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Racial Socialization, Racial Identity, and Academic Attitudes Among African American Adolescents: Examining the Moderating Influence of Parent–Adolescent Communication

Sandra Tang¹, Vonnie C. McLoyd¹, and Samantha K. Hallman¹

¹Department of Psychology, University of Michigan, East Hall, 530 Church Street, Ann Arbor, MI 48109-1043, USA

Abstract

A significant gap remains in our understanding of the conditions under which parents' racial socialization has consequences for adolescents' functioning. The present study used longitudinal data to examine whether the frequency of communication between African American parents and adolescents ($N = 504$; 49 % female) moderates the association between parent reports of racial socialization (i.e., cultural socialization and preparation for bias) at 8th grade and adolescent reports of racial identity (perceived structural discrimination, negative public regard, success-oriented centrality) at 11th grade, and in turn, academic attitudes and perceptions. Parents' racial socialization practices were significant predictors of multiple aspects of adolescents' racial identity in families with high levels of communication, but they did not predict any aspects of adolescents' racial identity in families with low levels of communication. Results highlight the importance of including family processes when examining the relations between parents' racial socialization and adolescents' racial identity and academic attitudes and perceptions.

Keywords

Racial socialization; Racial identity; Parent–child communication; Adolescence

Introduction

Racial socialization refers to the process by which parents transmit both implicit and explicit messages about the meaning of one's race in a broader societal context (Coard and Sellers 2005). It is a salient aspect of parenting among African Americans (Hughes and Johnson 2001), and one that most frequently centers on cultural socialization (i.e., messages about cultural heritage, cultural traditions, racial pride) and preparation for bias (i.e., messages about racial discrimination and strategies for coping with discrimination) (Hughes et al.

Correspondence to: Sandra Tang.

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2006). Adolescent racial identity is the most commonly investigated outcome of parents' racial socialization, a pattern attributable to the fact that the goal of many racial socialization practices is instilling a sense of racial pride and cultural knowledge in children (Hughes et al. 2006) and the fact that the development of racial identity among African Americans is a salient psychosocial task during the adolescent years (Phinney 1989).

Relations Between Parents' Racial Socialization and Adolescents' Racial Identity

Most investigations of African Americans indicate that cultural socialization, and parents' racial socialization more generally, is associated with indicators of racial identity (Hughes et al. 2006). Evidence exists that adolescents whose parents engage in more racial socialization have a greater tendency to question allegiance to the dominant culture's worldview of African Americans (Marshall 1995), express greater appreciation for African American culture (Stevenson 1995), and manifest a stronger and more positive orientation to African Americans and their culture (McHale et al. 2006; Wills et al. 2007). More recently, researchers have found that racial socialization profiles characterized by high levels of racial pride, self-worth, and preparation for bias messages are associated with higher levels of racial centrality among African American adolescents (Neblett et al. 2009).

Several studies linking parents' racial socialization and adolescents' racial identity have two methodological limitations that we address in the present study. First, most are based on cross-sectional data (e.g., McHale et al. 2006), which provide no basis for inferences about causal or temporal relations. Second, several studies rely on adolescent reports as indicators of both parents' racial socialization and adolescent racial identity, potentially inflating estimated relations between these two variables due to shared method variance (e.g., Neblett et al. 2009; Stevenson 1995). The handful of studies assessing correspondence between adolescent and parent reports of racial socialization find weak to modest correspondence, suggesting nontrivial incongruence in messages that parents communicate and adolescents' perceptions of these messages (Hughes et al. 2008; Thomas and King 2007). In a study of a racially and ethnically diverse sample of adolescents that measured both parent and adolescent reports of racial socialization, only adolescent reports were associated with racial identity (Hughes et al. 2009). The present study used longitudinal data and different informants to provide a stronger test of the relationship between parents' racial socialization and adolescent racial identity. In particular, we examined whether racial socialization (i.e., cultural socialization and preparation for bias) as reported by parents predicted adolescents' reports of racial identity 3 years later.

Several considerations led us to focus on the developmental period between 8th and 11th grade. First, identity development is a salient psychosocial task during this period—a task that involves attempts to integrate and consolidate components of the self, including ethnicity and race, into a coherent whole (Erikson 1994; Hughes 2003). Second, for many African American youth, this period may be marked by greater salience of racial cleavages among peers (e.g., dating) and increased exposure to racial discrimination as they spend more time outside of the home (Fisher et al. 2000; Romero and Roberts 1998; Tatum 1997). Consistent with Cross's (1971) "encounter" stage of African American identity development, these developments are likely to propel youth into exploration of their racial

identity. In a similar vein, French and colleagues' research suggests that the transition from middle school to high school is particularly promotive of racial and ethnic identity exploration due to higher levels of racial and ethnic diversity in the student populations in high schools (French et al. 2000). Adolescence is a developmental period of interest in relation to parental racial socialization as well. Compared to African American parents of younger children, African American parents of adolescents report transmitting preparation for bias messages more frequently and are more likely to translate their own discrimination experiences into conversations with their children about racial bias (Hughes, 2003; Hughes and Chen 1997). These differences likely reflect parents' sensitivity to age-related differences in children's ability to understand racial issues as well as parents' reactions to children's information-seeking and first-hand experiences with racial bias as they get older and spend less time with their parents (Hughes and Chen 1997). In sum, whether racial socialization in early adolescence is linked to racial identity during late adolescence is a well-motivated question because messages about racial bias markedly increase during adolescence and because the search for racial identity often occurs in an increasingly racialized environment.

Drawing on conceptual and empirical work by Sellers and colleagues (Sellers et al. 1998) and Oyserman et al. (2001), we focused on three aspects of racial identity, specifically, success-oriented racial centrality (extent to which feelings of success are tied to African American identity), negative public regard (adolescents' perception that others view African Americans unfavorably), and perceived structural discrimination. Perceived structural discrimination has not been previously identified as a dimension of identity in the MMRI; but as a concept, aligns with Sellers et al.'s (1998) assertion that "the qualitative meaning that [Blacks] ascribe to membership in [their] racial group" (p. 806) is an important component of Black identity. It is conceptually similar to public regard in that it assesses perceptions of others' (i.e., society's) evaluative judgments of African Americans. However, perceived structural discrimination and public regard differ in that the former focuses on more indirect, implicit indicators of racism in which there is no identifiable, individual perpetrator, whereas the latter assesses more explicit, personally mediated indicators of racism.

Our rationale for focusing on these aspects of racial identity was multi-faceted. First, prior research indicates that centrality and regard are more stable across contexts than other dimensions of racial identity (e.g., salience) (Sellers et al. 1998). Second, centrality is a fairly consistent correlate of cultural socialization (e.g., McHale et al. 2006), whereas negative or lower public regard is more consistently linked to preparation for bias (e.g., Rivas-Drake 2011). We focused on success-oriented centrality, rather than racial centrality more generally, because of our interest in academic attitudes/perceptions, discussed below, and our presumption that the former has stronger implications for these academic outcomes than the latter. In a similar vein, we gave negative public regard and perceived structural discrimination selective attention because these aspects of identity have well-documented links to lower achievement values, school engagement, and school achievement (Oyserman et al. 2001; Smith et al. 2003; Taylor and Graham 2007).

Relations between Adolescents' Racial Identity and Academic Attitudes and Perceptions

A second goal of the present study was to determine whether different dimensions of racial identity are differentially related to adolescents' attitudes about school and perceptions of their academic competence. Several studies have found that aspects of racial/ethnic identity are related to academic outcomes among racial/ethnic minority youth. Among African American adolescents, pro-Black attitudes and psychological connectedness to the Black community (i.e., centrality) have been linked to positive academic efficacy, attitudes, and behavior (Oyserman, et al. 2001; Resnicow et al. 1999), and positive private regard is associated with increased school attachment, academic efficacy, grades, and standardized test scores (Chavous et al. 2003; Smith et al. 2003). In contrast, awareness of racism and barriers (i.e., negative public regard) has been associated with lower grades and standardized test scores (Oyserman et al. 2001; Smith et al. 2003).

There is also evidence that more differentiated racial-ethnic self-schemas have implications for adolescents' academic outcomes. In a series of studies involving African American, Latino, American Indian and Arab-Palestinian Israelis attending middle schools and high schools, Oyserman et al. (2003) found that school success as measured by GPA was higher among youth with a "dual identity" (i.e., strong identification with the in-group and with larger society) or a "minority identity" (i.e., strong identification as a member of an in-group that must fight to overcome obstacles to attain larger societal resources), compared to youth who did not identify themselves in racial-ethnic terms (i.e., low centrality) or who identified themselves only in terms of their in-group without reference to membership in larger society (i.e., high centrality).

Parent-Adolescent Relations as a Moderating Influence

The primary contribution of the present study is its examination of whether the frequency of communication between parents and their adolescent moderates the association between parents' racial socialization and adolescents' racial identity. Family systems frameworks have brought into sharper focus questions about how parents' racial socialization messages and children's responses to and instigation of these messages are connected to characteristics of the parent-child relationship. These questions are to be expected because parents' racial socialization messages are not transmitted in a vacuum, but within the context of a relationship (Frabutt et al. 2002; McHale et al. 2006; Smalls, 2009).

However, studies examining these questions are quite sparse. Some research has assessed the frequency of racial socialization messages in relation to aspects of the parent-child relationship such as warmth, communication, negativity, monitoring and involvement (Frabutt et al. 2002). A few studies have gone beyond bivariate descriptive analyses to examine whether the affective quality of the parent-child relationship moderates the association between parents' racial socialization and adolescents' outcomes (Cooper and McLoyd 2011; McHale et al. 2006; Smalls 2009; Williams and Smalls-Glover 2014). Predicated largely on Darling and Steinberg's (1993) premise that a positive emotional climate enhances the effectiveness of parents' socialization practices because it promotes adolescents' willingness to be socialized, these studies generally hypothesize that a more positive emotional climate will strengthen the association between parents' racial

socialization and adolescents' psychosocial adjustment. However, empirical support for this hypothesis is quite thin.

McHale et al.'s (2006) study of two-parent African American families found no evidence that parents' self-reported racial socialization messages (i.e., preparation for bias, cultural socialization) were more strongly related to adolescents' self-reports of racial identity, locus of control, or depressive symptomatology under conditions of high parental warmth. In Cooper and McLoyd's (2011) investigation of African American single mothers and their adolescent children, contrary to prediction, adolescents whose mothers reported more preparation for bias messages had lower self-esteem and higher depressive symptomatology under conditions of high maternal warmth and support (adolescent report).

Williams and Smalls-Glover (2014) found that adolescents' attributions about parents' motives for racial socialization (e.g., because they "love you," "want what is best for you") did not moderate the relationship between two types of parental messages (i.e., racial barriers, racial pride) and African American adolescents' racial identity. In another investigation focusing on adolescents' task persistence and school engagement, rather than racial identity, Smalls (2009) reported evidence of democratic-involved parenting (characterized by democratic decision-making and high levels of warmth and involvement) as a moderating influence, but estimates of this influence may be inflated because adolescents were the informants for all variables. Racial barrier messages were positively associated with task persistence and school engagement among adolescents who perceived their mothers as high in democratic-involved parenting, but negatively related with task persistence and school engagement among adolescents who perceived their mothers as low in democratic-involved parenting. Democratic-involved parenting did not moderate the association between other dimensions of racial socialization (i.e., racial pride messages, self-worth messages) and task persistence/school engagement. Taken together, the findings from these four studies provide virtually no evidence that a more positive emotional climate strengthens the association between parents' racial socialization and adolescents' positive psychosocial adjustment.

Study Objectives and Hypotheses

A significant gap remains in our understanding of the conditions under which parents' racial socialization has consequences for adolescents' psychosocial functioning (McHale et al. 2006). Arguably, some of the most proximate of these conditions exists within the family. As discussed above, prior research relevant to this issue has focused on parental warmth, but the findings mainly have been null or inconsistent with conceptually-grounded expectations. Other dimensions of the parent-child relationship may be more fertile grounds for advancing knowledge about family processes that condition the association between racial socialization and adolescent racial identity. In addition to its attention to parental warmth, parental socialization research has long focused on parent-child communication, a variable that itself involves multiple dimensions such as processes, patterns, style, frequency, and content (Darling and Steinberg 1993; Ennett et al. 2001; Moschis 1985). The present study directs attention to the frequency of parent-child communication, in particular, how often the adolescent talks with the parent about aspects of their daily lives (e.g., friendship relations,

problems at school) and about their future. Parent–child communication is essential in creating mutual understanding of family values, expectations, and rules. It may be uniquely important during adolescence because it affords opportunities for discussion of these issues, as well as opportunities for adolescents to solicit and parents to offer support and counsel, at a time when adolescents are negotiating a bevy of new experiences and psychosocial challenges. At the same time, because adolescents are spending less time with their parents, experiencing less intimacy with them and more intimacy with peers, and exerting a strong need for autonomy, the significance of parent–child communication for child functioning may be different during adolescence than prior developmental periods (Laursen and Collins 2013).

Using longitudinal data, we examined whether frequency of parent–adolescent communication moderates the association between parents’ reports of racial socialization (i.e., cultural socialization and preparation for bias) at Time 1 (8th grade) and adolescents’ reports of racial identity at Time 2 (11th grade). Greater dialogue between adolescents and their parents during the course of daily life may maintain and/or strengthen the parent–adolescent bond (Laursen and Collins 2013) and reflect and/or cultivate a climate in which adolescents are more likely to accurately perceive, accept, and internalize parents’ racial socialization messages. In turn, adolescents may be more likely to develop racial identities congruent with these messages. Hence, we hypothesized that in the context of high levels of parent–adolescent communication, in contrast to low levels of parent–adolescent communication, parents’ racial socialization messages will be more strongly related to adolescents’ racial identity.

Turning to the association between adolescents’ racial identity and academic-related outcomes, we predicted that perceived structural discrimination and negative public regard would be associated with less positive attitudes about school and lower perceptions of academic competence, in keeping with prior findings (Oyserman et al. 2001; Smith et al. 2003). However, we expected success-oriented racial centrality to be positively associated with school attitudes and perceptions of academic competence. In addition, we expected parent–adolescent communication to moderate these associations. Although a number of studies have assessed the moderating effect of parenting style on the relation between specific parenting practices and child outcomes (e.g., Smalls, 2009) and the main effects of parent–child communication (e.g., Ennett et al. 2001), we are not aware of child socialization studies that investigate the moderating effects of parent–child communication. Ceballo, Dahl, Aretakis, and Ramirez’s (2001) investigation of children’s exposure to community violence gives some indirect evidence that parent–child communication may be implicated in family processes that moderate the impact of children’s exposure to acute and chronic stressors. These researchers found that higher levels of mother–child concordance regarding children’s experiences with community violence were significantly associated with fewer internalizing behavior problems in children. It is highly plausible that higher levels of mother–child concordance were partly a product of more frequent parent–child communication and in turn, increased levels of parental awareness of the child’s exposure and response to community violence (Ceballo et al. 2012). Drawing on Ceballo et al.’s investigation and analyses (Ceballo et al. 2001, 2012), we assumed that greater parent–adolescent communication enhances parents’ awareness of their adolescent’s attitudes and

perceptions, which in turn affords more opportunities for parents to shape adolescent attitudes and perceptions in ways that promote positive academic outcomes. Adolescents whose parents frequently transmit messages about racial bias may perceive more structural discrimination and negative public regard. However, given the high value that most parents attach to education, we expected that any tendency for these adolescent perceptions to translate into negative attitudes about school and low perceived competence would be mitigated by high levels of parent–adolescent communication. Following this line of reasoning, we hypothesized that in the context of high parent–adolescent communication, the hypothesized negative association between perceived structural discrimination (and negative public regard) and academic outcomes would be weaker, while the hypothesized positive link between racial centrality and academic outcomes would be stronger.

Method

Sample

Data for this study were drawn from the Maryland Adolescent Development in Context Study (MADICS; Eccles, 1997), which collected six waves of data on 1,482 families living in Prince George's County from 1991 to 2000. The MADICS included both African American families (61 %) and European American families and is unique because the African American families represent a wide range of socioeconomic statuses even though they all lived in one county. The details on sampling and data collection procedures are available at <http://www.rcgd.isr.umich.edu/pgc/home.htm>.

The present study is based on African-American adolescents with data in 8th (1993) and 11th grades (1996/ 1997; $n = 924$), the two time points in the MADICS data that contained the most complete data on our variables of interest during the transition to high school. The adolescents missing data on all the variables pertaining to parent–adolescent communication and adolescent racial identity were excluded from our analysis. The final analytic sample contained 504 11–13 year olds and their primary caregivers (92 % female) in 1997. The families in our sample had a median household income of \$31,000. In 33 % of the families in our sample, the highest level of parental education was less than a high school degree. In contrast, 36 % of the families reported at least one parent graduating high school. Around 18 % of the families in our sample had at least one parent who attended some college, and about 7 % of the families had at least one parent with a college degree. Finally, 6 % of the families in our sample had a parent with a graduate degree. About half (51 %) of the adolescents in the full sample were male and 63 % came from a two-parent household. The families who were dropped from the analyses were quite similar to the families in our sample except that the excluded families were more likely to be in households with married parents ($t = 4.06, p < .001$) with higher levels of income ($t = 2.08, p < .05$), and to have parents who engaged in more cultural socialization ($t = 21.89, p < .001$).

Measures

Parent–Adolescent Communication—The moderator variable of interest in the present study, frequency of parent–adolescent communication, was assessed using four statements that began with the stem “My 8th grader talks to me about.” The primary caregiver reported

how often the adolescent talked with her/him about the adolescent's friends, problems at school, classes, and future career, using a 6-point Likert-type scale with the following response options: 1 (*almost never*), 2 (*less than once a month*), 3 (*1–3 times a month*), 4 (*about once a week*), 5 (*a few times a week*), and 6 (*almost every day*). A mean score was created (Cronbach's $\alpha = .81$) and then dichotomized at the median. The families that had a mean score of 4 (*once per week*) or higher were in the high communication group ($n=262$), whereas families who scored below 4 were in the low communication group ($n=242$).

Family Racial Socialization—African American parents' racial socialization was assessed using two measures drawn from the primary caregiver's responses when adolescents were in 8th grade to represent two common types of socialization in African American families (Hughes et al. 2006).

Cultural Socialization—This socialization measure was based on an index of 10 items that asked parents to report on the importance and salience of race and culture in their family and personal lives. In seven of the items, parents used a 4-pt Likert scale ranging from 1 (*not at all*) to 4 (*very*) to indicate how true statements such as the following were: "How important is your racial background to the daily life of your family," and "People of your race have a culturally rich heritage." Each of these items was recoded into a binary variable (0, 1) and given a 1 when parents responded 3 (*somewhat*) or 4 (*very*). In the remaining three items, parents used a 5-pt Likert scale ranging from 1 (*almost never*) to 5 (*almost always*) to report on the frequency of activities that potentially accent race or African American culture. The following are examples of some of the questions that were asked: "How often does the child study the traditions of or about being his or her race," and "How often do you participate in community activities with people of your racial background?" Each of these items was recoded into a binary variable (0, 1) and given a 1 when parents responded 4 (*frequently*) or 5 (*almost always*). All binary variables were added together (maximum score = 10) so that higher values on this summative variable indicated higher levels of cultural socialization.

Preparation for Racial Bias—The second socialization measure was based on an item that asked parents to report on a 6-pt Likert scale ranging from 1 (*almost never*) to 6 (*almost every day*) the frequency with which they talked about race discrimination with the adolescent. Higher values indicate more racial bias preparation ($M = 2.93$, $SD = 1.56$).

Adolescent Racial Identity—Three constructs based on items created for the MADICS study were used to measure aspects of adolescents' racial identity in 11th grade.

Perceived Structural Discrimination—Adolescents' perception of structural discrimination was based on a mean score of five items (Cronbach's $\alpha = .70$). On a 4-pt Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*), adolescents reported on their agreement with two statements: "Because of my race, I have to work harder" and "Because of my race, I have to do better to get ahead." On a 5-pt Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), adolescents reported on their agreement with statements such as: "To get ahead, I have to work harder than Whites," "Being Black won't make it harder for my success" (reverse-coded), and "Because I am Black, I probably won't

get ahead without school.” All five items were standardized prior to creating the mean composite so that higher scores indicate more perceived structural discrimination.

Negative Public Regard—Four items were used to assess adolescents’ perception of how others view African Americans (Cronbach’s $\alpha = .56$).¹ On a 5-pt Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), adolescents reported on their agreement with statements such as the following: “Others think that Black people are unworthy,” “Others think Blacks are not as effective as other races.” A mean score was created so that higher scores indicate the adolescent’s perception that others regard African Americans more unfavorably.

Success-Oriented Centrality—Six items were used to assess the extent to which feelings of success were tied to adolescents’ identity as African Americans (Cronbach’s $\alpha = 0.70$). On a 5-pt Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), adolescents reported on how strongly they agreed with statements such as the following: “It will help other Blacks if I am successful” and “It is important for my family and community that I do well.” A mean score was created so that higher scores represent a stronger link between the importance of success and African American identity.

Adolescent Academic Attitudes and Perceptions—Due to the large amount of missing data on adolescent grades and achievement in the 11th grade, we focused on adolescents’ attitudes about school and perceptions of their academic competence during 11th grade as our outcomes, which had more complete data.

Positive School Attitude—Adolescents’ attitudes about school were assessed using a composite variable comprised of 17 items drawn from the Michigan Study of Adolescent Life Transitions (MSALT; Eccles et al. 1993; Cronbach’s $\alpha = .82$) that asked adolescents to report on their feelings about school. On a scale ranging from 1 (*strongly agree*) to 5 (*strongly disagree*), adolescents reported on how strongly they agreed with statements, such as “Most of my classes are boring.” Other items asked adolescents to rate on a scale ranging from 1 (*not an important reason*) to 7 (*a very important reason*) the importance of different motives for attending school, such as “I go to school because I enjoy my classes.” The scores were first standardized before creating a mean score so that higher scores indicate more positive attitudes about school.

Perceived Competence—Adolescents’ perception of their academic competence was assessed using a composite variable comprised of 5 items from the MSALT. The items asked adolescents to report on a scale ranging from 1 (*almost never*) to 5 (*almost always*) how strongly they agreed with questions such as, “Are you good at figuring out plans for problem solving?” They also rated their ability on various school subjects on a scale ranging from 1 (*not at all good*) to 7 (*very good*). The standardized composite variable demonstrated moderate reliability (Cronbach’s $\alpha = .67$). The higher scores signify greater perceived academic competence.

¹Although the reliability is moderately low, it is in alignment with the reliability reported in existing literature (e.g., Cronbach’s α range = 0.55–0.61; Sellers et al. 1997; Seaton et al. 2009).

Socio-demographic Characteristics—To control for the influence of potentially confounding variables, a number of family and child characteristics were included in the model. A dichotomous variable represented the mothers' marital status (1 = married) while an ordinal variable (1 = *less than high school*, 2 = *high school graduate*, 3 = *some college*, 4 = *college graduate*, 5 = *graduate degree*) represented the highest number of years of education completed by either parent. Household income was based on the Census needs standard. To adjust the skewed distribution, this variable was recoded into five quintiles (1 = \$3–\$2600, 2 = \$2700–\$27000, 3 = \$27500–\$34500, 4 = \$34900–\$44211, 5 = \$45000–\$100000). Finally, a dichotomous variable represented the child's sex (1 = boy). All of these items were drawn from Wave 3 of the MADICS data when adolescents were in 8th grade.

Analytic Strategy

Multiple-group path analyses were estimated using M-PLUS Version 6 to assess whether the hypothesized relationships between African American parents' racial socialization, various aspects of adolescents' racial identity, and in turn, adolescents' academic attitudes and perceptions differed for families with high and low levels of communication. To maximize the full sample size and to avoid missing data bias, full information maximum likelihood (FIML) was used during model estimation (Allison 2003). Additionally, MLR estimators were used in estimating the models because they are robust to non-normality of observations (Muthén and Muthén 1998–2012).

The overall fit of the hypothesized model to the observed data was determined using four indices: the Chi square statistic (χ^2), comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR). Convention states that good model fit occurs when the χ^2 statistic is non-significant, the CFI is greater than .90 and when the RMSEA and SRMR values are below .06 with an upper-bound confidence interval below .10 (Hu and Bentler 1999).

Results

The means, standard deviations, and correlations between variables from Mplus FIML estimation are presented by subgroup in Tables 1 and 2. The intercorrelations give some initial support to the hypothesis that families with low and high levels of communication differ in the strength of relations between racial socialization and racial identity. Most of the correlations between families' racial socialization and adolescents' racial identity were larger for families with high levels of communication than families with low levels of communication. For example, cultural socialization was positively and more strongly correlated with perceived structural discrimination ($r_{\text{high}} = .24$ vs $r_{\text{low}} = .03$) and success-oriented centrality ($r_{\text{high}} = .14$ vs $r_{\text{low}} = .03$) for families with high levels of communication in comparison to families with low levels of communication. We also see some preliminary evidence that the strength of the relations between racial identity and academic outcomes differ for families with high versus low levels of communication in ways consistent with our hypotheses. Success-oriented centrality was positively and more strongly correlated with adolescents' positive school attitude ($r_{\text{high}} = .20$ vs $r_{\text{low}} = .13$) for families with high levels of communication. Negative public regard was negatively and more strongly correlated with

school attitudes among adolescents with low levels of communication with their caregivers, compared to adolescents with high levels of communication ($\eta_{\text{low}} = -.23$ vs. $\eta_{\text{high}} = -.02$). Likewise, in low communication families, perceived structural discrimination was negatively related to school attitudes, whereas there was virtually no relation between these two variables in high communication families ($\eta_{\text{low}} = -.18$ vs. $\eta_{\text{high}} = -.02$).

Based on multiple fit indices, the initial hypothesized model did not fit the observed data very well ($\chi^2 (df) = 124.18(30)$, $p < 0.001$, RMSEA = .11, SRMR = .05, CFI = .66). The modification indices (MI) suggested adding error covariances between perceived structural discrimination and negative regard and success-oriented centrality. In general, modification indices should only be used if there is a strong theoretical reason for adapting the model based on the information provided by MI. Given that these indices represent aspects of racial identity and thus should be correlated, these suggested modifications were added to the model. The resultant model is an appropriate plausible model, and as the fit indices demonstrate, fit the observed data well ($\chi^2 (df) = 27.79(26)$, $p > 0.05$, RMSEA = .02, SRMR = .03, CFI = .99). Finally, nested models in which one model had all pathways constrained was compared to another model with no constrained pathways (baseline model) to determine whether the hypothesized processes differed for families with high and low levels of communication. The results from the Wald Chi-square test of nested models was significant ($\chi^2 (df) = 40.82(26)$, $p < 0.05$), which indicates that these relations as a whole differed for low and high communication groups. The results from Wald Chi-square tests of specific pathways of interest indicate group differences in the pathway from preparation for racial bias and negative public regard ($\chi^2 (df) = 4.91(1)$, $p < 0.05$). The final path models that incorporated the suggested modifications are displayed in Figs. 1 and 2 with standardized coefficients. The correlations between indices of adolescents' racial identity were significant, but are not shown in the figures. Similarly, error covariances among the exogenous variables were estimated but are not shown in the figures. These results are provided in Table 3.

Consistent with our hypothesis, parents' racial socialization practices did not predict any aspects of adolescents' racial identity in families with low levels of communication, but were significant predictors of aspects of adolescents' racial identity in families with high levels of communication. Among families with high levels of communication, parents who engaged in more cultural socialization had adolescents who perceived more structural discrimination ($b = .06$, $p = .01$) and scored higher on success-oriented centrality ($b = .04$, $p = .05$). Similarly, among families with high levels of communication, parents who engaged in more preparation for racial bias had adolescents with greater negative public regard ($b = .05$, $p = .05$).

Turning to the association between adolescent racial identity and academic outcomes, adolescents' perceived structural discrimination was associated with lower perceived academic competence ($b = -.12$, $p = .05$) and less positive attitudes toward school ($b = -.12$, $p = .05$) among families with low levels of communication. Adolescents' negative public regard was associated with less positive attitudes toward school ($b = -.14$, $p = .05$) among families with low levels of communication, but was unrelated to any of the academic attitudes among families with high levels of communication. Success-oriented centrality was

associated with more positive attitudes toward school ($b_{low} = .14, p = .05$; $b_{high} = .17, p = .01$) and perceptions of higher academic competence ($b_{low} = .27, p = .001$; $b_{high} = .25, p = .001$) for both high and low communication families.

Discussion

A substantial body of literature has examined the relationship between racial socialization, adolescent racial identity, and adolescent outcomes. The majority of this work, however, is based on cross-sectional data with either the adolescent or parent as the sole informant, and importantly, rarely considers the intrafamilial social context in which these processes occur. Thus, the present study bridges this gap in the literature by using longitudinal data to investigate racial socialization in conjunction with family processes. Specifically, we examined whether African American families' level of communication moderates the extent to which parents' different racial socialization practices as reported by the parent in 8th grade predict varying aspects of adolescents' racial identity, and in turn, academic attitudes and perceptions as reported by the adolescent in 11th grade. The study results indicate that, as a whole, these processes differed by parent–adolescent communication levels, and thus, highlight the importance of including family processes in future research when examining the influence of family racial socialization practices on adolescent outcomes.

The Moderating Influence of Parent–Adolescent Communication

The most prominent differences in the model between families with low and high levels of communication existed between families' racial socialization and adolescents' racial identity. Among families with low levels of communication, no aspect of adolescents' racial identity was predicted by families' racial socialization practices. This finding corroborates prior research that finds no links between parent reports of racial socialization and adolescent reports of their racial identity (Phinney and Chavira 1995). In contrast, among families with high levels of communication, every aspect of adolescents' racial identity was predicted by at least one type of family racial socialization practice. Aligned with the idea that children are more likely to internalize their parents' messages and beliefs when there is mutual understanding of family values, expectations, and rules, the moderating influence of family communication provides a potential explanation for the inconsistencies found in prior studies and gives credence to the idea that when parent–adolescent communication levels are low there is a greater likelihood of a disconnect between the messages conveyed by parents and adolescents' acceptance of these messages.

Associations Between Family Racial Socialization and Adolescents' Racial Identity

Among families with high levels of communication, higher levels of cultural socialization in 8th grade predicted adolescents' perception of greater structural discrimination and success-oriented centrality three years later. These longitudinal associations support prior work indicating that greater cultural socialization is related to a greater awareness of societal oppression among adolescents (Stevenson 1994), and a greater sense of closeness with other African Americans among adults (Demo and Hughes 1990). We also found that higher levels of preparation for racial bias predicted higher levels of perceived negative public regard among families with high levels of communication, which supports cross-sectional

work demonstrating a link between preparation for bias and negative public regard among youth (Rivas-Drake 2011; Rivas-Drake et al. 2009).

Among families with high levels of communication, the divergent associations between cultural socialization and aspects of adolescents' racial identity highlight the complexity inherent to the process of transmitting messages about cultural heritage, cultural traditions, and racial pride. On one hand, instilling a sense of pride in and value of African American culture and heritage leads to greater success-oriented centrality, which in turn, is associated with better academic attitudes and perceptions. Yet at the same time, instilling greater value of African American culture and heritage brings to the forefront a greater awareness of structural discrimination, which in turn, is associated with worse academic attitudes and perceptions. For marginalized racial groups, such as African Americans, whose history is laden with systematic inequities and discrimination, it is unsurprising that cultural socialization, and racial socialization more generally, would relate to diverging facets of racial identity. As such, it is important to understand under what conditions these divergent aspects of racial identity relate to adolescents' academic attitudes and perceptions.

Associations Between Adolescents' Racial Identity and Academic Attitudes and Perceptions

In addition to moderating the associations between racial socialization and racial identity, family communication also moderated the relations between adolescents' academic attitudes and perceptions and two aspects of adolescents' racial identity (i.e., perceived structural discrimination and negative public regard). This pattern of results suggests that family communication may be an important factor in mitigating processes that undermine positive academic attitudes and perceptions.

Perceived Structural Discrimination and Negative Public Regard—Although perceived structural discrimination was linked to less optimal academic outcomes for both high and low communication families, this aspect of racial identity was a more salient predictor of negative academic attitudes and perceptions for adolescents from families with low levels of communication. These results are in accordance with studies indicating that perceptions of higher racial barriers are associated with lower achievement among elementary-aged children (Smith et al. 2003), and less adaptive behavioral outcomes among adolescents (Stevenson 1997). The fact that perceived structural discrimination predicted more negative academic attitudes and perceptions for adolescents from families with low levels of communication than for adolescents from families with high levels of communication suggests that frequent parent–adolescent communication may help attenuate negative processes that undermine achievement and lead to negative academic attitudes and perceptions. In other words, when there is a high frequency of communication between the parent and adolescent about topics important to the adolescents' daily life (e.g., school, friends), the parent is likely to have a deeper understanding of the adolescents' psychological state and thus have more opportunities to subvert any processes leading to suboptimal academic attitudes and perceptions.

In a similar vein, negative public regard was associated with poorer attitudes toward school, but only for adolescents from families with low levels of communication. Sellers et al. (2006) speculate that adolescents with more negative public regard may exhibit better outcomes because they likely experienced more racial discrimination, and thus, developed more effective coping skills to deal with it. Although there is no evidence of a positive association in the present study, the lack of association between negative public regard and adolescents' academic attitudes and perceptions among adolescents from families with high levels of family communication may indicate that parents' preparation for racial bias in these families included more talk about coping strategies that helped negate the detrimental effects of negative public regard on adolescents' outcomes. This hypothesis needs to be tested further with data on the quality and content of conversations between parents and adolescents, particularly around preparation for bias.

Success-Oriented Centrality—In contrast to the other aspects of racial identity examined in this study, success-oriented centrality was the only aspect of adolescents' racial identity that was associated with positive academic attitudes and perceptions for adolescents in families with both high and low levels of parent–adolescent communication. The prominent link between adolescents' psychological connectedness to the African American community and positive academic attitudes and perceptions echoes extant work demonstrating an association between higher levels of cultural pride and higher levels of achievement among children (Smith et al. 2003) and adolescents (Oyserman et al. 2001). The recurring association between centrality and positive academic attitudes and perceptions found across studies and age groups substantiates the importance of fostering individuals' sense of community as a means to strengthen students' academic attitudes and perceptions.

Importantly, the fact that success-oriented centrality was associated with adolescents' positive academic attitudes and perceptions regardless of whether families had high or low levels of communication raises questions about other family processes that we may not have investigated in our study. Moreover, there are other influences in the youth's ecology outside the family (e.g., teachers, mentors) that may be encouraging adolescents to view their success as tied to their racial identity as an African American. Future research should examine the racial socialization roles of individuals outside the family in conjunction with the role of the parents in shaping adolescents' racial identity, and in turn, whether there are similar relations with adolescents' academic attitudes and perceptions.

Study Limitations

The findings presented here should be considered in light of the study limitations. First, we only examined the frequency of parent–child communication because we did not have the data to examine the quality of communication. Our measure may tap the frequency of both harmonious and conflictual parent–adolescent communication. Second, the communication measure was based on parent report of how often their child talked to them about various topics important in their life, but we cannot be certain who is prompting the communication. The wording of these items may suggest that the child is initiating the conversation, thus, signaling a positive and open relationship between the child and parent. On the other hand, it is also possible that the child is talking to the parent about these topics in response to the

parents' questioning. Given the difference in association between parent solicitation versus adolescent disclosure of information and adolescent outcomes found in prior research (e.g., Kerr and Stattin 2000), future studies should examine the moderation of these associations with items that reflect the quality of the communication and are explicit about who is initiating the communication to determine the robustness of the results from the present study.

Third, we did not have data on the nature of how parents prepared youth for racial bias. In the present study, preparation for racial bias was represented by one item that measured the frequency with which parents discussed racial bias with their children. The content parents use to prepare adolescents for racial bias is unknown. For example, it is unclear whether parents promoted caution of other racial groups or promoted coping techniques for managing discrimination, which are different aspects of preparation for bias that can have varying relations with adolescents' racial identity (Demo and Hughes 1990). Future studies should extend this work by investigating frequency in conjunction with content to understand how different aspects of parents' bias preparation relate to adolescents' racial identity.

Fourth, the negative public regard construct had relatively low reliability. Although our measure's reliability was comparable to the reliability of this construct in the work of Sellers et al. (1997); Neblett (2009), the low reliability indicates that this construct is not measured well. It may be the case that items used to create negative public regard in this study, similar to the items used in Seller's work, are too general with regard to who is the "public," which may have lowered the measure's reliability. The low reliability of our negative public regard measure could have attenuated its relations with adolescents' academic attitudes and perception. In Rivas-Drake's (2011) study of Latino youth, the reliability of public regard was much higher (e.g., Cronbach's $\alpha = .89$). However, this measure was restricted to youth's perception of the public regard of teachers and professors, a targeted group, which may have helped with the reliability of their measure.

Finally, we did not have adolescent reports of family racial socialization. As a result, we were unable to investigate whether parent and adolescent reports of racial socialization had the same association with various aspects of adolescents' racial identity seen in other studies based on one reporter.

Conclusion

The findings from the present study extend the literature on racial socialization, racial identity, and adolescent academic-related outcomes among African American youth in several important ways. First, and most importantly, our findings indicate that the frequency of parent-child communication moderated several of the hypothesized associations. These results underscore that racial socialization and racial identity development do not occur in a vacuum, but rather occur within the larger family context. This needs to be taken into consideration in future research. Second, that the longitudinal relations between parents' racial socialization practices and adolescents' racial identity were significant for only families with high levels of communication demonstrates that frequent family

communication acts as an important conduit for families to convey messages and beliefs to their children. The open communication lines within the family enables parents to be more in tune with their adolescents' attitudes and feelings and in turn, affords opportunities for parents to rectify psychological processes that undermine students' academic success. Specifically, our findings suggest that within a communicative familial context, when parent engage in cultural activities and treat race as a salient aspect of family life, adolescents reported a stronger psychological connection to the African American community and a stronger belief that success is integral to their identity. As such, the results from the present study highlight the importance of African American parents adding cultural socialization practices to their parenting toolbox as a means for promoting success-oriented centrality.

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Biographies

Sandra Tang is a Research Fellow in the Psychology Department at the University of Michigan. Her research interests include parent socialization, parent–child relationships, academic outcomes, and the role of socioeconomic status and race/ethnicity in family processes and child outcomes.

Vonnie C. McLoyd is the Ewart A. C. Thomas Professor of Psychology at the University of Michigan. She is interested in parental behavior and family relations as paths through which economic conditions such as poverty, parental job loss, and parental work characteristics exert their influence on youth's socioemotional adjustment and as processes that protect youth from, or increase youth's vulnerability to, the effects of experiences in peer and neighborhood contexts known to compromise socioemotional adjustment (e.g., neighborhood violence, peer victimization, racial discrimination).

Samantha K. Hallman is an Assessment and Evaluation Postdoctoral Research Associate in the Center for Research on Learning and Teaching at the University of Michigan. Her research interests include academic achievement, identity, motivation and self-regulation, and the role of poverty and racism in explaining achievement disparities.

Fig. 1. Multi-group standardized FIML estimates: low communication ($n = 242$). *Note* Estimated error covariances and socio-demographic characteristics included as controls in the model but are not shown in the figure. $^*p .05$; $^{**}p .01$; $^{***}p .001$

Fig. 2.

Multi-group standardized FIML estimates: high communication ($n = 262$). *Note* Estimated error covariances and socio-demographic characteristics included as controls in the model are not shown in the figure. * $p < .05$; ** $p < .01$; *** $p < .001$

Table 1

FIML means, standard deviations, and correlations of study variables for low communication (n = 242)

	1	2	3	4	5	6	7	8	9	10	11
Adolescent academic attitudes and perceptions											
1 Positive school attitude	–										
2 Perceived competence	0.46	–									
Adolescent racial identity											
3 Perceived structural discrimination	–0.18	–0.09	–								
4 Negative public regard	–0.23	–0.13	0.30	–							
5 Success-oriented centrality	0.13	0.26	0.22	–0.07	–						
Family racial socialization											
6 Cultural socialization	0.06	0.06	0.03	–0.06	0.03	–					
7 Preparation for racial bias	0.09	0.05	0.04	–0.10	0.04	0.17	–				
Socio-demographic characteristics											
8 Married	–0.09	–0.08	0.14	0.07	–0.02	0.08	–0.04	–			
9 Educational attainment	–0.03	–0.09	–0.03	0.08	–0.15	0.10	0.02	–0.11	–		
10 Income	–0.07	0.01	0.10	0.07	0.15	0.07	–0.08	0.17	0.19	–	
11 Male child	–0.09	0.04	0.06	–0.12	0.06	–0.06	0.10	0.01	–0.12	0.07	–
M or %	–0.07	–0.02	0.02	2.97	3.75	6.13	2.52	64 %	2.17	3.19	59 %
SD	0.54	0.55	0.70	0.64	0.56	2.28	1.30	1.15	1.15	1.42	

Table 2

FIML means, standard deviations, and correlations of study variables for high communication (n = 262)

	1	2	3	4	5	6	7	8	9	10	11
Adolescent academic attitudes and perceptions											
1 Positive school attitude	–										
2 Perceived competence	0.45	–									
Adolescent racial identity											
3 Perceived structural discrimination	0.02	–0.09	–								
4 Negative public regard	–0.02	0.03	0.37	–							
5 Success-oriented centrality	0.20	0.18	0.28	0.00	–						
Family racial socialization											
6 Cultural socialization	0.09	0.04	0.24	0.06	0.14	–					
7 Preparation for racial bias	0.12	–0.02	0.18	0.15	0.03	0.35	–				
Socio-demographic characteristics											
8 Married	0.01	–0.05	0.03	–0.04	0.13	–0.00	–0.05	–			
9 Educational attainment	0.04	0.07	–0.03	–0.03	–0.08	–0.06	–0.02	–0.04	–		
10 Income	–0.08	–0.07	0.19	–0.02	–0.04	0.17	0.10	0.04	0.17	–	
11 Male child	–0.10	0.06	0.02	–0.04	–0.04	–0.08	0.02	–0.04	0.07	0.07	–
M or %	0.06	0.04	–0.03	3.00	3.62	6.21	3.23	62 %	2.18	2.86	44 %
SD	0.48	0.62	0.70	0.62	0.59	2.33	1.67	1.19	1.19	1.35	

Table 3

Unstandardized and standardized FIML estimates and selected fit indices from multigroup path analyses between low and high communication groups

Pathways	Low communication (<i>n</i> =242)		High communication (<i>n</i> =262)	
	<i>b</i> _{low} (SE)	β _{low}	<i>b</i> _{high} (SE)	β _{high}
Adolescent racial identity to academic attitudes and perceptions				
Perceived structural discrimination → attitude regarding school	−0.12* (0.05)	−0.16	−0.03 (0.06)	−0.05
Negative public regard → attitude regarding school	−0.14* (0.06)	−0.17	−0.01 (0.05)	−0.01
Success-oriented centrality → attitude regarding school	0.14* (0.06)	0.15	0.17** (0.06)	0.21
Perceived structural discrimination → perceived competence	−0.12* (0.05)	−0.13	−0.17** (0.07)	−0.20
Negative public regard → perceived competence	−0.06 (0.06)	−0.08	0.10 (0.07)	0.10
Success-oriented centrality → perceived competence	0.27*** (0.27)	0.28	0.25*** (0.07)	0.24
Parent racial socialization to adolescent racial identity				
Cultural socialization → perceived structural discrimination	0.04 (0.06)	0.01	0.06** (0.02)	0.18
Preparation for racial bias → perceived structural discrimination	0.02 (0.04)	0.05	0.04 (0.03)	0.09
Cultural socialization → negative public regard	−0.05 (0.06)	−0.07	0.01 (0.02)	0.02
Preparation for racial bias → negative public regard	−0.04 (0.03)	−0.07	0.05* (0.02)	0.14
Cultural socialization → success-oriented centrality	0.01 (0.05)	0.04	0.04* (0.02)	0.16
Preparation for racial bias → success-oriented centrality	0.02 (0.03)	0.05	−0.00 (0.02)	−0.01
Socio-demographic characteristics to adolescent racial identity				
Married → perceived structural discrimination	0.18* (0.09)	0.12	0.04 (0.09)	0.03
Education → perceived structural discrimination	−0.02 (0.04)	−0.03	−0.03 (0.04)	−0.05
Income → perceived structural discrimination	0.03 (0.03)	0.07	0.08* (0.03)	0.16
Boy → perceived structural discrimination	0.10 (0.09)	0.04	0.04 (0.08)	0.03
Married → negative public regard	0.11 (0.09)	0.08	−0.03 (0.08)	−0.03
Education → negative public regard	0.04 (0.04)	0.07	−0.01 (0.04)	−0.02
Income → negative public regard	0.02 (0.03)	0.04	−0.02 (0.03)	−0.04
Boy → negative public regard	−0.14 (0.08)	−0.12	0.02 (0.08)	0.02
Married → success-oriented centrality	−0.08 (0.08)	−0.08	0.16* (0.08)	0.13
Education → success-oriented centrality	−0.09** (0.04)	−0.19	−0.03 (0.03)	−0.05
Income → success-oriented centrality	0.08* (0.03)	0.20	−0.03 (0.03)	−0.06
Boy → success-oriented centrality	0.03 (0.08)	0.02	0.01 (0.08)	−0.01
Covariances				
Perceived structural discrimination with negative public regard	0.14*** (0.03)	0.32	0.15*** (0.03)	0.37
Perceived structural discrimination with success-oriented centrality	0.09** (0.03)	0.23	0.11*** (0.02)	0.27

Model fit: CFI = 0.99, RMSEA = 0.02, $\chi^2(df) = 27.79(26)$, $p > .05$, SRMR = 0.03

CFI comparative fit index, RMSEA root mean square error of approximation, χ^2 Chi-square, SRMR standardized root mean square residual

* $p < .05$;

**
 $p < .01$;

 $p < .001$

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