Racial/Ethnic Socialization and Identity Development in Black Families: The Role of Parent and Youth Reports

Stephen C. Peck
University of Michigan

Amanda B. Brodish
University of Michigan

Oksana Malanchuk
University of Michigan

Meeta Banerjee
University of Michigan

Jacquelynne S. Eccles
University of Michigan

Acknowledgements: This work was supported in part by the NICHD Grant #R01 HD33437 awarded to Jacquelynne S. Eccles and Arnold J. Sameroff, NICHD Grant # R01 HD048970 awarded to Jacquelynne S. Eccles, and NICHD Grant # R01 HD068298 awarded to Jacquelynne S. Eccles. We thank the following people for their support of this project (listed alphabetically): Todd Bartko, Elaine Belansky, Heather Bouchey, Nick Butler, Celina Chatman, Courtney Cogburn, Diane Early, Kari Fraser, Tom Fuller-Rowell, Leslie Gutman, Katie Jodl, Ariel Kalil, Linda Kuhn, Sarah Lord, Karen McCarthy, Alice Michael, Melanie Overby, Robert Roeser, Sherri Steele, Erika Taylor, Janice Templeton, Cindy Winston, and Carol Wong.

Abstract

Racial/ethnic (R/E) socialization is widely practiced in R/E minority families. However, only recently have models been developed to understand how parents' R/E socialization messages influence adolescent development. The primary goal of the present study was to clarify and extend existing work on R/E socialization in African American (Black) families by distinguishing between parent and youth reports of parents' R/E socialization messages and examining the extent to which adolescents and their parents agree about these socialization messages. In addition, we tested a theoretical model in which parent reported R/E socialization messages have an indirect effect on the development of youth R/E identity through youth reports of their parents' R/E socialization messages. Using a combination of open- and close-ended data from a longitudinal study of self-identified Black adolescents and their parents, we found statistically significant parent-youth agreement about whether or not parents send both general R/E socialization messages and, for daughters, specific R/E socialization messages. R/E socialization messages focused on promoting cultural pride and history were associated positively with R/E identity development, whereas messages focused on preparing youth for discrimination tended to be unrelated to R/E identity development. The results largely supported the hypothesis that parent reports of parents' R/E socialization messages are related indirectly to the development of adolescent R/E identity via youth reports of parents' R/E socialization messages.

Key words: racial/ethnic identity, racial/ethnic socialization, adolescence, parent socialization

Racial/Ethnic Socialization and Identity Development in Black Families

The development of identity has been identified as one of the critical tasks of adolescence (Erikson, 1968). Parents can play an important role in helping their children develop a strong sense of identity by communicating beliefs, values, norms, and behavior (Eccles, 1993). Parents of racial/ethnic (R/E) minority youth face the additional burden of helping their children develop positive R/E identities in a societal context of R/E stigma and discrimination (Eccles, Wong, & Peck, 2006). Accordingly, helping children understand their race/ethnicity and cope effectively with discrimination is widely practiced by R/E minority parents (Hughes, Rodriguez, Smith, Johnson, Stevenson, & Spicer, 2006), and these R/E socialization efforts often vary by youth gender (e.g., Brown, Linver, & Evans, 2010; McHale, Crouter, Kim, Burton, Davis, Dotterer, & Swanson, 2006; Thomas & Speight, 1999). In the present study, we explore the role of parent R/E socialization in the development of R/E identity among Black adolescents and the extent to which this process is moderated by gender.

Although models articulating general and gender socialization have existed for some time (e.g., Baumrind, 1971; Darling & Steinberg, 1993; Eccles, 1983, 1993; Maccoby, 1992), only recently have theoretical models been developed to understand the process by which parent R/E socialization influences R/E identity development (e.g., Hughes, Witherspoon, Rivas-Drake, & West-Bey, 2009; Murry, Berkel, Brody, Miller, & Chen, 2009). For example, Murry et al. (2009) found that parental R/E socialization practices were associated with R/E pride and self-esteem in their children, suggesting that they are less likely to internalize negative stereotypes about Blacks (e.g., Murry et al., 2009; Neblett, Smalls, Ford, Nguyen, & Sellers, 2009).

However, a limitation of previous work is the failure to consider simultaneously both parent and youth reports of parents' R/E socialization messages. For example, researchers often

rely only on *youth reports* of their parents' R/E socialization messages (e.g., Neblett et al., 2009; Rivas-Drake, Hughes, & Way, 2009; Stevenson & Arrington, 2009). In other work, however, researchers rely only on *parent reports* of their own R/E socialization messages (e.g., Caughy, O'Campo, Randolph, & Nickerson, 2002; McHale et al., 2006; Murry et al., 2009). In both cases, these reports are commonly referred to as *parent* R/E socialization. Consistent with the work of Hughes, Hagelskamp, Way, & Foust (2009), we believe that considering simultaneously both perspectives may help account for the complex transactions between parents and children during the socialization process. Advocates of social cognitive theories of parenting (e.g. Eccles, 1983, 1993; Eccles & Wigfield, 2002) stress that parents influence their children via the children's perceptions of their parents' behavior. Testing this mediation process, however, requires using reports about parenting from both parents and their children.

We believe the distinction between parent and youth reports is important both methodologically and theoretically. For example, using a single latent variable indicated by both parent and youth reports translates into modeling only those aspects of socialization about which parents and their children agree. Given relatively low levels of agreement, this methodological approach is likely to mask the unique effects of parent and youth perceptions of parents' socialization messages on youth development. In addition, examining the relations of parent and youth reports of parents' R/E socialization messages to R/E identity development should help inform theoretical expectations about the extent to which the influence of parent socialization depends on youth perceptions (Eccles, 1983; Eccles & Wigfield, 2002).

Our motivation for focusing on adolescence is twofold. First, parents' R/E socialization messages during this period increase in frequency and complexity, presumably to help their children deal with R/E biases likely to be encountered outside the home (Eccles et al., 1993;

Hughes, Rodriguez, et al., 2006). Second, adolescence is a period marked generally by identity development (Erikson, 1968) and, more specifically, by R/E identity development (e.g., Cross, 1991). R/E issues may become more salient during adolescence because Black youth begin to notice differential treatment and have more discussions around race and ethnicity with peers and family members (Tatum, 1997; Wong, Eccles, & Sameroff, 2003).

Parent-Youth (Dis)agreement about Socialization Messages

Although the use of only youth reports of parents' socialization messages may often be warranted, including both parent and youth reports about R/E socialization messages may be necessary for understanding the dynamic interplay between parents and their children (Hughes & Chen, 1997; Hughes, Rivas, Foust, Hagelskamp, Gersick, & Way, 2008). Several factors appear to motivate the sole use of youth reports where exploring the effects of parent socialization messages on youth development. First, parent socialization messages are believed to most strongly impact youth development to the extent that these messages become integrated into the youth's self-concept (Eccles, Jacobs, & Harold, 1990; Guilamo-Ramos et al., 2007). Second, it is expensive to obtain data from both youth and their parent(s). Third, when independent observations of parent socialization messages are obtained, observers' ratings tend to relate more strongly to youth than parent reports (Gonzales, Cauce, & Mason, 1996), suggesting that parents' reports may be biased (e.g., Schwartz, Barton-Henry, & Pruzinsky, 1985).

There is also evidence of weak relations between parent and youth reports of parents' socialization messages (Gonzales et al., 1996; Hughes, Bachman, Ruble, & Fuligni, 2006; Thomas & King, 2007). In particular, previous studies have found weak relations between parent and youth reports of parent R/E socialization (Hughes, Bachman, et al., 2006; Hughes, Hagelskamp, et al., 2009; Thomas & King, 2007). For example, Hughes, Hagelskamp, et al.

(2009) found small correlations between mother and youth reports of R/E socialization practices, and Thomas and King (2007) found agreement between African American mothers and daughter reports of mothers' R/E socialization messages for only one out of five dimensions of R/E identity (i.e., appreciation of cultural heritage).

Role of Youth and Family Characteristics in R/E Socialization

A variety of youth and family characteristics appear to be associated with R/E socialization processes. For example, Caughy et al. (2002) found that parents with higher socioeconomic status (SES) reported more R/E socialization messages and had homes that displayed more African American culture than parents with lower SES (see also McHale et al., 2006; White-Johnson, Ford, & Sellers, 2010). Although other studies have found no relation between family SES and R/E socialization (e.g., Frabutt, Walker, & MacKinnon-Lewis, 2002; Phinney & Chavira, 1995), smaller sample sizes in those studies may have reduced their ability to detect significant SES effects.

Youth gender has also been linked to R/E socialization (e.g., Brown et al., 2010; Thomas & King, 2007; Thomas & Speight, 1999). For example, parents may engage in more *preparation for bias* socialization messages with their sons than their daughters because of expectations that their sons will be exposed to more R/E stigma (McHale, et al., 2006; Thomas & Speight, 1999). Studies have also shown that parents engage in more R/E socialization around R/E pride and the history of one's R/E group (referred to as *cultural socialization*) with their daughters than their sons (e.g., Brown et al., 2010; Thomas & King, 2007). In contrast, other research has revealed no gender differences (e.g., Frabutt et al., 2002; Hughes & Chen, 1997).

Youth gender has also been found to moderate convergence between parent and youth reports of R/E socialization. For example, Hughes, Hagelskamp, et al. (2009) found stronger

correlations between mother-daughter than mother-son reports of cultural socialization but stronger correlations between mother-son than mother-daughter reports of preparation for bias.

Parent vs. Youth Reports in Predicting Youth R/E Identity

Only Hughes, Hagelskamp, et al. (2009) have explored the relations of both parent and youth reports of parents' R/E socialization to youth R/E identity, but they did not examine mediation models. Specifically, Hughes, Hagelskamp, et al. found that mother's reports of R/E socialization messages tended to be unrelated to early adolescents' R/E identity, whereas early adolescents' reports of mothers' R/E socialization messages were positively related to ethnic affirmation, exploration, and behavioral engagement. In the present study, we included four dimensions of R/E identity assessed when youth were in the 8th and 11th grades: R/E cultural connection, R/E importance, expected R/E discrimination, and R/E behavioral involvement.

Study Overview

The present study extends previous work in several ways. First, to address our question about the extent to which Black parents and youth agree about parents' R/E socialization messages, we examined parents' and their adolescent child's closed- and open-ended responses about parents' R/E socialization messages, the extent to which parent and youth agreed about these messages, and the extent to which messages and agreement varied by family SES and youth gender. Second, consistent with Eccles' (1983, 1993) socialization model (see also, Eccles & Wigfield, 2002), we used structural equation modeling (SEM) to test the hypothesis that parents' reports of R/E socialization indirectly impact youth R/E identity development via youth reports of their parents' R/E socialization. Due to the conceptual match between the respective types of socialization messages and two of the four R/E identity dimensions, we expected preparation for bias messages to be most strongly related to expectations about R/E

discrimination and cultural messages to be most strongly related to R/E cultural connection. We also extended existing work by (a) focusing on R/E identity development from middle to late adolescence and (b) including a relatively large sample of Black males and females.

Method

Participants

Participants in this study were 502 self-identified Black adolescents (and their parents) who participated in the Maryland Adolescent Development in Context Study (MADICS), a longitudinal study of neighborhood, peer, parent, and social factors influencing adolescent development. Wave 1 data were collected during the fall of the 7th grade (Age ≈ 12), wave 3 data were collected during the summer after the adolescents completed the 8thG (Age ≈ 14), and wave 4 data were collected during the summer after the adolescents completed the 11thG (Age ≈ 17). In the 8thG and 11thG, respectively, 625 and 502 Black parent-youth dyads participated. The 416 dyads with complete data at both waves were more likely to include daughters and have higher SES than dyads who participated at only one of these waves; the same results were found where comparing the complete set of 7thG Black dyads (n = 879) with the complete set of 8thG dyads. Importantly, none of the R/E identity variables used in our analyses differed significantly as a function of participation status (all *p*s > .30). For analyses involving only the R/E socialization messages, we used the 502 parent-youth dyads with complete 11thG data. For the SEM analyses, we used the 416 dyads for whom we have complete longitudinal data plus the 85 participants for whom we have only 11thG data (McDonald & Ho, 2002).[1] The 1991 median income range was $45,000-$49,999, with 64% of the primary caregivers (hereafter, "parents") having achieved a high school diploma and 36% having achieved a college degree.

Procedure

Parents and youth completed face-to-face structured interviews and paper-pencil questionnaires during in-home visits. Although the primary caregivers included fathers, grandparents, and other relatives (7%), they were usually the mother. Each interview took approximately one hour and each questionnaire took approximately 45 minutes to complete. The parent and youth respondents were each compensated $15 to $50 (depending on the year of assessment) each time they participated.

Measures

Family socioeconomic status (SES)

A composite indicator of family SES was created from information provided by the primary caregiver at the 7th grade visit (1991). The composite score is a mean of the following standardized scores (using the full sample): the highest level of education of either parent (0-20, with 20 being doctorate or M.D.), the highest occupational status of either parent (0-99, with doctor being 99) based on Nam & Powers (1983), and the family income based on annual income categories (1-16 with 16 being more than $75,000).

R/E socializations messages

R/E socialization messages in general. In the face-to-face interview during the 11thG visit, parents were asked, "Are there things you do or tell [Child's name] to help him/her know what it is to be Black?". In a separate face-to-face interview during the 11thG visit, youth respondents were asked, "Are there things your parents …do or tell you to help you know what it is to be Black?". In both cases, the close-ended responses options were "Yes" = 1 and "No" = 0.

Preparation for bias and cultural socialization messages. If the parent said yes to the close-ended R/E socialization question, they were asked "What kinds of things do you do or say" and "What are the most important things you do or say?" Similarly, youth who indicated that

their parent sent R/E socialization messages were asked: "What do they do or tell you?" and "What are the most important things they do or tell you?" Interviewers probed for three answers per question from both parents and youth, for a total of 6 possible responses. If the respondent provided only one or two responses to a question, interviewers probed with "anything else?".

Content analysis of the open-ended responses involved a two-pronged process, working from both the top-down (theory) and the bottom-up (responses). Preparation for bias messages were conceptually defined as messages designed to increase awareness or means of coping with discrimination, whereas cultural socialization messages were defined as messages that promoted cultural pride or knowledge of R/E group history (Hughes, Rodriguez, et al., 2006). Two trained coders then independently coded all responses for the presence of preparation for bias messages (e.g., "You will likely be discriminated against because of your race" and "The odds are against you") and cultural socialization messages (e.g., "We discuss the history of African Americans in general" and "Be proud that you are African-American and know where you came from").

If any of the 6 responses included preparation for bias themes, the parent preparation for bias (PPPB) or youth preparation for bias (YPPB) variable was coded 1 (and 0 otherwise); if any of the 6 responses included cultural socialization themes, the parent cultural socialization (PPCS) or youth cultural socialization (YPCS) variable was coded 1 (and 0 otherwise). Given ample opportunity to report R/E socialization messages, we interpret "0," or the absence of a specific theme, to mean that the parent was unlikely to have intentionally sent, or the youth was unlikely to have been consciously aware that a parent sent, messages reflecting that theme. Interrater reliability for the parent and youth responses was assessed by the Holsti Method (Holsti, 1969) and ranged from .80 to .90; disagreements were resolved together with the Project Manager.

Youth R/E identity variables

R/E Cultural Connection (RCC). RCC was assessed by 4 items with 5-point response scales ranging from 1 (*not at all true of me*) to 5 (*extremely true of me*) at the 8thG and from 1 (*strongly agree*) to 5 (*strongly disagree*) at the 11thG: "People of my race/ethnicity have a culturally rich heritage", "I have meaningful traditions because of my race/ethnicity", "People of my race are very supportive", and "I have close friends because of my race." These items were scored such that higher values indicate more connection to one's R/E group (8thG α = .68; 11thG α = .74). Revised scales using only the first two items (see the online supplement) yielded 8thG and 11thG α's = .75 and .71.

R/E importance (RI). RI was assessed by 3 items with 4-point response scales ranging from 1 (*not at all*) to 4 (*very*): "How important is it for you to know about your racial or ethnic background?", "How important is your racial or ethnic background to the daily life of your family?", and "How proud are you of your racial or ethnic background?" (8thG α = .65; 11thG α = .63).

Expected R/E Discrimination (ERD). ERD was assessed by 4 items. Two items were rated from 1 (*not at all*) to 5 (*a lot*): "How much do you think discrimination because of your race might keep you from getting the job you want?" and "How much do you think discrimination because of your race might keep you from getting the amount of education you want?". Two items were rated from 1 (*strongly disagree*) to 4 (*strongly agree*): "Because of your race, no matter how hard you work, you will always have to work harder to prove yourself" and "Because of your race, it is important that you do better than other kids at school in order to get ahead" (8thG α = .73; 11thG α = .72). For the items using 5-point response scales, response categories 4 (*quite a bit*) and 5 (*a lot*) were collapsed to 4 for the statistics reported in Table 4.

R/E Behavioral Involvement (RBI). RBI was assessed by 3 items with 5-point response scales ranging from 1 (*almost never*) to 5 (*almost always*): "How often do you study the traditions or history of people with your racial background?", "How often do you participate in community activities with people of your racial background?", and "How often do you celebrate any special days connected to your racial background?" (8^{th}G α = .73; 11^{th}G α = .72).

Results

R/E Socialization Messages in General

Of the 502 parents of 11th graders, 72% (n = 361) answered "yes" to the question of whether or not they do or tell their child things about what it means to be Black, and the percent was similar for daughters (73%) and sons (71%). In contrast, of the 502 youth respondents, only 38% (n = 188) answered "yes" to the corresponding question , and the percent was slightly lower for daughters (35%) than sons (40%). Logistic regression analyses revealed that both parents (β = .73, $p < .001$, OR = 2.08) and youth (β = .58, p = .001, OR = 1.79) from higher SES families were more likely to report that parents send R/E socialization messages than those from lower SES families, and these reports did not vary by gender or the gender x SES interaction, ps > .35.

Parents who reported sending general R/E socialization messages to their child were significantly more likely than chance to have a child who reported that their parent sends them general R/E socialization messages (χ^2 [1, n = 502] = 39.95, $p < .001$, OR = 4.61, 95% CI [2.79, 7.59]). These relations were similar for daughters (χ^2 [1, n = 254] = 22.88, $p < .001$, Φ = .300, OR = 5.94) and sons (χ^2 [1, n = 248] = 17.73, $p < .001$, Φ = .267, OR = 3.87) (see Table 1).

Preparation for Bias and Cultural Socialization Messages

Parent reports. Of the parents who indicated sending R/E socialization messages to their child, 47% (n = 171) reported sending preparation for bias messages, and 80% (n = 288) reported

sending cultural socialization messages. For parents of daughters, 38% mentioned preparation for bias messages, and 84% mentioned cultural socialization messages. For parents of sons, 57% mentioned preparation for bias messages, and 76% mentioned cultural socialization messages.

Logistic regression analyses revealed that parents from higher SES families were more likely to report sending preparation for bias ($\beta = 0.39$, $p = .03$, $OR = 1.48$) and cultural socialization ($\beta = 0.67$, $p < .001$, $OR = 1.96$) messages than parents from lower SES families. In addition, parents of females were less likely to report sending preparation for bias messages ($\beta = -0.54$, $p = .005$, $OR = 0.59$) and more likely to report sending cultural socialization messages ($\beta = 0.38$, $p = .05$, $OR = 1.46$) than parents of males, and these reports did not vary as a function of the gender x SES interaction terms, ps > .87.

Youth reports. Of the youth who indicated that their parents send R/E socialization messages, 30% ($n = 57$) reported that their parents send preparation for bias messages, and 77% ($n = 145$) reported that their parents send cultural socialization messages. For daughters, 27% mentioned preparation for bias messages, and 84% mentioned cultural socialization messages. For sons, 33% mentioned preparation for bias and 71% mentioned cultural socialization. Logistic regression analyses revealed that youth from higher SES families were more likely to report receiving preparation for bias ($\beta = 0.78$, $p = .01$, $OR = 1.48$) and cultural socialization ($\beta = 0.43$, $p = .02$, $OR = 1.54$) messages from their parents than youth from lower SES families, and these reports did not vary by gender or the gender x SES interaction terms, ps > .15.

Parent-Youth Convergence

Preparation for bias messages. Parents who reported sending preparation for bias messages were marginally more likely than chance to have a child who reported receiving preparation for bias messages (χ^2 [1, $n = 502$] = 2.75, $p = .10$, $\Phi = .074$). However, this relation

was moderated by gender (see Table 2), applying to daughters (χ^2 [1, n = 254] = 4.21, p = .04, Φ = .129, OR = 2.40, 95% CI [1.02, 5.64]) but not sons (χ^2 [1, n = 248] = .07, p = .79, Φ = .017, OR = 1.11, 95% CI [.53, 2.32]). None of these relations was moderated by a median split of SES.

Cultural socialization. Parents who reported sending cultural socialization messages were more likely than chance to have a child who reported receiving cultural socialization messages (χ^2 [1, n = 502] = 12.58, p < .001, Φ = .158). These relations were again moderated by gender (see Table 3), applying more to daughters (χ^2 [1, n = 254] = 11.90, p = .001, Φ = .216, OR = 2.88, 95% CI [1.56, 5.34]) than sons (χ^2 [1, n = 248] = 2.39, p = .122, Φ = .098, OR = 1.56, 95% CI [.89, 2.74]). Again, none of these relations was moderated by a median split of SES.

Parent R/E Socialization and Youth R/E Identity

We conducted SEMs using M*plus* Version 6.11 (Muthén & Muthén 1998–2010) to test the hypothesis that parent reports of R/E socialization messages have an indirect effect on youth R/E identity through youth reports of their parents' R/E socialization messages. SEMs correct for measurement error in the R/E identity scales (Hayduk, 1987), and M*plus* makes full use of the available data (e.g., FIML methods of addressing data assumed to be missing at random; Muthén & Muthén 1998–2010). To evaluate the overall fit of the SEMs, we report fit indices provided by M*plus*: the chi-square statistic, the Comparative Fit Index (CFI), the Root-Mean-square Error of Approximation (RMSEA), and the Weighted Root-Mean-Squared Residual (WRMR). In order to accurately estimate indirect effects with dichotomous mediator variables, we used the WLSMV estimator (Muthén & Muthén 1998–2010) and corresponding DIFFTEST procedure to test the difference between nested models (Muthén & Muthén 1998–2010).

Parent-youth R/E socialization models. Consistent with the confirmatory factor analyses indicating a multidimensional structure among the R/E identity dimensions (see the online

supplement), multiple-group SEMs testing the overall theoretical model for females and males were conducted separately for each of the four R/E identity dimensions.[2] In addition, consistent with the factorial-invariance evidence (see the online supplement), the measurement models for the R/E identity factors were constrained to be equal across genders and time, and the residual variances for matching 8thG and 11thG R/E identity indicators were allowed to covary. The R/E identity indicators were also converted to z-scores prior to conducting the SEMs.

In specifying the structural models, we allowed family SES to predict both parent and youth reports of parents' R/E socialization as well as 11thG R/E identity. Each parent socialization variable was allowed to predict its corresponding youth socialization variable and 11thG R/E identity, and the parent socialization variables were allowed to correlate with each other. The youth socialization variables were allowed to predict 11thG R/E identity, correlate with each other, and be predicted by 8thG R/E identity. Using the *model indirect* command in M*plus*, we tested the indirect effect of parent's report of preparation for bias socialization (and cultural socialization) on 11thG R/E identity via youth's report of preparation for bias (and cultural socialization). See Table 4 for the female and male means, standard deviations, and correlations for the major study variables.

RCC. The multi-group model examining 11thG RCC fit very well (χ^2 (41) = 50.79, p = .141; see Table 5). For daughters (see Figure 1), SES was positively associated with 11thG RCC, parent reports of preparation for bias (PPPB), parent reports of cultural socialization (PPCS), and youth reports of preparation for bias (YPPB), but not with youth reports of cultural socialization (YPCS) (see Table 5). PPPB was positively associated with YPPB, and PPCS was positively associated with YPCS. PPPB and PPCS were not related significantly to 11thG RCC. YPCS was positively associated with daughters' 11thG RCC, but the negative association between

YPPB and 11thG RCC was not significant. The indirect effect of PPPB on 11thG RCC via YPPB (90% CI on *b* = -.09 [-.23, .05]) was not significant, but the indirect effect of PPCS on 11thG RCC via YPCS (90% CI on *b* = .13 [.01, .25]) was significant for daughters.

For sons (see Figure 2), SES was associated with 11thG RCC and both PPCS and YPCS. In contrast to the results for daughters, the relations between PPPB and YPPB and between PPCS and YPCS were not significant for sons. Neither PPPB nor PPCS was related directly to sons' 11thG RCC. YPCS was positively associated with 11thG RCC, and the negative association between YPPB and 11thG RCC was marginally significant. The indirect effects of PPPB on 11thG RCC via YPPB and PPCS on 11thG RCC via YPCS were not significant for sons.

Additional analyses. Using the adjusted chi-square (χ^{2*}) DIFFTEST option in M*plus*, we tested a series of more restrictive models to better understand the observed gender differences. Constraining the relations between PPPB and YPPB ($\chi^{2*}[1] = 1.91$, one-tailed $p = .084$) and between PPCS and YPCS ($\chi^{2*}[1] = 1.65$, one-tailed $p = .099$) to be equal for daughters and sons marginally worsened model fit. In addition, constraining the relations between PPPB and YPPB ($\chi^{2*}[1] = 0.30$, $p = .582$) and between PPCS and YPCS ($\chi^{2*}[1] = 1.41$, $p = .285$) to be zero for sons did not worsen model fits, whereas constraining the relations between PPPB and YPPB ($\chi^{2*}[1] = 5.52$, $p = .019$) and between PPCS and YPCS ($\chi^{2*}[1] = 9.60$, $p = .002$) to be zero for daughters did worsen model fits. Equality constraints on the daughter/son effects of YPPB on 11thG RCC (βs = -.32/-.30, $p = .038$; $\chi^{2*}[1] = 0.03$, $p = .862$) and YPCS on 11thG RCC (βs = .47/.48, $p < .001$; $\chi^{2*}[1] = 1.24$, $p = .266$) did not worsen model fits.

RI, ERD, and RBI. The models for the remaining R/E identity variables fit fairly well (see Table 5): RI model χ^2 (73) = 108.07, $p = .005$; ERD model χ^2 (131) = 195.90, $p < .001$; and RBI model χ^2 (188) = 224.38, $p = .036$. The relations between YPPB and 11thG RI, ERD, and RBI

were not significant for either daughters or sons, but the relations between YPCS and these R/E identity variables were moderately large and significant for both daughters and sons, with two exceptions: The relation between YPCS and 11thG RI was not significant for daughters, and the relation between YPCS and 11thG ERD was marginally significant for sons. The indirect effects of PPCS on 11thG RBI via YPCS were significant for daughters (90% CI on b = .13 [.01, .25]), and the indirect effects of PPCS on 11thG ERD via YPCS were marginally significant for daughters (90% CI on b = .11 [.00, .23]).[3] The remaining parameter estimates in these R/E identity models were similar to those for RCC (see Table 5).

Tests of the more restrictive models focused on the observed gender differences revealed that constraining the effects of PPPB on YPPB to be equal for daughters and sons tended to worsen model fit (one-tailed ps ranged from .044 to .048), and constraining the effects of PPCS on YPCS to be equal for daughters and sons tended to marginally worsen model fit (one-tailed p's ranged from .102 to .109) across all models. In addition, constraining the effects of PPPB on YPPB and PPCS on YPCS to be zero for sons did not worsen model fits (ps ranged from .254 to .582), whereas applying the same constraints for daughters worsened model fits (ps ranged from .003 to .011). Equality constraints on the effects of YPPB and YPCS on 11thG R/E identity did not worsen model fits, with the following exceptions: equality constraints on the daughter/son effects of YPPB (βs = -.12/-.10, p = .424; $\chi^{2*}(1) = 3.05$, p = .081) and YPCS (βs = .42/.39, p = .002; $\chi^{2*}(1) = 2.92$, p = .087) on 11thG REI-RC marginally worsened model fits.

Discussion

In a sample of Black adolescents and their parents, we examined parent and youth reports of parents' R/E socialization messages and their relations to the development of four dimensions of R/E identity. Although parent-youth agreement about parents' R/E socialization messages was

statistically significant, it varied considerably across both forms of agreement and socialization content. We also found that youth – but not parent – reports of parents' R/E socialization messages were related to the development of adolescents' R/E identity, and that these messages were differentially related to different aspects of R/E identity. The results largely supported the hypothesis that parent reports of parents' R/E socialization messages are related indirectly to the development of youth R/E identity via youth reports of parents' R/E socialization messages.

Parent vs. Youth Reports of Parent R/E Socialization Messages

Consistent with past research (Hughes, Bachman, et al., 2006; Hughes, Hagelskamp, et al., 2009), more cultural socialization than preparation for bias messages were reported by both parents and youth. In addition, although parents reported sending more preparation for bias messages to their sons than their daughters, and more cultural socialization messages to their daughters than their sons, sons and daughters reported that their parents were equally likely to send preparation for bias and cultural socialization messages.

The observed gender differences in parent but not youth reports of parents' R/E socialization messages suggests that parents intend to emphasize distinct messages for their daughters versus sons but that their daughters and sons may not experience this distinction in the way it was intended. This discrepancy highlights our concern about the implications of research findings based only on either parent or youth reports of parent socialization messages. In this case, our conclusions about the likelihood of parents sending either preparation for bias or cultural socialization messages would differ had we relied solely on either parent or youth reports of parents' R/E socialization messages.

We also found that both parents and youth from higher SES families were more likely than those from lower SES families to report that parents send R/E socialization messages to youth, and parents from higher SES families were more likely than those from lower SES

families to report sending both preparation for bias and cultural socialization messages. Although some research has found no relation or an inverse relation, the present findings add to the growing body of work showing that more R/E socialization tends to occur in higher SES families (e.g., Caughy et al., 2002; McHale et al., 2006).

We obtained some evidence for parent-youth agreement about R/E socialization messages sent and received within the family. Specifically, (a) parents who reported sending R/E socialization messages to their child were more likely than expected by chance to have a child who reported receiving R/E socialization messages from their parents (and the effect size was medium for both daughters and sons) and (b) parents who reported sending preparation for bias or cultural socialization messages were more likely than expected by chance to have daughters (but not sons) who reported receiving preparation for bias or cultural socialization messages, respectively. However, consistent with past research on parent-youth agreement about socialization practices (Gonzales et al., 1996; Schwartz et al., 1985), the extent of agreement was relatively small (e.g., in only 5% and 20% of cases did both parents and youth report that parents send preparation for bias and cultural socialization messages, respectively). These findings are consistent with past work showing that parents' reports of socialization behaviors tend to be positively biased (e.g., Schwartz et al. 1985) and suggests that parents may be over-reporting the amount of R/E socialization that occurs within the family.

Notably, the gender differences in parent-youth convergence about specific R/E socialization messages found here differ from Hughes, Hagelskamp, et al.'s (2009) findings that mothers' and daughters' reports were significantly correlated for cultural socialization but not preparation for bias messages, whereas mothers' and sons' reports were significantly correlated for preparation for bias but not cultural socialization messages. The pattern of observed gender

differences in parent-youth convergence found in this study is inconsistent with the idea that mother-child agreement about R/E socialization messages is related to the match between the content of socialization messages with gender stereotypes (Hughes, Hagelskamp, et al., 2009) but consistent with the idea that females may be more receptive than males to their parents' R/E socialization messages regardless of message content.

A variety of research findings suggest that females may be more likely to hear and accurately encode their parents' (mothers and fathers) messages than males. For example, Knafo and Schwartz (2003) demonstrated that female adolescents were more accurate at perceiving their parents' values than male adolescents, regardless of whether the parent was a father or mother. Other work has shown that females as young as preschool age are better able than males to reason about interpersonal situations and decode subtle emotional cues (e.g., Porath, 2001). Moreover, females in the 8th and 11th grades have been found to have better listening skills than males (e.g., Hunter, Gambell, & Randhawa, 2005).

R/E Socialization influences on the Development of R/E Identity

The results revealed that youth but not parent reports of parents' R/E socialization messages tend to be associated with adolescent R/E identity development and that these relations vary somewhat across different dimensions of R/E identity. These results are largely consistent with Hughes, Hagelskamp, et al.'s (2009) findings that mother reports of mothers' R/E socialization messages tend to be unrelated to early adolescents' R/E identity, whereas early adolescents reports of mothers' R/E socialization messages are positively related to early adolescents' R/E identity. In both cases, given no statistically significant relations between parent reports of their socialization messages and youth R/E identity, the conclusions warranted

by the observed relations between R/E socialization and R/E identity would differ if they were based only on either parent or youth reports.

We had expected that preparation for bias messages would be most strongly related to ERD, whereas cultural socialization messages would be most strongly related to RCC. However, our findings revealed that YPCS was positively related to each aspect of R/E identity except RI for females and ERD for males, whereas YPPB tended to be negatively or unrelated to each aspect of R/E identity for both females and males. The negative relations found between YPPB messages and R/E identity development, though seldom statistically significant, are consistent with the negative relations between youth reports of parents' preparation for bias messages and *ethnic affirmation* (Phinney, 1992) found by Hughes, Witherspoon, et al. (2009). These results provide support for the idea that some adolescents may experience messages about impending discrimination episodes as threatening and, hence, have a tendency to de-emphasize, disengage, reject, or otherwise disidentify from their R/E group membership. However, given that fewer youth reported receiving preparation for bias than cultural socialization messages, and the YPPB SDs for both females and males were relatively small, there may have been insufficient variation on the YPPB variable to generate reliable estimates of its relation to the R/E identity variables.

Despite these generally consistent findings, we found minimal evidence for gender differences in the relations between youth reports of parents' R/E socialization messages and R/E identity. For example, whereas Hughes, Hagelskamp, et al. (2009) found stronger relations between youth reports of parents' cultural socialization messages and both ethnic affirmation and exploration among females than males, we found that the relations between YPCS messages and R/E identity development for females and males tended to be statistically indistinguishable.

Although among neither daughters nor sons were parent reports of parents' R/E socialization messages related directly to youth R/E identity development, we found (a) indirect effects of parent reports of parents' R/E socialization messages in general on R/E identity development via youth reports of parents' R/E socialization messages in general for both daughters and sons and (b) indirect effects of PPCS messages on R/E identity development (for RCC, ERD, & RBI) via YPCS messages among daughters. These indirect effects provide support for the hypothesis that youth must hear and construct meaning about parent's R/E socialization messages before they can be integrated into youth R/E identity. In addition, the lack of indirect effects among sons for parents' specific R/E socialization messages suggests that they may be undermined by competing messages from other readily available sources, such as peers and media (Dubow, Huesmann, & Greenwood, 2007; Wigfield, Byrnes, & Eccles, 2006).

The indirect effects of PPCS on females' R/E identity development are somewhat discrepant with the results of Hughes, Hagelskamp, et al. (2009) who found no relation between parent reports of parents' R/E socialization and youth R/E identity. These discrepant findings may be due to the different data analytic approaches used in the two studies (e.g., SEM vs. hierarchical multiple regression), but there are other noteworthy differences. For example, youth in this study self-identified as either Black or African American and were in the 8th to 11th grades, whereas in Hughes, Hagelskamp, et al. they were classified via mothers' reports as Black, Latino, or Chinese and were in the 6th to 8th grades. Hence, the discrepant findings may reflect differences in the way R/E socialization impacts R/E identity across diverse R/E groups and periods of development. For example, given that the frequency and complexity of parent's R/E socialization messages tend to increase with a child's age (Hughes, Bachman, et al., 2006), parents may send different R/E socialization messages to younger and older adolescents.

Limitations and Future Directions

Several limitations should be acknowledged. First, youth reported about what their *parents* said or did to help them understand what it means to be Black, but we only have parallel reports from one of their parents (usually their mother). A more complete analysis of R/E socialization capable of distinguishing between the roles of youth gender and parent-youth gender dynamics will require parallel reports from both mothers and fathers. Second, we coded open-ended responses into dichotomous variables reflecting whether or not a particular message theme was mentioned, and using dichotomous variables can reduce statistical power. Finally, the youth measures of socialization and R/E identity were taken from the same individual, so we were unable to rule out the alternative explanation that the associations between youth reports of parents' R/E socialization messages and R/E identity were the result of same-informant biases.

Conclusion

The present study contributes to the literature on R/E socialization by distinguishing between parent and youth reports of parents' R/E socialization messages and examining their relations to several dimensions of R/E identity development. The results suggest that females and their parents are more likely than males and their parents to agree about the types of R/E socialization messages sent and received within the family. Among both females and males, it is youth rather than parent reports of parents' cultural socialization messages that tend to be related to R/E identity development. Importantly, however, parent reports of parents' R/E socialization messages tend to be related indirectly to the development of youth R/E identity via youth reports of parents' R/E socialization messages, especially among daughters. The role of parents in shaping sons' R/E identity is more vexing and will probably require attending to a more complex array of socialization factors, such as peer, extended family, and media influences.

References

Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology Monograph, 4,* (1, Pt. 2), 1-103. doi: 10.1037/h0030372.

Brown, T. L., Linver, M. R., & Evans, M. (2010). The role of gender in the racial and ethnic socialization of African American adolescents. *Youth & Society, 41*, 357-381. doi: 10.1177/0044118X09333665.

Caughy, M. O., O'Campo, P. J., Randolph, S. M., & Nickerson, K. (2002). The influence of racial socialization practices on the cognitive and behavioral competence of African American preschoolers. *Child Development, 73,* 1611-1625. doi: 10.1111/1467-8624.00493.

Cross, W. E. (1991). *Shades of black: Diversity in African-American identity*. Philadelphia: Temple University Press.

Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin, 113,* 487-496. doi: 10.1037/0033-2909.113.3.487.

Dubow, E. F., Huesmann, L., & Greenwood, D. (2007). Media and youth socialization: Underlying processes and moderators of effects. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 404-430). New York: Guilford.

Eccles, J. S. (1983). Expectancies, values, and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motives: Psychological and sociological approaches* (pp. 75-146). San Francisco: Freeman and Company.

Eccles, J. S. (1993). School and family effects on the ontogeny of children's interests, self-perceptions, and activity choice. In J. Jacobs (Ed.), *Nebraska Symposium on Motivation, 1992: Developmental perspectives on motivation* (pp. 145- 208). Lincoln, NB: University of Nebraska Press.

Eccles, J. S., Jacobs, J. E., & Harold, R. D. (1990). Gender role stereotypes, expectancy effects, and parents' socialization of gender differences. *Journal of Social Issues, 46,* 183-201. doi: 10.1111/j.1540-4560.1990.tb01929.x.

Eccles, J. S., Jacobs, J. E., Harold, R. D., Yoon, K. S., Arbreton, A., & Freedman-Doan, C. (1993). Parents and gender-role socialization during middle childhood and adolescent years. In S. Oksamp & M. Costanzo (Eds.). *Gender issues in contemporary society* (pp. 59-83). Newbury Park: Sage.

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review Of Psychology*, *53*, 109-132. doi: 10.1146/annurev.psych.53.100901.135153

Eccles, J. S., Wong, C. A., & Peck, S. C. (2006). Ethnicity as a social context for the development of African-American adolescents. *Journal of School Psychology,* 44, 407-426. doi: 10.1016/j.jsp.2006.04.001.

Erikson, E. H. (1968). *Identity: Youth and crisis*. London: Faber & Faber.

Frabutt, J. A., Walker, A. M., & MacKinnon-Lewis, C. (2002). Racial socialization messages and the quality of mother/child interactions in African American families. *Journal of Early Adolescence, 22,* 200–217. doi: 10.1177/0272431602022002004.

Gonzales, N. A., Cauce, A. M., & Mason, C. A. (1996). Interobserver agreement in the assessment of parental behavior and parent-adolescent conflict: African American mothers, daughters, and independent observers. *Child Development, 67,* 1483-1498. doi: 10.2307/1131713.

Guilamo-Ramos, V., Jaccard, J., Dittus, P., Bouris, A., Holloway, I., & Casillas, E. (2007). Adolescent expectancies, parent-adolescent communication and intentions to have sexual intercourse among inner-city, middle school youth. *Annals of Behavioral Medicine, 34,* 56-66. doi: 10.1007/BF02879921.

Hayduk, L. A. (1987). *Structural equation modeling with LISREL: Essentials and advances.* Baltimore, MD: Johns Hopkins University Press. doi: 10.2307/1165186.

Holsti, O. R. (1969). *Content analysis for the social sciences and humanities*. Reading, MA: Addison-Wesley.

Hughes, D., Bachman, M., Ruble, D., & Fuligni, A. (2006). Tuned in or tuned out: Parents' and children's interpretation of parental racial/ethnic socialization practices. In L. Balter & C. S. Tamis-LeMonda (Eds.), *Child psychology: A handbook of contemporary issues* (pp. 591-610). New York: University Press.

Hughes, D., & Chen, L. (1997). When and what parents tell children about race: An examination of race-related socialization among African American families. *Applied Developmental Science, 1,* 200–214. doi**:** 10.1207/s1532480xads0104_4.

Hughes, D., Hagelskamp, C., Way, N., & Foust, M. D. (2009). The role of mothers' and adolescents' perceptions of ethnic-racial socialization in shaping ethnic-racial identity among early adolescent boys and girls. *Journal of Youth and Adolescence, 38,* 605-626. doi 10.1007/s10964-009-9399-7.

Hughes, D., Rivas, D., Foust, M., Hagelskamp, C., Gersick, S., & Way, N. (2008). How to catch a moonbeam: A mixed-methods approach to understanding ethnic socialization in ethnically diverse families. In S. M. Quintana & C. McKnown (Eds.) *Handbook of race, racism, and child development* (pp. 226-277). Hoboken: Wiley. doi:10.1002/9781118269930.ch11.

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

Hughes, D., Witherspoon, D., Rivas-Drake, D., & West-Bey, N. (2009). Received ethnic-racial socialization messages and youths' academic and behavioral outcomes: Examining the mediating role of ethnic identity and self-esteem. *Cultural Diversity and Ethnic Minority Psychology, 15,* 112-124. doi: 10.1037/a0015509.

Hunter, D., Gambell, T., & Randhawa, B. (2005). Gender gaps in group listening and speaking: Issues in social constructivist approaches to teaching and learning. *Educational Review, 57,* 329-355. doi: 10.1080/00131910500149416.

Knafo, A., & Schwartz, S. H. (2003). Parenting and adolescents' accuracy in perceiving parental values. *Child Development, 74,* 595-611. doi: 10.1111/1467-8624.7402018.

Maccoby, E. E. (1992). The role of parents in the socialization of children: An historical overview. *Developmental Psychology, 28,* 1006-1017. doi:10.1037/0012-1649.28.6.1006.

McDonald, R. P., & Ho, M. R. (2002). Principles and practices in reporting structural equation analyses. *Psychological Methods, 7,* 64-82. doi: 10.1037/1082-989X.7.1.64.

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

Murry, V. M., Berkel, C., Brody, G. H., Miller, S. J., & Chen, Y. (2009). Linking parental socialization to interpersonal protective processes, academic self-presentation, and expectations among rural African American youth. *Cultural Diversity and Ethnic Minority Psychology, 15,* 1-10. doi: 10.1037/a0013180.

Muthén, L. K. & Muthén, B. O. (1998-2010). *Mplus User's Guide. Sixth Edition*. Los Angeles, CA: Muthén & Muthén

Nam, C. B., & Powers, M. G. (1983). *The socioeconomic approach to status measurement: With a guide to occupational and socioeconomic status scores.* Houston: Cap and Gown Press.

Neblett, E. W., Smalls, C. P., Ford, K. R., Nguyen, H. X., & Sellers, R. M. (2009). Racial socialization and racial identity: African American parents' messages about race as precursors to identity. *Journal of Youth and Adolescence, 38,* 189-203. doi 10.1007/s10964-008-9359-7.

Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for diverse groups. *Journal of Adolescence, 13,* 171-183. doi: 10.1177/074355489272003.

Phinney, J. S., & Chavira, V. (1995). Parental ethnic socialization and adolescent coping with problems related to ethnicity. *Journal of Research on Adolescence, 5,* 31-53. doi**:** 10.1207/s15327795jra0501_2.

Porath, M. (2001). Young girls' social understanding: Emergent interpersonal expertise. *High Ability Studies, 12,* 113-126. doi**:**10.1080/13598130120058716.

Rivas-Drake, D., Hughes, D., & Way, N. (2009). A preliminary analysis of associations among ethnic-racial socialization, ethnic discrimination, and ethnic identity among urban sixth graders. *Journal of Research on Adolescence, 19,* 558-584. doi: 10.1111/j.1532-7795.2009.00607.x.

Schwarz, J. C., Barton-Henry, M. S., & Pruzinsky, T. (1985). Assessing child-rearing behaviors: A comparison of ratings made by mother, father, child, and sibling on the CRPBI. *Child Development, 56,* 462-479. doi: 10.2307/1129734.

Stevenson, H. C., & Arrington, E. G. (2009). Racial/ethnic socialization mediates perceived racism and the racial identity of African American adolescents. *Cultural Diversity and Ethnic Minority Psychology, 15,* 125-136. doi: 10.1037/a0015500.

Tatum, B. D. (1997). *Why are all the Black kids sitting together in the cafeteria? And other conversations about race.* New York: Basic Books.

Thomas, A. J., & King, C. T. (2007). Gendered racial socialization of African American mothers and daughters. *The Family Journal: Counseling and Therapy for Couples and Families. 15*, 137-142.

Thomas, A. J., & Speight, S. L. (1999). Racial identity and racial socialization attitudes of African American parents. *Journal of Black Psychology, 25,* 152–170. doi: 10.1177/0095798499025002002.

White-Johnson, R. L., Ford, K. R., & Sellers, R. M. (2010). Parental racial socialization profiles: Association with demographic factors, racial discrimination, childhood socialization, and racial identity. *Cultural Diversity and Ethnic Minority Psychology*, *16*, 237-247. doi: 10.1037/a0016111.

Wigfield, A., Byrnes, J. P., & Eccles, J. S. (2006). Development during early and middle adolescence. In P. A. Alexander & P. H. Winne (Eds.), *The handbook of educational psychology* (pp. 87-113). Mahwah, NJ: Erlbaum.

Wong, C. A., Eccles, J. S., & Sameroff, A. (2003). The influence of ethnic discrimination and ethnic identification on African American adolescents' school and socioemotional adjustment. *Journal of Personality*, *71*, 1197-1232. DOI: 10.1111/1467-6494.7106012.

Notes

[1] We did not include data from participants for whom we have only 8th grade data (n = 208) because they were missing too much data for our key analyses. The SEM results for females are based on 253 instead of 254 cases because of missing SES data. Structural equation models using listwise deletion (including only the 416 participants for whom we have complete longitudinal data) instead of using all available data (i.e., using Full Information Maximum Likelihood [FIML] estimation), yielded virtually identical results.

[2] Similar multiple-group SEMs testing the overall theoretical model for females and males were conducted using 8th and 11th grade measures of self-esteem. The rationale, results, and relevance of these analyses are reported in the online supplement.

[3] Similar multiple-group SEMs conducted using the close-ended, parent and youth reports of parent R/E socialization revealed significant indirect effects of parent reports on 11thG R/E identity via youth reports in 7 of the 8 cases. Specifically, there were indirect effects

…for both daughters (b = .09, SE = .05, p = .036) and sons (b = .07, SE = .04, p = .046) on RCC;

…for both daughters (b = .08, SE = .04, p = .019) and sons (b = .05, SE = .03, p = .044) on ERD;

…for both daughters (b = .16, SE = .05, p = .002) and sons (b = .12, SE = .05, p = .006) on RBI;

…and for daughters (b = .12, SE = .06, p = .021) but not sons (b = .03, SE = .05, p = .157) on RI.

Table 1

Parent-Youth Convergence on 11th Grade Reports of General R/E Socialization Messages

Females		Did parent report sending general R/E socialization messages to their child?	
		NO	YES
Did youth report that parent sends general R/E socialization messages?	NO	Actual n = 61 (24%) Expected n = 45 (18%) ASR = 4.80	Actual n = 104 (41%) Expected n = 120 (47%) ASR = -4.80
	YES	Actual n = 8 (3%) Expected n = 24 (10%) ASR = -4.80	Actual n = 81 (32%) Expected n = 65 (26%) ASR = 4.80

Males		Did parent report sending general R/E socialization messages to their child?	
		NO	YES
Did youth report that parent sends general R/E socialization messages?	NO	Actual n = 58 (24%) Expected n = 43 (17%) ASR = 4.20	Actual n = 91 (37%) Expected n = 106 (43%) ASR = -4.20
	YES	Actual n = 14 (6%) Expected n = 29 (12%) ASR = -4.20	Actual n = 85 (34%) Expected n = 70 (28%) ASR = 4.20

ASR = Adjusted Standardized Residual. ASR's are interpreted as Z-scores (e.g., ASR values above 1.96, 2.58, and 3.29 are significant at the two-tailed .05, .01, & .001 levels, respectively).

Table 2

Parent-Youth Convergence on 11th Grade Reports of Preparation for Bias Messages

Females		Did parent report sending preparation for bias messages to their child?	
		NO	YES
Did youth report that parent sends preparation for bias messages?	NO	Actual n = 170 (67%) Expected n = 166 (65%) ASR = 2.10	Actual n = 60 (24%) Expected n = 64 (25%) ASR = -2.10
	YES	Actual n = 13 (5%) Expected n = 17 (7%) ASR = -2.10	Actual n = 11 (4%) Expected n = 7 (3%) ASR = 2.10

Males		Did parent report sending preparation for bias messages to their child?	
		NO	YES
Did youth report that parent sends preparation for bias messages?	NO	Actual n = 129 (52%) Expected n = 128 (52%) ASR = .30	Actual n = 86 (35%) Expected n = 87 (35%) ASR = -.30
	YES	Actual n = 19 (8%) Expected n = 20 (8%) ASR = -.30	Actual n = 14 (6%) Expected n = 13 (5%) ASR = .30

ASR = Adjusted Standardized Residual.

Table 3

Parent-Youth Convergence on 11th Grade Reports of Cultural Socialization Messages

Females		Did parent report sending cultural socialization messages to their child?	
		NO	YES
Did youth report that parent sends cultural socialization messages?	NO	Actual n = 82 (33%) Expected n = 70 (28%) ASR = 3.40	Actual n = 97 (38%) Expected n = 109 (43%) ASR = -3.40
	YES	Actual n = 17 (9%) Expected n = 29 (11%) ASR = -3.40	Actual n = 58 (20%) Expected n = 46 (18%) ASR = 3.40

Males		Did parent report delivering cultural socialization message to their child?	
		NO	YES
Did youth report that parent sends cultural socialization messages?	NO	Actual n = 88 (35%) Expected n = 83 (33%) ASR = 1.50	Actual n = 90 (36%) Expected n = 96 (39%) ASR = -1.50
	YES	Actual n = 27 (9%) Expected n = 33 (13%) ASR = -1.50	Actual n = 43 (20%) Expected n = 38 (15%) ASR = 1.50

ASR = Adjusted Standardized Residual.

Table 4

Means, Standard Deviations, and Correlations by Gender and Wave for Major Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. SES	--	.18	.27	.08	.18	.13	.23	.06	.14	.15	.11	.25	.06	.14	.10
2. YPtbB	.21	--	.27	.48	.77	.09	.13	.05	.22	.12	.16	.20	.19	.20	.35
3. PPtbB	.26	.30	--	.09	.22	.53	.69	.08	.07	.12	.13	.10	.16	.09	.13
4. YPPB	.17	.44	.17	--	.28	.02	.13	.01	.02	-.02	.10	-.02	.04	.05	.15
5. YPCS	.15	.88	.26	.35	--	.05	.10	.13	.17	.12	.17	.23	.21	.23	.36
6. PPPB	.14	.08	.38	.13	.02	--	.17	.10	-.08	.13	.04	-.04	.05	-.02	-.03
7. PPCS	.25	.22	.76	.18	.22	.21	--	.03	-.04	.04	.01	.10	.13	.08	.10
8. RCC8	.19	.16	.02	.16	.17	.03	.00	--	.24	.29	.27	.21	.16	.24	.14
9. RI8	.10	.18	.26	.07	.12	.13	.17	.20	--	.20	.30	.14	.30	.12	.17
10. ERD8	.20	.20	.11	.16	.13	.00	.07	.32	.25	--	.26	.19	.23	.38	.12
11. RBI8	.04	.13	.13	.05	.11	.08	.10	.23	.32	.25	--	.21	.20	.03	.30
12. RCC11	.27	.26	.15	.11	.27	.04	.06	.34	.29	.30	.26	--	.15	.27	.23
13. RI11	.05	.27	.16	.14	.21	-.01	.05	.12	.42	.24	.31	.39	--	.16	.41

(continued)

Table 4 *Means, Standard Deviations, and Correlations by Gender and Wave for Major Study Variables (continued)*

14. ERD11	.23	.32	.14	.11	.30	.00	.02	.27	.27	.42	.22	.37	.27	--	.28
15. RBI11	.21	.43	.27	.16	.41	.12	.15	.21	.33	.21	.42	.44	.47	.27	--
M (*SD*)															
Females	-0.14 (.81)	0.35 (.48)	0.73 (.45)	0.09 (.29)	0.30 (.46)	0.28[a] (.45)	0.61 (.49)	2.67 (1.24)	3.57 (.53)	2.23 (.73)	2.87 (.94)	2.91 (1.17)	3.37 (.58)	2.14[b] (.68)	2.78 (.89)
Males	-0.08 (.77)	0.40 (.49)	0.71 (.46)	0.13 (.34)	0.28 (.45)	0.40[a] (.49)	0.54 (.50)	2.80 (1.06)	3.52 (.54)	2.27 (.73)	2.87 (.83)	3.01 (1.11)	3.44 (.51)	2.29[b] (.68)	2.89 (.85)

Note: Correlations below the diagonal are among females in the sample (*n*s = 206-254); correlations above the diagonal are among males in the sample (*n*s = 207-248). Although exact *p* values vary with the N of each cell, correlation coefficients greater than .13, .16, and .21 have $p < .05$, $p < .01$, and $p < .001$. The mean difference between females and males is statistically significant, $p = .003^{a}$ and $p = .013^{b}$. SES = Family Socioeconomic Status; YPtbB = Youth Close-Ended Report of Parents' R/E Socialization Messages; PPtbB = Parent Close-Ended Report of Parents' R/E Socialization Messages; YPPB = Youth Report of Parents' Preparation for Bias Messages; YPCS = Youth Report of Parents' Cultural Socialization; PPPB = Parent Report of Parents' Preparation for Bias Messages; PPCS = Parent Report of Parents' Cultural Socialization Messages; RCC8 = 8th Grade R/E Cultural Connection; RI8 = 8th Grade R/E Importance; ERD8 = 8th Grade Expected R/E Discrimination; RBI8 = 8th Grade R/E Behavioral Involvement; RCC11 = 11th Grade R/E Cultural Connection; RI11 = 11th Grade R/E Importance; ERD11 = 11th Grade Expected R/E Discrimination; RBI11 = 11th Grade R/E Behavioral Involvement.

Table 5

Summaries of R/E Socialization SEMs for the 4 R/E Identity Factors

	R/E Cultural Connection								R/E Importance							
	Female				Male				Female				Male			
	β	b	se	p	β	b	se	p	β	b	se	p	β	b	se	p
REI8 -> REI11	.32	.29	.12	.01	.09	.10	.12	.41	.49	.48	.10	.00	.27	.23	.10	.01
YPPB -> REI11	-.37	-.25	.20	.22	-.29	-.21	.12	.09	.31	.23	.23	.33	-.12	-.08	.11	.46
YPCS -> REI11	.57	.40	.18	.03	.45	.31	.10	.00	.13	.10	.21	.63	.35	.23	.10	.02
PPPB -> REI11	.11	.09	.13	.51	-.12	-.08	.08	.29	-.15	-.12	.14	.41	.02	.02	.07	.81
PPCS -> REI11	-.20	-.15	.11	.19	.05	.04	.08	.63	.05	.04	.13	.76	.16	.11	.07	.13
PPPB -> YPPB	.31	.35	.17	.03	.07	.07	.13	.58	.31	.34	.16	.03	.07	.07	.13	.58
PPCS -> YPCS	.30	.32	.18	.01	.11	.11	.11	.29	.30	.31	.12	.01	.11	.12	.11	.29
SES -> REI11	.36	.34	.10	.00	.24	.22	.09	.01	-.04	-.04	.10	.69	-.05	-.05	.08	.55
SES -> YPPB	.25	.36	.18	.04	.12	.16	.14	.25	.25	.35	.17	.04	.12	.16	.14	.25
SES -> YPCS	.11	.15	.12	.23	.21	.29	.13	.03	.11	.15	.12	.23	.21	.29	.13	.03
SES -> PPPB	.19	.23	.11	.03	.17	.22	.11	.05	.19	.23	.11	.03	.17	.22	.11	.05
SES -> PPCS	.32	.41	.10	.00	.29	.39	.11	.00	.32	.41	.10	.00	.29	.39	.11	.00
REI8 -> YPPB	.27	.37	.19	.05	.01	.01	.19	.96	.12	.17	.22	.45	.03	.03	.15	.82
REI8 -> YPCS	.22	.29	.14	.04	.18	.27	.17	.11	.14	.19	.15	.22	.26	.34	.15	.02
PPPB -> YPPB -> REI11†	-.11	-.09	.08	.16	-.02	-.02	.03	.30	.10	.08	.08	.18	-.01	-.01	.01	.33
PPCS -> YPCS -> REI11†	.17	.13	.07	.04	.05	.04	.04	.17	.04	.03	.06	.31	.04	.03	.03	.16
11thG R/E Identity R^2	.37				.28				.45				.25			
χ^2 Contribution by Gender	35.29				15.50				61.87				46.20			
Fit Statistics	CFI = .969, RMSEA = .031, WRMR = .859								CFI = .937, RMSEA = .044, WRMR = 1.117							

(continued)

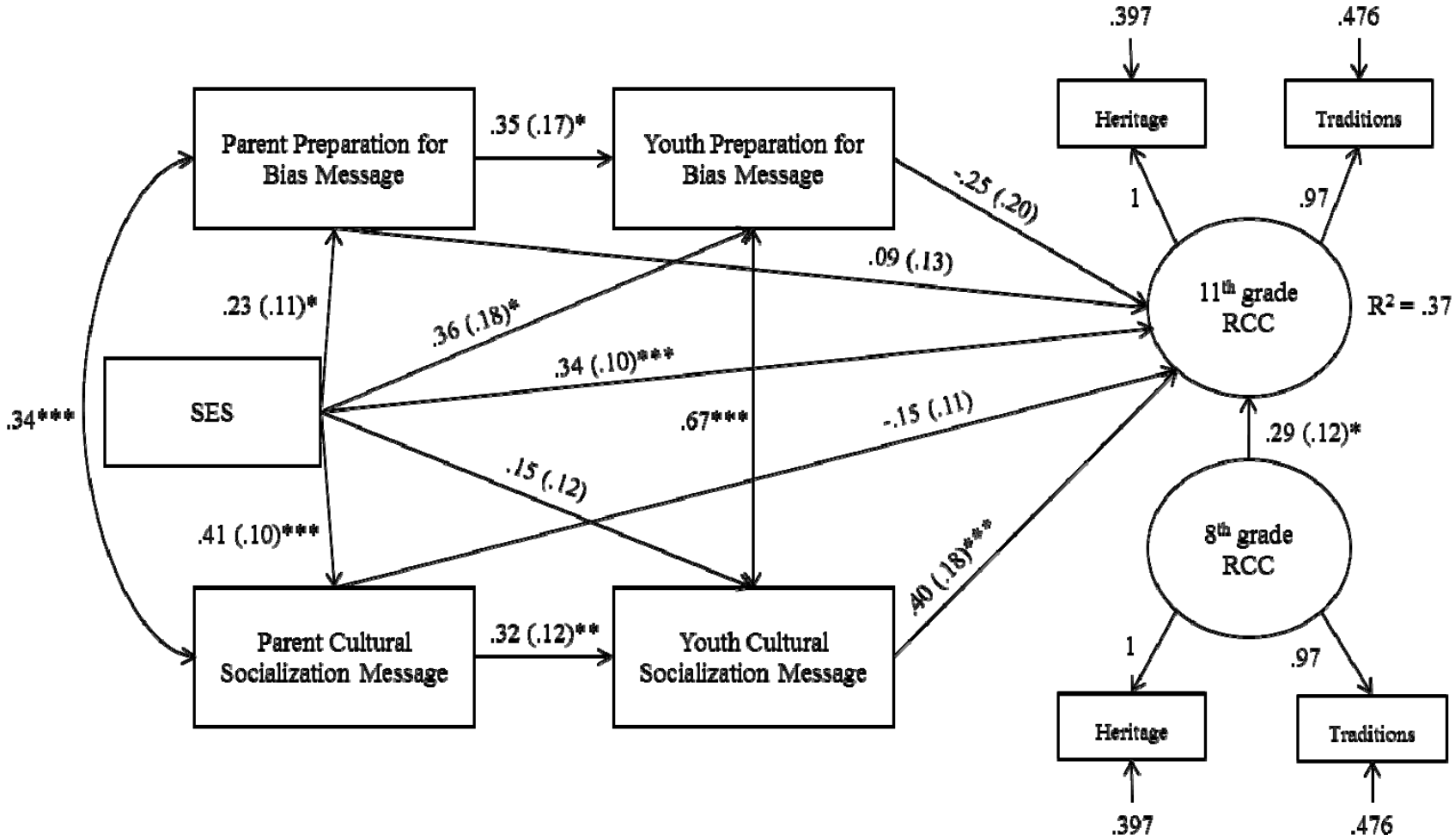
Table 5

Summaries of R/E Socialization SEMs for the 4 R/E Identity Factors (continued)

	Expected R/E Discrimination								R/E Behavioral Involvement							
	Female				Male				Female				Male			
	β	b	se	p	β	b	se	p	β	b	se	p	β	b	se	p
REI8 -> REI11	.56	.55	.15	.00	.51	.51	.11	.00	.44	.40	.08	.00	.27	.28	.11	.01
YPPB -> REI11	-.47	-.22	.17	.19	.01	.01	.08	.94	-.15	-.09	.18	.59	-.06	-.03	.09	.70
YPCS -> REI11	.72	.36	.16	.02	.27	.15	.08	.07	.63	.42	.15	.01	.54	.34	.09	.00
PPPB -> REI11	.11	.05	.11	.62	-.05	-.03	.06	.65	.12	.08	.11	.44	-.10	-.07	.07	.36
PPCS -> REI11	-.26	-.13	.09	.14	.05	.03	.06	.63	-.06	-.04	.09	.69	.06	.04	.07	.56
PPPB -> YPPB	.31	.35	.16	.03	.07	.07	.13	.58	.31	.34	.16	.03	.07	.07	.13	.58
PPCS -> YPCS	.30	.31	.12	.01	.11	.11	.11	.29	.30	.31	.12	.01	.11	.11	.12	.29
SES -> REI11	.35	.23	.08	.01	.09	.07	.06	.27	.15	.14	.08	.07	-.01	-.01	.07	.89
SES -> YPPB	.25	.37	.18	.04	.12	.16	.14	.25	.25	.35	.17	.04	.12	.16	.14	.25
SES -> YPCS	.11	.15	.12	.23	.21	.29	.13	.03	.11	.15	.12	.23	.21	.29	.13	.03
SES -> PPPB	.19	.23	.11	.03	.17	.22	.11	.05	.19	.23	.11	.03	.17	.22	.11	.05
SES -> PPCS	.32	.41	.10	.00	.29	.39	.11	.00	.32	.41	.10	.00	.29	.39	.11	.00
REI8 -> YPPB	.28	.59	.32	.07	-.09	-.15	.23	.51	.10	.14	.20	.48	.21	.33	.20	.11
REI8 -> YPCS	.16	.31	.23	.18	.14	.26	.20	.18	.17	.23	.15	.13	.26	.42	.18	.02
PPPB -> YPPB -> REI11†	-.15	-.08	.07	.14	.00	.00	.01	.47	-.05	-.03	.07	.31	.00	.00	.01	.38
PPCS -> YPCS -> REI11†	.22	.11	.07	.06	.03	.02	.02	.18	.19	.13	.07	.03	.06	.04	.04	.15
11^{th}G R/E Identity R^2	.61				.40				.61				.42			
χ^2 Contribution by Gender	108.80				87.10				114.18				110.20			
Fit Statistics	CFI = .894, RMSEA = .044, WRMR = 1.259								CFI = .951, RMSEA = .028, WRMR = 1.163							

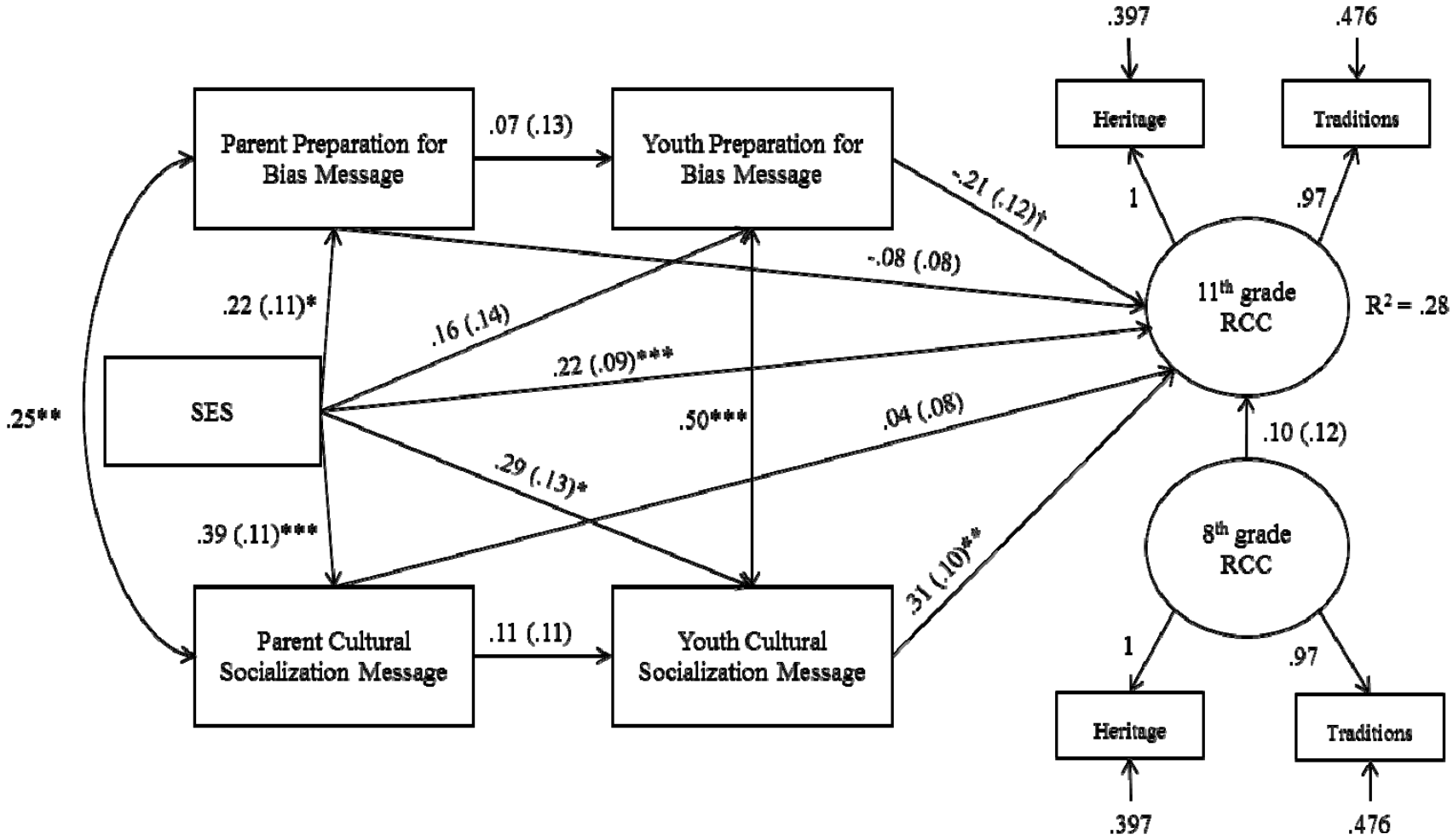
REI8 = 8^{th} Grade R/E Identity; REI11 = 11^{th} Grade R/E Identity; SES = Family Socio-Economic Status; YPPB = Youth Report of Parents' Preparation for Bias Messages; YPCS = Youth Report of Parents' Cultural Socialization; PPPB = Parent Report of Parents' Preparation for Bias Messages; PPCS = Parent Report of Parents' Cultural Socialization Messages; † = one-sided p values.

Figure 1. Structural equation model predicting 11th grade racial/ethnic identity among females.



Note: Path coefficients are unstandardized. Standard errors are shown in parentheses.
* $p < .05$, ** $p < .01$, *** $p < .001$.

Figure 2. Structural equation model predicting 11th grade racial/ethnic identity among males



Note: Path coefficients are unstandardized. Standard errors are shown in parentheses.
† $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Racial/Ethnic Socialization and Identity Development in Black Families: The Role of Parent and Youth Reports

Online Supplement

Our initial analysis of the relations between parents' racial/ethnic (R/E) socialization messages and youth R/E identity development included analyses of self-esteem that paralleled the analyses of R/E identity included in the main report. There are two primary reasons we included self-esteem in these analyses: First, the concept of self-esteem has played a central role in R/E identity theory (cf. Ashmore, Deaux, & McLaughlin-Volpe, 2004; Luhtanen and Crocker, 1992; Phinney, 1992). Second, the concept of self-esteem has been used by researchers studying the relations between parent R/E socialization practices and youth R/E identity.

For example, Murry, Brody, and colleagues (Brody et al. 2004; Murry et al., 2005, 2009) argued and found that certain parental practices, including R/E socialization (as reported by mothers), instill positive R/E pride and self-esteem in their children, which, in turn, predicts positive child outcomes. This model is supported by research showing that Black parents who socialize their children around issues of race/ethnicity have children with more positive R/E identities and self-esteem, suggesting that they are less likely to internalize negative stereotypes about Blacks (e.g., Harris-Britt, Valrie, Kurtz-Costes, & Rowley, 2007; Murry et al., 2005, 2009; Neblett, Smalls, Ford, Nguyen, & Sellers, 2009).

In addition, Hughes, Witherspoon, and colleagues (2009) recently proposed a similar theoretical model linking parent R/E socialization to adolescent outcomes through positive R/E identity and self-esteem. Taken together, these models suggest that relations between parent R/E socialization and youth psychosocial outcomes are mediated through youth-level process variables that include both R/E identity and self-esteem.

In the main report, we argued and found partial support for the idea that parents' R/E socialization messages become integrated into youth R/E identity, in part, by youth perceiving and constructing meaning around the messages being delivered by their parents (cf. Carlson,

Cooper, & Spradling, 1991; Gniewosz & Noack, 2012; Ohannessian, Lerner, Lerner, & von Eye, 1995; 2000). Thus, we treat parent and youth reports of parents' R/E socialization messages as separate constructs. Here, in the online supplement, we examine how parent and youth reports of parents' R/E socialization messages are related to youth self-esteem by explicitly testing the mediation model proposed by Eccles and her colleagues (e.g., Eccles, 1983, 1993; Eccles & Wigfield, 2002) that the influence of parent socialization on youth outcomes will be explained largely through youth perceptions of their parent's socialization practices. We also present the results of confirmatory factor analyses (CFA) used to examine R/E identity and self-esteem measurement model invariance across both time and gender.

We conducted structural equation models (SEMs) using M*plus* (Muthén & Muthén 1998–2010), which allowed us to correct for the effects of measurement error, to test the proposed model that parent reports of R/E socialization have an indirect effect on 11th grade youth self-esteem through youth reports of parents' R/E socialization. In these analyses, we controlled for earlier reports (8th grade) of youth self-esteem in order to explore the extent to which parent and youth reports of parent's R/E socialization are related to changes in self-esteem from the 8th through 11th grades. We assume that although the youth and parents are reporting about socialization during the 11th grade assessment, these reports reflect their recent history of R/E socialization. Accordingly, our theoretical model suggests that youth and parent reports of parents' 11th grade R/E socialization messages will be related to changes in self-esteem from the 8th grade (8thG) to the 11th grade (11thG).

Measures. *Self-esteem (S-E).* S-E was measured using 3 items adapted from Harter's (1982) global self-worth scale and rated from 1 (*almost never*) to 5 (*almost always*): "How often do you wish you were different than you are?", "How often would you like to change lots of

things about yourself if you could?", and "How often are you pretty sure about yourself?". These items were reverse scored, as necessary, such that higher values indicate higher levels of self-esteem (8^{th}G α = .68; 11^{th}G α = .68). (The socioeconomic status [SES] and R/E socialization measures are described in the main report).

Youth R/E Identity and Self-Esteem Measurement Models

We conducted structural equation modeling (SEM) using M*plus* Version 6.11 (Muthén & Muthén 1998–2010) to test the hypothesis that parent reports of R/E socialization messages have an indirect effect on self-esteem through youth reports of their parents' R/E socialization messages. First, we present the results of confirmatory factor analyses (CFA) designed to test the hypothesis that the four dimensions of R/E identity used in the main report can be treated as a single second-order factor in our primary analyses. Next, we present the results of multiple-group SEMs designed to test the hypothesis that the R/E identity and self-esteem measurement models are invariant across gender and time. Finally, we present the results of the SEMs used to test the relations among parent reports of their R/E socialization messages, youth reports of parents' R/E socialization messages, and the development of youth self-esteem.

To evaluate the overall fit of the SEMs, we report fit indices provided by M*plus*: the chi-square statistic, the Comparative Fit Index (CFI), and the Root-Mean-square Error of Approximation (RMSEA). In addition, for the CFAs we report the Standardized Root-Mean-Squared Residual (SRMR), and for the full structural models we report the Weighted Root-Mean-Squared Residual (WRMR). In order to accurately estimate indirect effects with dichotomous mediator variables, we used the WLSMV estimator (Muthén & Muthén 1998–2010). In addition, we used the M*plus* DIFFTEST procedure to test the difference between nested models involving the WLSMV estimator (Muthén & Muthén 1998–2010).

R/E identity dimensionality. R/E identity is viewed increasingly as a multidimensional construct (e.g., Ashmore et al., 2004; Phinney, 1992; Phinney & Ong, 2007; Sellers, Smith, Shelton, Rowley, & Chavous, 1998). In the present study, four dimensions of R/E identity were assessed when youth were in the 8th and 11th grades: R/E cultural connection, R/E importance, expected R/E discrimination, and R/E behavioral involvement. R/E cultural connection refers to beliefs about having meaningful R/E traditions and heritage; R/E importance refers to beliefs about the relevance of R/E background to one's daily life; expected R/E discrimination refers to beliefs about encountering future R/E discrimination; and R/E behavioral involvement refers to the frequency of engaging in behaviors that reflect one's R/E group membership. Details about the measurement procedure and reliabilities can be found in the main report. Here, in the supplement, we report on our analysis of the R/E identity measurement model.

Given theory indicating that R/E identity is a multidimensional construct, and our tentative hypothesis that the relations between R/E socialization and R/E identity may vary as a function of the specific dimension of R/E identity, we used CFAs to test the hypothesis that our four R/E identity factors form a unidimensional second-order factor. We first specified a measurement model using a single 8thG R/E identity factor reflecting the 16 observed 8thG R/E identity variables (χ^2 [104] = 906.48, $p < .001$). We then specified a measurement model using four correlated 8thG R/E identity factors corresponding to our four theoretically-specified R/E identity factors (χ^2 [98] = 298.39, $p < .001$; CFI = .872, RMSEA = .070, SRMR = .053).

Comparing these models using a chi-square difference test revealed that the four-factor model fit the data better than the one-factor model, $\chi^2_{(diff)} = 608.09$, $df_{(diff)} = 6$, $p < .001$. Comparing the 8thG four-factor model to an 8thG 2nd-order factor model, in which a single 2nd-order R/E identity factor was reflected by the four R/E identity factors, worsened the model fit,

$\chi^2_{(diff)} = 7.92$, $df_{(diff)} = 2$, $p < .025$. Repeating these analyses on the 11thG R/E identity factors yielded similar results: The 11thG four-factor model (χ^2 [98] = 363.38, $p < .001$; CFI = .867, RMSEA = .073, SRMR = .061) fit the data better than the one-factor model, $\chi^2_{(diff)} = 633.28$, $df_{(diff)} = 6$, $p < .001$, and the 2nd-order factor model worsened the model fit, $\chi^2_{(diff)} = 21.03$, $df_{(diff)} = 2$, $p < .001$.

R/E identity and self-esteem invariance. We next tested whether the measurement models for, hence the interpretation of, self-esteem and each of the four R/E identity factors were invariant across gender (i.e., female and male) and time (i.e., 8thG and 11thG). Beginning with R/E Cultural Connection (RCC), comparing a model with two correlated RCC factors (i.e., 8thG and 11thG) – each reflected by the four respective 8thG and 11thG observed variables and with the factor loadings unconstrained across females and males – to a similar model constraining the factor loadings to be equivalent across genders revealed that the equality constraints worsened the model fit, $\chi^2_{(diff)} = 18.43$, $df_{(diff)} = 6$, $p < .01$.

Consistent with recent work on this variable indicating that the RCC factor can be adequately specified using only two indicator variables (i.e., 'heritage' and 'traditions'), with no reduction in Cronbach's alpha (Peck, Brodish, Malanchuk, & Eccles, 2010), the source of misfit involved differences between females and males in the loading patterns of the 'supportive' and 'close friends' variables. Comparing the unconstrained to constrained two-item RCC models revealed factorial invariance across gender, $\chi^2_{(diff)} = 2.11$, $df_{(diff)} = 2$, $p > .10$. Similar invariant factor loadings between females and males were obtained for R/E Importance (RI), $\chi^2_{(diff)} = 5.00$, $df_{(diff)} = 4$, $p > .10$; Expected R/E Discrimination (ERD), $\chi^2_{(diff)} = 6.28$, $df_{(diff)} = 6$, $p > .10$, R/E Behavioral Involvement (RBI), $\chi^2_{(diff)} = 4.44$, $df_{(diff)} = 8$, $p > .10$, and Self-Esteem (S-E), $\chi^2_{(diff)} = 2.26$, $df_{(diff)} = 4$, $p > .10$

Given factorial invariance across gender for each of these five variables, we then tested for longitudinal invariance. Beginning with the two-item RCC factors, comparing the longitudinally-unconstrained model, in which the factor loadings were free to vary between the 8thG and 11thG, to the constrained model in which the factor loadings were set to be equal across the 8thG and 11thG, revealed that the RCC factor loadings were invariant across time, $\chi^2_{(diff)} = 0.12$, $df_{(diff)} = 1$, $p > .10$. Similar invariant factor loadings between 8thG and 11thG were obtained for RI, $\chi^2_{(diff)} = 0.33$, $df_{(diff)} = 2$, $p > .10$; ERD, $\chi^2_{(diff)} = 4.49$, $df_{(diff)} = 3$, $p > .10$; BI, $\chi^2_{(diff)} = 2.87$, $df_{(diff)} = 4$, $p > .10$; and S-E, $\chi^2_{(diff)} = 0.33$, $df_{(diff)} = 2$, $p > .10$. All of these gender and longitudinal invariance models were also found to be, and subsequently treated as, invariant at the residual and intercept levels, with one exception: The ERD item intercepts varied across genders and were allowed to vary in subsequent models.

Parent R/E Socialization and Self-Esteem. The SEMs involving self-esteem were specified like the models involving R/E identity (described in the main report) but without the paths from 8thG S-E to youth reports of parents sending preparation for bias messages (YPPB) and youth reports of parents sending cultural socialization messages (YPSC). See Table 4s for the female and male means, standard deviations, and correlations for the major study variables.

The multi-group model examining 11th grade S-E fit very well (χ^2 (86) = 85.70, p = .489, CFI = .995, RMSEA = .001, WRMR = .948). The structural relations among SES and the R/E socialization variables are similar to the relations found in the R/E identity models (see Table 5s). For both daughters (χ^2 contribution = 38.85; 11th grade S-E R^2 = .31) and sons (χ^2 contribution = 46.84; 11thG S-E R^2 = .30), none of the R/E socialization variables was associated with 11thG S-E, and neither of the indirect R/E socialization effects approached significance.

Results of the tests of the more restrictive models to better understand the observed gender differences were practically identical to the results reported for the R/E identity factors.

Discussion

In a sample of Black adolescents and their families, we examined parent and youth reports of parents' R/E socialization messages and their relations to the development of self-esteem. We found no support for the idea that parent or youth reports of parents' R/E socialization messages are related to the development of youth self-esteem during middle to late adolescence.

Previous research on the impact of R/E socialization on self-esteem is mixed, with some research demonstrating significant relations (e.g., Hughes, Witherspoon, et al., 2009; Harris-Britt et al., 2007; Murry et al., 2009) and other research demonstrating no relations (e.g., Davis & Stevenson, 2006). The age of the youth included in these studies may help to explain these discrepant findings. In the present study, and in Davis and Stevenson (2006), participants were in the 10th and 11th grades. In Hughes, Witherspoon, et al. (2009), Harris-Britt et al. (2007), and Murry et al. (2009) participants were in the 4-6th grades, 8th grade, and 5th grade, respectively.

Among younger children, parents' R/E socialization may be more strongly related to youth self-esteem because of the more important role of the family in childhood and early adolescence than in later adolescence (Collins & Laursen, 2006). As adolescents gain autonomy and independence from the family, the influence of parents on their children decreases, while peer and academic influences increase (Collins & Laursen, 2006). For example, the importance of peer social relationships for self-esteem is particularly strong during adolescence (e.g., Thomaes et al., 2010). Thus, it is possible that the influence of parents on their children's self-

esteem may decrease before the influence of parents on R/E identity, yielding a pattern of findings consistent with those obtained in the present study.

The results of the present study may also appear to be similar to the results obtained by Murry et al. (2009) who found that parent R/E socialization predicted youth *self-pride* across the 5th and 6th grades. However, there are several reasons to avoid interpreting our results as an attempted replication of the Murry et al. results. For example, in addition to the age differences in our samples, their R/E socialization factor was indicated by parent reports and included reference to both preparation for bias and cultural socialization, so the differential effects we found between parent and youth reports and between preparation for bias and cultural socialization messages (described in the main report) are difficult to reconcile with their results. Most importantly, however, rather than modeling the relations of R/E socialization messages to R/E identity and self-esteem in separate models, as we did, they modeled the relations of R/E socialization to a latent variable (i.e., self-pride) indicated by measures of both R/E identity and self-esteem. Consequently, and as at least partially suggested by our null findings with respect to self-esteem, the relations they observed between R/E socialization and self-pride may have been driven primarily by the relations between R/E socialization and R/E identity.

References

Ashmore, R. D., Deaux, K., & McLaughlin-Volpe, T. (2004). An organizing framework for collective identity: Articulation and significance of multidimensionality. *Psychological Bulletin, 130,* 80-114.

Brody, G. H., Murry, V. M., Gerrard, M., Gibbons, F. X., Molgaard, V., McNair, L., et al. (2004). The Strong African American Families Program: Translating research into prevention programming. *Child Development, 75,* 900–917.

Carlson, C. I., Cooper, C. R., & Spradling, V. Y. (1991). Developmental implications of shared versus distinct perceptions of the family in early adolescence. *New Directions For Child Development*, *51,* 13-32.

Collins, W. A., & Laursen, B. (2006). Parent-adolescent relationships. In P. Noller & J. A. Feeney (Eds.), *Close relationships: Functions, forms, and processes* (pp. 111-125). Hove, England: Psychology Press.

Davis, G. Y., & Stevenson, H. C. (2006). Racial socialization experiences and symptoms of depression among Black youth. *Journal of Child and Family Studies, 15,* 303-317.

Eccles, J. S. (1983). Expectancies, values, and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motives: Psychological and sociological approaches* (pp. 75-146). San Francisco: Freeman and Company.

Eccles, J. S. (1993). School and family effects on the ontogeny of children's interests, self-perceptions, and activity choice. In J. Jacobs (Ed.), *Nebraska Symposium on Motivation, 1992: Developmental perspectives on motivation* (pp. 145- 208). Lincoln, NB: University of Nebraska Press.

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review Of*

Psychology, *53*, 109-132.

Gniewosz, B., & Noack, P. (2012). The role of between-parent values agreement in parent-to-child transmission of academic values. *Journal Of Adolescence*, *35*, 809-821.

Harris-Britt, A., Valrie, C. R., Kurtz-Costes, B., & Rowley, S. J. (2007). Perceived racial discrimination and self-esteem in African American youth: Racial socialization as a protective factor. *Journal of Research on Adolescence, 17,* 669-682.

Harter, S. (1982). The perceived competence scale for children. *Child Development, 53,* 87-97.

Hughes, D., Witherspoon, D., Rivas-Drake, D., & West-Bey, N. (2009). Received ethnic-racial socialization messages and youths' academic and behavioral outcomes: Examining the mediating role of ethnic identity and self-esteem. *Cultural Diversity and Ethnic Minority Psychology, 15,* 112-124.

Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality And Social Psychology Bulletin*, *18*(3), 302-318.

Murry, V. M., Brody, G. H., McNair, L. D., Luo, Z., Gibbons, F. X., Gerrard, M., & Wills, T. A. (2005). Parental involvement promotes rural African American youths' self-pride and sexual self-concepts. *Journal of Marriage and Family, 67,* 627-642.

Murry, V. M., Berkel, C., Brody, G. H., Miller, S. J., & Chen, Y. (2009). Linking parental socialization to interpersonal protective processes, academic self-presentation, and expectations among rural African American youth. *Cultural Diversity and Ethnic Minority Psychology, 15,* 1-10.

Muthén, L.K. & Muthén, B.O. (1998-2010). *Mplus User's Guide. Sixth Edition*. Los Angeles, CA: Muthén & Muthén.

Neblett, E. W., Smalls, C. P., Ford, K. R., Nguyen, H. X., & Sellers, R. M. (2009). Racial socialization and racial identity: African American parents' messages about race as precursors to identity. *Journal of Youth and Adolescence, 38,* 189-203.

Ohannessian, C., Lerner, R. M., Lerner, J. V., & von Eye, A. (1995). Discrepancies in adolescents' and parents' perceptions of family functioning and adolescent emotional adjustment. *The Journal Of Early Adolescence*, *15*, 490-516.

Ohannessian, C., Lerner, R. M., Lerner, J. V., & von Eye, A. (2000). Adolescent-parent discrepancies in perceptions of family functioning and early adolescent self-competence. *International Journal Of Behavioral Development*, *24*, 362-372.

Peck, S. C., Brodish, A. B., Malanchuk, O., & Eccles, J. S. (2010, June). Conceptualizing and measuring multiple dimensions of individual-level racial/ethnic identity. In A. B. Brodish (Chair), *Racial/Ethnic Identity: Insights on Measurement, Development, Changes, and Consequences*. Symposium conducted at the inaugural meeting of the Society for the Psychological Study of Ethnic Minority Issues, Ann Arbor, MI.

Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for diverse groups. *Journal of Adolescence, 13,* 171-183.

Phinney, J, S., & Ong, A. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, 54,* 271-281.

Sellers, R. M., Smith, M. A., Shelton, J. N., Rowley, S. A., & Chavous, T. M. (1998). Multidimensional model of racial identity: A reconceptualization of African American racial identity. *Personality and Social Psychology Review, 2,* 18-39.

Thomaes, S., Reijntjes, A., Orobio de Castro, B., Bushman, B. J., Poorthuis, A., & Telch, M. J. (2010). I like me if you like me: On the interpersonal modulation and regulation of preadolescents' state self-esteem. *Child Development, 81,* 811-825.

Table 4s

Means, Standard Deviations, and Correlations by Gender and Wave for Major Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. SES	--	.18	.27	.08	.18	.13	.23	.06	.14	.15	.11	.05	.25	.06	.14	.10	.04
2. YPtbB	.21	--	.27	.48	.77	.09	.13	.05	.22	.11	.16	-.10	.20	.19	.20	.35	-.11
3. PPtbB	.26	.30	--	.09	.22	.53	.69	.08	.07	.12	.13	-.07	.10	.16	.09	.13	.08
4. YPPB	.17	.44	.17	--	.28	.02	.13	.01	.02	-.02	.10	-.09	-.02	.04	.05	.15	-.07
5. YPCS	.15	.88	.26	.35	--	.05	.10	.13	.17	.12	.17	-.03	.23	.21	.23	.36	-.05
6. PPPB	.14	.08	.38	.13	.02	--	.17	.10	-.08	.13	.04	-.06	-.04	.05	-.02	-.03	.08
7. PPCS	.25	.22	.76	.18	.22	.21	--	.03	-.04	.04	.01	-.04	.10	.13	.08	.10	.07
8. RCC8	.19	.16	.02	.16	.17	.03	.00	--	.24	.29	.27	-.18	.21	.16	.24	.14	-.02
9. RI8	.10	.18	.26	.07	.12	.13	.17	.20	--	.20	.30	.11	.14	.30	.12	.17	.02
10. ERD8	.20	.20	.11	.16	.13	.00	.07	.32	.24	--	.26	-.07	.19	.23	.38	.12	.03
11. RBI8	.04	.13	.13	.05	.11	.08	.10	.23	.32	.26	--	-.11	.21	.20	.03	.30	-.05
12. S-E8	.06	.02	03	.00	-.02	-.02	-.01	-.10	-.02	-.08	.12	--	-.11	.01	-.11	-.13	.40
13. RCC11	.27	.26	.15	.11	.27	.04	.06	.34	.29	.30	.26	.03	--	.15	.27	.23	-.07
14. RI11	.05	.27	.16	.14	.21	-.01	.05	.12	.42	.24	.31	.06	.39	--	.16	.41	.08

Table 4s *Means, Standard Deviations, and Correlations by Gender and Wave for Major Study Variables (continued)*

15. ERD11	.23	.32	.14	.10	.30	.00	.02	.27	.27	.42	.23	.07	.37	.27	--	.28	-.12
16. RBI11	.21	.43	.27	.16	.41	.12	.15	.21	.33	.21	.42	.08	.44	.47	.28	--	-.15
17. S-E11	-.03	.08	.07	.05	.04	.02	.02	-.06	-.02	.02	.03	.39	-.05	-.01	-.08	.10	--
M (*SD*)																	
Females	-0.14 (.81)	0.35 (.48)	0.73 (.45)	0.09 (.29)	0.30 (.46)	0.28[a] (.45)	0.61 (.49)	2.67 (1.24)	3.57 (.53)	2.23 (.73)	2.87 (.94)	3.82[b] (.92)	2.91 (1.17)	3.37 (.58)	2.14[c] (.68)	2.78 (.89)	3.80 (.88)
Males	-0.08 (.77)	0.40 (.49)	0.71 (.46)	0.13 (.34)	0.28 (.45)	0.40[a] (.49)	0.54 (.50)	2.80 (1.06)	3.52 (.54)	2.27 (.73)	2.87 (.83)	4.04[b] (.79)	3.01 (1.11)	3.44 (.51)	2.29[c] (.68)	2.89 (.85)	3.94 (.87)

Note: Correlations below the diagonal are among females in the sample (*n*s = 206-254); correlations above the diagonal are among males in the sample (*n*s = 207-248). Although exact *p* values vary with the N of each cell, correlation coefficients greater than .13, .16, and .21 have $p < .05$, $p < .01$, and $p < .001$. The mean difference between females and males is statistically significant, $p = .003^a$, $p = .009^b$, and $p = .013^c$. SES = Family Socio-Economic Status; YPtbB = Youth Report of Parents' General R/E Socialization Messages; PPtbB = Parent Report of Parents' General R/E Socialization Messages; YPPB = Youth Report of Parents' Preparation for Bias Messages; YPCS = Youth Report of Parents' Cultural Socialization; PPPB = Parent Report of Parents' Preparation for Bias Messages; PPCS = Parent Report of Parents' Cultural Socialization Messages; RCC8 = 8th Grade R/E Cultural Connection; RI8 = 8th Grade R/E Importance; ERD8 = 8th Grade Expected R/E Discrimination; RBI8 = 8th Grade R/E Behavioral Involvement; S-E8 = 8th Grade Self-Esteem; RCC11 = 11th Grade R/E Cultural Connection; RI11 = 11th Grade R/E Importance; ERD11 = 11th Grade Expected R/E Discrimination; RBI11 = 11th Grade R/E Behavioral Involvement; S-E11= 11th Grade Self-Esteem.

Table 5s

Summaries of R/E Socialization SEMs for Self-Esteem

	Self-Esteem							
	Female				Male			
	β	b	se	p	β	b	se	p
SE8 -> SE11	.54	.50	.09	.00	.51	.57	.11	.00
YPPB -> SE11	.17	.12	.20	.54	-.09	-.07	.12	.53
YPCS -> SE11	-.06	-.04	.17	.81	-.06	-.05	.11	.66
PPPB -> SE11	.00	.00	.13	.99	.12	.10	.08	.23
PPCS -> SE11	.05	.04	.12	.72	.07	.06	.08	.53
PPPB -> YPPB	.31	.34	.16	.03	.07	.07	.13	.58
PPCS -> YPCS	.30	.31	.11	.01	.11	.11	.11	.29
SES -> SE11	-.09	-.09	.09	.33	.04	.04	.09	.66
SES -> YPPB	.25	.35	.17	.04	.12	.16	.14	.25
SES -> YPCS	.11	.14	.12	.23	.21	.28	.13	.03
SES -> PPPB	.19	.23	.11	.03	.17	.22	.11	.05
SES -> PPCS	.32	.41	.10	.00	.29	.39	.11	.00
PPPB -> YPPB -> SE11†	.05	.04	.07	.28	-.01	-.01	.01	.35
PPCS -> YPCS -> SE11†	-.02	-.01	.05	.40	-.01	-.01	.01	.34

SE8 = 8th Grade Self-Esteem; SE11 = 11th Grade Self-Esteem; SES = Family Socio-Economic Status; YPPB = Youth Report of Parents' Preparation for Bias Messages; YPCS = Youth Report of Parents' Cultural Socialization; PPPB = Parent Report of Parents' Preparation for Bias Messages; PPCS = Parent Report of Parents' Cultural Socialization Messages; na = not applicable; † = one-sided p value.