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Cultural Socialization Across Contexts: Family–Peer Congruence and Adolescent Well-Being

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Abstract Racial/ethnic minority youth live at the intersection of diverse cultures, yet little is known about cultural socialization outside families or how cultural socialization in multiple settings conjointly influences adolescent well-being. In a sample of 236 8th graders (51 % female; 89 % Latinos, 11 % African Americans), we examined adolescents' perceptions of family and peer cultural socialization toward the heritage culture and the mainstream American culture. A variable-centered approach demonstrated that the socioemotional and academic benefits of family cultural socialization were most evident when peer cultural socialization was congruently high. Although family and peer cultural contexts are often assumed to be drastically different, we identified similar proportions of adolescents experiencing congruently high, congruently low, and incongruent cultural socialization from families and peers using a person-centered approach. Although the incongruent group received relatively high levels of cultural socialization in one setting, their well-being was similar to the congruently low group. The findings highlight the importance of considering cultural socialization across multiple developmental settings in understanding racial/ethnic minority youth's well-being.

Keywords Cultural socialization · Family–peer congruence · Adolescent well-being

Introduction

"Caught between two worlds" is a common portrait of racial/ethnic minority youth living between their heritage culture and the mainstream American culture: whereas parents of minority youth strive to preserve the heritage culture in the younger generation, youth's peers and the larger society typically practice the mainstream American culture (Benet-Martínez and Haritatos 2005). Extant research has explored minority youth's abilities to navigate multiple cultural contexts (e.g., biculturalism, racial/ethnic identity; Nguyen and Benet-Martínez 2013; Umaña-Taylor et al. 2014), yet few studies have examined the different cultural socialization settings that ultimately create the need for adolescents to negotiate multiple cultures (Mistry and Wu 2010). In adolescence, the social environment becomes increasingly complex, and socialization agents outside families become increasingly salient (Brown and Larson 2009), making the investigation of cultural contexts in multiple settings particularly important.

The present study focuses on a salient cultural process in two proximal developmental settings for racial/ethnic minority adolescents, namely cultural socialization by families and peers. Cultural socialization refers to the developmental processes through which children learn about histories and traditions of a culture, acquire cultural beliefs and values, and develop positive attitudes toward that culture (Hughes et al. 2006; Romero et al. 2000; Tyler et al. 2008). The existing literature has examined cultural socialization almost exclusively as parents' efforts to teach and maintain their heritage culture for their children (e.g., cultural socialization in Hughes et al. 2006; ethnic socialization in Umaña-Taylor et al. 2009, enculturation in Lee et al. 2006), yet prior work also indicates that parents socialize their children toward the mainstream culture (e.g.,

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Romero et al. 2000; Tyler et al. 2008). To capture culture socialization in a more comprehensive manner, the present study examines socialization practices toward both one's heritage culture and the mainstream American culture. Although socialization around issues of race/ethnicity (i.e., racial/ethnic socialization) also takes on other forms, such as preparation for bias, silence around race/ethnicity, and egalitarianism, cultural socialization has been most consistently linked to better child adjustment as it focuses on positive cultural messages (Hughes et al. 2006). Empirical work has highlighted the benefits of cultural socialization toward one's heritage culture for racial/ethnic minority youth's identity development, socioemotional well-being, and academic outcomes (Hughes et al. 2006; Rodriguez et al. 2009). A few studies also suggest that parents' mainstream cultural socialization is associated with positive child outcomes (Evans et al. 2012; Marks et al. 2014). Yet, little is known about how cultural socialization in other proximal developmental settings influence adolescent development, and more importantly, how cultural socialization in multiple settings work conjointly (Priest et al. 2014). The present study fills this void by examining the joint influence of family and peer cultural socialization on adolescents' socioemotional and academic well-being using variable- and person-centered approaches.

Family Cultural Socialization, Peer Cultural Socialization, and Adolescent Well-Being

In racial/ethnic minority families, parents purposefully and explicitly engage in cultural socialization, teaching children about their heritage culture (e.g., cultural knowledge, values, and practices) and encouraging children to respect their cultural background (Hughes et al. 2006; Umaña-Taylor and Fine 2004). They also implicitly do so by involving adolescents in daily activities related to their heritage culture, such as celebrating cultural events, preparing food of one's heritage culture, and associating with one's heritage group (Hughes et al. 2006; Umaña-Taylor and Fine 2004). In addition to one's heritage culture, parents also teach children about the mainstream American culture in both overt and covert ways. Prior work has documented parents' efforts to promote knowledge and preferences of the mainstream group (Romero et al. 2000), to encourage children to be involved in the mainstream culture (Stevenson et al. 2002), and to convey beliefs and values of the mainstream American culture (Tyler et al. 2008). Our own work using a mixed-methods approach demonstrated that parents actively stress the importance of learning about the mainstream American culture, teach children about the values and practices of the mainstream culture, and implicitly practice mainstream cultural socialization by involving adolescents in events and activities that represent the mainstream culture (Wang et al. 2015). These practices resemble parents' efforts to socialize their children to the heritage culture.

Cultural socialization has been consistently linked to better child adjustment, as it conveys positive messages about race/ethnicity and fosters youth's positive feelings of their racial/ethnic group and themselves (Hughes et al. 2006; Rodriguez et al. 2009). These positive feelings are particularly adaptive as issues of race/ethnicity are highly salient in the daily lives of racial/ethnic minority youth. Indeed, youth who have received greater family cultural socialization toward one's heritage culture demonstrate less loneliness and depressive symptoms (McHale et al. 2006; Polo and Steven 2009); they also exhibit better adjustment at school, such as higher levels of school engagement and belonging as well as greater involvement with peers (Dotterer et al. 2009; Tran and Lee 2011; Wang and James 2012). While family socialization toward the mainstream American culture has been less studied, prior work suggests that parents' promotion of mainstream values and cross-race friendships is associated with socioemotional and academic benefits, as it promotes children's competence in the mainstream society and positive attitudes toward other racial/ethnic groups (Evans et al. 2012; Marks et al. 2014).

Although the benefits of family cultural socialization are well-established in the literature, little is known about cultural socialization in other key developmental settings for adolescents, such as peer groups (Priest et al. 2014). Our recent work demonstrated that peers endorse similar heritage and mainstream socialization practices as families, including talking to youth about the importance of learning the heritage and mainstream American culture, encouraging youth to hang out with people from one's own or other racial/ethnic groups, and attending concerts by artists from their heritage or the mainstream American groups (Wang et al. 2015). The present study extends this work by examining the socioemotional and academic outcomes linked to peer cultural socialization. While direct evidence of this link is limited, studies examining peer contact (i.e., without assessing the content of peer interactions or socialization messages) demonstrate that both interracial and intraracial peer contact are associated with youth's ethnic/racial identity development (Umaña-Taylor 2004; Yip et al. 2010). Theoretical work also posits that peer socialization around issues of race/ethnicity, when it involves positive messages, likely promotes adolescents' positive attitudes toward racial/ethnic groups and themselves (Hughes et al. 2011; Yip and Douglass 2011).

Examining family and peer cultural socialization simultaneously also enables exploration of their interactive effects on adolescent well-being. Examining interactive effects is supported by recent scholarship documenting the

varying developmental implications of family cultural socialization by contextual factors such as family relationships and neighborhood characteristics (Hernández et al. 2014; Supple et al. 2006; Tsai et al. 2015). More importantly, the investigation of family–peer interactions is motivated by theoretical perspectives that emphasize the interactive nature of proximal developmental settings. According to the bioecological theory of child development (Bronfenbrenner and Morris 2006), development is driven by individuals' interactions within their proximal environments (e.g., peers, family, school, culture). These contexts are dynamic and mutually interrelated, and, as such, proximal contexts should not be considered in isolation from one another. Adaptive adjustment is optimized, moreover, when the different proximal ecological settings are compatible in terms of their role demands and developmental goals for the child (Bronfenbrenner 1979). In contrast, incongruent developmental settings may create difficulties for individuals to fulfill their roles and compromise individual development and psychological well-being. Informed by this work, we investigate whether the effect of family cultural socialization on adolescent adjustment may be conditioned by peer cultural socialization.

Family–Peer Cultural Socialization Profiles and Adolescent Well-Being

Although families and peers socialize youth toward both their heritage and the mainstream American culture (Wang et al. 2015), it is often assumed that these developmental settings differ in their relative endorsement of the two cultures. Indeed, limited prior work on this topic suggests that families more often emphasize the heritage culture, whereas peer groups are more oriented toward the mainstream culture (Zhou 1997). Work on cultural transmission also considers the family as the primary transmitter of one's heritage culture (Umaña-Taylor et al. 2009), whereas socialization agents outside the family, especially peers, serve as the transmitters of the mainstream culture (Costigan and Dokis 2006). Empirically, qualitative work exploring conflicting expectations from parents and peers among Chinese American adolescents observed a similar pattern (Qin 2009). At home, parents emphasized the traditional Chinese values centered on education and family obligation; adolescents were expected to be frugal, work hard, and spend most of their time with family. At school, peers practiced the mainstream culture and valued being popular, and adolescents were expected to be fashionable, participate in extracurricular activities, and hang out with friends (Qin 2009).

These findings suggest family and peer cultural socialization may be incongruent, but it is unclear whether such

incongruence commonly exists for racial/ethnic minority adolescents or only emerges for a small proportion. Similarly, although congruently high socialization from family and peers is likely quite beneficial for youth, it is unknown whether such congruence does actually occur for adolescents. A second goal of the present study was to investigate profiles of family and peer cultural socialization using a person-centered approach. We explored subgroups of adolescents experiencing various patterns of family and peer socialization toward the heritage culture and the mainstream American culture, seeking to quantify how many adolescents experience incongruence versus congruence in socialization messages across families and peers.

Using this person-centered approach also enabled us to investigate the unique challenges associated with each distinct congruent/dissonant profile. Bioecological theory highlights the benefits of contextual congruence (Bronfenbrenner and Morris 2006), and these benefits have also been observed empirically. For example, an ethnographic study by Phelan et al. (1991) showed that, when families, schools, and peers shared similar values and expectations, adolescents were able to integrate their roles across contexts, work toward consistent goals shared by different contexts, and receive support from important others across settings (e.g., parents, friends, teachers). In contrast, when the multiple worlds differed greatly or contradicted each other in expectations and values, youth found it difficult to reconcile the discrepancies, set up coherent goals, and behave consistently. Quantitative studies also document the different developmental implications for possible congruence versus incongruence profiles. Congruent, nurturing learning environments at home and school have been shown to boost children's academic motivation and achievement (Crosnoe et al. 2010). In contrast, students who experience family–school discontinuities in academic values and expectations exhibit poorer socioemotional and academic outcomes (Arunkumar et al. 1999; Tyler et al. 2010). The literature on parent–child acculturation discrepancies in immigrant families also suggests that incongruent values and beliefs between parents and adolescents often create family conflicts and compromise adolescent adjustment (Lui 2015). Informed by this theoretical and empirical work, the present study explored the extent to which congruent versus dissonant profiles of family and peer cultural socialization were differentially associated with adolescents' socioemotional and academic well-being.

The Present Study

The primary goal of the present study was to examine the joint influences of family and peer cultural socialization on adolescents' adjustment in a sample of 236 racial/ethnic

minority 8th graders. We focused on early adolescence because negotiating issues related to culture and race/ethnicity become an important pursuit for young people during this developmental period (Umaña-Taylor et al. 2014), and messages from important others are particularly influential at this time (Rivas-Drake et al. 2009). Additionally, while socialization agents outside families such as peers are increasingly salient in early adolescence (Brown and Larson 2009; Knoll et al. 2015), young people may be less cognitively skilled in managing the diverse messages from multiple sources during this time of development (Blakemore and Choudhury 2006). Therefore, family–peer congruence and incongruence are likely particularly influential.

We examined the joint influences of family and peer cultural socialization using both variable- and person-centered approaches. Using a variable-centered approach, we examined the extent to which the main effects and interaction effects between family and peer cultural socialization were associated with adolescents' socioemotional well-being and academic adjustment. Informed by the well-established benefits of family cultural socialization (Hughes et al. 2006), we hypothesized that both family and peer socialization toward one's heritage culture and the mainstream American culture would be associated with better socioemotional and academic outcomes. In terms of the interaction effects between family and peer cultural socialization, we examined both linear and quadratic interaction effects in an attempt to capture potential complex relationships between family–peer congruence and adolescent well-being (Edwards 1994; Laird and De Los Reyes 2013). Informed by the bioecological theory highlighting the benefits of contextual congruence (Bronfenbrenner 1979), we expected that high family cultural socialization would be most prominent when peer cultural socialization was congruently high versus relatively low.

We then moved to a person-centered approach to explore the existence of family–peer congruence versus incongruence and the well-being of adolescents with various family–peer profiles. Informed by qualitative work on family and peer cultural contexts for racial/ethnic minority students (Qin 2009), we expected to identify groups of adolescents who experienced congruent family and peer cultural socialization as well as groups of adolescents receiving incongruent messages from these two sets of socializing agents. Regarding the developmental implications of family–peer cultural socialization profiles, we expected that adolescents in the congruently high group would exhibit optimal development compared to adolescents in groups displaying either congruently low or incongruent cultural socialization across contexts. Additionally, we hypothesized that adolescents in the potential incongruent groups would exhibit better outcomes than those in the congruently low group, as high socialization in one developmental setting may be protective (e.g., Benner and Mistry 2007).

Our investigation controls for several demographic characteristics (i.e., gender, socioeconomic status, family structure, race/ethnicity, immigrant status) that may be associated with cultural socialization and family–peer congruence. For example, adolescents who are females, whose parents have higher education, and who are from intact families tend to receive greater cultural socialization toward their heritage culture (Brown et al. 2007). Additionally, African American youth tend to receive messages about the mainstream culture more frequently than do Latino youth (Hughes 2003). Finally, immigrant parents tend to socialize their children more toward their heritage culture (Umaña-Taylor et al. 2009), whereas US-born parents are more likely to practice mainstream cultural socialization. The experience of family–peer incongruence, thus, may be more typical for adolescents from immigrant families than those with US-born parents (Zhou 1997). Informed by these demographic variations, we include adolescent gender, socioeconomic status, family structure, race/ethnicity, and immigrant status as control variables in the present study.

Method

Participants

Data were drawn from a larger study of adolescents' development in context (the Schools, Peers, and Adolescent Development Project; Project SPAD) conducted with 8th grade students at two middle schools in the South. The current sample includes 236 racial/ethnic minority adolescents (89 % Latinos, 11 % African Americans; 51 % female). A majority of the participants (69 %) were born in the US, and a majority of their parents (78 % fathers, 74 % mothers) were foreign-born. The sample has a relatively high percentage of students whose parents did not graduate from high school (59 %). The racial/ethnic and socioeconomic composition of the sample was comparable to those of the larger student body at the schools from which they were drawn, which were predominantly Latino (86 %) and socioeconomically disadvantaged (i.e., 97 % of the students receiving free-or-reduced-price lunch). Demographic information of the sample is shown in Table 1.

Procedures

The research team identified two middle schools with concentrated racial/ethnic minority populations in a central city in the South. Upon gaining approval from the local

Table 1 Demographic characteristics of participants

	N	%	M	SD
Gender	236			
Female	121	51.3		
Male	115	48.7		
Race/ethnicity	236			
Latino	209	88.6		
African American	27	11.4		
Highest parent education	231		1.84	1.25
Less than high school	136	58.9		
High school degree	45	19.5		
Some college but no degree	17	7.4		
2-year college degree	17	7.4		
4-year college degree or higher	16	6.9		
Immigrant status	232			
Immigrant family (at least one parent foreign born)	189	81.5		
Non-immigrant family (both parents U.S. born)	43	18.5		
Family structure	236			
Live with both biological parents	103	43.6		
Do not live with both biological parents	133	56.4		

school district and school administrators, the research team distributed parent consent forms to the entire 8th grade during advisory periods; all students who returned parent consent forms were entered into a drawing for four iPods. Students whose parents provided consent (62 % of all the eligible students at School 1 and 69 % at School 2) were then asked to provide student assent and complete the survey. Each participant received a small monetary compensation ($15) for completing the survey, and each school received a small honorarium for assistance in coordination of data collection activities. All consent and assent forms and student surveys were available in English and Spanish. To ensure comparability, questionnaires were translated into Spanish and then back-translated into English. Inconsistencies were resolved by two bilingual research team members, with careful consideration of items' culturally-appropriate meaning. The majority of the students completed surveys in English (92 %).

Measures

Cultural socialization

We used a cultural socialization measure developed specifically for Project SPAD (Wang et al. 2015) based on prior work on familial ethnic socialization (Umaña-Taylor and Fine 2004). *Family socialization toward one's heritage culture* was assessed by four overt socialization items (e.g., "teach/talk to you about the values and beliefs of your

ethnic/cultural background") and two covert socialization items (e.g., "listen to music or watch tv/movies by artists from your ethnic/cultural background"). Ratings ranged from 1 (*never*) to 5 (*always*). Family socialization toward the mainstream American culture was assessed by changing the cultural referent from "your cultural background" to "mainstream American culture." Following the family cultural socialization items, adolescents rated peer cultural socialization practices. We first asked adolescents to nominate five of their best friends; the majority (92 %) nominated five friends (M = 4.81, SD = .74). Participants then rated these friends' cultural socialization practices using the same items as family cultural socialization. This resulted in four total subscales: family socialization of the heritage culture, family socialization of the mainstream culture, peer socialization of the heritage culture, and peer socialization of the mainstream culture. The cultural socialization measure demonstrated good reliability and validity. Our prior work showed that the four subscales capture distinct dimensions of cultural socialization, and all the subscales demonstrated stable factor structure across gender, race/ethnicity, nativity, socioemotional status, and language of assessment (Wang et al. 2015). We were also able to establish strong factorial invariance across the subscales using the current sample (Wang et al. 2015), enabling mean comparisons across the four types of cultural socialization. The internal consistency was high for each subscale (α_{range} = .85–.93), with higher mean scores indicating greater socialization.

Socioemotional Well-Being

Socioemotional well-being was assessed as a latent construct based on depressive symptoms and loneliness. *Depressive symptoms* were assessed by the Children's Depressive Inventory (Kovacs 1992). Using a 3-point scale, adolescents rated 10 items on their depressed feelings in the past 2 weeks (e.g., "I am sad"). *Loneliness* was assessed by Asher and Wheeler's (1985) Loneliness Scale. Using a 5-point scale, adolescents rated 13 items about their feelings of loneliness at school (e.g., "I have nobody to talk to"). The internal consistency was high for both the depressive symptoms scale ($\alpha = .80$) and the loneliness scale ($\alpha = .86$). The socioemotional well-being items were coded such that higher mean scores denoted more socioemotional distress.

Academic Outcomes

Academic outcomes were assessed as a latent construct based on three indicators, including school engagement, shared academic activities with peers, and school belonging. *School engagement* (e.g., "I pay attention in class") was measured by a five-item scale from the Perceived Social Norms for Schoolwork and Achievement during Adolescence (PSNSA; Witkow 2006). *Shared academic activities* with peers were assessed by a five-item scale from PSNSA (e.g., "help each other with homework"). *School belonging* was assessed by a five-item subscale from Gottfredson's (1984) Effective School Battery (e.g., "I feel like I am a part of this school"). Students rated all items for the three academic measures on a five-point scale ranging from 1 (*not at all*) to 5 (*all the time*). Higher mean scores denoted more positive academic outcomes, and all three measures demonstrated good reliability ($\alpha = .75$ for school engagement; $\alpha = .85$ for academic activities; $\alpha = .79$ for school belonging).

Covariates

Data on students' gender and race/ethnicity (i.e., Latino, African American) were collected from school records. Based on student reports, we identified immigrant status ($1 = at\ least\ one\ parent\ born\ outside\ U.S.$, $0 = both\ parents\ born\ in\ U.S.$), family structure ($1 = living\ with\ both\ biological\ parents$, $0 = other\ family\ structure$), and parent education ($1 = less\ than\ high\ school$, $4 = 4\text{-}year\ college\ graduates\ or\ higher$). We also controlled for the school the student attended and the language version of the survey.

Analysis Plan

Data analyses were conducted in a structural equation modeling framework in the following steps. We first conducted preliminary analyses to investigate similarities and differences in cultural socialization across contexts through bivariate correlations and comparisons of mean differences among the four types of cultural socialization: family socialization of heritage culture, family socialization of mainstream culture, peer socialization of heritage culture, and peer socialization of mainstream culture. We also examined bivariate correlations between cultural socialization and adolescents' demographic characteristics (i.e., gender, race/ethnicity, family structure, parental education, immigrant status).

In our primary analyses, we used variable- and person-centered approaches to examine the influence of family and peer cultural socialization for adolescent well-being. Adolescent well-being was captured by a latent construct of socioemotional distress based on depressive symptoms and loneliness, and a latent construct of academic adjustment based on school engagement, shared academic activities with peers, and school belonging. A measurement model was fit to assess the validity of the latent constructs. All the analyses controlled for adolescents' demographic characteristics (i.e., gender, race/ethnicity, family structure, parental education, immigrant status), survey language, and the school each adolescent attended.

For the variable-centered approach, we first examined main effects of family and peer cultural socialization on adolescents' socioemotional distress and academic adjustment and then introduced interaction terms between family and peer socialization to the models. Both linear and quadratic interaction effects were tested in an attempt to capture potential complex relationships between family–peer congruence and adolescent well-being (Edwards 1994; Laird and De Los Reyes 2013). When significant interaction terms emerged, we used two approaches to interpret the interaction effects. We first conducted simple slope analyses (Aiken and West 1991; Preacher et al. 2006) to examine the extent to which family cultural socialization was linked to adolescent well-being when peer cultural socialization was low (i.e., one standard deviation below the mean) versus high (i.e., one standard deviation above the mean). We also used the Johnson-Neyman technique (Muthén and Muthén 1998-2014; Preacher et al. 2006) to determine at which point on the peer cultural socialization spectrum the effect of family cultural socialization on adolescent well-being became significant or non-significant. Separate models were tested for heritage and mainstream cultural socialization.

In the person-centered approach, our analyses proceeded in two steps. We first used latent profile analysis (LPA) to explore distinct patterns of family and peer culture socialization. LPA allows for estimations of subpopulations based on multiple indicators. Models estimating one to five profiles were fit sequentially. We selected the

optimal solution based on multiple fit indices, including Bayesian information criterion (BIC), the sample size adjusted BIC (ABIC), and a log-likelihood-based test (i.e., Lo-Mendel-Rubin (LMR) test; Nylund et al. 2007). Smaller BIC and ABIC values indicate better model fit, and a significant LMR test indicates that the model with k classes fit the data significantly better than the model with $k - 1$ classes. We conducted separate LPAs for heritage and mainstream cultural socialization. For LPAs of heritage cultural socialization, three indicators were included: family heritage cultural socialization, peer heritage cultural socialization, and an ordinal directionality indicator capturing three potential categories of difference between family and peer heritage cultural socialization (i.e., $1 = family socialization greater than peer socialization$, $0 = family socialization congruent with peer socialization$, $-1 = family socialization less than peer socialization$). We included the directionality indicator to add information on family–peer congruence versus incongruence to the model and increase accuracy of class enumeration (see Lubke and Muthén 2007 for a discussion of including covariates in latent class models). LPAs of mainstream cultural socialization were conducted using an identical approach. To gain a comprehensive understanding of these profiles, we examined the extent to which these profiles were associated with adolescents' demographic characteristics (i.e., gender, race/ethnicity, family structure, parental education, immigrant status).

We then investigated links between family–peer cultural socialization profiles and youth well-being (i.e., socioemotional distress, academic adjustment). We used dichotomous variables to capture each socialization profile, with one omitted profile as the reference group; we rotated the reference group to obtain all possible comparisons between socialization profiles. Separate models were tested for heritage and mainstream cultural socialization profiles.

All analyses were conducted in Mplus 7.3 (Muthén and Muthén 1998-2014). Mplus handles missing data with the full-information maximum likelihood (FIML), which utilizes all available information without imputing missing data and allows for generalizing study findings to the population (Enders 2010). Missing data were minimal for primary variables (0–1 %).

Results

Preliminary Explorations of Family and Peer Cultural Socialization

Descriptive statistics for cultural socialization are displayed in Table 2. We initially examined bivariate correlations among the four types of cultural socialization:

family socialization of heritage and mainstream culture and peer socialization of heritage and mainstream culture. The four socialization types were moderately related with each other (r_{range}: .46–.78). We also compared mean differences between family and peer heritage cultural socialization and then family and peer mainstream cultural socialization using paired sample t tests. Results indicated higher heritage cultural socialization in families ($M = 3.79$, $SD = .89$) than that in peer groups ($M = 3.47$, $SD = 1.05$), $t (235) = 5.06$, $p < .001$. There were no significant differences in mainstream cultural socialization at home ($M = 3.28$, $SD = .95$) and in peer groups ($M = 3.27$, $SD = 1.08$), $t (233) = .24$, $p = .81$. We then examined mean differences between heritage and mainstream cultural socialization, first within family and again in peer groups. Paired sample t tests showed that adolescents reported greater socialization toward the heritage culture than the mainstream American culture, regardless of socialization agent [$t (235) = 9.14$, $p < .001$ for family socialization, $t (233) = 4.33$, $p < .001$ for peer socialization].

Regarding associations between cultural socialization and adolescents' demographic characteristics, we observed very few significant relations. Latino youth and youth from immigrant families (i.e., at least one parent was foreign born) reported less mainstream cultural socialization from their families than their non-Latino peers and those from native-born families. Additionally, adolescents whose parents had a higher education level reported greater family mainstream cultural socialization than those whose parents had lower education levels.

Family Cultural Socialization, Peer Cultural Socialization, and Adolescent Well-Being: A Variable-Centered Approach

Our primary analyses first investigated the independent and conjoint effects of family and peer cultural socialization for adolescent well-being using a variable-centered approach. The measurement model for the socioemotional and academic well-being latent variables fit the data well [$\chi^2 (4, N = 236) = 1.279$, $p = .87$, CFI = 1.000, RMSEA = .000, SRMR = .010], and all adjustment indicators exhibited adequate loadings on the latent constructs ($\beta_{range} = .48–.86$, $p < .001$). Coefficient estimates for the main effects and interaction effects of family and peer socialization are presented in Table 3. Concerning cultural socialization toward the heritage culture, we did not observe significant main effects of family or peer socialization on adolescents' socioemotional distress, but a significant linear interaction effect emerged. Simple slope analyses (see Fig. 1a) indicated that greater family heritage cultural socialization was linked to lower socioemotional distress when peer heritage cultural socialization was high ($\beta = -.30$, $p < .05$). In

Table 2 Bivariate correlations among study variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Family heritage socialization														
2. Family mainstream socialization	.57***													
3. Peer heritage socialization	.52***	.56***												
4. Peer mainstream socialization	.46***	.68***	.78***											
5. Loneliness	-.20**	-.16*	-.15*	-.14*										
6. Depression	-.06	-.14*	-.10	-.12	.61***									
7. School engagement	.27***	.21**	.11	.14*	-.30***	-.21**								
8. Peer academic activities	.38***	.41***	.32***	.36***	-.28***	-.26***	.25***							
9. School belonging	.26***	.25***	.20**	.24***	-.40***	-.34***	.31***	.32***						
10. Gender	.02	-.02	-.09	-.09	.11	.25***	.09	-.03	.04					
11. Race/ethnicity	-.08	-.21**	.00	-.09	.11	.16*	.02	-.09	-.06	.05				
12. Parent education	.01	.13*	-.02	.03	-.03	-.10	.01	.07	.10	-.04	-.44***			
13. Immigrant status	.05	-.13*	.01	-.04	.01	.09	-.00	-.09	-.00	.03	.59***	-.39***		
14. Family structure	-.09	-.08	.04	-.02	.04	.04	.02	-.08	-.05	-.12	.29***	-.13*	-.20***	
Mean	3.79	3.28	3.47	3.27	1.77	.26	3.86	2.79	3.99	.51	.89	1.84	.81	.44
SD	.89	.95	1.05	1.08	.54	.29	.63	.98	.72	.50	.32	1.23	.39	.50
N	236	236	236	234	236	236	236	236	236	236	236	231	232	236

Gender compares females with males. Race/ethnicity compares Latino youth to African American youth. Immigrant status compares adolescents from immigrant families (i.e., at least one parent was foreign born) to those from non-immigrant families (i.e., both parents were U.S. born). Family structure compares adolescents who lived with both biological parents to those who did not

* $p < .05$; ** $p < .01$; *** $p < .001$

contrast, this relationship was not significant when peer socialization was low ($\beta = -.03$, $p = .81$). More specifically, based on the Johnson–Neyman technique, the protective effect of family heritage cultural socialization on adolescents' socioemotional distress was significant when peer heritage cultural socialization was 3.68 or higher (i.e., socialization practices occurring, on average, between sometimes and most of the time; 41 % of the sample).

Moving to the link between heritage cultural socialization and adolescents' academic adjustment, greater family socialization and greater peer socialization were both linked to better academic outcomes. Additionally, a quadratic interaction effect between family and peer heritage cultural socialization emerged. Simple slope analyses indicated that the quadratic relationship between family heritage cultural socialization and academic adjustment was significant when peer socialization was high ($\beta = .35$, $p < .05$) but not low ($\beta = -.14$, $p = .28$). More specifically (see Fig. 2a), when peer socialization was high, adolescents' academic adjustment improved faster as their family heritage cultural socialization increased. In contrast, when peer socialization was low, the improvement in adolescents' academic adjustment was not as pronounced as family heritage cultural socialization increased. Based

on the Johnson–Neyman technique, these increasing academic returns of family heritage cultural socialization became significant when peer heritage cultural socialization was 4.32 or higher (i.e., practices occurring, on average between most of the time and always; 25 % of the sample).

We observed an identical promotive pattern for mainstream cultural socialization. For socioemotional distress, the main effects of family and peer mainstream cultural socialization were not significant, but a linear interaction emerged. Simple slope analyses (see Fig. 1b) indicated that greater family mainstream cultural socialization was linked to lower socioemotional distress when peer cultural socialization was high ($\beta = -.24$, $p < .05$); this relationship was not significant when peer cultural socialization was low ($\beta = .05$, $p = .74$). More specifically, the protective effect of family mainstream cultural socialization became significant when peer mainstream cultural socialization was at or above 4.21 (i.e., socialization practices occurring, on average, between most of the time and always; 20 % of the sample).

For the links between mainstream cultural socialization and academic adjustment, greater family socialization (but not peer socialization) was associated with better academic

Table 3 Coefficient estimates for relations between interactions of family and peer cultural socialization and adolescent well-being

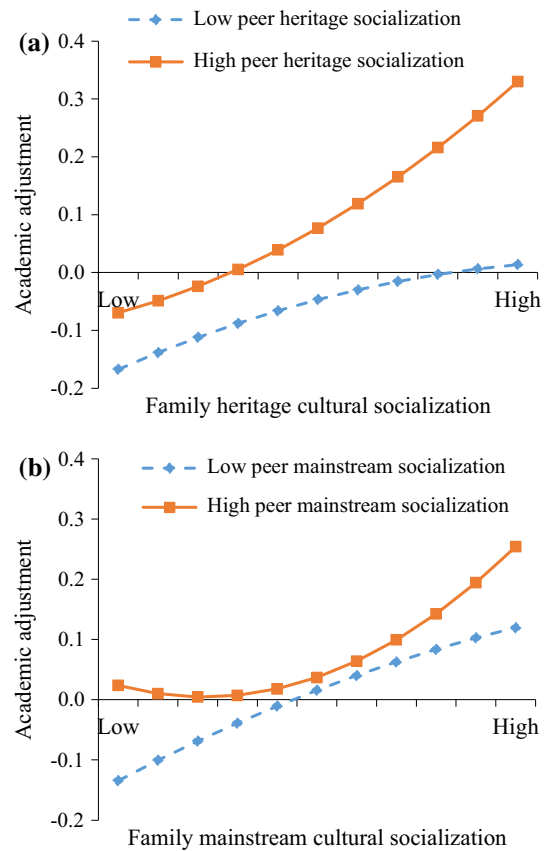|	Socioemotional distress						Academic adjustment					
	Model 1		Model 2		Model 3		Model 1		Model 2		Model 3	
	β	SE	β	SE	β	SE	β	SE	β	SE	β	SE
Heritage cultural socialization												
Family socialization	−.13	(.09)	−.16	(.09)	−.24	(.13)	.46	(.09)***	.48	(.09)***	.62	(.13)***
Peer socialization	−.09	(.09)	−.07	(.09)	−.09	(.12)	.19	(.10)*	.18	(.10)	.09	(.13)
Family × peer socialization			−.15	(.07)*	−.08	(.12)			.11	(.08)	.13	(.13)
Quadratic family socialization					−.05	(.10)					.06	(.11)
Quadratic peer socialization					−.03	(.10)					−.09	(.11)
Peer × quadratic family socialization					−.09	(.14)					.31	(.15)*
Family × quadratic peer socialization					.18	(.16)					−.34	(.18)
	$R^2 = .04$		$R^2 = .06$		$R^2 = .07$		$R^2 = .33$		$R^2 = .35$		$R^2 = .39$	
Mainstream cultural socialization												
Family socialization	−.13	(.10)	−.10	(.10)	−.09	(.14)	.46	(.11)***	.47	(.11)***	.36	(.15)*
Peer socialization	−.06	(.10)	−.09	(.10)	−.04	(.12)	.17	(.11)	.17	(.11)	−.02	(.13)
Family × peer socialization			−.15	(.08)*	−.11	(.16)			−.03	(.08)	−.18	(.17)
Quadratic family socialization					−.09	(.13)					.18	(.14)
Quadratic peer socialization					.03	(.12)					.05	(.13)
Peer × quadratic family socialization					−.07	(.23)					.49	(.24)*
Family × quadratic peer socialization					.01	(.23)					−.17	(.24)
	$R^2 = .03$		$R^2 = .06$		$R^2 = .06$		$R^2 = .35$		$R^2 = .35$		$R^2 = .41$	

All models demonstrated good model fit, $CFI_{range} = .979–1.000$, $RMSEA_{range} = .000–.052$, $SRMR_{range} = .017–.018$. $N = 236$

* $p < .05$; ** $p < .01$; *** $p < .001$
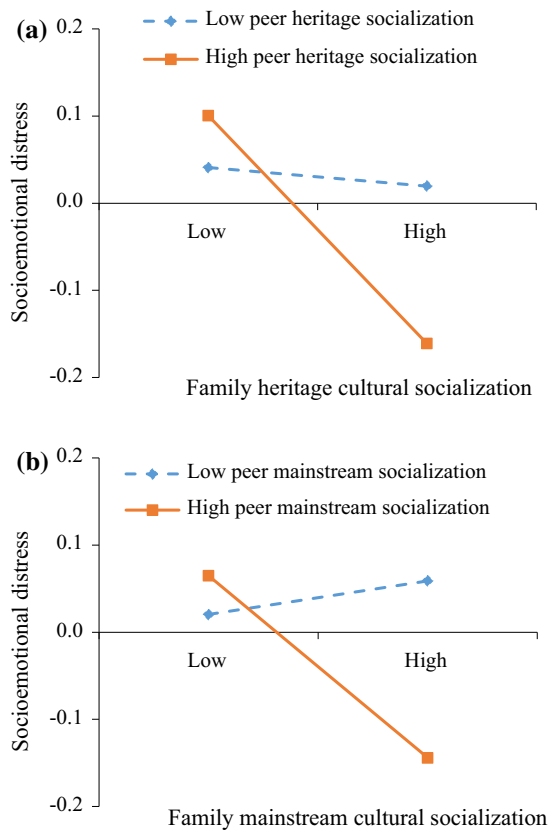
Fig. 1 a Interaction effects of family and peer socialization toward heritage culture for adolescents' socioemotional distress (latent variable, $M = -.03$, $SD = .43$). Low peer heritage socialization was assessed as one standard deviation below the mean, and high peer heritage socialization was assessed as one standard deviation above the mean. b Interaction effects of family and peer socialization toward mainstream American culture for adolescents' socioemotional distress (latent variable, $M = -.04$, $SD = .44$). Low peer mainstream socialization was assessed as one standard deviation below the mean, and high peer mainstream socialization was assessed as one standard deviation above the mean

Fig. 2 a Interaction effects of family and peer socialization toward heritage culture for adolescents' academic adjustment (latent variable, $M = .00$, $SD = .28$). Low peer heritage socialization was assessed as one standard deviation below the mean, and high peer heritage socialization was assessed as one standard deviation above the mean. b Interaction effects of family and peer socialization toward mainstream American culture for adolescents' academic adjustment (latent variable, $M = .03$, $SD = .29$). Low peer mainstream socialization was assessed as one standard deviation below the mean, and high peer mainstream socialization was assessed as one standard deviation above the mean

outcomes. Additionally, a quadratic interaction effect between family and peer heritage cultural socialization emerged. Simple slope analyses indicated that the quadratic relation between family mainstream cultural socialization and adolescents' academic adjustment was significant when peer socialization was high ($\beta = .46$, $p < .01$) but not low ($\beta = -.10$, $p = .63$). Specifically (see Fig. 2b), when peer socialization was high, adolescents' academic adjustment improved faster as their family mainstream cultural socialization increased. In contrast, when peer socialization was low, the improvement in adolescents' academic adjustment was less pronounced as family mainstream cultural socialization increased. Based on the Johnson-Neyman technique, these increasing academic returns of family mainstream cultural socialization became significant when peer mainstream cultural

socialization was 3.89 or higher (i.e., practices occurring, on average, between sometimes and most of the time; 31 % of sample).

Family–Peer Cultural Socialization Profiles and Adolescent Well-being: A Person-Centered Approach

While a variable-centered approach is advantageous in identifying the independent and interactive effects of family and peer cultural socialization, it leaves open the question of what family and peer cultural socialization actually look like for adolescents. Our second set of analyses used a person-centered approach to delineate the

various combinations of family and peer cultural socialization and to determine how these family–peer socialization profiles differentially linked to adolescent well-being.

Profiles of Family and Peer Cultural Socialization

We first examined subgroups of adolescents who experienced various patterns of family and peer cultural socialization using latent profile analyses, separately for heritage and mainstream cultural socialization. Table 4 presents model fit statistics for the 1-class to 5-class solutions. For heritage cultural socialization, the 3-class solution emerged as optimal: while the BIC and ABIC values decreased from the 1-class to 4-class solutions (the 5-class solution did not converge), these declines leveled off from the 3-class to 4-class model. Additionally, LMR tests suggested that the 3-class model fit the data significantly better than the 2-class model, but there was no significant difference between the 3-class and 4-class models. The three distinct groups of heritage cultural socialization are shown in Fig. 3a. Approximately 36 % of the sample received congruently high levels of heritage cultural socialization across family and peers, whereas 38 % of the sample received congruently low levels of heritage socialization; additionally, 26 % of the sample received incongruent socialization, with parents practicing *greater* heritage socialization than peers.

An identical approach was used to explore subgroups of adolescents who experienced different patterns of family and peer socialization toward the mainstream American culture. The three-class solution also emerged as optimal (see Fig. 3b): 20 % of the sample experienced congruently high levels of mainstream cultural socialization from
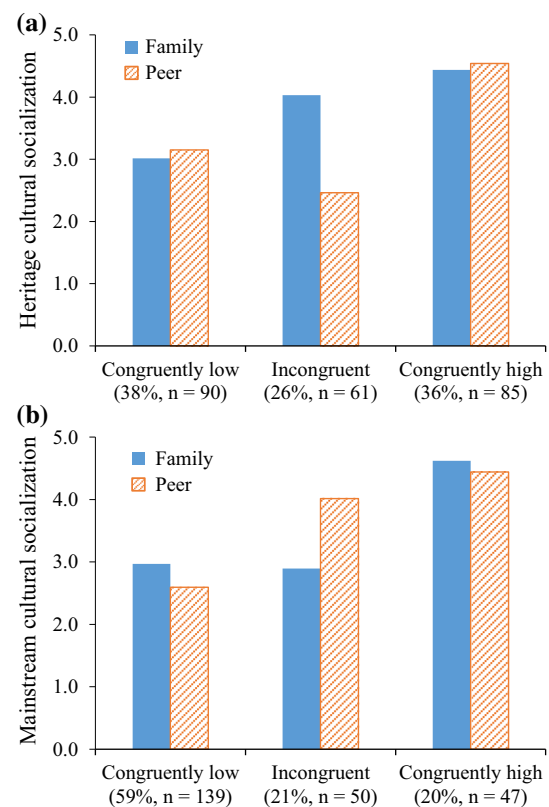
Fig. 3 **a** Profiles of family and peer socialization toward the heritage culture. **b** Profiles of family and peer socialization toward the mainstream culture

family and peers, whereas 59 % of the sample had congruently low levels of socialization. Moreover, 21 % of the sample received incongruent socialization in which parents practiced *less* mainstream socialization than peers.

Table 4 Latent profile analysis of family and peer cultural socialization of heritage and mainstream culture

	1 class	2 classes	3 classes	4 classes	5 classes
Heritage cultural socialization					
Loglikelihood	−901.77	−847.23	−800.13	−773.35	N/A
Parameters	6	10	14	18	
BIC	1836.32	1749.10	1676.76	1645.04	
ABIC	1817.30	1717.40	1632.39	1587.99	
Entropy		.71	.83	.86	
LMR *p* value		.00	.00	.25	
Mainstream cultural socialization					
Loglikelihood	−959.87	−902.37	−871.08	−841.74	−829.21
Parameters	6	10	14	18	22
BIC	1952.80	1859.84	1819.28	1782.65	1779.63
ABIC	1933.78	1828.14	1774.90	1725.59	1709.89
Entropy		.71	.82	.81	.85
LMR *p* value		.00	.02	.61	.72

Model fit indices of the 5-class solution for heritage cultural socialization were not reported because the model did not converge. N = 236

Concerning associations between family–peer cultural socialization profiles and adolescents' demographic characteristics, we observed no significant relationships with two exceptions. Latino adolescents were more likely than African American adolescents to be in the incongruent group for mainstream cultural socialization, χ^2 (2) = 7.28, $p < .05$. Additionally, adolescents from immigrant families were more likely to be in the incongruent group for mainstream cultural socialization than those from non-immigrant families, χ^2 (2) = 6.34, $p < .05$.

Family–Peer Cultural Socialization Profiles and Adolescent Well-Being

We next examined links between family–peer cultural socialization profiles and adolescent well-being (i.e., socioemotional distress, academic adjustment). For heritage cultural socialization (see the upper portion of Table 5), adolescents who received congruently high socialization of the heritage culture from both their families and peers reported lower socioemotional distress and better academic adjustment than the other two groups. Although adolescents in the incongruent group had relatively high levels of family heritage socialization compared to adolescents in the congruently low socialization group, we did not observe any significant differences in well-being between the two groups. The advantages we observed for adolescents in the congruently high group are aligned with findings from the variable-centered approach highlighting the benefits of high family heritage cultural socialization when peer heritage cultural socialization was also high. The non-significant difference between the incongruent group and the congruently low group parallels the findings from the variable-centered approach highlighting the diminished benefits of high family cultural socialization when peer cultural socialization was low.

An identical pattern was observed for mainstream cultural socialization (see the lower portion of Table 5). Specifically, adolescents who received congruently high socialization toward the mainstream American culture from both their families and peers demonstrated lower socioemotional distress and better academic adjustment than the other two groups. Although adolescents in the incongruent group received relatively high levels mainstream socialization from their peers than adolescents in the incongruently low group, there was no significant difference in well-being between the two groups. Again, these findings are consistent with those based on the variable-centered approach.

Discussion

Racial/ethnic minority youth live at the intersection of diverse cultures (e.g., the mainstream American culture, their heritage culture), and they receive a multitude of varying messages about these cultures from important others in their lives. Yet, the current literature base focuses almost exclusively on cultural socialization that youth experience from their parents, despite the fact that peers become key socializing agents during adolescence (Brown and Larson 2009). The current study is a first attempt to explore cultural socialization across developmental settings (i.e., at home, in peer groups) and how these settings work conjointly to influence adolescent well-being. Using a variable-centered approach, we found that the benefits of family cultural socialization were conditioned by peer cultural socialization based on adolescent reports, such that higher levels of heritage and mainstream cultural socialization at home were linked to better socioemotional and academic well-being when peer cultural socialization was also relatively high. We further used a person-centered

Table 5 Coefficient estimates for relations between profiles of family and peer cultural socialization and adolescent well-being

	Socioemotional distress		Academic adjustment	
	β	SE	β	SE
Heritage cultural socialization				
Incongruent versus congruently low	−.05	(.08)	.18	(.10)
Congruently high versus congruently low	−.24	(.08)**	.48	(.09)***
Congruently high versus incongruent	−.19	(.09)*	.29	(.11)**
Mainstream cultural socialization				
Incongruent versus congruently low	−.00	(.08)	.05	(.09)
Congruently high versus congruently low	−.22	(.08)**	.42	(.09)***
Congruently high versus incongruent	−.22	(.09)*	.37	(.11)**

All models demonstrated good model fit, CFI_{range} = .982–.991, $RMSEA_{range}$ = .033–.044, $SRMR_{range}$ = .014–.020. $N = 236$

* $p < .05$; ** $p < .01$; *** $p < .001$

approach to identify the prevalence of family–peer congruence versus incongruence in cultural socialization. Despite the common assumption that family and peer cultural contexts are drastically different for racial/ethnic minority and immigrant youth (Zhou 1997; Umaña-Taylor et al. 2009), we identified similar proportions of adolescents reporting congruently high, congruently low, and incongruent socialization from their families and peers. Similar to findings from the variable-centered approach, adolescents in the congruently high group demonstrated optimal adjustment. Moreover, although the incongruent group received relatively high levels of cultural socialization in one setting, they did not demonstrate better well-being than the congruently low group.

Family Cultural Socialization, Peer Cultural Socialization, and Adolescent Well-Being

Both family and peer cultural socialization toward the heritage culture and the mainstream American culture demonstrated some benefits for adolescent well-being according to our variable-centered approach. Based on bivariate correlations, regardless of heritage or mainstream cultural socialization, family and peer socialization were both generally associated with better well-being. The benefits of family and peer cultural socialization, especially toward the heritage culture, persisted for adolescents' academic adjustment when these two contexts were considered simultaneously. These associations echo the well-established findings documenting the positive effects of family cultural contexts in the literature (Hughes et al. 2006) and extend these findings to highlight the benefits of multiple developmental settings. The effects of family cultural socialization, however, were more consistent when compared to peer socialization, suggesting that parents remain central socialization agents who shape adolescents' racial/ethnic identity and cultural values in early adolescence (Umaña-Taylor et al. 2009). Whether the particular strength of parent socialization relative to peer socialization persists across the stages of later adolescence, when youth come to have more achieved identity (Meeus et al. 2010), is an important topic for future study.

In addition to the main effects of cultural socialization on adolescent well-being, our findings demonstrated that the role of family cultural socialization was conditioned by peer cultural socialization. Regardless of heritage or mainstream cultural socialization, higher levels of family socialization were only significantly linked to socioemotional well-being when peer socialization was also high. A similar pattern was observed for adolescents' academic adjustment: when peer socialization was high, high levels of family socialization became increasingly beneficial. The benefits associated with contextual congruence likely

represent cumulative advantage (Crosnoe et al. 2010; DiPrete and Eirich 2006; Elder 1998) in which young people benefit from multiple cultural resources. The non-linear, increasing academic returns due to contextual congruence suggests that the combination of multiple cultural resources may lead to even more favorable outcomes. Given that issues of race/ethnicity and culture are particularly salient in racial/ethnic minority adolescents' daily lives (Rivas-Drake et al. 2014), it is not surprising that such cumulative advantage of socialization congruence would promote not only adolescents' socioemotional well-being but also their general adjustment at school. In contrast, when a culture is highly endorsed at home but not valued by peers to the same extent, youth may have difficulties reconciling this incongruence. Recent work has demonstrated that the effectiveness of family socialization in promoting adolescents' cultural values depends on contextual factors such as family relationships and neighborhood characteristics (Hernández et al. 2014; Supple et al. 2006; Tsai et al. 2015), and the present study adds to this emerging literature by demonstrating that the effects of family cultural socialization also depend on cultural contexts in other proximal developmental settings such as peer groups. More importantly, our findings highlight the importance of examining the role of multiple developmental settings and socializing agents to best understand the influence of cultural socialization for adolescent adjustment (Mistry and Wu 2010; Priest et al. 2014).

Family–Peer Profiles of Cultural Socialization and Adolescent Well-Being

While we identified a beneficial effect for adolescent well-being when family and peer cultural socialization were congruently high using a variable-centered approach, it was unclear whether such congruence actually emerges in adolescents' lives. Determining the commonality of this experience was critical given the common perception of dissonance across contexts, such that racial/ethnic minority families often highly endorse one's heritage culture whereas peer groups practice the mainstream American culture (Qin 2009). Although this notion was supported by the mean-level differences in heritage cultural socialization that we observed in this study, using a variable-centered approach, we identified roughly equal proportions of adolescents experiencing congruently high (36 %), congruently low (38 %), and incongruent heritage cultural socialization from their families and peers (26 %). Similar profiles were identified for mainstream cultural socialization, except that the pattern of the incongruent profile was reversed—for the incongruent heritage cultural socialization profile, heritage culture was more highly endorsed at home than in peer groups; for the incongruent mainstream

cultural socialization profile, mainstream American culture was practiced more often in peer groups than at home. The opposite pattern for the incongruent profiles was consistent with theories asserting families as the transmitters of heritage culture and peers as more relevant for the transmission of the mainstream American culture (Costigan and Dokis 2006; Umaña-Taylor et al. 2009; Zhou 1997).

More importantly, our study demonstrates that, while family–peer incongruence was present for some adolescents, the majority of adolescents experienced congruent socialization across family and peer settings, although these socialization practices could occur at congruently high or congruently low levels. This congruence was somewhat unexpected, and it may, in part, be due to the fact that our participants attended schools with a high percentage of same-ethnic peers. However, prior research with large samples from diverse schools suggests that adolescents often share similar views of race/ethnicity with their close friends (Hamm 2000). In fact, the broader literature on family and peer relationships often finds concurrence in these two proximal environments (for a review, see Brown and Bakken 2011). That said, future work is needed to investigate the generalizability of our findings for adolescents attending more ethnically diverse schools as well as those living outside ethnic enclaves.

We also observed that congruence versus incongruence in cultural socialization messages had different developmental implications. The adolescents in the congruently high heritage or mainstream cultural socialization group appeared to be quite well-adjusted, with the congruence likely supporting their ability to make smooth transitions in their "multiple worlds" (e.g., families, peers, schools), consistent with early qualitative work (Phelan et al. 1991). Given the congruent, positive socialization messages about race/ethnicity from their important others, these adolescents are likely able to develop a coherent, positive sense of self and behave consistently across contexts. This congruently high heritage socialization may be even more critical for adolescents attending schools with fewer same-ethnic peers given the challenges associated with being under-represented racially/ethnically in one's proximal contexts (e.g., discrimination and marginalization; Benner and Wang 2015; Seaton and Yip 2009).

In contrast, adolescents in incongruent socialization groups (either toward the heritage culture or the mainstream American culture) likely experience challenges in navigating multiple developmental settings with varying cultural contexts. These adolescents may have conflicted feelings as they move between families and schools, and such internal cultural conflicts have been identified as a stressor for psychological well-being (Benet-Martínez and Haritatos 2005). Our findings suggest that, although these adolescents receive relatively high cultural socialization

from one developmental setting, this did not seem to buffer the lack of socialization from the other setting. Thus, helping this group of adolescents to reconcile incongruent socialization messages from their important others seems particularly important.

While we did not observe significant differences in adjustment between the incongruent and congruently low groups, the challenges for adolescents in the latter group may look different. Rather than feeling conflicted, adolescents who received congruently low socialization from their families and peers may struggle with feelings of alienation from either their heritage culture or the mainstream culture, and lacking a sense of belonging to either culture has been shown to undermine one's psychological well-being and academic outcomes (Nguyen and Benet-Martínez 2013; Rivas-Drake et al. 2014). Future work is needed to investigate who these adolescents are and factors linked to each socialization profile. Together these findings would highlight the unique challenges associated with each socialization profile and identify different targets for intervention and prevention efforts (e.g., feelings of conflict versus alienation).

Strengths, Limitations, and Implications

By investigating cultural socialization across developmental settings (i.e., at home, in peer groups), the present study makes a strong contribution to the cultural socialization literature that has focused almost exclusively on family ethnic socialization. Our findings suggest that the benefits of family ethnic socialization are conditioned by cultural socialization practices in peer groups, highlighting the need to consider other key socialization agents in adolescence. In fact, recent theoretical work has delineated racial/ethnic and cultural socialization in other developmental settings such as schools (Hughes et al. 2011) and communities (Mistry and Wu 2010), and a recent conceptual framework of racial/ethnic identity development also calls for more attention to influences outside the family context (Umaña-Taylor et al. 2014). Our work represents an important step in moving beyond family settings to more comprehensively consider the multitude of cultural influences on youth development.

The current investigation also has practical implications in promoting adaptive cultural contexts for racial/ethnic minority youth. The cultural socialization practices used in the present study could serve as potential targets for prevention and intervention programs. For example, it might be fruitful for schools and after-school programs to recognize cultural heritages and celebrate traditions of various groups. Moreover, intervention work has focused attention on promoting culturally-informed parenting practices (e.g., Coard et al. 2007), and youth may benefit the most from

such programs when other socialization settings are targeted as well. Finally, the present study also highlighted subgroups of adolescents who may be at particular risk of cultural incongruence. For example, adolescents from Latino and immigrant families are more likely to experience mainstream cultural incongruence than their peers, possibly due to the large distance between their culture of origin and the mainstream American culture (Lui 2015). Thus, intervention programs that address cultural incongruence may be particularly beneficial for these adolescents.

The current findings, however, should be interpreted within the study's limitations. The current data were collected from schools with a dense Latino population, and the majority of our participants were Latino students. School racial/ethnic composition has been found to be a contextual determinant of racial/ethnic processes in schools and peer groups and their linkages to adolescent well-being (Benner and Graham 2009; Yip et al. 2010). Mainstream American culture may be more endorsed and practiced in diverse schools where students experience greater exposure to cross-ethnic peers. However, it is an open question whether family–peer congruence would be more or less common or adaptive in diverse settings. Nevertheless, how school racial/ethnic composition contributes to variations in ethnic socialization practices and the potential developmental implications of family and peer cultural socialization within schools of varying demographics is an exciting line of future inquiry.

The present study also investigated ethnic socialization practices at a particular time in the life course—early adolescence when students were in 8th grade. Early adolescence is a critical developmental period when notions around race/ethnicity and culture become more salient (Umaña-Taylor et al. 2014). Yet adolescents are just developing social cognitive skills (Blakemore and Choudhury 2006; Quintana et al. 1999) that help them reconcile complex ideas outside families that weigh particularly important (Knoll et al. 2015). These developmental changes may make early adolescence a particular vulnerable stage for cultural incongruence across family and peer contexts. However, theoretical work also points to the importance of examining developmental changes over the early life course (Elder 1998). As young people transition from middle to high school and then to college or the workforce, they may be exposed to more racial/ethnically diverse peers and colleagues (Benner 2011) and experience greater cultural variation in family and peer settings. On the other hand, as they age, youth also become more experienced and cognitively skilled at managing incongruence, making incongruence potentially less detrimental for adjustment in later developmental periods. These possible variations highlight the need for a more thorough investigation of family and peer cultural socialization, as well as their congruence versus incongruence, across the early life course.

Additionally, the present study used self-report, cross-sectional data, and, thus, the proposed directional relationships described in the current study (i.e., cultural socialization influencing adolescent well-being) cannot be fully determined. The use of self-report data might result in shared variance in the observed relationship between cultural socialization and adolescent well-being. Moreover, recent work suggests that a bidirectional relationship may exist between parent cultural socialization and adolescents' ethnic identity (Umaña-Taylor et al. 2013). Therefore, it is possible that adolescent adjustment also influences family and peer socialization practices. Additionally, adolescents who have adjustment issues or poorer relationships with their parents may seek out peer groups with different cultural practices in order to gain autonomy from their family environments (Fuligni et al. 2001). Equally possible is that adolescents who are well-adjusted likely have better family and peer relationships (Branje et al. 2010; Stice et al. 2004) and, thus, experience congruently high levels of cultural socialization across contexts. Future studies with longitudinal data from multiple informants are needed to disentangle the directionality in the link between congruence/incongruence in family and peer cultural socialization and adolescent adjustment.

Conclusion

Navigating across diverse cultural contexts is a common developmental challenge for racial/ethnic minority youth. In investigating heritage and mainstream cultural socialization from families and peers, the findings presented here represent a first step in quantitatively documenting the developmental implications of cultural socialization in multiple contexts and highlighting the role of matches and mismatches across socialization agents and cultural settings. These findings demonstrated the interactive nature of cultural contexts and highlighted adaptive patterns of cultural socialization by multiple agents. We hope this work will spur future longitudinal research on cultural socialization with individuals across developmental stages and in more diverse ecological contexts.

References

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.

Arunkumar, R., Midgley, C., & Urdan, T. (1999). Perceiving high or low home–school dissonance: Longitudinal effects on adolescent emotional and academic well-being. *Journal of Research on Adolescence, 9*, 441–466. doi:10.1207/s15327795jra0904_4.

Asher, S. R., & Wheeler, V. A. (1985). Children's loneliness: A comparison of rejected and neglected peer status. *Journal of Consulting and Clinical Psychology, 53*, 500–505. doi:10.1037/0022-006X.53.4.500.

Benet-Martínez, V., & Haritatos, J. (2005). Bicultural identity integration (BII): Components and psychosocial antecedents. *Journal of Personality, 73*, 1015–1050. doi:10.1111/j.1467-6494.2005.00337.x.

Benner, A. D. (2011). The transition to high school: Current knowledge, future directions. *Educational Psychology Review, 23*, 299–328. doi:10.1007/s10648-011-9152-0.

Benner, A. D., & Graham, S. (2009). The transition to high school as a developmental process among multiethnic urban youth. *Child Development, 80*, 356–376. doi:10.1111/j.1467-8624.2009.01265.x.

Benner, A. D., & Mistry, R. S. (2007). Congruence of mother and teacher educational expectations and low income youth's academic competence. *Journal of Educational Psychology, 99*, 140–153. doi:10.1037/0022-0663.99.1.140.

Benner, A. D., & Wang, Y. (2015). Adolescent substance use: The role of demographic marginalization and socioemotional distress. *Developmental Psychology, 51*, 1086–1097. doi:10.1037/dev0000026.

Blakemore, S.-J., & Choudhury, S. (2006). Development of the adolescent brain: Implications for executive function and social cognition. *Journal of Child Psychology and Psychiatry, 47*, 296–312. doi:10.1111/j.1469-7610.2006.01611.x.

Branje, S. T., Hale, W. I., Frijns, T., & Meeus, W. J. (2010). Longitudinal associations between perceived parent–child relationship quality and depressive symptoms in adolescence. *Journal of Abnormal Child Psychology, 38*, 751–763. doi:10.1007/s10802-010-9401-6.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge: Harvard University Press.

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In R. M. Lerner & W. Damon (Eds.), *Handbook of child psychology (6th ed.): Vol 1, theoretical models of human development* (pp. 793–828). Hoboken, NJ: Wiley.

Brown, B. B., & Bakken, J. P. (2011). Parenting and peer relationships: Reinvigorating research on family–peer linkages in adolescence. *Journal of Research on Adolescence, 21*, 153–165. doi:10.1111/j.1532-7795.2010.00720.x.

Brown, B. B., & Larson, J. (2009). Peer relationships in adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology, Vol 2: Contextual influences on adolescent development* (3rd ed., pp. 74–103). Hoboken, NJ: Wiley.

Brown, T. N., Tanner-Smith, E. E., Lesane-Brown, C. L., & Ezell, M. E. (2007). Child, parent, and situational correlates of familial ethnic/race socialization. *Journal of Marriage and Family, 69*, 14–25. doi:10.1111/j.1741-3737.2006.00340.x.

Coard, S. I., Foy-Watson, S., Zimmer, C., & Wallace, A. (2007). Considering culturally relevant parenting practices in intervention development and adaptation: A randomized controlled trial of the Black Parenting Strengths and Strategies (BPSS) Program. *The Counseling Psychologist, 35*, 797–820. doi:10.1177/0011000007304592.

Costigan, C. L., & Dokis, D. P. (2006). Relations between parent–child acculturation differences and adjustment within immigrant Chinese families. *Child Development, 77*, 1252–1267. doi:10.1111/j.1467-8624.2006.00932.x.

Crosnoe, R., Leventhal, T., Wirth, R. J., Pierce, K. M., & Pianta, R. C. (2010). Family socioeconomic status and consistent environmental stimulation in early childhood. *Child Development, 81*, 972–987. doi:10.1111/j.1467-8624.2010.01446.x.

DiPrete, T. A., & Eirich, G. M. (2006). Cumulative advantage as a mechanism for inequality: A review of theoretical and empirical developments. *Annual Review of Sociology, 32*, 271–297. doi:10.1146/annurev.soc.32.061604.123127.

Dotterer, A. M., McHale, S. M., & Crouter, A. C. (2009). Sociocultural factors and school engagement among African American youth: The roles of racial discrimination, racial socialization, and ethnic identity. *Applied Developmental Science, 13*, 61–73. doi:10.1080/10888690902801442.

Edwards, J. R. (1994). The study of congruence in organizational behavior research: critique and a proposed alternative. *Organizational Behavior and Human Decision Processes, 58*, 51–100. doi:10.1006/obhd.1994.1029.

Elder, G. H. (1998). The life course as developmental theory. *Child Development, 69*, 1–12. doi:10.2307/1132065.

Enders, C. K. (2010). *Applied missing data analysis*. New York: Guilford Press.

Evans, A. B., Banerjee, M., Meyer, R., Aldana, A., Foust, M., & Rowley, S. (2012). Racial socialization as a mechanism for positive development among African American youth. *Child Development Perspectives, 6*, 251–257. doi:10.1111/j.1750-8606.2011.00226.x.

Fuligni, A. J., Eccles, J. S., Barber, B. L., & Clements, P. (2001). Early adolescent peer orientation and adjustment during high school. *Developmental Psychology, 37*, 28–36. doi:10.1037/0012-1649.37.1.28.

Gottfredson, G. D. (1984). *The effective school battery*. Odessa, FL: Psychological Assessment Resources Incorporated.

Hamm, J. V. (2000). Do birds of a feather flock together? The variable bases for African American, Asian American, and European American adolescents' selection of similar friends. *Developmental Psychology, 36*, 209–219. doi:10.1037/0012-1649.36.2.209.

Hernández, M. M., Conger, R. D., Robins, R. W., Bacher, K. B., & Widaman, K. F. (2014). Cultural socialization and ethnic pride among Mexican-origin adolescents during the transition to middle school. *Child Development, 85*, 695–708. doi:10.1111/cdev.12167.

Hughes, D. (2003). Correlates of African American and Latino parents' messages to children about ethnicity and race: A comparative study of racial socialization. *American Journal of*

Community Psychology, 31, 15–33. doi:10.1023/A:1023066418688.

Hughes, D., McGill, R. K., Ford, K. R., & Tubbs, C. (2011). Black youths' academic success: The contribution of racial socialization from parents, peers, and schools. In N. E. Hill, T. L. Mann, & H. E. Fitzgerald (Eds.), *African American children and mental health: Development and context, prevention and social policy* (Vol. 1, pp. 95–124). Santa Barbara, CA: Praeger/ABC-CLIO.

Hughes, D., Rodriguez, J., Smith, E. P., Johnson, D. J., Stevenson, H. C., & Spicer, P. (2006). Parents' ethnic-racial socialization practices: A review of research and directions for future study. *Developmental Psychology, 42*, 747–770. doi:10.1037/0012-1649.42.5.747.

Knoll, L. J., Magis-Weinberg, L., Speekenbrink, M., & Blakemore, S.-J. (2015). Social influence on risk perception during adolescence. *Psychological Science, 26*, 583–592. doi:10.1177/0956797615569578.

Kovacs, M. (1992). *Children's depression inventory manual*. North Tonawanda, NY: Multi-Health Systems.

Laird, R. D., & De Los Reyes, A. (2013). Testing informant discrepancies as predictors of early adolescent psychopathology: Why difference scores cannot tell you what you want to know and how polynomial regression may. *Journal of Abnormal Child Psychology, 41*, 1–14. doi:10.1007/s10802-012-9659-y.

Lee, R. M., Grotevant, H. D., Hellerstedt, W. L., Gunnar, M. R., & Minnesota International Adoption Project Team. (2006). Cultural socialization in families with internationally adopted children. *Journal of Family Psychology, 20*, 571–580. doi:10.1037/0893-3200.20.4.571.

Lubke, G., & Muthén, B. O. (2007). Performance of factor mixture models as a function of model size, covariate effects, and class-specific parameters. *Structural Equation Modeling, 14*, 26–47. doi:10.1207/s15328007sem1401_2.

Lui, P. P. (2015). Intergenerational cultural conflict, mental health, and educational outcomes among Asian and Latino/a Americans: Qualitative and meta-analytic review. *Psychological Bulletin, 141*, 404–446. doi:10.1037/a0038449.

Marks, A. K., Godoy, C., & García Coll, C. (2014). An ecological approach to understanding immigrant child and adolescent developmental competencies. In E. T. Gershoff, R. S. Mistry, D. A. Crosby, E. T. Gershoff, R. S. Mistry, & D. A. Crosby (Eds.), *Societal contexts of child development: Pathways of influence and implications for practice and policy* (pp. 75–89). New York, NY: Oxford University Press.

McHale, S. M., Crouter, A. C., Kim, J.-Y., Burton, L. M., Davis, K. D., Dotterer, A. M., & Swanson, D. P. (2006). Mothers' and fathers' racial socialization in African American families: implications for youth. *Child Development, 77*, 1387–1402. doi:10.1111/j.1467-8624.2006.00942.x.

Meeus, W., van de Schoot, R., Keijsers, L., Schwartz, S. J., & Branje, S. (2010). On the progression and stability of adolescent identity formation: A five-wave longitudinal study in early-to-middle and middle-to-late adolescence. *Child Development, 81*, 1565–1581. doi:10.1111/j.1467-8624.2010.01492.x.

Mistry, J., & Wu, J. (2010). Navigating cultural worlds and negotiating identities: A conceptual model. *Human Development, 53*, 5–25. doi:10.1159/000268136.

Muthén, L. K., & Muthén, B. O. (1998-2014). *Mplus User's Guide* (7th ed.). Los Angeles, CA: Muthen & Muthen.

Nguyen, A.-M. D., & Benet-Martínez, V. (2013). Biculturalism and adjustment: A meta-analysis. *Journal of Cross-Cultural Psychology, 44*, 122–159. doi:10.1177/0022022111435097.

Nylund, K., Asparouhov, T., & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling, 14*, 535–569. doi:10.1080/10705510701575396.

Phelan, P., Davidson, A. L., & Cao, H. T. (1991). Students' multiple worlds: Negotiating the boundaries of family, peer, and school cultures. *Anthropology & Education Quarterly, 22*, 224–250. doi:10.1525/aeq.1991.22.3.05x1051k.

Polo, A. J. L., & Steven, R. (2009). Culture, context, and the internalizing distress of Mexican American youth. *Journal of Clinical Child and Adolescent Psychology, 38*, 273–285. doi:10.1080/15374410802698370.

Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interactions in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics, 31*, 437–448. doi:10.3102/10769986031004437.

Priest, N., Walton, J., White, F., Kowal, E., Baker, A., & Paradies, Y. (2014). Understanding the complexities of ethnic-racial socialization processes for both minority and majority groups: A 30-year systematic review. *International Journal of Intercultural Relations, 43*, 139–155. doi:10.1016/j.ijintrel.2014.08.003.

Qin, D. B. (2009). Being "good" or being "Popular": Gender and ethnic identity negotiations of Chinese immigrant adolescents. *Journal of Adolescent Research, 24*, 37–66. doi:10.1177/0743558408326912.

Quintana, S. M., Castañeda-English, P., & Ybarra, V. C. (1999). Role of perspective-taking abilities and ethnic socialization in development of adolescent ethnic identity. *Journal of Research on Adolescence, 9*, 161–184. doi:10.1207/s15327795jra0902_3.

Rivas-Drake, D., Hughes, D., & Way, N. (2009). Public ethnic regard and perceived socioeconomic stratification: Associations with well-being among Dominican and Black American youth. *The Journal of Early Adolescence, 29*, 122–141. doi:10.1177/0272431608324479.

Rivas-Drake, D., Seaton, E. K., Markstrom, C., Quintana, S., Syed, M., Lee, R. M., & Ethnic and Racial Identity in the 21st Century Study Group. (2014). Ethnic and racial identity in adolescence: Implications for psychosocial, academic, and health outcomes. *Child Development, 85*, 40–57. doi:10.1111/cdev.12200.

Rodriguez, J., Umaña-Taylor, A., Smith, E. P., & Johnson, D. J. (2009). Cultural processes in parenting and youth outcomes: examining a model of racial-ethnic socialization and identity in diverse populations. *Cultural Diversity and Ethnic Minority Psychology, 15*, 106–111. doi:10.1037/a0015510.

Romero, A. J., Cuéllar, I., & Roberts, R. E. (2000). Ethnocultural variables and attitudes toward cultural socialization of children. *Journal of Community Psychology, 28*, 79–89. doi:10.1002/(SICI)1520-6629(200001)28:1<79:AID-JCOP8>3.0.CO;2-N.

Seaton, E. K., & Yip, T. (2009). School and neighborhood contexts, perceptions of racial discrimination, and psychological well-being among African American adolescents. *Journal of Youth and Adolescence, 38*, 153–163. doi:10.1007/s10964-008-9356-x.

Stevenson, H. C., Cameron, R., Herrero-Taylor, T., & Davis, G. Y. (2002). Development of the teenager experience of racial socialization scale: Correlates of race-related socialization frequency from the perspective of black youth. *Journal of Black Psychology, 28*, 84–106. doi:10.1177/0095798402028002002.

Stice, E., Ragan, J., & Randall, P. (2004). Prospective relations between social support and depression: Differential direction of effects for parent and peer support? *Journal of Abnormal Psychology, 113*, 155–159. doi:10.1037/0021-843X.113.1.155.

Supple, A. J., Ghazarian, S. R., Frabutt, J. M., Plunkett, S. W., & Sands, T. (2006). Contextual influences on Latino adolescent ethnic identity and academic outcomes. *Child Development, 77*, 1427–1433. doi:10.1111/j.1467-8624.2006.00945.x.

Tran, A. G. T. T., & Lee, R. M. (2011). Cultural socialization as a moderator of friendships and social competence. *Cultural Diversity and Ethnic Minority Psychology, 17*, 456–461. doi:10.1037/a0024728.

Tsai, K. M., Telzer, E. H., Gonzales, N. A., & Fuligni, A. J. (2015). Parental cultural socialization of Mexican–American adolescents' family obligation values and behaviors. *Child Development, 86*, 1241–1252. doi:10.1111/cdev.12358.

Tyler, K. M., Brown-Wright, L., Stevens-Watkins, D., Thomas, D., Stevens, R., Roan-Belle, C., & Smith, L. T. (2010). Linking home-school dissonance to school-based outcomes for African American high school students. *Journal of Black Psychology, 36*, 410–425. doi:10.1177/0095798409353758.

Tyler, K. M., Dillihunt, M. L., Boykin, A. W., Coleman, S. T., Scott, D. M., Tyler, C. M. B., & Hurley, E. A. (2008). Examining cultural socialization within African American and European American Households. *Cultural Diversity and Ethnic Minority Psychology, 14*, 201–204. doi:10.1037/1099-9809.14.3.201.

Umaña-Taylor, A. J. (2004). Ethnic identity and self-esteem: Examining the role of social context. *Journal of Adolescence, 27*, 139–146. doi:10.1016/j.adolescence.2003.11.006.

Umaña-Taylor, A. J., Alfaro, E. C., Bámaca, M. Y., & Guimond, A. B. (2009). The central role of familial ethnic socialization in Latino adolescents' cultural orientation. *Journal of Marriage and Family, 71*, 46–60.

Umaña-Taylor, A. J., & Fine, M. A. (2004). Examining ethnic identity among Mexican-origin adolescents living in the United States. *Hispanic Journal of Behavioral Sciences, 26*, 36–59. doi:10.1177/0739986303262143.

Umaña-Taylor, A. J., Quintana, S. M., Lee, R. M., Cross, W. E., Rivas-Drake, D., Schwartz, S. J., & Ethnic and Racial Identity in the 21st Century Study Group. (2014). Ethnic and racial identity during adolescence and into young adulthood: An integrated conceptualization. *Child Development, 85*, 21–39. doi:10.1111/cdev.12196.

Umaña-Taylor, A. J., Zeiders, K. H., & Updegraff, K. A. (2013). Family ethnic socialization and ethnic identity: A family-driven, youth-driven, or reciprocal process? *Journal of Family Psychology, 27*, 137–146. doi:10.1037/a0031105.

Wang, Y., Benner, A. D., & Kim, S. Y. (2015). The Cultural Socialization Scale: Assessing family and peer socialization toward heritage and mainstream cultures. *Psychological Assessment, 27*, 1452–1462. doi:10.1037/pas0000136.

Wang, M. T., & James, P. (2012). Parental racial socialization as a moderator of the effects of racial discrimination on educational success among African American adolescents. *Child Development, 83*, 1716–1731. doi:10.1111/j.1467-8624.2012.01808.x.

Witkow, M. R. (2006). *Perceived social norms for schoolwork and achievement during adolescence*. Ypsilanti, MI: Eastern Michigan University.

Yip, T., & Douglass, S. (2011). Ethnic/Racial identity and peer relationships across elementary, middle and high school. In X. Chen & K. H. Rubin (Eds.), *Socioemotional development in cultural context* (pp. 186–207). New York, NY: Guilford Press.

Yip, T., Seaton, E. K., & Sellers, R. M. (2010). Interracial and intraracial contact, school-level diversity, and change in racial identity status among African American adolescents. *Child Development, 81*, 1431–1444. doi:10.1111/j.1467-8624.2010.01483.x.

Zhou, M. (1997). Growing up American: The challenge confronting immigrant children and children of immigrants. *Annual Review of Sociology, 23*, 63–95. doi:10.1146/annurev.soc.23.1.63.

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