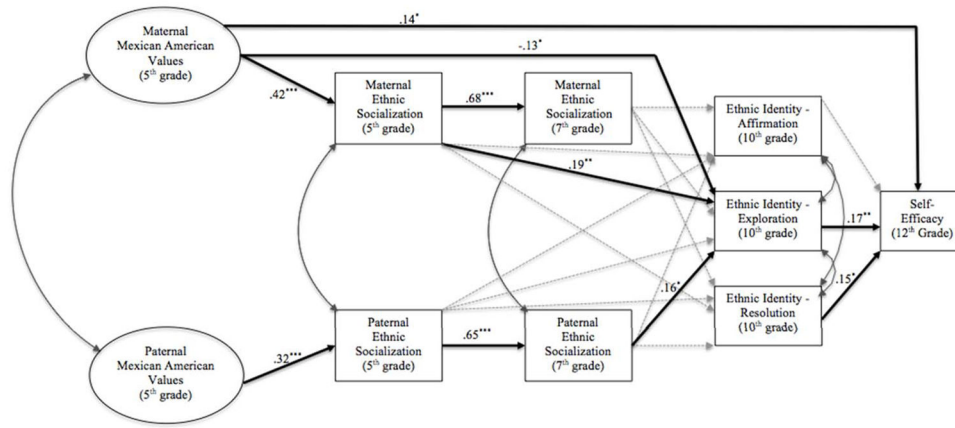
Figure 1. Cultural socialization model

Note. Model fit: c^2 (103) = 183.31; CFI = .97; RMSEA = .04; SRMR =.04; $^*p < .05$, $^{**}p < .01$, $^{***}p < .001$

Table 1

Correlations and descriptive statistics for study variables.

		1	2	3	4	5	6	7	8	9	10
1.	Maternal Mexican American values (5th grade)	--									
2.	Paternal Mexican American values (5th grade)	.21**	--								
3.	Maternal ethnic socialization (5th grade)	.37**	.09*	--							
4.	Paternal ethnic socialization (5th grade)	.11*	.30**	.23**	--						
5.	Maternal ethnic socialization (7th grade)	.23**	.03	.68**	.19**	--					
6.	Paternal ethnic socialization (7th grade)	.12*	.27**	.22**	.68**	.21**	--				
7.	Affirmation (10th grade)	-.07	-.04	.00	-.12*	.03	-.08	--			
8.	Exploration (10th grade)	-.03	-.03	.17**	.09	.14**	.16**	.20**	--		
9.	Resolution (10th grade)	.01	-.02	.11*	.07	.12*	.10	.22**	.51**	--	
10.	Self-efficacy (12th grade)	.10	.02	.02	-.02	.01	-.04	.12*	.23**	.25**	--
	Mean (SD)	4.40 (.37)	4.38(.38)	3.15 (.51)	3.00 (.54)	3.21 (.48)	3.13 (.51)	4.80 (.41)	3.77 (.76)	4.31 (.67)	3.70 (.46)

Note.

*
p < .05

**
p < .01