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Multiracial in Middle School: The Influence of Classmates and Friends on Changes in Racial Self-Identification

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Abstract

In the present research, the influence of racial diversity among classmates and friends on changes in racial self-identification among multiracial youth was examined (n = 5,209; M_{age} = 10.56 years at the beginning of sixth grade). A novel individual-level measure of diversity among classmates based on participants' course schedules was utilized. The findings revealed that although there was some fluidity in multiracial identification at the beginning of middle school, changes in multiracial identification were more evident later in middle school. In addition, although diversity among classmates and friends both increased the likelihood of multiracial identification in the beginning of middle school, only diversity among friends mattered later in middle school, when fluidity in multiracial identification was at its peak.

Multiracial youth are one of the fastest growing demographic groups in this nation (Pew Research Center, 2015). In 2013, about 1 in 10 children were born to parents of different racial groups (up from 1 in 100 in 1970), and these percentages are expected to triple by 2060. Acknowledging this growing population, researchers who study identity processes have much to learn from multiracial youth who must negotiate two or more racial or ethnic identities and for whom deciding how to racially self-identify may be a unique and complex developmental task (Terry & Winston, 2010). As evidence of this complexity, previous research documents that racial self-identification is more fluid for multiracial compared to monoracial youth (Doyle & Kao, 2007; Gaither, 2015; Harris & Sim, 2002; Hitlin, Scott Brown, & Elder, 2006) and may be influenced by social contextual factors such as school or neighborhood racial composition (Herman, 2004; Nishina, Bellmore, Witkow, & Nylund-Gibson, 2010). In the present research, we examine racial self-identification among multiracial youth in early adolescence when subjective meanings of their social identities are beginning to take shape (Ruble et al., 2004), and we consider the influence of the school racial context—namely racial diversity among classmates and friends—on change in multiracial identification over time.

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Fluidity in Racial Self-Identification

According to social identity theory (Tajfel & Turner, 1986), self-identification occurs in response to comparisons made between the self and others in the same social context, suggesting that changes in context could result in changes in identification (Cheng & Lively, 2009). For multiracially identifying youth—who are more likely than monoracially identifying youth to change their racial self-identification—the social context may be especially influential. For example, the racial context (i.e., the racial composition of the social groups to which they belong) may define the parameters of their identity and thus shape their identity development over time (Rockquemore, Brunsma, & Delgado, 2009). Among monoracial youth, for whom racial self-identification may be an "uncontested issue," the racial context may be less impactful (Hitlin et al., 2006; Terry & Winston, 2010).

Previous theoretical approaches to understanding fluidity in multiracial identification, such as stage models of multiracial identity, not only failed to take into account the importance of the social context but conceptualized a single endpoint at which such fluidity (often viewed as identity exploration) would ultimately be resolved (see Poston, 1990). Contemporary theories such as the ecological approach allow for a broader range of possible identities that could emerge in various social contexts and that develop in a nonlinear fashion over time, without requiring an individual to ultimately settle on just one identity (Rockquemore et al., 2009). For example, although some multiracial individuals may exclusively self-identify with a single racial category or as multiracial, others may move between mono- and multiracial identities, taking advantage of the flexibility to choose the racial identification that best fits a given setting (Rockquemore & Brunsma, 2002). This type of identity, known as protean identity, relies upon exposure to and contact with diverse others (Brunsma, 2006) who provide the "available choices" on which to base their identification (Rockquemore et al., 2009). The more contemporary ecological approach suggests that racial diversity in social settings is a prerequisite for (or at the very least a correlate of) fluidity in multiracial self-identification.

The small body of research that has investigated fluidity in multiracial identification supports the tenets of the ecological approach. Hitlin et al. (2006) observed changes in racial self-identification in a nationally representative sample of adolescents and identified three patterns of identification among multiracially identifying youth: those who self-identified as monoracial at the first time point and switched to multiracial at the next time point (referred to as *diversifiers*), those who self-identified as multiracial at the first time point and switched to monoracial at the next time point (*consolidators*), and those who identified as multiracial at both time points. For all youth in the sample, living in a neighborhood that was predominantly White significantly decreased the likelihood of change in racial self-identification, suggesting that the presence of one numerically large racial group restricted fluidity in racial identification. Nishina et al. (2010) examined the role of the school racial context in the consistency of racial self-identification at six time points across the middle school years. These authors reported that multiracially identifying youth were more likely than other youth to change their racial self-identification and that changes from monoracial to multiracial identification were more likely to occur in middle schools that were racially diverse, presumably because diverse schools provided more exposure to multiple racial

groups and greater flexibility in choosing with whom to align. Together, these studies demonstrate the fluidity in racial self-identification among multiracial youth and highlight some of the ways that racial context matters.

Proximal Levels of Influence

Although neighborhood- and school-level measures of social context are important for our understanding of the factors that may broadly promote or restrict fluidity in racial self-identification, context at the level of actual social interaction may be even more meaningful for understanding individual changes in identification (Brunsma, 2006). For example, in a large study of multiracial adolescents, Herman (2004) reported that peer group effects such as the race or ethnicity of friends and other socially connected peers were more consistently related to patterns of racial self-identification than were neighborhood effects. According to the bioecological model of human development (Bronfenbrenner & Morris, 2006), the social context is more likely to influence change over the life course, the closer or more proximal it is to the individual. The more immediate the environment, the greater the probability of complex and sustained social interactions. However, even within the same (immediate) sphere of influence, the prominence of some versus other types of contact may shift over time. For example, as youth transition from childhood to adolescence and seek to become autonomous, friends become more influential than even family members for a range of developmental processes (Steinberg & Silverberg, 1986). Thus, for multiracially identifying youth, friends may play an important role in the fluidity of their racial self-identification.

The Present Study

For this study, we drew upon a large sample of mono- and multiracial early adolescent youth and examined changes in their racial self-identification across four time points from the beginning to the end of middle school. We chose a middle school sample for two primary reasons: (a) the timing of the transition to middle school closely aligns with developmental changes in social-cognitive understandings that may influence conceptualizations of race and racial categorization as well as racial identity (Umaña-Taylor et al., 2014), and (b) because fitting in with peers is one of the primary tasks of psychosocial development during early adolescence (Newman & Newman, 1976), the middle school years are the ideal time to study the influence of peers (in this case, classmates and friends) on important identity processes.

We capitalized on a new way of operationalizing school racial diversity that allowed us to measure individual participants' exposure to diverse peers based on their course schedules, thus better capturing the school racial context at the interactional level (see Brunsma, 2006). We also measured racial diversity among participants' friends. We hypothesized that diversity among both classmates and friends would result in a greater likelihood of change in multiracial identification over time, but given that friends are more proximal than classmates, we expected the effect to be stronger for friends.

The friendship literature documents that both selection effects (characteristics of individuals that govern who they choose as their friends) and influence effects (characteristics of friends

that govern individuals' behavior) account for changes in individuals' friendship choices and behaviors over time (Gremmen, Dijkstra, Steglich, & Veenstra, 2017; Mercken, Candel, Willems, & de Vries, 2009; Veenstra, Dijkstra, Steglich, & Van Zalk, 2013). We expected that diversity among friends would result in a greater likelihood of change in multiracial identification for the reasons stated above, but we also examined the possibility that multiracial identification could result in choosing more racially diverse friends because youth who identify as multiracial may have more options than monoracial youth when choosing friends who are similar to them based on race or ethnicity. For this reason, we used a cross-lagged path model that allowed us to examine the influence of racially diverse friends on change in multiracial identification, while accounting for the potential influence that multiracial identification could have on choosing more or less racially diverse friends.

Method

Participants

Participants comprised a sample of approximately 6,000 middle school students participating in the UCLA Middle School Diversity Project, a longitudinal study of school racial diversity and social adjustment across three cohorts of students. Students were enrolled in 1 of 26 middle schools in Northern and Southern California carefully selected to represent a variety of racial or ethnic compositions. Based on information gathered from the California Department of Education, six schools were racially diverse such that no single racial group represented a numerical majority in the population, and members of each of four major racial or ethnic groups (i.e., African American, Asian, Latino, and White) were present in the student population; nine schools had 2 large and relatively equal racial or ethnic groups (e.g., Latino and Asian) with very few members of other groups, and 11 schools had a clear racial or ethnic majority group with a smaller number of members from each of the other groups. To reduce confounds of racial diversity with socioeconomic status (SES), schools at the extremes of the SES continuum were avoided; only schools within a 20%–80% range of free or reduced price lunch eligibility were recruited for the study.

The racial or ethnic composition of our sample is based on student self-report at each wave of data collection. Students were asked the question, "What is your ethnic group?" and were instructed to select only 1 of the following 13 options designed to capture the heterogeneity within the major pan-ethnic groups represented in the California school-aged population: Native American, Black/African American, Black/other country of origin, East Asian, Latino, Mexican/Mexican American, Middle Eastern, Pacific Islander (including Filipino), South Asian, Southeast Asian, White, multiethnic/biracial, and other. For this study, some groups were combined (Black/African American and Black/other country of origin, East Asian and Southeast Asian, and Latino and Mexican/Mexican American). Given the relatively small number of participants who self-reported as Middle Eastern, Pacific Islander, and South Asian (approximately 2% of participants from each wave), these students were combined and included in the "other" category. Participants who selected "multiethnic/biracial" were asked to specify their response. The overall racial or ethnic breakdown of the sample based on participants' responses in the fall of sixth grade was 12% Black/African American, 14% East/Southeast Asian, 20% White, 32% Latino/Mexican, 14% multiethnic/

biracial, and 8% other. These distributions varied by no more than two percentage points across any subsequent wave. For example, in the spring of eighth grade, the racial or ethnic composition of the sample was 11% Black/African American, 13% East/Southeast Asian, 21% White, 33% Latino/Mexican, 15% multiethnic/biracial, and 7% other. Across the 26 schools, the percentage of participants who identified as multiracial in the fall of sixth grade ranged from 5% to 20%. By spring of eighth grade, those percentages ranged from 1% to 20%.

Parental consent and student assent was obtained for 5,991 participants. Because participants could self-identify with any racial category at any given wave of data collection and the analytic strategy allowed us to measure change in racial self-identification from wave to wave, all participants (monoracially and multiracially identifying) were included in this study. As attrition is common in longitudinal research designs, some participants were lost over time. Between fall and spring of sixth grade, participation decreased by 2.6% ($n = 157$); between spring of sixth grade and spring of seventh grade, participation decreased by 9.8% ($n = 569$); and between spring of seventh grade and spring of eighth grade, participation decreased by 10.6% ($n = 559$). A series of chi-square tests were performed to compare rates of attrition for participants who identified as multiracial and other participants at each subsequent wave of data collection and revealed no significant differences from fall to spring of sixth grade or from spring of sixth grade to spring of seventh grade. From spring of seventh grade to spring of eighth grade, participants who identified as multiracial were more likely to leave the study than participants who identified as White or Latino/Mexican, but less likely to leave than participants who identified as Black/African American or East/Southeast Asian ($\chi^2 = 33.43$, $df = 5$, $p < .001$). Because the model estimates (described below) were based on change in racial self-identification between adjacent time points, participants with missing data were only excluded for the waves at which data at the adjacent wave(s) were also missing such that the number of participants in the analytic sample was greater than the number of participants at the final wave of data collection. For example, participants with nonmissing data at the first and second waves were included in the analytic sample even if they had missing data at the third and fourth waves. Nineteen cases that had missing data on all variables in this study were dropped from the analysis. An additional 763 cases were excluded due to partial missingness, and 36 cases were dropped due to missing data on the final exogenous variable. The final analytic sample was 5,209 participants (53% female; $M_{age} = 10.56$ years at the beginning of sixth grade).

Procedure

Beginning in the 2009–2010 school year (for Cohort 1, and repeated in the 2010–2011 and 2011–2012 school years for Cohorts 2 and 3, respectively), students completed a questionnaire during a single period in the fall semester of one of their sixth-grade classes. Students recorded their answers independently as they followed instructions being read aloud by a graduate research assistant who reminded them of the confidentiality of their responses. A second researcher circulated around the classroom to help students as needed. This procedure was repeated in the spring semester of sixth grade and again in the spring semesters of seventh and eighth grades for a total of four waves of data. Students were given

an honorarium of $5 for completing the questionnaire at Waves 1 and 2 in sixth grade and an honorarium of $10 for Waves 3 and 4 in seventh and eighth grades.

Measures

Multiracial Identification—A dichotomous variable was created at each wave to indicate whether participants identified as multiracial or not. Students who self-reported as "multiethnic/biracial" were coded as 1 and all other students were coded as 0.

Diversity Among Classmates—Because students in middle school rotate classrooms for each course in which they are enrolled, the racial or ethnic composition of any given course could differ from the racial or ethnic composition of the school such that school-level measures of racial diversity may not reflect true opportunities for intergroup contact among youth at school. In addition, the racial diversity experienced by youth in their classrooms could vary substantially from student to student even within the same school. For these reasons, a novel measure of diversity was employed in which racial diversity was measured at the individual level based on students' course schedules (obtained from participating schools) and was used in place of a single measure of school-level diversity (see Echols & Graham, 2016 for a discussion of the methodological advantages of measuring diversity at the individual level). Participants' self-reported race or ethnicity was used in conjunction with their individual class schedules to calculate diversity among classmates based on Simpson's (1949) diversity index.

$$D_c = 1 - \sum_{i=1}^{g} p_i^2$$

Diversity among classmates across all classes in each participant's course schedules was calculated by subtracting from 1 the sum of squared proportions of classmates from each racial or ethnic group (i) for the total number of racial or ethnic groups (g) in the school (based on participant data). Diversity scores are reported as a proportion between 0 and 1, with 0 representing no diversity and 1 representing maximum diversity. Substantively, the diversity index measured at the individual level represents the probability that any two students drawn randomly from a given participant's list of classmates would be from different racial or ethnic groups. Participants received a unique classmate diversity score based on their class schedule at each wave of data collection.

Diversity Among Friends—As part of a larger peer nomination protocol, participants at each wave of data collection were asked to list the names of their good friends in their grade at their school. The response form included seven spaces for listing names. Previous research suggests that students typically list 3–5 names using this unlimited nomination procedure (Bukowski, Pizzamiglio, Newcomb, & Hoza, 1996). Students were advised that they could request additional pages if needed. Using the friendship nominations and participants' self-reported race or ethnicity, a diversity score based on Simpson's (1949) diversity index was then computed.

$$D_f = 1 - \sum_{i=1}^{g} p_i^2$$

Using this formula, diversity among friends (who were participants in the study) was calculated by subtracting from 1 the sum of squared proportions of nominated friends from each racial or ethnic group (*i*) for the total number of racial or ethnic groups (*g*) in the school.

Analytic Strategy

To account for the possibility of reciprocal associations between diversity among friends and multiracial identification over time, a cross-lagged path model in Mplus 7.4 (Muthén & Muthén, 2010) was employed in which the paths from diversity among friends to multiracial identification *and* from multiracial identification to diversity among friends between all successive waves were estimated. Given the dichotomous nature of the multiracial identification variable, our model employed the recommended weighted least squares estimation for dichotomous variables with missing data, which provides probit coefficients over log odds (Asparouhov & Muthén, 2010). To account for the availability of diverse peers in students' classes throughout the school day, paths from diversity among classmates to multiracial identification between all successive waves were also estimated (reverse paths from multiracial identification to classmate diversity were not estimated because students' course schedules may have been based on factors outside individual students' control). The conceptual model appears in Figure 1.

Prior to estimating the model, intraclass correlations (ICCs) for the primary outcome variable (multiracial identification) were calculated in Mplus. The ICC values at each time point were as follows: $\rho = .017$ (Wave 1), $\rho = .015$ (Wave 2), $\rho = .018$ (Wave 3), and $\rho = .025$ (Wave 4), suggesting that little variance (< 3% at any given wave) in multiracial identification was explained by between-school differences in participants' likelihood of self-identifying as multiracial. For this reason—and because our unique measure of racial diversity among classmates allowed us to capture diversity at the individual level—school-level dependencies were not explicitly modeled.

Results

Table 1 contains the means, standard deviations, ranges, and correlations for all study variables. In general, multiracial identification (i.e., the likelihood of self-identifying as multiracial) increased over time, with the lowest values in the fall of sixth grade and the highest values in the spring of seventh grade (see Table 1). Approximately 25% of the sample ($n = 1{,}496$) identified as multiracial at least once during middle school. Approximately 10% of the sample ($n = 575$) identified as multiracial at one wave only, approximately 6% ($n = 364$) identified as multiracial at two waves, approximately 5% ($n = 277$) identified as multiracial at three waves, and approximately 5% ($n = 280$) identified as multiracial at all four waves. Table 2 contains the percentage of participants from each racial or ethnic group that changed their racial identification between adjacent points in time (i.e.,

from fall to spring of sixth grade, from spring of sixth grade to spring of seventh grade, etc.). As shown in Table 2, participants who identified as multiracial changed their racial identification more than participants from any other racial group, with the most change occurring between spring of seventh grade and spring of eighth grade.

Path Analysis

The conceptual model shown in Figure 1 includes more variables that can be correlated than there are sufficient path coefficients to estimate. In such a case, a model is said to be overidentified, meaning that too many unique pieces of information (e.g., correlations, variances, covariances) are present to estimate the model properly (see Bollen, 1989; Little, 2013). To make the model identifiable (i.e., reduce the number of path coefficients to estimate), certain paths and correlations were constrained. First, the paths predicting classmate diversity at each successive wave were constrained to be equal because the correlations between diversity among classmates at each wave were the highest and most stable among all study variables (see Table 1). For example, classroom diversity was highly stable from fall to spring of sixth grade, presumably because students' course schedules remained the same during the same academic year. Next, the correlations between diversity among classmates and diversity among friends were constrained to be equal because these correlations were also stable across time (see Table 1).

Multiracial Identification—The path model analysis is an ideal method for establishing the stability (or instability) of a variable—in this case, multiracial identification—over time. The coefficients for multiracial identification between successive waves in Figure 2 represent the probits (i.e., probability units) of self-identifying as multiracial, controlling for multiracial identification at the previous time point. Probit values range from negative to positive infinity, with values of 0 representing a .5 probability (i.e., 50–50 chance). In this case, negative values would represent a probability smaller than chance of self-identifying as multiracial at two adjacent time points, whereas positive values would represent a probability greater than chance of self-identifying as multiracial at both time points. Thus, the greater the probability of a given path, the greater stability in multiracial identification over time, and the smaller the probability of a given path, the lesser stability in multiracial identification over time. As shown in Figure 2, multiracial identification was most stable from fall to spring of sixth grade ($\beta = 2.113$, $p < .001$). Although the remaining paths remained positive and significant, indicating that youth who identified as multiracial at one time point were more likely than chance to identify as multiracial at the next time point, the probability of multiracial identification decreased over time, being least stable from spring of seventh grade to spring of eighth grade ($\beta = 0.806$, $p < .001$). In other words, change in multiracial identification was more likely at the end than the beginning of middle school.

Diversity Among Classmates—Exposure to diverse classmates at the beginning of sixth grade had a strong, positive influence on multiracial identification at the end of sixth grade ($\beta = 1.541$, $p < .001$); this effect diminished slightly between spring of sixth grade and spring of seventh grade ($\beta = 1.021$, $p < .001$) and was no longer significant by the end of middle school.

Diversity Among Friends—The cross-lagged paths in our model allowed us to examine whether diversity among friends increased the likelihood of multiracial identification or whether identifying as multiracial increased the likelihood of choosing more diverse friends. As shown in Figure 2, multiracial identification had only one small effect on diversity among friends from spring of sixth grade to spring of seventh grade ($\beta = 0.029$, $p < .01$). However, diversity among friends had a significant influence on multiracial identification from fall to spring of sixth grade ($\beta = 0.365$, $p < .001$) and from spring of seventh grade to spring of eighth grade ($\beta = 0.462$, $p < .05$). Thus, it appears that having diverse friends matters more for multiracial identification than multiracial identification matters for choosing diverse friends.

Discussion

In this study, we examined fluidity in self-identifying as multiracial in middle school and investigated the influence of racial diversity among classmates and friends on multiracial identification over time. Although there was some fluidity in self-identifying as multiracial at the beginning of middle school, fluidity was more evident later in middle school, with the most changes occurring between the spring of seventh grade and the spring of eighth grade. Racial diversity among classmates and friends was associated with multiracial identification in the beginning of middle school, but only racial diversity among friends mattered later in middle school, when fluidity in multiracial identification was at its peak. There were fewer effects of self-identifying as multiracial on selecting more diverse friends.

Fluidity in Multiracial Identification as a Developmental Process

What explains greater fluidity in multiracial identification over time? Adolescence is a critical period in identity development, marked by identity exploration and experimentation (Erikson, 1968; Marcia, 1983). For racial and ethnic identity development, many of the processes that precede active exploration, such as awareness of race, social-cognitive maturity, and susceptibility to peer influence, unfold in the early adolescent years (Umaña-Taylor et al., 2014). Multiracial identity development may not necessarily follow the same trajectory as racial and ethnic identity development in general. For example, multiracially identifying individuals may not reach a final state of commitment to a single identity. However, like other youth who experience an increase in racial–ethnic identity exploration throughout middle school (see Quintana, 2007), multiracial youth may be more likely to explore their identity later in middle school as they near the middle adolescent years. Changes in racial self-identification may be one manifestation of their exploration of membership in the racial groups to which they belong.

Developmental changes in the importance of friendships throughout the middle schools years could explain why diversity among friends was more influential than diversity among classmates toward the end of middle school *and* why diversity among friends was more influential on multiracial identification than multiracial identification was on diversity among friends. In new social contexts such as the beginning of middle school in which close friendships have not yet been established, classmates may have a stronger influence on developmental processes because their characteristics and behaviors shape the perception of

norms at school (Brechwald & Prinstein, 2011). As youth become more familiar with peers in their school environment and form closer associations, friends become more proximal than classmates and have a greater influence on individual development (Gremmen et al., 2017; Molloy, Gest, & Rulison, 2011). In addition, previous research has shown that over the course of middle school, the influence of friends on adolescents' behavior becomes stronger than the influence of adolescents' behavior on who they choose as their friends (Gremmen et al., 2017; Mercken et al., 2009). It is therefore not surprising that by the end of middle school only diversity among friends had a significant influence on multiracial identification (and not vice versa). The time it takes to adjust to middle school as well as the growing influence of friends might also partly explain why there was more fluidity in multiracial identification at the end rather than the beginning of middle school.

Finally, the racial diversity of the middle school context itself may shed light on the developmental patterns documented here. Although current approaches to understanding multiracial identification acknowledge the role of the racial or ethnic composition of social networks (e.g., Rockquemore & Brunsma, 2002), as yet there is little research on the mechanisms by which diversity exerts its effect. We know from other research with young adolescents that greater racial diversity in middle school may foster the development of more complex social identities (Knifsend & Juvonen, 2014). In the literature, social identity complexity is defined as less overlap between salient identity groups and less rigid boundaries between in-groups and out-groups (Roccas & Brewer, 2002). Fluidity in multiracial identification in diverse school contexts could be conceptualized as a form of complex social identity development in which multiracially identifying youth are able to shift more freely from one identification to another without feeling obligated to permanently discard one identification in favor of the other (see Poston, 1990; Rockquemore, 1998; Root, 1996). A diverse group of friends may be best equipped to facilitate this process.

Contributions, Limitations, and Future Directions

This research adds to a small number of studies that examine changes in racial self-identification among multiracial adolescents and provides new insight into why these changes may occur. First, by taking into account the role of friends in the school social context, this study illuminates the importance of proximal influences on racial self-identification. Given social priorities in middle school that revolve around peers (Buhrmester & Furman, 1986; LaFontana & Cillessen, 2010), friends may be one of the most influential factors in important identity development processes that unfold during this time. Next, by using a novel index of school racial diversity based on participants' individual course schedules, this study also measures diversity in a way that most closely represents students' actual contact with other racial or ethnic groups at school. To understand how racial diversity contributes to the social context at school, we must use measures of diversity that accurately reflect individual experiences in that context. Finally, by using longitudinal data that span the entire range of middle school, this study helps pinpoint when changes in racial self-identification are most likely to occur.

These contributions notwithstanding, we acknowledge limitations in our approach that should be considered and addressed in future research. First, our analytic model served to

document the likelihood and timing of changes in multiracial self-identification throughout middle school—it did not differentiate between racial or ethnic groups based on the nature of those changes (e.g., to and from which racial or ethnic groups participants reported they belonged). Although we provided some of this information descriptively, we recognize that additional analyses of the data are warranted to better understand the complexities of fluidity in racial self-identification for members of different racial or ethnic groups, including monoracial youth. These complexities are no doubt related to status hierarchies in our society that likely affect the degree to which youth navigate between multiracial and monoracial identities. In research with a college sample, for example, Townsend, Fryberg, Wilkins, and Markus (2012) documented that multiracial students from solely higher status groups (i.e., Asian/White) were more likely to claim a biracial identity than were multiracial students from part lower status groups (i.e., Black/White and Latino/White). Although biracial too, these latter students were more likely to identify as their monoracial lower status group (see Rockquemore & Brunsma, 2002 for a related discussion). Such findings underscore the heterogeneity within multiracial populations and how variations in status may impact multiracial identification. For Black/White multiracial youth in particular, the findings remind us of the history of hypodescent in U.S. society (i.e., the “one drop rule”) that dismissed identity choice and legally mandated that biracial individuals identify as the lower status group (see Ho, Sidanius, Levin, & Banaji, 2011).

A related limitation is our approach to the racial or ethnic context in school. Although we selected schools to represent a variety of racial or ethnic group configurations, we measured racial diversity in general without giving attention to the specific racial or ethnic groups represented in each school. Nishina et al. (2010) reported that when multiracially identifying youth shifted to a monoracial identity, they were more likely to identify with the monoracial numerical majority group in their school. This could mean that multiracial youth in social contexts where a particular racial or ethnic group is recognized as dominant (i.e., in the numerical majority) may prefer to self-identify as members of that group. Future research should probe more deeply into the match or mismatch between multiracially identifying youths’ racial or ethnic background and the specific racial or ethnic groups available in their immediate social environments.

Conclusion

There was a time when the research community regarded multiracial youth as a troubled and marginalized population faced with the daunting task of defining their racial or ethnic identity—a task that would inevitably lead to confusion and place them at risk for a number of maladaptive adjustment outcomes, including poor relationships with their peers (see a review in Shih & Sanchez, 2005). Fortunately, this deficit view has changed with more contemporary theories and research about the assets associated with being multiracial (see Gaither, 2015). Although we recognize the unique psychosocial challenges associated with identifying as multiracial, we are optimistic about the resilience of multiracial youth. If, as Erikson (1968) and Marcia (1983) suggest, identity exploration sets the stage for having meaningful interpersonal relationships and becoming a well-adjusted adult, multiracial youth who experiment with their identity by changing their self-identification across social contexts or time may have a developmental advantage over youth who do not engage in such

experimentation. We urge the field to consider the ways in which fluidity in racial self-identification may be a promotive factor for multiracial youth and closely examine how racial identity exploration can be best supported in the school context.

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References

Asparouhov T, Muthén B. Weighted least squares estimation with missing data. Mplus Technical Appendix. 2010; 2010:1–10.

Bollen KA. Structural equations with latent variables. New York, NY: Wiley; 1989.

Brechwald WA, Prinstein MJ. Beyond homophily: A decade of advances in understanding peer influence processes. Journal of Research on Adolescence. 2011; 21:166–179. DOI: 10.1111/j.1532-7795.2010.00721.x [PubMed: 23730122]

Bronfenbrenner U, Morris PA. The bioecological model of human development. In: Lerner RM, Damon W, editorsHandbook of child psychology: Theoretical models of human development. Hoboken, NJ: Wiley; 2006. 793–828.

Brunsma DL. Public categories, private identities: Exploring regional differences in the biracial experience. Social Science Research. 2006; 35:555–576. DOI: 10.1016/j.ssresearch.2004.10.002

Buhrmester D, Furman W. The changing functions of friends in childhood: A neo-Sullivanian perspective. In: Derlega VJ, Winstead BA, editorsFriendship and social interaction. New York, NY: Springer; 1986. 41–62.

Bukowski WM, Pizzamiglio MT, Newcomb AF, Hoza B. Popularity as an affordance for friendship: The link between group and dyadic experience. Social Development. 1996; 5:189–202. DOI: 10.1111/j.1467-9507.1996.tb00080

Cheng S, Lively KJ. Multiracial self-identification and adolescent outcomes: A social psychological approach to the marginal man theory. Social Forces. 2009; 88:61–98. DOI: 10.1353/sof.0.0243

Doyle J, Kao G. Are racial identities of multiracials stable? Changing self-identification among single and multiple race individuals. Social Psychology Quarterly. 2007; 70:405–423. DOI: 10.1177/019027250707000409 [PubMed: 19823596]

Echols L, Graham S. For better or worse: Friendship choices and peer victimization among ethnically diverse youth in the first year of middle school. Journal of Youth and Adolescence. 2016; 45:1862–1876. DOI: 10.1007/s10964-016-0516-0 [PubMed: 27272516]

Erikson E. Youth: Identity and crisis. New York, NY: WW Norton Company; 1968.

Gaither SE. “Mixed” results: Multiracial research and identity explorations. Current Directions in Psychological Science. 2015; 24:114–119. DOI: 10.1177/0963721414558115

Gremmen MC, Dijkstra JK, Steglich C, Veenstra R. First selection, then influence: Developmental differences in friendship dynamics regarding academic achievement. Developmental Psychology. 2017; 53:1356–1370. DOI: 10.1037/dev0000314 [PubMed: 28394144]

Harris DR, Sim JJ. Who is multiracial? Assessing the complexity of lived race. American Sociological Review. 2002; 67:614–627. DOI: 10.2307/3088948

Herman M. Forced to choose: Some determinants of racial identification in multiracial adolescents. Child Development. 2004; 75:730–748. DOI: 10.1111/j.1467-8624.2004.00703.x [PubMed: 15144483]

Hitlin S, Scott Brown J, Elder GH. Racial self-categorization in adolescence: Multiracial development and social pathways. Child Development. 2006; 77:1298–1308. DOI: 10.1111/j.1467-8624.2006.00935.x [PubMed: 16999799]

Ho AK, Sidanius J, Levin DT, Banaji MR. Evidence for hypodescent and racial hierarchy in the categorization and perception of biracial individuals. Journal of Personality and Social Psychology. 2011; 100:492–506. https://doi.org/0.1037/a0021562. [PubMed: 21090902]

Knifsend CA, Juvonen J. Social identity complexity, cross-ethnic friendships, and intergroup attitudes in urban middle schools. Child Development. 2014; 85:709–721. DOI: 10.1111/cdev.12157 [PubMed: 24032401]

LaFontana KM, Cillessen AH. Developmental changes in the priority of perceived status in childhood and adolescence. Social Development. 2010; 19:130–147. DOI: 10.1111/j.1467-9507.2008.00522.x

Little TD. Longitudinal structural equation modeling. New York, NY: Guilford; 2013.

Marcia JE. Some directions for the investigation of ego development in early adolescence. The Journal of Early Adolescence. 1983; 3:215–223. DOI: 10.1177/0272431683033004

Mercken L, Candel M, Willems P, de Vries H. Social influence and selection effects in the context of smoking behavior: Changes during early and mid adolescence. Health Psychology. 2009; 28:73–82. DOI: 10.1037/a0012791 [PubMed: 19210020]

Molloy LE, Gest SD, Rulison KL. Peer influences on academic motivation: Exploring multiple methods of assessing youths' most "influential" peer relationships. Journal of Early Adolescence. 2011; 31:13–40. DOI: 10.1177/0272431610384487

Muthén LK, Muthén BO. Mplus user's guide. Los Angeles, CA: Author; 2010.

Newman PR, Newman BM. Early adolescence and its conflict: Group identity vs. alienation. Adolescence. 1976; 11:261–274.

Nishina A, Bellmore A, Witkow MR, Nylund-Gibson K. Longitudinal consistency of adolescent ethnic identification across varying school ethnic contexts. Developmental Psychology. 2010; 46:1389–1401. DOI: 10.1037/a0020728 [PubMed: 21058829]

Pew Research Center. Multiracial in America: Proud, diverse, and growing in numbers. 2015. Jun 11, Retrieved from http://www.pewsocialtrends.org/2015/06/11/multiracial-in-america/

Poston WC. The biracial identity development. Journal of Counseling and Development. 1990; 69:152–155. DOI: 10.1002/j.1556-6676.1990.tb01477.x

Quintana SM. Racial and ethnic identity: Developmental perspectives and research. Journal of Counseling Psychology. 2007; 54:259–270. https://doi.org/0.1037/0022-0167.54.3.259.

Roccas S, Brewer MB. Social identity complexity. Personality and Social Psychology Review. 2002; 6:88–106. DOI: 10.1207/S15327957PSPR0602_01

Rockquemore KA. Between black and white exploring the "biracial" experience. Race and Society. 1998; 1:197–212. DOI: 10.1016/S1090-9524(99)80044-8

Rockquemore KA, Brunsma DL. Socially embedded identities: Theories, typologies, and processes of racial identity among Black/White biracials. The Sociological Quarterly. 2002; 43:335–356. DOI: 10.1111/j.1533-8525.2002.tb00052.x

Rockquemore KA, Brunsma DL, Delgado DJ. Racing to theory or retheorizing race? Understanding the struggle to build a multiracial identity theory. Journal of Social Issues. 2009; 65:13–34. DOI: 10.1111/j.1540-4560.2008.01585.x

Root MP. A bill of rights for racially mixed people. In: Root MP, editorThe multiracial experience: Racial borders as the new frontier. Thousand Oaks, CA: Sage; 1996. 3–14.

Ruble DN, Alvarez J, Bachman M, Cameron J, Fuligni AJ, Garcia Coll CT, Rhee E. The development of a sense of "we": The emergence and implications of children's collective identity. In: Bennett M, Sani F, editorsThe development of the social self. New York, NY: Psychology Press; 2004. 29–76.

Shih M, Sanchez DT. Perspectives and research on the positive and negative implications of having multiple racial identities. Psychological Bulletin. 2005; 131:569–591. DOI: 10.1037/0033-2909.131.4.569 [PubMed: 16060803]

Simpson EH. Measurement of diversity. Nature. 1949; 163:688.doi: 10.1038/163688a0

Steinberg L, Silverberg SB. The vicissitudes of autonomy in early adolescence. Child Development. 1986; 57:841–851. DOI: 10.2307/1130361 [PubMed: 3757604]

Tajfel H, Turner JC. The social identity theory of intergroup behavior. In: Worchel S, Austin W, editorsPsychology of inter-group relations. Chicago, IL: Nelson Hall; 1986. 7–24.

Terry RL, Winston CE. Personality characteristic adaptations: Multiracial adolescents' patterns of racial self-identification change. Journal of Research on Adolescence. 2010; 20:432–455. DOI: 10.1111/j.1532-7795.2010.00638.x

Townsend S, Fryberg S, Wilkins C, Markus H. Being mixed: Who claims a biracial identity? Cultural Diversity and Ethnic Minority Psychology. 2012; 18:91–96. DOI: 10.1037/a0026845 [PubMed: 22250901]

Umaña-Taylor AJ, Quintana SM, Lee RM, Cross WE, Rivas-Drake D, Schwartz SJ, … Seaton E. Ethnic and racial identity during adolescence and into young adulthood: An integrated conceptualization. Child Development. 2014; 85:21–39. DOI: 10.1111/cdev.12196 [PubMed: 24490890]

Veenstra R, Dijkstra JK, Steglich C, Van Zalk MHW. Network-behavior dynamics. Journal of Research on Adolescence. 2013; 23:399–412. DOI: 10.1111/jora.12070

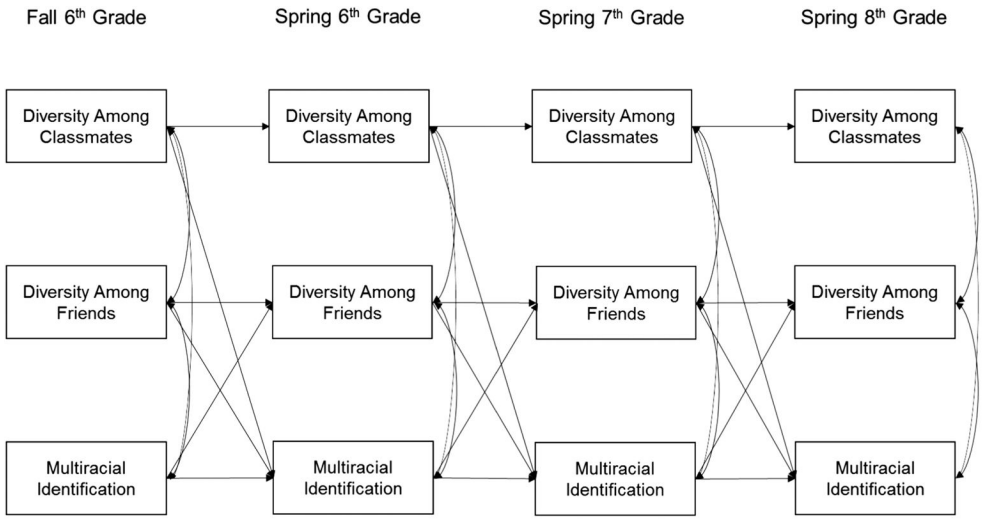

Figure 1.
Conceptual model.

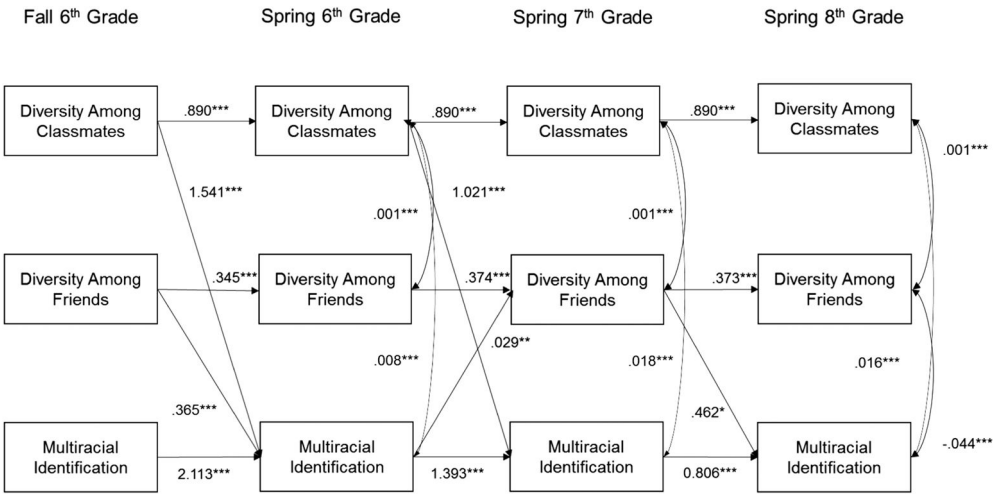

Figure 2.

Reduced model. *$p < .05$. **$p < .01$. ***$p < .001$.

Table 1

Means, Standard Deviations, Ranges, and Correlations for All Variables in Path Model

	1	2	3	4	5	6	7	8	9	10	11	12
1 Multiracial W1	—											
2 Multiracial W2	.578**	—										
3 Multiracial W3	.558**	.630**	—									
4 Multiracial W4	.538**	.579**	.612**	—								
5 Friend diversity W1	.099**	.092**	.115**	.106**	—							
6 Friend diversity W2	.086**	.087**	.072**	.084**	.383**	—						
7 Friend diversity W3	.101**	.109**	.113*	.113*	.284**	.360**	—					
8 Friend diversity W4	.135**	.114**	.134**	.114**	.240**	.285**	.375**	—				
9 Classmate diversity W1	.140**	.137**	.133**	.144**	.292**	.305**	.291**	.304**	—			
10 Classmate diversity W2	.127**	.151**	.128**	.143**	.289**	.312**	.291**	.307**	.939**	—		
11 Classmate diversity W3	.130**	.139**	.150**	.140**	.265**	.279**	.303**	.304**	.706**	.719**	—	
12 Classmate diversity W4	.133**	.142**	.133**	.172**	.242**	.272**	.276**	.333**	.693**	.716**	.760**	—
M	.139	.155	.172	.147	.342	.358	.336	.320	.670	.670	.665	.652
SD	.346	.361	.377	.354	.272	.266	.267	.267	.123	.120	.124	.129
Range	0–1	0–1	0–1	0–1	0–1	0–1	0–1	0–1	0–1	0–1	0–1	0–1

*$p < .05$.

**$p < .01$.

Table 2

Percentage of Participants From Each Racial or Ethnic Group That Changed Racial Self-Identification

	Fall to spring of sixth grade	Spring of sixth grade to spring of seventh grade	Spring of seventh grade to spring of eighth grade
African American/Black	16.2	19.0	11.4
Asian	6.7	5.9	4.2
Caucasian/White	10.3	7.8	5.7
Latino/Mexican	5.4	6.8	4.7
Multiracial	32.6	27.2	37.3
Other	25.9	18.1	17.5