Gender Role Attitudes across the Transition to Adolescent Motherhood in Mexican-Origin Families

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Using longitudinal data collected at four time points from 191 dyads of Mexican-origin adolescent first-time mothers and their mother figures, we examined changes in and socialization of traditional gender role attitudes across the transition to parenthood using latent growth curve modeling and actor–partner interdependence modeling. Longitudinal growth models indicated that, regardless of nativity status, adolescent mothers' and their foreign-born mother figures' gender role attitudes became more egalitarian across adolescents' transition to parenthood, spanning from the 3rd trimester of pregnancy to 36 months postpartum. Furthermore, actor-partner interdependence modeling suggested that adolescents' and their mother figures' gender role attitudes during adolescents' third trimester of pregnancy equally contributed to subsequent increases in one another's gender role attitudes at 10 months postpartum. Importantly, this reciprocal socialization process was not moderated by adolescent mothers' nor by their mother figures' nativity status. Findings suggest that it is important to understand the cultural and intergenerational family processes that contribute to the development of gender role attitudes during the transition to parenthood for adolescent mothers and their mother figures in Mexican-origin families.

Keywords: Gender Role Attitudes; Adolescent Mothers; Actor–Partner Interdependence Modeling

Gender role attitudes inform parenting decisions (Katz-Wise, Priess, & Hyde, 2010) and the division of labor between partners (Bianchi & Milkie, 2010), making these attitudes central to understanding the family ecology. Gender role attitudes refer to beliefs about what roles and behaviors are appropriate for women and men (Hoffman & Kloska, 1995). At a fundamental level, traditional gender role ideologies suggest that women and men are different and therefore should assume distinct roles and functions, whereas egalitarian gender role ideologies suggest that roles and functions should be assigned independent of gender (Rogers & Amato, 2000). Research on the gender role attitudes of parents, conducted largely with adult and primarily non-Latina/o White samples, has found that attitudes typically become more traditional during the transition to parenthood (Katz-Wise et al., 2010), and other studies find that these attitudes remain relatively stable after this transition (Fan & Marini, 2000). Yet, few longitudinal studies have

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examined stability or change in traditional gender role attitudes among *adolescent mothers* during the transition to parenthood, even though gender roles attitudes are typically still developing throughout adolescence (Crouter, Whiteman, McHale, & Osgood, 2007).

Teen pregnancy rates have declined in the United States since the early 1990s (Santelli & Melnikas, 2010), but remain a pressing issue to study given that the United States has the highest rate among all developed countries (United Nations Statistics Division, 2012). Furthermore, Mexican-origin adolescents have the highest birthrate of all ethnic groups in the United States (Centers for Disease Control & Prevention, 2011), and Mexican-origin individuals constitute the fastest-growing ethnic minority group in the United States (U.S. Census, 2013). Thus, it is particularly important to understand normative developmental processes, such as the development of gender role attitudes, among Mexican-origin adolescents, especially those who experience a non-normative transition to parenthood during adolescence.

In addition, few studies have examined the role of culture in understanding how gender role attitudes change or remain stable across the transition to adolescent parenthood. To our knowledge, virtually no studies have investigated gender role attitudes across the transition to parenthood among Mexican-origin adolescents and their mother figures, despite knowledge that risk for teen pregnancy is heightened in this population (Centers for Disease Control & Prevention, 2011) and gender plays a prominent role in the lives of Latina/o families (e.g., Cauce & Domenech-Rodríguez, 2002). Thus, the current study used data from a community-based sample of first-time, Mexican-origin adolescent mothers and their mother figures to examine (a) within-person developmental changes in gender role attitudes, and (b) the bidirectional nature of gender role attitude socialization across the transition to parenthood among adolescent mothers and their mother figures.

Developmental and Contextual Differences between Adolescent and Adult Mothers

The malleability of gender role attitudes is largely a function of the socializing experiences that one endures (Fan & Marini, 2000). Thus, the timing of pregnancy (i.e., in adolescence or in adulthood), in conjunction with current social and contextual norms about when pregnancy is socially acceptable during the lifespan (i.e., adulthood in the United States; Flanagan, McGrath, Meyer, & Garcia Coll, 1995), likely has implications for normative development, including the development of gender role attitudes. That is, gender role attitudes may shift during the transition to parenthood for both adolescent and adult mothers, given the new context and parenting roles that shape their environment; however, this shift in attitudes may differ for mothers who transition to parenthood in adolescence compared to in adulthood.

Distinct developmental and contextual differences between adolescent and adult mothers may contribute to qualitative changes (or relative stability) in their gender role attitudes during the parenting transition. First, and perhaps most importantly, adolescent mothers are in a developmental period when they are still forming and sharpening their cognitive abilities and social skills (Flanagan et al., 1995). Thus, gender role attitudes may shift (i.e., become more egalitarian or more traditional) as adolescents gain the cognitive abilities necessary to consider abstract concepts, such as the role of gender in society, or after increased exposure to new social influences and experiences (e.g., observing how others negotiate gender). Some studies have found that gender role attitudes tend to become more egalitarian across the developmental transition from adolescence to young adulthood (Fan & Marini, 2000), whereas others have found that changes in gender role attitudes vary as a function of various individual and contextual characteristics, such as gender, birth order, or parents' attitudes (e.g., Crouter et al., 2007; Galambos, Almeida, &

Petersen, 1990). The shift to more egalitarian gender role attitudes is consistent with gender schema perspectives, which postulate that gender traditionality declines throughout adolescence into young adulthood (e.g., Galambos, Berenbaum, & McHale, 2009; Martin & Halverson, 1981). This shift to more egalitarian gender role attitudes is in contrast with the shift to more traditional gender role attitudes among adults during the transition to parenthood (e.g., Katz-Wise et al., 2010). Thus, an important question to explore is how gender role attitudes develop across the transition to parenthood among *adolescent mothers*.

The family ecology is a second distinct difference between adolescent and adult mothers. That is, unlike heterosexual adult mothers, adolescent mothers are less likely to live with a male partner and are more likely to coreside with their family-of-origin (e.g., Contreras, Narang, Ikhlas, & Teichman, 2002). Research on adolescent mothers has identified that their mother figures, rather than the father of their child, are typically the most salient source of support during the transition to parenthood (e.g., Kalil & Danziger, 2000). Thus, given that the extant literature on gender role attitudes during the transition to parenthood has typically focused on the interplay between heterosexual adult mothers' and their male partners' gender role attitudes (e.g., Katz-Wise et al., 2010), it is important to consider the intergenerational family processes that occur between adolescent mothers and their mother figures when attempting to understand gender role attitudes across this transition period. Research on adolescent development has found that mothers are important socializing agents of their daughters' gender role attitudes (e.g., Ex & Janssens, 1998). Adolescents whose parents have more traditional gender role ideologies and attend to issues of gender roles in conversations with their children tend to also develop more traditional gender role attitudes themselves (e.g., McHale, Crouter, & Whiteman, 2003). Thus, as compared to adult mothers, the primary figure in the development and socialization of gender role attitudes among teen mothers may be their mother figures.

Finally, while mothers often play a salient role in socializing their daughters (Updegraff, McHale, Crouter, & Kupanoff, 2001), it may be the case that changes in adolescents' lives (i.e., teen pregnancy) may contribute to some aspect of their mother figures' development. This may be especially true for mothers of teen moms, given that they are often involved in a coparental relationship with their daughters and serve as a salient source of support during this transitional period (e.g., Kalil & Danziger, 2000). Thus, because they are often involved in coparenting their grandchild, they may experience similar changes in their gender role attitudes that have been documented among adult mothers (Katz-Wise et al., 2010). Furthermore, the event of teenage pregnancy within the family system may result in changes to mothers' gender role attitudes, in addition to adolescent mothers' gender role attitudes, such that reciprocal associations may be evident during the transition to adolescent motherhood. This hypothesis is consistent with family socialization perspectives that suggest that socialization may occur in a more reciprocal manner among parents and their older adolescents and young adults, as compared to the more hierarchical pattern of influence between parents and younger adolescents or children (Grusec & Hastings, 2007). Indeed, prior studies have documented that cultural value socialization (e.g., familism) is more reciprocal between Mexican-origin adolescents and their fathers (e.g., Perez-Brena, Updegraff, & Umaña-Taylor, 2015). Specific to the current study, research has documented bidirectional longitudinal effects on the development of gender role attitudes in adult daughter–mother dyads (Bohannon & Blanton, 1999), but this research did not examine adolescent daughter–adult mother reciprocity. Thus, it is important to examine whether adolescent mothers' gender role attitudes contribute to their mother figures' gender role attitudes, rather than solely focusing on the typically studied mother-to-adolescent socialization processes.

Gender Role Attitudes in Mexican-Origin Families

The role of gender has been at the forefront of research on Latina/o families (e.g., Cauce & Domenech-Rodríguez, 2002). Cultural socialization perspectives highlight the importance of understanding how cultural values, such as traditional gender role attitudes, are transmitted from one generation to the next (e.g., Schwartz, Unger, Zamboanga, & Szapocznik, 2010). Conceptually, Mexican-origin families' cultural attitudes and expectations about gender may vary based on one's acculturative and nativity statuses (e.g., Fuligni, 2001). Acculturation refers to the process of adapting to one's host culture (i.e., Anglo-orientation in the United States; Cuéllar, Arnold, & Maldonado, 1995), and higher levels of Anglo-orientation have been found to be associated with less traditional gender role attitudes (e.g., Su, Richardson, & Wang, 2010; Updegraff & Umaña-Taylor, 2010). Furthermore, children and adolescents, as compared to their parents, tend to more rapidly acculturate to U.S. culture (e.g., Portes & Rumbaut, 1996); thus, rather than examining a static association between Anglo-orientation and traditional gender role attitudes across a developmental transition, it is important to understand the dynamic interplay of these constructs across time. Thus, acculturation is examined as a predictor of both adolescent mothers' and their mother figures' gender role attitudes across the transition to adolescent motherhood.

In addition to acculturation, others have documented that attitudes about gender roles also vary by nativity status (i.e., whether a person was born in the United States or outside of the United States). Studies that have examined the association between nativity status and gender role attitudes have found that U.S.-born mothers tend to report less traditional gender role attitudes as compared to those born in Mexico (Leaper & Valin, 1996). Other studies, while not focused on mothers in particular, have also documented a positive relationship between U.S.-born nativity status and more egalitarian gender role ideologies (e.g., Phinney & Flores, 2002). Thus, nativity status is examined as a predictor of both adolescent mothers' and mother figures' gender role attitudes across the adolescents' transition to parenthood.

Perhaps more importantly, the cultural socialization process in Mexican-origin adolescent mother-mother figure dyads may depend on the nativity status of adolescents' mother figures. That is, mother figures who were born outside of the United States may have less of an impact on their daughters' gender role attitudes because of the incongruence between their upbringing and the current values and norms in the United States (Vollebergh, Iedema, & Raaijmakers, 2001). Yet, consistent with the reciprocal socialization hypothesis, it may also be the case that Mexican-origin adolescent mothers living in the United States will have a stronger impact on their mother figures' gender role attitudes if their mother figures were born outside of the United States (e.g., Bacallao & Smokowski, 2007; Fuligni & Telzer, 2012). That is, adolescents living in the United States may need to help educate their Mexico-born parents about cultural traditions, such as gender role attitudes (Fuligni & Telzer, 2012). Thus, we examine mother figures' nativity status as a moderator of the reciprocal socialization between adolescent mothers' and their mother figures' gender role attitudes.

The Present Study

The current study builds on previous literature by using longitudinal growth curve modeling and cross-lagged actor-partner interdependence modeling (APIM; Kashy & Kenny, 1999) to examine the within-person developmental changes in gender role attitudes and reciprocal socialization processes across adolescent mothers' transition to parenthood among adolescent mothers and their mother figures. First, we examined the patterns of developmental change in traditional gender role attitudes among adolescent

mothers and their mother figures, separately, during the adolescents' transition to parenthood. Given the lack of research on adolescent mothers' development of traditional gender role attitudes, we did not have a priori hypotheses about their trajectories. Furthermore, although prior research finds that adults' gender role attitudes are largely stable, we had no a priori hypotheses about how the adolescents' mother figures' attitudes would change during the study given that they are often engaged in coparenting their adolescents' children (Pittman & Coley, 2011), an interaction which may ultimately impact their gender role attitudes. Finally, given the importance of understanding how culture impacts the development of gender role attitudes across this transition for both adolescent mothers and their mother figures, we also examined if variability existed in these trajectories by nativity status.

Second, we examined the potential for reciprocal socialization of gender role attitudes during the transition to parenthood across adolescent mothers and their mother figures using APIM. This modeling approach allowed for actor associations (e.g., an adolescent's earlier report of gender role attitudes predicting her later report) and dyadic relationship associations (i.e., an adolescent's report of gender role attitudes predicting her mother figure's report of gender role attitudes at a subsequent time point) to be measured uniquely and simultaneously (Cook & Kenny, 2005). This method allows for greater confidence in the interpretations of the directionality of socialization in relationships above and beyond more traditional methods that tend to test these associations separately (e.g., multivariate regression). We expected that mother figures' gender role attitudes would predict later reports of their adolescents' gender role attitudes across the transition to parenthood, given that mother figures tend to be the primary source of support for pregnant and parenting adolescents (e.g., Contreras et al., 2002). Given prior support for the finding that there is a reciprocal contribution among gender role attitudes for mothers and their adult daughters (i.e., Bohannon & Blanton, 1999), and due to the salient event of their adolescent daughters' pregnancy and subsequent transition to parenthood, we expected to find that adolescents' gender role attitudes also would predict changes in the mother figures' gender role attitudes during their adolescents' transition to parenthood. Furthermore, given the possibility of cultural brokerage in Mexican-origin families, we examined moderation of the tested model by the mother figures' nativity status. Because the reciprocal socialization process may be influenced by whether the adolescent and mother figure lived together, coresidency status was included as a control variable on adolescents' and mother figures' reports of gender role attitudes across the transition to parenthood.

METHOD

Sample Characteristics

The sample was drawn from an ongoing community-based longitudinal study of 207 dyads consisting of Mexican-origin adolescent mothers and their mother figures in a southwestern U.S. metropolitan city. The analytic sample for the current study consisted of 191 *first-time* adolescent mothers and their mother figures. The current study used data from the first four waves of data collection. At Time 1 (T1), adolescents were an average of 16.19 years old (SD = 0.97, range = 15–18 years) and were primarily born in the United States (63.4%). Mother figures averaged 40.78 years old (SD = 6.78, range = 21–78 years) and the majority were born in Mexico (68.6%). Most (88%) adolescent mothers coresided with their mother figures at T1. At Time 2 (T2), 69% of the 187 participants who provided information about coresidency lived together. At Time 3 (T3), 59.5% of the 168 participants who provided information about coresidency lived together. Finally, 50% of the 160

participants at Time 4 (T4) who provided information about coresidency lived together. The sample was predominantly low income, as the average household income of the mother figures at T1 was $27,951 annually ($SD$ = $20,186, range = $94 to $114,000). Of the adolescents who were employed at T1 of the study (n = 36; 19%), their average hourly wage was $6.91 ($SD$ = $3.53). Most adolescents reported that they were in a relationship with the biological father of their child (68.6%) at T1. Over half (60.7%) of the adolescents were enrolled in school at T1, 4.7% had already graduated from high school or earned a GED, and 34.6% had already dropped out of school. By Time 4 (T4), their average level of educational attainment was 11.23 years (SD = 1.48).

Procedure

Participants were recruited from community agencies and schools in a southwestern urban region of the United States. To participate in the study, participants needed to be pregnant, between the ages of 15 and 18, not legally married, have a mother figure who was willing to participate in the study, and identify as Mexican-origin. In-home interviews with adolescents lasted approximately 2.5 hours, while interviews with mother figures lasted approximately 1.5 hours. Interviews were conducted in Spanish (adolescents = 37%, mother figures = 69%) or English. T1 interviews occurred when the adolescent was in her third trimester of pregnancy (M = 30.79 weeks, SD = 4.49), T2-T4 interviews were conducted 10, 24, and 36 months postpartum, respectively. Adolescents and their mother figures received $25 for participation at T1, $30 at T2, $35 at T3, and $40 at T4. Of the 191 first-time adolescents who participated at T1, 97% participated at T2, 86% at T3, and 84% at T4. Of the 191 mother figures, 92% participated at T2, 83% at T3, and 82% at T4. Analyses suggested that gender role attitudes at T1 did not differ by attrition status across the study. The university's institutional review board approved the study protocol.

Measures

Gender role attitudes were measured for adolescents and mother figures at all four time points by a 10-item adapted version of Hoffman and Kloska's (1995) *Gender Role Attitude Scale*, which has been validated with Mexican-origin individuals living in the United States (Adams, Coltrane, & Parke, 2007). Items were rated on a 4-point Likert scale with end points of (1) *strongly disagree* and (4) *strongly agree*, such that higher scores represent beliefs and attitudes consistent with more traditional gender role attitudes. Cronbach's α ranged from 0.89 to 0.93 across all four time points and across both reporters. Separate latent variables were created for each reporter across all waves using a balanced parceling approach (see Little, Cunningham, Shahar, & Widaman, 2002), which helped to create a structurally stable latent construct. Latent variable modeling is preferred over manifest scores because it accounts for measurement unreliability, leading to more accurate estimates in structural models (Kline, 2011).

The Anglo Orientation Subscale of the Acculturation Rating Scale for Mexican Americans – II (Cuéllar et al., 1995) was used to assess the extent to which adolescent mothers and their mother figures engaged in Anglo-oriented behaviors (e.g., "I speak English," "I associate with Anglos") at all four time points. The Anglo Orientation subscale consists of 13 items, rated on a 5-point Likert scale with end points of (1) *Not at all* to (5) *Extremely often or almost always*. Items were mean scored, such that higher scores represent a higher endorsement of Anglo-oriented behaviors. Cronbach's α ranged from 0.87 to 0.94.

Nativity was assessed at T1 of the study by one question for both adolescent mothers and their mother figures: "In what country were you born?" Nativity was coded as 0 = *Mexico* and 1 = *U.S.* Finally, age was calculated for each participant by subtracting

her birthdate from the date of the interview at T1. Adolescents responded to questions at all four time points about whether they lived with their mother figure; coresidency was coded as (0) *Did not live with mother figure* and (1) *Did live with mother figure*.

RESULTS

Latent Growth Curve Modeling Results

Table 1 displays the means, standard deviations, and correlations for key study variables. Both adolescent mothers and mother figures reported relatively moderate levels of traditional gender role attitudes at T1, but these attitudes became less traditional across the study. Prior to testing the conceptualized models, longitudinal measurement invariance of the gender role attitudes measure was established (see Table 2) for both adolescent mothers and their mother figures from T1 to T4, suggesting that measurement of gender role attitudes remained equivalent across the four time points of the study (Little, Card, Slegers, & Ledford, 2007).

Consistent with the first goal, latent growth curve modeling in M*plus* (Muthén & Muthén, 2010) was used to assess the developmental trajectories of both adolescent mothers' and their mother figures' gender role attitudes from adolescents' third trimester of pregnancy (T1) until 36 months postpartum (T4). Initially, unconditional latent growth curve models were estimated to examine the underlying structure of change separately for adolescent mothers and their mother figures. Model fit was assessed using the comparative fit index (CFI) and the root mean square error of approximation (RMSEA). The CFI is considered to indicate good (acceptable) fit when it attains a value of 0.95 (0.90) or higher, and the RMSEA reflects good (acceptable) fit with values of 0.05 (0.08) or lower (Kline, 2011). Once the underlying structure of change was identified, moderation by nativity status of the reporter was tested using multiple-group confirmatory factor analyses. Nested model comparisons were used for this approach, such that a more constrained model (i.e., path constrained across groups) was compared to a less constrained model (i.e., path freely estimated across groups). If the chi-square difference test was not significant, it suggested that the path of interest was similar across nativity status groups. Missing data were handled in analyses using full information maximum likelihood (Schlomer, Bauman, & Card, 2010).

A series of models (available upon request) supported a quadratic pattern of change in gender role attitudes among adolescent mothers (model fit: χ^2 [df = 4] = 4.73, p = .32; CFI = 1.00; RMSEA = 0.03 [90% CI: 0.00–0.12]). Next, adolescent mothers' nativity status was tested as a moderator of change in gender role attitudes. A series of nested models revealed that nativity status did not moderate changes in adolescent mothers' gender role attitudes ($\Delta\chi^2$ values with 1 df ranged from 0.081 to 2.914). Thus, as shown in Figure 1a, for both U.S. born and Mexico-born adolescent mothers, endorsement of traditional gender role attitudes decreased between the third trimester of pregnancy and 10 months postpartum, remained relatively stable between 10 and 24 months postpartum, and then decreased again between 24 and 36 months postpartum.

A series of models (available upon request) supported a linear pattern of change in gender role attitudes among mother figures (model fit: χ^2 [df = 8] = 15.18, p = .06; CFI = 0.98; RMSEA = 0.07 [90% CI: 0.00–0.12]), such that mother figures' endorsement of traditional gender role attitudes decreased during this period. A series of nested models revealed that mother figures' gender role attitudes varied significantly by their nativity status (see Figure 1b). First, Mexico-born mother figures (β_0 = 2.23) reported more traditional gender role attitudes at Time 1 (i.e., the intercept) compared to U.S.-born mother figures (β_0 = 1.81; $\Delta\chi^2$ [Δdf = 1] = 18.09). Furthermore, the linear slope in gender role

TABLE 1
Correlations, Means, and Standard Deviations of Key Study Variables

	1	2	3	4	5	6	7	8	9	10
1. T1 AR GRA	—									
2. T2 AR GRA	0.76***	—								
3. T3 AR GRA	0.66***	0.76***	—							
4. T4 AR GRA	0.60***	0.63***	0.71***	—						
5. T1 MFR GRA	0.34***	0.39***	0.23**	0.16*	—					
6. T2 MFR GRA	0.42***	0.42***	0.27***	0.19*	0.70***	—				
7. T3 MFR GRA	0.39***	0.36***	0.26***	0.22*	0.69***	0.69***	—			
8. T4 MFR GRA	0.30***	0.29***	0.20*	0.18*	0.73***	0.63***	0.74***	—		
9. T1 AR age	-0.19**	-0.22**	-0.18*	-0.07	-0.14	-0.21**	-0.12	-0.18*	—	
10. T1 AR nativity	-0.11	-0.10	-0.09	-0.03	-0.14	-0.12	-0.16	-0.08	0.06	—
11. T1 AR Anglo	-0.12	-0.09	-0.05	-0.05	-0.12	-0.13	-0.10	0.04	-0.03	0.50***
12. T2 AR Anglo	-0.10	-0.08	0.05	-0.01	-0.25***	-0.17*	-0.17*	-0.12	0.02	0.45***
13. T3 AR Anglo	-0.07	-0.09	-0.02	-0.09	-0.19*	-0.12	-0.16	-0.13	-0.02	0.46***
14. T4 AR Anglo	-0.15	-0.10	-0.08	-0.12	-0.15	-0.14	-0.19*	-0.17*	-0.01	0.49***
15. T1 MFR age	0.12	0.10	0.15	0.12	0.08	0.04	-0.03	0.05	0.02	0.27***
16. T1 MFR nativity	-0.10	-0.10	-0.01	0.04	-0.32***	-0.18*	-0.20*	-0.18*	0.06	0.49***
17. T1 MFR Anglo	-0.13	-0.15*	-0.06	-0.04	-0.36***	-0.19*	-0.32***	-0.20*	0.08	0.48***
18. T2 MFR Anglo	-0.13	-0.16*	-0.07	-0.06	-0.39***	-0.21**	-0.27***	-0.27**	0.11	0.44***
19. T3 MFR Anglo	-0.13	-0.19*	-0.11	-0.08	-0.42***	-0.27***	-0.27***	-0.29***	0.12	0.41***
20. T4 MFR Anglo	-0.16	-0.27***	-0.09	-0.04	-0.39***	-0.22***	-0.31***	-0.22**	0.09	0.48***
Mean	2.06	1.91	1.88	1.82	2.09	2.09	2.00	1.99	16.76	0.63
SD	0.61	0.62	0.61	0.62	0.66	0.68	0.64	0.66	0.98	0.48

TABLE 1
(Continued)

	11	12	13	14	15	16	17	18	19	20
11. T1 AR Anglo	—									
12. T2 AR Anglo	0.77***	—								
13. T3 AR Anglo	0.71***	0.76***	—							
14. T4 AR Anglo	0.70***	0.83***	0.83***	—						
15. T1 MFR age	0.12	0.16*	0.16	0.14	—					
16. T1 MFR nativity	0.42***	0.46***	0.40***	0.37***	0.18*	—				
17. T1 MFR Anglo	0.43***	0.48***	0.41***	0.34***	0.17*	0.81***	—			
18. T2 MFR Anglo	0.41***	0.45***	0.37***	0.35***	0.14*	0.80***	0.89***	—		
19. T3 MFR Anglo	0.41***	0.44***	0.38***	0.32***	0.25**	0.78***	0.91***	0.91***	—	
20. T4 MFR Anglo	0.45***	0.48***	0.44***	0.38***	0.10	0.80***	0.89***	0.89***	0.90**	—
Mean	3.63	3.69	3.84	3.81	41.22	0.31	2.69	2.58	2.61	2.72
SD	0.73	0.72	0.72	0.71	6.81	0.47	1.06	1.00	0.97	1.01

Note. AR = Adolescent report; GRA = Gender role attitudes; MFR = Mother figure report; Anglo = Anglo-orientation. Nativity coded as 0 = Mexico-born, 1 = U.S.-born. Sample sizes ranged across analyses from 140 to 191.
*$p < .05$.
**$p < .01$.
***$p < .001$.

TABLE 2

Measurement Invariance Testing of Gender Role Attitudes Across Reporter and Time (Time 1 to 4)

	χ^2 (df)	$\Delta\chi^2$ (Δdf)	CFI	RMSEA (90% CI)
Configural	186.89 (188)	—	1.00	0.00 (0.00, 0.03)
Loading	194.11 (200)	7.22 (12)	1.00	0.00 (0.00, 0.03)
Intercept	206.69 (212)	12.58 (12)	1.00	0.00 (0.00, 0.03)

Note. df = degrees of freedom; CFI = Comparative fit index; RMSEA = root mean square error of approximation; CI = confidence interval. Measurement invariance constraints across reporter and time were tested simultaneously. The configural model places no constraints across the different time points or reporters. The loading invariance model constrains the factor loadings across time and across reporters to be equal. The intercept invariance model constrains the intercept means to be equal across time and across reporters.
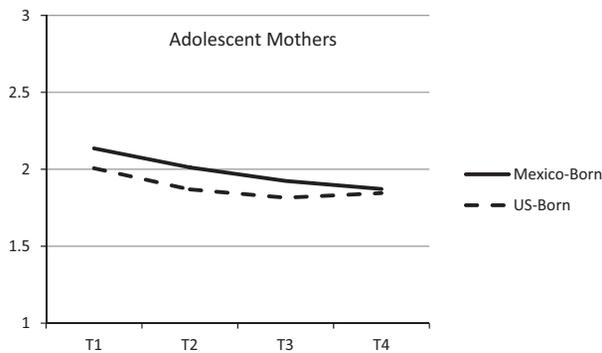
(a)
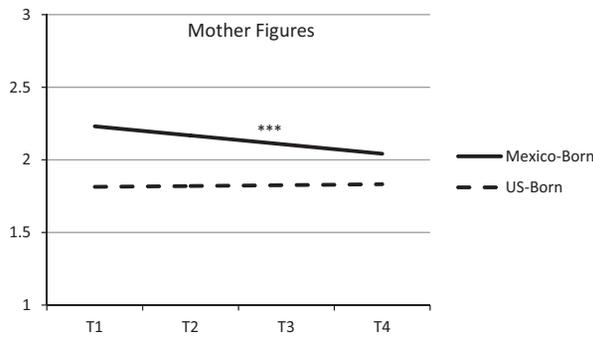
(b)

Note. T1= Time 1. T2 = Time 2. T3 = Time 3. T4 = Time 4.

FIGURE 1. Within-Person Changes in Traditional Gender Role Attitudes Across the Transition to Adolescent Parenthood by Nativity among: (a) Adolescent Mothers and their (b) Mother Figures.

attitudes was significantly different by nativity status ($\Delta\chi^2$ [Δdf = 1] = 6.46), such that there was a significant decrease in traditional gender role attitudes among Mexico-born mother figures ($\beta_1 = -0.06$, $p < .001$), but not among U.S.-born mother figures ($\beta_1 = 0.01$, $p = .77$).

Actor–Partner Interdependence Model Results

To address goal two, a latent APIM (Kashy & Kenny, 1999) was conducted in M*plus* (Muthén & Muthén, 2010) to assess the reciprocity of gender role attitudes in adolescent mothers and their mother figures across the transition to adolescent motherhood and first 3 years of parenting. Adolescent mothers' and mother figures' ages, nativity statuses, Anglo-orientations, and mother figure-adolescent coresidency status were entered as predictors of gender role attitudes in the initial model. Mother figures' nativity status was not included as a predictor of gender role attitudes in the model that examined moderation.

The initial model (see Figure 2) resulted in good fit: χ^2 (df = 588) = 754.497, p < .001, CFI = 0.96, RMSEA = 0.04 (90% CI: 0.03–0.05). At the covariate level, both adolescent mothers' age and mother figures' Anglo orientations at T1 were negatively associated with their respective gender role attitudes, such that older adolescents and more acculturated mother figures held less traditional gender role attitudes. Coresidence was only associated with adolescents' gender role attitudes at T4, such that the adolescents who lived with their mother figures 3 years postpartum reported less traditional gender role attitudes. As depicted in Figure 2, the rank-order stability estimates of adolescent mothers' and mother figures' gender role attitudes were relatively high across the four waves of the study. Relationships between reporters' gender role attitudes (i.e., adolescents' gender role attitudes predicting mother figures' gender role attitudes, and vice versa) were significant only during the transition to parenthood (i.e., T1 to T2). Specifically, mother figures' endorsement of more traditional gender role attitudes at T1 were associated with increases in adolescents' traditional gender role attitudes at T2 (β = 0.16, p < .01); further, adolescents' endorsement of traditional gender role attitudes at T1 also were associated with increases in their mother figures' endorsement of traditional gender roles at T2 (β = 0.19, p < .05). A nested model comparison was conducted to examine whether these cross-lagged paths from T1 to T2 could be constrained to be equal and this test was
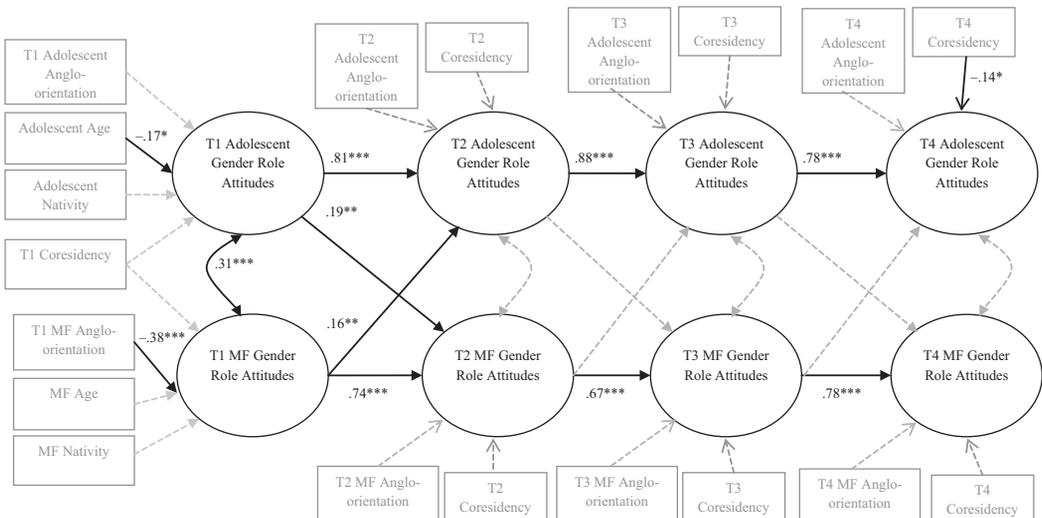

FIGURE 2. Initial APIM Model of Gender Role Attitudes between Adolescent Mothers and their Mother Figures.

Note. MF = mother figure. Nativity was coded 0 = Mexico-born and 1 = U.S.-born. Coresidency was coded 0 = Adolescent and MF did not live together and 1 = Adolescent and MF lived together. T1 = Time 1; T2 = Time 2; T3 = Time 3; T4 = Time 4. Gray dashed lines represent nonsignificant associations. Standardized estimates are shown.

not significant ($\Delta\chi^2$ [Δdf = 1] = 0.59, p > .05), suggesting that the mother figures and adolescent mothers equally contributed to each other's respective increases in endorsement of traditional gender role attitudes during the transition to parenthood. No additional cross-lagged paths (i.e., dyadic associations) were significant, suggesting that the socialization of gender role attitudes between adolescent mothers and their mother figures occurs only during the transition period and remains stable after this transition. The final model, with these constrained paths, demonstrated good fit: χ^2 (df = 501) = 755.09, p < .001, CFI = 0.96, RMSEA = 0.04 (90% CI: 0.03–0.05).

Finally, a nested model comparison to examine whether the cross-lagged (i.e., socialization predictions) and rank-order stability paths differed by mother figures' nativity status revealed that there was no moderation ($\Delta\chi^2$ [Δdf = 12] = 15.75, p > .05). Thus, it appears that adolescents and their mother figures, regardless of the nativity status of the mother figure, reciprocally contribute to changes in one another's traditional gender role attitudes across the adolescent's initial transition to parenthood.

DISCUSSION

Adolescent mothers must simultaneously negotiate the normative developmental processes and tasks of adolescence along with the specific challenges associated with the transition to motherhood. Knowledge of normative developmental processes, such as the development of gender role attitudes, within adolescent mother populations will allow for a more successful integration of these developmental processes in prevention and intervention programming aimed at reducing risk for this group of young women. The results from the current study suggest that the non-normative life event of adolescent pregnancy within the family context is associated with a decline in traditional gender role attitudes for both adolescent mothers and their mother figures. Thus, consistent with theoretical conceptualizations of gender role attitudes during adolescence (Galambos et al., 2009; Martin & Halverson, 1981), we found that adolescents' gender role attitudes became less traditional over a span of 3 years (15–18 years of age for the youngest adolescents in the sample, and 18–21 years of age for the oldest adolescents in the sample). Importantly, this finding is in contrast with studies of adult mothers, whose gender role attitudes tended to become more traditional during the transition to parenthood (e.g., Katz-Wise et al., 2010). We also found that the gender role attitudes of foreign-born mother figures became less traditional across this transition, which is inconsistent with previous research that has suggested that gender role attitudes remain largely stable in adulthood after the initial transition to parenthood (e.g., Fan & Marini, 2000). Yet, given the importance of understanding how culture intersects with normative developmental processes (Fuligni, 2001), our findings suggest that these adult mother figures were in the process of adapting to U.S. norms specific to gender role attitudes.

Importantly, during the initial transition to parenthood, both adolescent mothers and their mother figures contributed to one another's subsequent gender role attitudes, regardless of the nativity status of the mother figure. Notably, these contributions to each other's subsequent gender role attitudes across the transition to parenthood are of similar strength, suggesting that neither individual has a greater role in socialization of these attitudes. These findings contribute to the literature on the family contexts of gender development (McHale et al., 2003), adding that gender attitudes may develop reciprocally within mother figure–adolescent mother dyads during adolescents' transition to parenthood. Although this finding was not consistent with our initial culturally informed hypothesis that there would be a stronger reciprocal socialization between adolescents' and their mother figures' gender role attitudes among foreign-born mother figure dyads compared to U.S.-born mother figure dyads, it may be the case that adolescents' transition to parent-

hood alters family dynamics in a way that contributes to changes in all family members' beliefs and attitudes about gender roles in families.

Finally, we found few cultural and demographic predictors of gender role attitude development across the four waves of the study: Adolescents' age and mother figures' Anglo-orientation at the initial wave were both negatively associated with more traditional gender role attitudes, findings that are consistent with the extant literature (e.g., Fan & Marini, 2000; Updegraff & Umaña-Taylor, 2010). Thus, older Mexican-origin adolescent mothers and more acculturated mother figures were more likely to hold more egalitarian attitudes about gender.

Of particular interest, our findings are largely consistent with perspectives that suggest that non-normative timing of a life event may alter how development progresses (e.g., Flanagan et al., 1995). Thus, while the transition to parenthood is typically followed by an increase in more traditional gender role attitudes (e.g., Katz-Wise et al., 2010), we found that adolescent mothers' gender role attitudes became less traditional across this transition. Stated differently, our findings also suggest that the non-normative timing of pregnancy during adolescence did not disrupt the normative development of gender role attitudes in adolescence. Perhaps, because Mexican-origin adolescent mothers are likely to coreside with their family-of-origin and may not have a coparenting relationship with the baby's father, this living situation fosters an environment where the negotiation and exploration of one's gender role attitudes is necessary (i.e., the adolescent must take on both masculine-typed and feminine-typed gender roles).

Further, the reciprocal association of gender role attitudes across the initial transition to parenthood for adolescent mothers and their mother figures is consistent with the notion that individuals within a family microsystem are linked, and that when a major event occurs in the family, it not only affects the individual, but the whole family system (e.g., Elder & Shanahan, 2006). This finding is important as it implies that, in addition to gender role attitudes being malleable during this transition period, adolescents and their mother figures equally contributed to the development of each other's beliefs.

Prevention and intervention programs aimed at building and strengthening family relationships during the transition to parenthood for Mexican-origin adolescent mothers may incorporate issues of gender role attitudes into their programming as a topic of conversation, given that it may help adolescent mothers and their mother figures understand each other's choices and behaviors regarding parenting and the division of labor. This may be particularly important given that adolescent mothers' own mother figures often play a key role in coparenting their children (e.g., Contreras et al., 2002). Furthermore, given research revealing more traditional gender role attitudes among Latina/o families (e.g., Azmitia & Brown, 2002) and less freedom and autonomy among female offspring (e.g., Raffaelli & Ontai, 2004), it may be particularly important to understand whether the changes in gender role attitudes (i.e., movement toward more egalitarian attitudes) documented in the current study are associated with increases in family conflict and decreases in family cohesion. Thus, clinicians can utilize this research as a starting point from which to understand how gender role attitudes may become less traditional across the transition to adolescent parenthood, even among a cultural subgroup that has been found to endorse more traditional beliefs about gender role attitudes, and how these changes affect family dynamics.

Limitations and Future Directions

This study advances knowledge and understanding of reciprocal socialization of gender role attitudes during the transition to adolescent parenthood within the family context, but it is not without limitations. First, our study is only generalizable to low-income, Mexi-

can-origin adolescent mothers, and therefore, our conclusions cannot extend to other groups of adolescent mothers. Nonetheless, because Mexican-origin adolescent females have the highest teen birthrate in the United States, it is critically important to understand their normative development processes to inform the development of effective prevention and intervention programs (e.g., Knight, Roosa, & Umaña-Taylor, 2009), which may include a focus on gendered norms and behaviors, given the salient role that gender plays in Mexican-origin families (Cauce & Domenech-Rodríguez, 2002).

A second limitation and direction for future research pertains to fathers' gender role attitudes. Perhaps information about fathers' gender role attitudes may help to explain the development of gender role attitudes across this life transition period: That is, if fathers are involved in their child's life and are coparenting with the adolescent mother, are adolescent mothers more likely to hold more traditional gendered attitudes, similar to findings with adult mothers (e.g., Katz-Wise et al., 2010)? For example, if biological fathers are performing more care-oriented tasks, rather than encompassing the stereotypical financial provider role due to young age, it may be the case that adolescent girls and their mother figures shift to more egalitarian gender role attitudes to accommodate their coparenting experience with the baby's father. Furthermore, given that most adolescent mothers live with their families-of-origin and not with the child's father (Contreras et al., 2002), how do adolescent fathers' gender role attitudes change during the transition to parenthood?

In conclusion, this study contributes to the growing knowledge of how gender role attitudes develop and transform across the transition to parenthood. In particular, our findings suggest that the development of gender role attitudes during the transition from pregnancy to adolescent motherhood substantially differs from contemporary models of development during the transition to parenthood that have been largely derived from adult couples. Further, and consistent with prior research on intergenerational transmission of gender role attitudes among Latina/o families (Lam, McHale, & Updegraff, 2012), our research highlights the importance of attending to the reciprocal processes that transpire in adolescent mother–mother figure relationships during the initial transition to parenthood.

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