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Abstract

Ethnic identity is a crucial developmental task for ethnic minority youth. The present study investigated the development of ethnic identity in a large sample of Mexican-origin youth ($N = 674$) assessed biennially from age 10 to 19. Latent growth curve modeling was used to examine the trajectory of ethnic identity and its two facets: *exploration* (efforts to explore one's ethnic group) and *affirmation* (positive connection to one's ethnic group). Results showed a linear decline over time for ethnic identity and both facets; exploration declined more rapidly than affirmation. Using multigroup modeling, we tested whether the trajectories differ across gender and nativity. Compared to boys, girls' ethnic identity, exploration, and affirmation decreased less. The trajectories did not differ for youth born in Mexico versus the United States. Discussion considers the impact of developmental, acculturative, and social-contextual processes on ethnic identity development as well unique features of our ethnic identity measure.

Keywords

ethnic identity development, identity trajectory, Mexican-origin youth, longitudinal

Ethnic identity, or the extent to which one has a sense of belonging to a particular ethnic group, is a crucial developmental task for ethnic minority youth (Phinney, 1989).¹ The study of ethnic identity is a critical issue in contemporary culture as societies around the globe become increasingly multicultural. Recent research has used longitudinal designs to investigate the development of ethnic identity in various ethnic minority groups (e.g., French, Seidman, Allen, & Aber, 2006; Kiang, Witkow, Baldelomar, & Fuligni, 2010; Pahl & Way, 2006; Syed & Azmitia, 2009). However, more long-term multiwave longitudinal studies are needed to precisely track changes over time in ethnic identity. The present study is the first to examine ethnic identity development from late childhood (age 10) to emerging adulthood (age 19), using data on a large sample of Mexican-origin youth, a population that is heavily underrepresented in psychological research.

Drawing on previous work in ego identity (Erikson, 1968; Marcia, 1980), social and ethnic identity (Atkinson, Morten, & Sue, 1993; Cross, 1978; Tajfel & Turner, 1986), Phinney (1989) derived three developmental statuses in her model of ethnic identity development: *unexamined*, in which one has not explored the meaning of one's ethnic membership; *moratorium*, in which one is actively searching for what it means to belong to the ethnic group; and *achieved*, in which one has reached a clear sense of one's ethnic identity. Based on the model, Phinney and colleagues developed the Multigroup

Ethnic Identity Measure (MEIM; Phinney, 1992; Roberts et al., 1999). The MEIM has a two-factor structure that measures effort in exploring and understanding one's ethnic group (*exploration*) and the positive connection one feels toward one's ethnic group (*affirmation*). Because exploration and affirmation are often positively correlated, some studies using MEIM computed average scores to indicate the level of ethnic identity (McMahon & Watts, 2002; Rodriguez, Schwartz, & Whitbourne, 2010). That said, research adopting a multidimensional approach has highlighted the importance of examining the two facets separately (Roberts et al., 1999).

Phinney's ethnic identity model predicts an increase in exploration as adolescents progress beyond the unexamined identity status to the following statuses, especially during the moratorium status (Phinney, 1989, 1992). Supporting this prediction, a few longitudinal studies conducted in the United States have shown an increase in exploration of and

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engagement with one's ethnic culture for middle adolescents from 14 years old onward (French et al., 2006; Wang, Douglass, & Yip, 2017; Whitesell, Mitchell, Spicer, & Voices of Indian Teens Project Team, 2009). When the adolescents reached the achieved status, the exploration would stop increasing—either remain stably high or start to decline (Phinney, 1990, 1992). Indeed, Pahl and Way (2006) found that exploration decelerated over 3 years from middle to late adolescence.

Phinney's model does not make a specific prediction about the developmental trajectory of ethnic identity affirmation, although the achieved status is thought to bring a high level of affirmation (Phinney, 1992). Some researchers have found that affirmation increases over time (Altschul, Oyserman, & Bybee, 2006; French et al., 2006). Others, however, have found that affirmation remained stable over time (Fuller-Rowell, Ong, & Phinney, 2013; Kiang et al., 2010; Wang et al., 2017). Umaña-Taylor, Gonzales-Backen, and Guimond (2009) contended that affirmation is a social-contextual process that has a less normative developmental basis compared to exploration. For example, ethnic minority youth attending schools with different ethnic compositions showed different trajectories of ethnic identity affirmation (Pahl & Way, 2006; Umaña-Taylor, Gonzales-Backen, & Guimond, 2009).

Despite the evidence for Phinney's model described above, results in the literature were not conclusive. Even in the middle adolescent period, supposedly a critical time for identity exploration, ethnic identity may not increase (Kiang et al., 2010). In Kiang, Witkow, Baldelomar, and Fuligni's (2010) study, ethnic identity exploration and affirmation did not change from age 14 to 17 for European, Latino, and Asian American middle adolescents. Similarly, studies that categorized adolescents into developmental statuses according to their ethnic identity profile found that a considerable number of adolescents (30–40%) remained in the same status across time (Huang & Stormshak, 2011; Matsunaga, Hecht, Elek, & Ndiaye, 2010).

Using longitudinal data on a large sample of Mexican-origin youth, we examined three aims. First and foremost, we investigated the trajectory of ethnic identity from late childhood to emerging adulthood, allowing us to explore ethnic identity development across developmental periods that Phinney's model did not cover. Given that identity exploration is central to adolescent development, most ethnic identity research has focused on adolescence. To our knowledge, only two studies have examined ethnic identity development in late childhood (French et al., 2006) and emerging adulthood (Syed & Azmitia, 2009). The present data set, which covers ages 10–19, is ideal in that it can provide an overall picture of the developmental course of ethnic identity. Given the dearth of prior research and theory on ethnic identity across this age range, we referred to the ego identity development literature. While there is empirical evidence for a progressive change of ego identity over time, the age of achieved identity is much older than the models predicted. Kroger, Martinussen, and Marcia (2010) found that the mean proportions of achieved identity were 34% at age 22 and

47% at age 36 and that of moratorium status rose to a peak of 42% at age 19. Because ethnic identity is a crucial identity task for ethnic minority youth, they may continue exploring until age 19. Therefore, we tested all possible trends for the ethnic identity trajectory from age 10 to 19.

Second, we examined whether the two facets of ethnic identity—exploration and affirmation—show the same, or divergent, trajectories from late childhood to emerging adulthood. This examination offers a more comprehensive understanding of the developmental course of ethnic identity (Roberts et al., 1999; Umaña-Taylor, Gonzales-Backen, & Guimond, 2009). First, analyzing the trajectory of exploration is a direct test of Phinney's model. Both her model (Phinney, 1989) and empirical research (Pahl & Way, 2006) suggest that exploration should stop after one reaches an achieved status. That is, exploration should have a quadratic trend that increases from early to middle or late adolescence and remains stable or decreases afterward. Conversely, research on the development of ethnic identity affirmation is limited. We again turned to the ego identity literature. A recent review suggested that evidence to date does not support that identity exploration precedes identity commitment (Meeus, 2011). Extending this view, along with the findings suggesting that ethnic identity affirmation has a less developmental basis (Reitz, Motti-Stefanidi, & Asendorpf, 2014; Umaña-Taylor, Gonzales-Backen, & Guimond, 2009), we reasoned that affirmation would not necessarily increase as the minority youth explore their ethnic culture. We expected affirmation to remain stable over time.

Third, we examined whether the ethnic identity trajectories differ for boys and girls and for youth born in Mexico versus youth born in the United States. Females, because of their potential role as caregivers, are often expected to function as efficient carriers of the values and traditions of their culture (Mahalingam & Leu, 2005; Phinney, 1990). This might certainly be the case for Mexican-origin adolescents as Latino culture has a stronger expectation for girls to adhere to cultural traditions than for boys (Valenzuela, 1999). Such expectation might prompt girls to explore the meaning of their ethnic culture. Supporting this view, Umaña-Taylor, Gonzales-Backen, and Guimond (2009) found that ethnic identity exploration increased for Latina girls, but not for Latino boys; ethnic identity affirmation, in contrast, was similar for girls and boys. More broadly speaking, girls' ego identity is more likely to be achieved and is achieved earlier than boys' (Kroger, 1997; Meeus, van de Schoot, Keijsers, Schwartz, & Branje, 2010). Hispanic girls', but not boys', identity confusion tends to decline during adolescence because the family roles that girls are expected to fulfill provide a sense of identity coherence (Schwartz, Mason, Pantin, & Szapocznik, 2009). Given these findings, we expected that Mexican-origin girls would show greater increases in both facets of ethnic identity than boys.

The role of nativity in the ethnic identity development literature is much less conclusive. Past research has found that youth born in the United States have had lower ethnic identity than youth born outside of the United States, presumably due to

Table 1. Descriptive Statistics and Reliability of Ethnic Identity Full Scale, Exploration Subscale, and Affirmation Subscale, and Inter-Subscale Correlations From Ages 10 to 19.

Age	Ethnic Identity (8 Items)				Exploration (2 Items)				Affirmation (6 Items)				<i>r</i> _{inter-subscale}
	<i>M</i>	<i>SD</i>	α	<i>r</i> _{Mean}	<i>M</i>	<i>SD</i>	α	<i>r</i>	<i>M</i>	<i>SD</i>	α	<i>r</i> _{Mean}	
10	3.48	.44	.75	.30	3.19	.70	.30	.18	3.58	.44	.75	.34	.47**
12	3.47	.48	.84	.44	2.97	.79	.52	.36	3.64	.46	.86	.51	.54**
14	3.39	.50	.85	.46	2.82	.81	.58	.41	3.58	.49	.88	.57	.51**
16	3.23	.56	.87	.50	2.61	.80	.55	.38	3.43	.56	.89	.60	.57**
18	3.33	.52	.83	.43	2.60	.86	.54	.37	3.57	.51	.85	.51	.52**
19	3.31	.61	.89	.55	2.67	.87	.55	.38	3.52	.61	.93	.70	.56**

Note. Inter-item correlations are averaged (*r*_{Mean}) for the 8-item ethnic identity full scale and the 6-item Affirmation subscale.

the assimilative patterns brought by early exposure to the dominant culture and decreases in involvement with the ethnic culture (Phinney, 1990; Syed & Azmitia, 2009). Longitudinal studies, however, have failed to find a difference between first (foreign-born) and latter generation (U.S.-born) youth in their ethnic identity trajectory (French et al., 2006; Kiang et al., 2010; Pahl & Way, 2006). Thus, concerning our focus on ethnic identity trajectory, we do not make any specific predictions about the influence of nativity.

In sum, we examined the trajectory of ethnic identity from late childhood to emerging adulthood in an understudied and underrepresented population, Mexican-origin youth. As the first longitudinal study of ethnic identity that spans almost a decade, the present study provides a more comprehensive examination of the developmental pattern of ethnic identity than in past research. We also explored the potentially divergent trajectories of the exploration and affirmation facets of ethnic identity. Finally, we tested whether ethnic identity trajectories vary as a function of gender and nativity.

Method

Participants and Procedures

Data were from the California Families Project (CFP), an ongoing longitudinal study of 674 Mexican-origin children (50% girls) who attended the fifth grade at the first wave (*M*_{age} = 10.86, *SD*_{age} = 0.51). Participants were recruited from rosters of students in two school districts in a metropolitan area of Northern California. The first school district was very ethnically diverse (32–40% Hispanic, 17–21% White, 17–21% Asian, 16–21% African American, 5–10% other; DataQuest, 2013, 2019). The second school district was not quite as ethnically diverse (57–68% Hispanic, 22–33% White, 5% Asian, 1% African American, 3–6% other; DataQuest, 2013, 2019). Sixty-eight percent of the participants came from the first district and 32% from the second district. Trained research staff interviewed the participants individually in the participants' homes in either Spanish or English, depending on the participants' preference.

Ethnic identity was assessed 6 times, with a 2-year interval from ages 10 to 18 and a 1-year interval from age 18 to 19. Retention rates for the ethnic identity measure were between

85% and 90% across ages. To investigate the impact of attrition, we compared participants who completed the ethnic identity measure at age 19 to those who did not on age, gender, nativity, and ethnic identity at age 10. Males were less likely to participate at age 19 compared to females, $\chi^2(1) = 5.60$, $p = .02$; no other significant differences emerged, $ps > .05$.

Measures

Ethnic identity. Participants completed the 8-item Mexican American Ethnic Identification Scale adapted from the MEIM (Phinney, 1992). Two items measured the exploration facet (e.g., "You participate in Mexican cultural traditions such as special food, music, or customs") and 6 items tapped into the affirmation facet (e.g., "You are happy that you are Mexican/Mexican American").² The participants indicated how true each item was to them on a 4-point scale (1 = *not at all true*, 2 = *somewhat true*, 3 = *mostly true*, 4 = *very true*).

As shown in Table 1, the reliability of exploration was low at age 10 but acceptable (for a 2-item scale) from age 12 onward. The reliability of affirmation was also lower at age 10 than at the subsequent ages. Given that ethnic identity is related to cognitive development (Bernal, Knight, Garza, Ocampo, & Cota, 1990), the lower reliability at age 10 could be due to a poor understanding of the items.

We examined the factor structure of the 8 items at each wave with confirmatory factor analysis. We tested a one-factor model and a two-factor model which allow exploration and affirmation to correlate. The fit indices of the two models are presented in Table S1 (see Supplementary Materials).³ The two-factor model (comparative fit indices [CFIs] = .92–.96, Tucker–Lewis indices [TLIs] = .89–.94, root mean square error of approximations [RMSEAs] = .07–.12) fit slightly better than the one-factor model (CFIs = .90–.95, TLIs = .86–.93, RMSEAs = .07–.14). The χ^2 difference test was significant from age 12 to 19, $\Delta\chi^2 = 17.97$ – 49.70 , $ps < .001$, and nonsignificant at age 10, $\Delta\chi^2 = 0$, ns .

Nativity. We classified participants according to their birthplace: Mexico (29%) or the United States (71%). For those who were born in the United States, most had one parent born in Mexico (62%), and the rest had both parents born in the United

Table 2. Fit Indices for the Measurement Invariance Models of Ethnic Identity, Exploration, and Affirmation.

	Ethnic Identity				Exploration			Affirmation		
	Configural	Weak	Strong	Partial Strong	Configural	Weak	Strong	Configural	Weak	Strong
<i>df</i>	177	192	207	197	9	15	20	9	15	20
χ^2	318.28	357.53	706.16	541.75	6.60	14.55	63.81	9.36	15.42	105.46
CFI	0.98	0.97	0.92	0.95	1.00	1.00	0.96	1.00	1.00	0.98
TLI	0.97	0.96	0.90	0.92	1.02	1.00	0.87	1.00	1.00	0.93
RMSEA	0.03	0.04	0.06	0.05	0.00	0.00	0.06	0.01	0.01	0.08
NCI	0.90	0.88	0.69	0.77	1.00	1.00	0.97	1.00	1.00	0.94

Note. The configural invariance model freely estimates factor loadings for the latent factors at each age. The weak invariance model constrains the respective factor loadings to be equal at each age. The strong invariance model constrains the factor loadings and intercepts to be equal at each age. The partial strong invariance model freely estimates two intercepts of the four observed variables (two exploration items and two affirmation parcels); it is not applicable for the Exploration and Affirmation subscales because there are only two observed variables in each of the subscales. CFI = comparative fit index (Bentler, 1990); TLI = Tucker–Lewis index (Tucker & Lewis, 1973); RMSEA = root mean square error of approximation (Browne & Cudeck, 1993); NCI = noncentrality index (McDonald, 1989).

States (9%). Table S2 presents the descriptive statistics and reliabilities separately for participants born in Mexico versus in the United States.

Analysis Plan and Model Fit

Latent growth curve (LGC) modeling was conducted using Mplus Version 7.4 to examine the ethnic identity trajectories. We ran separate models for the full scale (ethnic identity) and the two subscales (Exploration, Affirmation). To account for the unbalanced numbers of items for the two subscales, the six affirmation items were randomly assigned to form two parcels. The two exploration items and the two affirmation parcels were entered as indicators of the latent exploration and affirmation factors, respectively, and the overall ethnic identity factor, jointly.

We tested measurement invariance across time for each of the three latent factors: ethnic identity, exploration, and affirmation. As there were only two observed variables for each latent factor in the two subscales, we set the loadings of observed variables equal for each latent factor and freely estimated the loadings. We compared the fit of three measurement invariance models: configural invariance, weak invariance, and strong invariance (see Table 2). We also ran a partial strong invariance model for ethnic identity. Although the χ^2 difference tests showed that the more constrained models (strong/partial strong) fit significantly worse than the less constrained models (weak), $ps < .001$, the more constrained models fit the data quite well. Because the partial strong and strong invariance models estimate invariant factor loadings and measurement intercepts across time, they allow for stronger inferences about real change over time in the three latent factors. Therefore, we selected the partial strong invariance model for ethnic identity and the strong invariance model for exploration and affirmation.

We used univariate second-order LGC models to examine the growth trajectory of ethnic identity, affirmation, and exploration over time. To find the best fitting growth trajectory for each variable, we conducted a series of model comparisons and

evaluated changes in χ^2 , degrees of freedom, CFI, TLI, and RMSEA. Specifically, we compared three models: (1) *no growth model* (Model 1), where the slope is fixed to be zero over time; (2) *linear growth model* (Model 2), where the slope linearly increases by one unit each year, with the first time point centered at 0, and the remaining time points fixed at 2, 4, 6, 8, and 9; and (3) a *latent basis model* (Model 3), where the first and last time points of the slope are fixed (at 0 and 9, respectively) and the middle time points are freely estimated to the data. In all models, path coefficients from the intercept to the repeated assessments were fixed to 1, and the intercept and slope were allowed to covary. The means of the intercepts were fixed at zero in order for the models to be identified.

Table 3 shows the univariate LGC model comparisons for ethnic identity, exploration, and affirmation. The no growth models fit the data poorly for the three variables. The linear growth models and the latent basis models fit the data similarly well for ethnic identity and exploration, so we decided to use the more parsimonious linear trajectories of ethnic identity (CFI = .92, TLI = .90, RMSEA = .06) and exploration (CFI = .95, TLI = .90, RMSEA = .05). The time points slope in the latent basis models did not show a quadratic trend for ethnic identity (0, 1.5, 4.1, 9.7, 7.9, 9.0), whereas the exploration trajectory levels off at the last two waves (0, 2.7, 4.5, 7.6, 9.0, 9.0). The latent basis model could not converge for affirmation, so we tested a quadratic model (see Table S3). The quadratic model (CFI = .96, TLI = .91, RMSEA = .09) fit the data similarly as the linear growth model (CFI = .95, TLI = .90, RMSEA = .09). Therefore, we adopted the linear growth model for affirmation.

To test whether the trajectories varied by gender and nativity, we used a multigroup modeling approach, in which we compared the fit of a model that allowed the mean of the slope to differ across groups (gender: Model 4a; nativity: Model 5a) to a model that constrained all coefficients to be identical across groups (gender: Model 4b; nativity: Model 5b). If the fit indices showed that the free slope models did not fit the data better than the constrained models, we conclude that the trajectories do not differ significantly across groups.

Table 3. Unstandardized Parameter Estimates for the Latent Growth Curve Models of Ethnic Identity, Exploration, and Affirmation.

	Ethnic Identity			Exploration			Affirmation	
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2
Factor means								
Intercept	0 (fixed)	0 (fixed)	0 (fixed)	0 (fixed)	0 (fixed)	0 (fixed)	0 (fixed)	0 (fixed)
Slope		-.03 (.01)**	-.04 (.01)**		-.21 (.02)**	-.18 (.04)**		-.04 (.01)**
Factor variances								
Intercept	.41 (.05)**	.33 (.05)**	.29 (.05)**	.82 (.22)**	1.18 (.44)**	1.12 (.72)	.75 (.07)**	.89 (.15)**
Slope		.01 (.01)**	.01 (.002)**		0.05 (.01)**	0.03 (.02)		.03 (.004)**
Factor covariance								
Intercept with slope		-.02 (.01)*	-.01 (.01)		-.13 (.06)*	-.10 (.11)		-.06 (.02)**
Model fit indices								
df	216	213	209	39	36	32	39	36
χ^2	945.60	710.18	665.16	402.78	96.41	93.54	416.86	250.18
CFI	.89	.92	.93	.68	.95	.95	.91	.95
TLI	.85	.90	.91	.46	.90	.89	.84	.90
RMSEA	.07	.06	.06	.12	.05	.05	.12	.09

Note. Model 1 = no growth; Model 2 = linear growth; Model 3 = latent basis; CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root mean square error of approximation. Numbers in parentheses are standard errors.

* $p < .05$. ** $p < .01$.

Results

Trajectories of Ethnic Identity, Exploration, and Affirmation

Figure 1 presents the trajectories of the full scale (ethnic identity) and the two subscales (Exploration, Affirmation). We collapsed the results for the first two aims to show the overall picture of the three trajectories. Mexican-origin youth's overall ethnic identity decreased from age 10 to 19 ($b = -.03$, $p < .001$). The decline was about one half of a standard deviation ($d = 0.47$) across the entire 9-year period.

The pattern was similar for both the exploration facet and the affirmation facet, but the slope coefficient was larger for exploration ($b = -.21$, $p < .001$, $d = 1.74$) than for affirmation ($b = -.04$, $p < .001$, $d = 0.38$). The exploration slope fell outside the standard error of the affirmation slope, and the affirmation slope fell outside the standard error of the exploration slope.

Do the Ethnic Identity Trajectories Vary by Gender and Nativity?

Table 4 presents coefficient estimates in the multigroup models for ethnic identity, exploration, and affirmation, with gender and nativity as the grouping variables. For gender, the free slope models (Model 4a) fit the data better than the constrained models (Model 4b) for ethnic identity, exploration, and affirmation. Girls' ethnic identity did not show significant change over time ($b = -.01$, $p = .62$, $d = 0.15$), whereas the boys' ethnic identity significantly decreased over time ($b = -.07$, $p < .001$, $d = 1.06$). The same pattern held for affirmation (girls: $b = .01$, $p = .44$, $d = 0.10$; boys: $b = -.09$, $p < .001$, $d = 0.89$). Girls and boys both decreased in exploration, but the

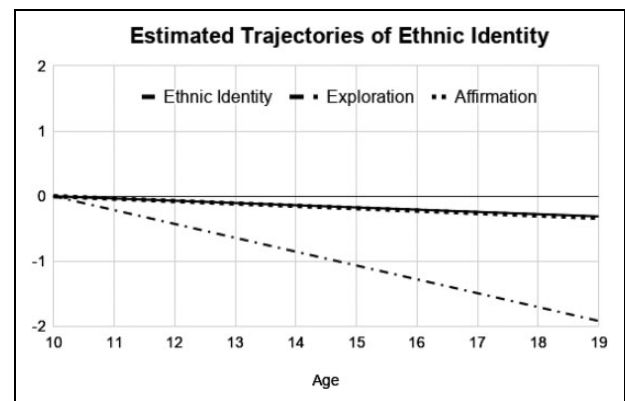


Figure 1. Trajectories of ethnic identity, exploration, and affirmation from ages 10 to 19. The trajectories were plotted based on the latent means generated from the second-order univariate latent growth curve models for ethnic identity, exploration, and affirmation, respectively.

magnitude of the decline was smaller for girls ($b = -.15$, $p < .001$, $d = 1.22$) than for boys ($b = -.27$, $p < .001$, $d = 2.20$).

For nativity, the free slope models (Model 5a) did not fit the data significantly better than the constrained models (Model 5b) for ethnic identity, exploration, and affirmation. According to parsimony, the constrained model was preferred, suggesting that the trajectories did not differ for youth born in Mexico versus the United States.

Discussion

The present study examined how the ethnic identity of Mexican-origin youth changed from late childhood to emerging adulthood. On average, ethnic identity tended to decrease over the 9 years of the study from age 10 to 19. This finding

Table 4. Unstandardized Parameter Estimates for the Multigroup Latent Growth Models of Ethnic Identity, Exploration, and Affirmation.

	Ethnic Identity				Exploration				Affirmation			
	Model 4a	Model 4b	Model 5a	Model 5b	Model 4a	Model 4b	Model 5a	Model 5b	Model 4a	Model 4b	Model 5a	Model 5b
Factor means												
Intercept	0 (fixed)	0 (fixed)	0 (fixed)	0 (fixed)	0 (fixed)	0 (fixed)	0 (fixed)	0 (fixed)	0 (fixed)	0 (fixed)	0 (fixed)	0 (fixed)
Slope for Group 1	-.01	-.04**	-.02 [†]	-.03**	-.15**	-.21**	-.20**	-.22**	.01	-.04**	-.02	-.04**
Slope for Group 2	-.07**		-.04**		-.27**		-.22**		-.09**		-.04**	
Factor variances												
Intercept	.35**	.34**	.35**	.35**	1.22**	1.22**	1.05**	1.05**	.82**	.82**	.92**	.92**
Slope	.01**	.01**	.01**	.01**	.04**	.05**	.05**	.05**	.03**	.03**	.03**	.03**
Factor covariance												
Intercept with slope	-.02*	-.02*	-.02*	-.02*	-.13*	-.13*	-.11 [†]	-.11 [†]	-.06**	-.05**	-.07**	-.06**
Model fit indices												
df	452	453	481	478	83	84	83	84	103	106	107	108
χ^2	1,137.30	1,176.14	1,106.71	1,093.87	159.98	191.81	164.56	165.19	428.68	474.74	388.53	390.64
CFI	0.89	0.88	0.90	0.90	0.93	0.90	0.93	0.93	0.92	0.91	0.93	0.93
TLI	0.87	0.86	0.89	0.89	0.89	0.84	0.89	0.89	0.90	0.89	0.92	0.92
RMSEA	0.07	0.07	0.06	0.06	0.05	0.06	0.05	0.05	0.10	0.10	0.09	0.09

Note. In Models 4a and 4b, Group 1 = girls, Group 2 = boys. In Models 5a and 5b, Group 1 = participants born in Mexico, Group 2 = participants born in the United States. CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root mean square error of approximation.

[†] $p < .10$. * $p < .05$. ** $p < .01$.

held for both facets of ethnic identity, exploration, and affirmation and for youth born in Mexico and the United States. The decline in ethnic identity is somewhat surprising, given that past research has found either an *increase* or no change over time. Previous studies varied in scales and ethnicities of the sample and had small numbers of Latino youth. Among the few longitudinal studies that directly tested ethnic identity trajectory, only half used the MEIM and included Latino or Hispanic youth (French et al., 2006; Fuller-Rowell et al., 2013; Kiang et al., 2010; Pahl & Way, 2006; Syed & Azmitia, 2009; Wang et al., 2017). The study with the greatest number of Latino youth had about 200 (Kiang et al., 2010). In contrast, our study tracked the change of MEIM with a large sample of Mexican-origin youth. Given these differences, we did not regard our results as contradictory to previous findings.

Contrary to predictions from Phinney's (1989, 1992) ethnic identity development model, our findings show that exploration decreased every 2 years as the Mexican-origin youth grew up. We expected to see an increase in exploration at some point during adolescence, but we did not find such a trend in our data. Although we believe our scale provides an appropriate test of Phinney's model, since it is largely based on her measure of ethnic identity (i.e., the MEIM), our scale does not provide a comprehensive assessment of all aspects of exploration and affirmation. Most notably, the two exploration items mainly tapped the behavioral aspect of the exploration facet. Ethnic behaviors, as one way to explore one's ethnic group, are also explicit expressions of ethnic identity and could be more susceptible to the sociocultural environment where the youth live. The youth may start with high engagement in ethnic behaviors due to familial socialization (Umaña-Taylor, Alfaro, Bámaca,

& Guimond, 2009) and reduce such engagement due to increasing negative experiences with the behaviors (Edwards & Romero, 2008). Since the exploration facet can also be about the cognitive effort that the youth put into exploring their ethnic culture (Phinney, 1990; Roberts et al., 1999), future research using a more comprehensive exploration measure may produce different results.

The affirmation facet also decreased from age 10 to 19, which was not consistent with our prediction that it would remain stable over time (Kiang et al., 2010; Wang et al., 2017). It is possible that minority youth's evaluation of their ethnic culture becomes less favorable as they grow up and have more interaction with the mainstream culture and other ethnic groups. The youth may begin to identify with the broader national culture and to negotiate a bicultural identity (Nguyen & Benet-Martinez, 2007; Schwartz, Unger, Zamboanga, & Szapocznik, 2010). Given that being *American* and connecting with one's ethnic culture are often conflicted in the United States (Benet-Martinez & Haritatos, 2005; Rodriguez et al., 2010), the minority youth might downplay their positive feelings toward their ethnic culture to meet acculturative goals. Immediate surroundings, such as family functioning (Reitz et al., 2014) and others' perception of one's ethnic group (Umaña-Taylor, Gonzales-Backen, & Guimond, 2009), also play a role in the development of affirmation.

Exploration declined at a more rapid rate than affirmation. Given that our Affirmation subscale taps positive evaluation toward one's ethnic culture (affective aspect of the affirmation facet) and our Exploration subscale taps engagement in ethnic behaviors (behavioral aspect of the exploration facet), the two subscales can be viewed as affective and behavioral

manifestations of ethnic identity, respectively. That is, ethnic identity decreased from age 10 to 19, and the decrease was more prominent for behavioral than for affective manifestation. The discrepancy in the decline rate suggests the significant role that social–contextual factors play in the identity process (Umaña-Taylor, Gonzales-Backen, & Guimond, 2009). When the minority youth encounter social challenges regarding their ethnic background, dissociating themselves from their ethnic group by reducing behaviors that highlight their ethnicity can be a strategic response (Umaña-Taylor & Guimond, 2010). Conversely, affect toward one’s ethnicity could be kept to the self, and thus, decelerated less.

Our findings on gender effect were consonant with prior work. Although we did not find support for our prediction that both facets of ethnic identity would increase more for Mexican-origin girls than boys, we did find evidence for the complementary pattern, namely that girls showed smaller decreases in exploration than boys and that girls’ affirmation remained stable while boys’ affirmation decreased. As the exploration measure focused on ethnic behaviors, our findings reflect the fact that Mexican-origin girls are expected to adhere to cultural traditions more than boys (Valenzuela, 1999). Although ethnic behaviors decreased for both genders, girls were more likely to continue the behaviors over time. Interestingly, the girls also maintained positive affect toward their ethnic culture. This could be because the girls internalized expectations from their ethnic community (Cupito, Stein, & Gonzales, 2015) and were less affected by social challenges such as discrimination (Umaña-Taylor & Guimond, 2010). In contrast, boys tend to interpret ethnic-related challenges as potential achievement barriers (McWhirter, 1997) and consequently feel less positive about their ethnic group as they grow up. In another study using CFP data, boys’ ethnic affirmation was predicted by school experiences, whereas girls’ affirmation was not (Hernández, Robins, Widaman, & Conger, 2017). These findings highlight the importance of considering gender-related identity processes when examining ethnic identity development.

We did not find an effect of nativity on ethnic identity trajectories, which is consistent with prior work (French et al., 2006; Pahl & Way, 2006). The null effect of nativity suggested that the decline of ethnic identity was unlikely driven by acculturative processes. As Mexican-born youth typically went through more intense acculturation than their U.S.-born counterparts, we may expect for acculturative processes to be more consequential; however, if that had been the case, we would have observed different trajectories based on nativity. That said, the current finding could be limited to the background homogeneity of our sample. Twenty-nine percent of our sample was Mexican-born, and another 62% had at least one Mexican-born parent. The ethnic ties for 91% of these youth were likely similar even though their birthplace varied. We suspect that the effect of nativity would be more prominent for a sample containing a larger portion of third-generation youth who have U.S.-born parents.

The current study is limited in several respects. First, due to space constraints, we did not empirically examine the factors

that could contribute to the decline of trajectories. However, we would expect that factors such as prejudice and cultural distance would be impactful. Future studies should systematically analyze the impact of variables depicting the familial, social, and cultural surroundings of the minority youth’s life. Second, our findings may not generalize to ethnic minorities who face different circumstances or whose ethnic culture is largely different from Mexican-origin youth in the United States. Since Mexicans and Mexican Americans comprise a large percentage of the population in California (38%; U.S. Census Bureau, 2010), the task of ethnic identity development may not be about constructing what it means to be a member of the ethnic culture but striving for being accepted by the larger mainstream culture as an already highly visible cultural group.

The present study investigated ethnic identity trajectory among Mexican-origin youth across almost a decade. Overall, we found that ethnic identity, as well as its exploration and affirmation facets, decreased from age 10 to 19. Given the measures used in the present study, it is appropriate to interpret the trajectories of exploration and affirmation facets as reflecting the change in the behavioral and affective manifestations, respectively, of ethnic identity. The results imply an impact of acculturative and social–contextual processes on, at least some aspects of, ethnic identity development. Future research should examine the interplay of developmental factors and social–contextual factors on changes in different ethnic identity facets.

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Supplemental Material

Supplemental material is available in the online version of this article.

Notes

1. Ethnicity is a multidimensional construct that encompasses a sense of common ancestry, language, and history as well as membership in particular cultural groups and the use of particular cultural practices. For the sake of simplicity and consistency with the large part of the ethnic identity literature, we favor the term “ethnic” over the broader term “ethnocultural.”

2. At the beginning of each interview, participants were asked, "In this interview, when we refer to people of Mexican origin, do you prefer that we use Mexican or Mexican American?" The responses to this question were then used to populate the ethnic identity measure. The slope means of ethnic identity ($-.03^*$ vs. $-.04^*$), exploration ($-.21^*$ vs. $-.23^*$), and affirmation ($-.03^*$ vs. $-.05^*$) did not differ significantly for those who self-labeled as Mexican ($n = 372$) vs. Mexican Americans ($n = 296$).
3. Supplemental tables are labeled with an "S" preceding the number and can be found online in the supplementary materials published with this article. The supplementary materials also include a link to download the raw data and script files from the Open Science Framework website.

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