

Dev Psychol. Author manuscript; available in PMC 2015 July 01.

Published in final edited form as:

Dev Psychol. 2014 July; 50(7): 1897–1909. doi:10.1037/a0036800.

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, and University of Michigan

Jacquelynne S. Eccles University of Michigan

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.

Keywords

racial/ethnic ic	dentity; racial/	ethnic social	lization; ado	lescence; paren	t socialization
	•				

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 \approx 12), wave 3 data were collected during the summer after the adolescents completed the $8^{th}G$ (Age \approx 14), and wave 4 data were collected during the summer after the adolescents completed the 11^{th} G (Age ≈ 17). In the 8^{th} G and 11^{th} G, 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 ps > .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). 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 &

 $^{^{1}}$ We did not include data from participants for whom we have only 8^{th} 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.

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 11^{th} G 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 11^{th} G 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.

<u>Preparation for bias and cultural socialization messages:</u> 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

<u>R/E Cultural Connection (RCC):</u> 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 $11^{th}G$: "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 ($8^{th}G \alpha = .68$; $11^{th}G \alpha = .74$). Revised scales using only the first two items (see the online supplement) yielded $8^{th}G$ and $11^{th}G \alpha$'s = .75 and .71.

<u>R/E importance (RI):</u> 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?" ($8^{th}G \alpha = .65$; $11^{th}G \alpha = .63$).

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" ($8^{th}G \alpha = .73$; $11^{th}G \alpha = .72$). 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?" ($8^{th}G \alpha = .73; 11^{th}G \alpha = .72$).

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 × 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 (β = 0.39, p = .03, OR = 1.48) and cultural socialization (β = 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 (β = -0.54, p = .005, OR = 0.59) and more likely to report sending cultural socialization messages (β = 0.38, p = .05, OR = 1.46) than parents of males, and these reports did not vary as a function of the gender × 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 × 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, $\Phi = .129$, QR = 2.40, 95% CI [1.02, 5.64]) but not sons (χ^2 [1, n = 248] = .07, p = .79, $\Phi = .017$, QR = 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, $\Phi = .158$). 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 Mplus 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 Mplus 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 Mplus: 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 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 $11^{th}G$ RCC fit very well (χ^2 (41) = 50.79, p = . 141; see Table 5). For daughters (see Figure 1), SES was positively associated with $11^{th}G$ 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

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

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 11^{th} G RCC. YPCS was positively associated with daughters' 11^{th} G RCC, but the negative association between YPPB and 11^{th} G RCC was not significant. The indirect effect of PPPB on 11^{th} G RCC via YPPB (90% CI on b = -.09 [-.23, .05]) was not significant, but the indirect effect of PPCS on 11^{th} G 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 $11^{\text{th}}G$ RCC ($\beta_8 = -.32/-.30$, p = .038; $\chi^{2*}[1] = 0.03$, p = .862) and YPCS on $11^{\text{th}}G$ RCC ($\beta_8 = .47/.48$, 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]). The remaining parameter estimates in these R/E identity models were similar to those for RCC (see Table 5).

³Similar 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 11^{thG} 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.

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 p 11th p 2. dentity did not worsen model fits, with the following exceptions: equality constraints on the daughter/son effects of YPPB (ps = p 1.2p 1.007, p 2.424; p 2.41 1 2.05, p 2.081) and YPCS (ps = p 2.42p 3.05, p 2.087) on p 1.41 p 3.05, p 3.05, p 3.081 and YPCS (ps = p 3.42p 3.092, p 3.093, p 3.093, p 3.093, p 3.093, p 3.093, p 3.094 p 3.094 p 3.095, p 3.095, p 3.095, p 3.096 p 3.096 p 3.097 p 3.097 p 3.097 p 3.097 p 3.097 p 3.098 p 3.099 p 3.09

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.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

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.

References

- Baumrind D. Current patterns of parental authority. Developmental Psychology Monograph. 1971; 4(1 Pt 2):1–103.10.1037/h0030372
- Brown TL, Linver MR, Evans M. The role of gender in the racial and ethnic socialization of African American adolescents. Youth & Society. 2010; 41:357–381.10.1177/0044118X09333665
- Caughy MO, O'Campo PJ, Randolph SM, Nickerson K. The influence of racial socialization practices on the cognitive and behavioral competence of African American preschoolers. Child Development. 2002; 73:1611–1625.10.1111/1467-8624.00493 [PubMed: 12361322]
- Cross, WE. Shades of black: Diversity in African-American identity. Philadelphia: Temple University Press; 1991.
- Darling N, Steinberg L. Parenting style as context: An integrative model. Psychological Bulletin. 1993; 113:487–496.10.1037/0033-2909.113.3.487
- Dubow, EF.; Huesmann, L.; Greenwood, D. Media and youth socialization: Underlying processes and moderators of effects. In: Grusec, JE.; Hastings, PD., editors. Handbook of socialization: Theory and research. New York: Guilford; 2007. p. 404-430.
- Eccles, JS. Expectancies, values, and academic behaviors. In: Spence, JT., editor. Achievement and achievement motives: Psychological and sociological approaches. San Francisco: Freeman and Company; 1983. p. 75-146.
- Eccles, JS. School and family effects on the ontogeny of children's interests, self-perceptions, and activity choice. In: Jacobs, J., editor. Nebraska Symposium on Motivation, 1992: Developmental perspectives on motivation. Lincoln, NB: University of Nebraska Press; 1993. p. 145-208.
- Eccles JS, Jacobs JE, Harold RD. Gender role stereotypes, expectancy effects, and parents' socialization of gender differences. Journal of Social Issues. 1990; 46:183–201.10.1111/j. 1540-4560.1990.tb01929.x
- Eccles, JS.; Jacobs, JE.; Harold, RD.; Yoon, KS.; Arbreton, A.; Freedman-Doan, C. Parents and gender-role socialization during middle childhood and adolescent years. In: Oksamp, S.; Costanzo, M., editors. Gender issues in contemporary society. Newbury Park: Sage; 1993. p. 59-83.
- Eccles JS, Wigfield A. Motivational beliefs, values, and goals. Annual Review Of Psychology. 2002; 53:109–132.10.1146/annurev.psych.53.100901.135153
- Eccles JS, Wong CA, Peck SC. Ethnicity as a social context for the development of African-American adolescents. Journal of School Psychology. 2006; 44:407–426.10.1016/j.jsp.2006.04.001
- Erikson, EH. Identity: Youth and crisis. London: Faber & Faber; 1968.
- Frabutt JA, Walker AM, MacKinnon-Lewis C. Racial socialization messages and the quality of mother/child interactions in African American families. Journal of Early Adolescence. 2002; 22:200–217.10.1177/0272431602022002004
- Gonzales NA, Cauce AM, Mason CA. Interobserver agreement in the assessment of parental behavior and parent-adolescent conflict: African American mothers, daughters, and independent observers. Child Development. 1996; 67:1483–1498.10.2307/1131713 [PubMed: 8890496]
- Guilamo-Ramos V, Jaccard J, Dittus P, Bouris A, Holloway I, Casillas E. Adolescent expectancies, parent-adolescent communication and intentions to have sexual intercourse among inner-city, middle school youth. Annals of Behavioral Medicine. 2007; 34:56–66.10.1007/BF02879921 [PubMed: 17688397]
- Hayduk, LA. Structural equation modeling with LISREL: Essentials and advances. Baltimore, MD: Johns Hopkins University Press; 1987.

Holsti, OR. Content analysis for the social sciences and humanities. Reading, MA: Addison-Wesley; 1969.

- Hughes, D.; Bachman, M.; Ruble, D.; Fuligni, A. Tuned in or tuned out: Parents' and children's interpretation of parental racial/ethnic socialization practices. In: Balter, L.; Tamis-LeMonda, CS., editors. Child psychology: A handbook of contemporary issues. New York: University Press; 2006. p. 591-610.
- Hughes D, Chen L. When and what parents tell children about race: An examination of race-related socialization among African American families. Applied Developmental Science. 1997; 1:200– 214.10.1207/s1532480xads0104_4
- Hughes D, Hagelskamp C, Way N, Foust MD. 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. 2009; 38:605–626.10.1007/s10964-009-9399-7 [PubMed: 19636759]
- Hughes, D.; Rivas, D.; Foust, M.; Hagelskamp, C.; Gersick, S.; Way, N. How to catch a moonbeam: A mixed-methods approach to understanding ethnic socialization in ethnically diverse families. In: Quintana, SM.; McKnown, C., editors. Handbook of race, racism, and child development. Hoboken: Wiley; 2008. p. 226-277.
- Hughes D, Rodriguez J, Smith EP, Johnson DJ, Stevenson HC, Spicer P. Parents' ethnic/racial socialization practices: A review of research and directions for future study. Developmental Psychology. 2006; 42:747–770.10.1037/0012-1649.42.5.747 [PubMed: 16953684]
- Hughes D, Witherspoon D, Rivas-Drake D, West-Bey N. 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. 2009; 15:112– 124.10.1037/a0015509 [PubMed: 19364198]
- Hunter D, Gambell T, Randhawa B. Gender gaps in group listening and speaking: Issues in social constructivist approaches to teaching and learning. Educational Review. 2005; 57:329– 355.10.1080/00131910500149416
- Knafo A, Schwartz SH. Parenting and adolescents' accuracy in perceiving parental values. Child Development. 2003; 74:595–611.10.1111/1467-8624.7402018 [PubMed: 12705575]
- Maccoby EE. The role of parents in the socialization of children: An historical overview. Developmental Psychology. 1992; 28:1006–1017.10.1037/0012-1649.28.6.1006
- McDonald RP, Ho MR. Principles and practices in reporting structural equation analyses. Psychological Methods. 2002; 7:64–82.10.1037/1082-989X.7.1.64 [PubMed: 11928891]
- McHale SM, Crouter AC, Kim J, Burton LM, Davis KD, Dotterer AM, et al. Mothers' and fathers' racial socialization in African American families: Implications for youth. Child Development. 2006; 77:1387–1402.10.1111/j.1467-8624.2006.00942.x [PubMed: 16999806]
- Murry VM, Berkel C, Brody GH, Miller SJ, Chen Y. Linking parental socialization to interpersonal protective processes, academic self-presentation, and expectations among rural African American youth. Cultural Diversity and Ethnic Minority Psychology. 2009; 15:1–10.10.1037/a0013180 [PubMed: 19209975]
- Muthén, LK.; Muthén, BO. Mplus User's Guide. 6. Los Angeles, CA: Muthén & Muthén; 1998–2010.
- Nam, CB.; Powers, MG. The socioeconomic approach to status measurement: With a guide to occupational and socioeconomic status scores. Houston: Cap and Gown Press; 1983.
- Neblett EW, Smalls CP, Ford KR, Nguyen HX, Sellers RM. Racial socialization and racial identity: African American parents' messages about race as precursors to identity. Journal of Youth and Adolescence. 2009; 38:189–203.10.1007/s10964-008-9359-7 [PubMed: 19636717]
- Phinney JS. The multigroup ethnic identity measure: A new scale for diverse groups. Journal of Adolescence. 1992; 13:171–183.10.1177/074355489272003 [PubMed: 2387919]
- Phinney JS, Chavira V. Parental ethnic socialization and adolescent coping with problems related to ethnicity. Journal of Research on Adolescence. 1995; 5:31–53.10.1207/s15327795jra0501_2
- Porath M. Young girls' social understanding: Emergent interpersonal expertise. High Ability Studies. 2001; 12:113–126.10.1080/13598130120058716

Rivas-Drake D, Hughes D, Way N. A preliminary analysis of associations among ethnic-racial socialization, ethnic discrimination, and ethnic identity among urban sixth graders. Journal of Research on Adolescence. 2009; 19:558–584.10.1111/j.1532-7795.2009.00607.x

- Schwarz JC, Barton-Henry MS, Pruzinsky T. Assessing child-rearing behaviors: A comparison of ratings made by mother, father, child, and sibling on the CRPBI. Child Development. 1985; 56:462–479.10.2307/1129734 [PubMed: 3987419]
- Stevenson HC, Arrington EG. Racial/ethnic socialization mediates perceived racism and the racial identity of African American adolescents. Cultural Diversity and Ethnic Minority Psychology. 2009; 15:125–136.10.1037/a0015500 [PubMed: 19364199]
- Tatum, BD. Why are all the Black kids sitting together in the cafeteria? And other conversations about race. New York: Basic Books; 1997.
- Thomas AJ, King CT. Gendered racial socialization of African American mothers and daughters. The Family Journal: Counseling and Therapy for Couples and Families. 2007; 15:137–142.
- Thomas AJ, Speight SL. Racial identity and racial socialization attitudes of African American parents. Journal of Black Psychology. 1999; 25:152–170.10.1177/0095798499025002002
- White-Johnson RL, Ford KR, Sellers RM. Parental racial socialization profiles: Association with demographic factors, racial discrimination, childhood socialization, and racial identity. Cultural Diversity and Ethnic Minority Psychology. 2010; 16:237–247.10.1037/a0016111 [PubMed: 20438162]
- Wigfield, A.; Byrnes, JP.; Eccles, JS. Development during early and middle adolescence. In: Alexander, PA.; Winne, PH., editors. The handbook of educational psychology. Mahwah, NJ: Erlbaum; 2006. p. 87-113.
- Wong CA, Eccles JS, Sameroff A. The influence of ethnic discrimination and ethnic identification on African American adolescents' school and socioemotional adjustment. Journal of Personality. 2003; 71:1197–1232.10.1111/1467-6494.7106012 [PubMed: 14633063]

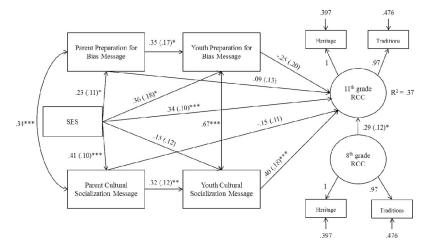


Figure 1. Structural equation model predicting 11^{th} grade racial/ethnic identity among females. Note: Path coefficients are unstandardized. Standard errors are shown in parentheses. * p < .05, *** p < .01, **** p < .001.

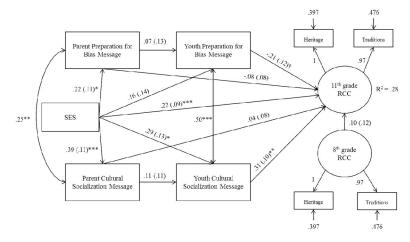


Figure 2. Structural equation model predicting 11^{th} grade racial/ethnic identity among males Note: Path coefficients are unstandardized. Standard errors are shown in parentheses. $\dagger p < .10, *p < .05, **p < .01, **** p < .001.$

Table 1Parent-Youth Convergence on 11th Grade Reports of General R/E Socialization Messages

Females			eral R/E socialization messages r child?
		NO	YES
		Actual n = 61 (24%)	Actual n = 104 (41%)
	NO	Expected $n = 45 (18\%)$	Expected $n = 120 (47\%)$
Did youth report that parent sends general R/E socialization messages?		ASR = 4.80	ASR = -4.80
		Actual n = 8 (3%)	Actual n = 81 (32%)
	YES	Expected $n = 24 (10\%)$	Expected $n = 65 (26\%)$
		ASR = -4.80	ASR = 4.80
Males		Did parent report sending gen to thei	eral R/E socialization message r child?
		NO	YES
		Actual n = 58 (24%)	Actual n = 91 (37%)
	NO	Expected $n = 43 (17\%)$	Expected $n = 106 (43\%)$
Did youth report that parent sends general R/E socialization messages?		ASR = 4.20	ASR = -4.20
		Actual n = 14 (6%)	Actual n = 85 (34%)
	YES	Expected $n = 29 (12\%)$	Expected $n = 70 (28\%)$
		ASR = -4.20	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).

 $\label{eq:Table 2} \mbox{Parent-Youth Convergence on 11^{th} Grade Reports of Preparation for Bias Messages}$

Females		Did parent report sending prepa chil	
		NO	YES
		Actual n = 170 (67%)	Actual n = 60 (24%)
	NO	Expected n = 166 (65%)	Expected $n = 64 (25\%)$
Did youth report that parent sends preparation for bias messages?		ASR = 2.10	ASR = -2.10
		Actual n = 13 (5%)	Actual n = 11 (4%)
	YES	Expected $n = 17 (7\%)$	Expected $n = 7 (3\%)$
		ASR = -2.10	ASR = 2.10
Males			eparation for bias messages to child?
		NO	YES
		Actual n = 129 (52%)	Actual n = 86 (35%)
	NO	Expected $n = 128 (52\%)$	Expected $n = 87 (35\%)$
Did youth report that parent sends preparation for bias messages?		ASR = .30	ASR =30
		Actual n = 19 (8%)	Actual n = 14 (6%)
	YES	Expected $n = 20$ (8%)	Expected $n = 13 (5\%)$
		ASR =30	ASR = .30

 $ASR = Adjusted \ Standardized \ Residual.$

 $\label{eq:Table 3} \mbox{Parent-Youth Convergence on 11^{th} Grade Reports of Cultural Socialization Messages}$

Females		Did parent report sending cultur chi	ral socialization messages to thei ild?
		NO	YES
		Actual n = 82 (33%)	Actual n = 97 (38%)
	NO	Expected $n = 70 (28\%)$	Expected $n = 109 (43\%)$
Did youth report that parent sends cultural socialization messages?		ASR = 3.40	ASR = -3.40
		Actual n = 17 (9%)	Actual n = 58 (20%)
	YES	Expected $n = 29 (11\%)$	Expected $n = 46 (18\%)$
		ASR = -3.40	ASR = 3.40
Males			ultural socialization message to child?
		NO	YES
		Actual n = 88 (35%)	Actual n = 90 (36%)
	NO	Expected $n = 83 (33\%)$	Expected $n = 96 (39\%)$
Did youth report that parent sends cultural socialization messages?		ASR = 1.50	ASR = -1.50
		Actual n = 27 (9%)	Actual n = 43 (20%)
	YES	Expected $n = 33 (13\%)$	Expected $n = 38 (15\%)$
		ASR = -1.50	ASR = 1.50

 $ASR = Adjusted \ Standardized \ Residual.$

NIH-PA Author Manuscript

NIH-PA Author Manuscript

Table 4

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

	1	2	3	4	w	9	7	&	6	10	11	12	13	14	15
1. SES18 .27 .08	1	.18	72.	80.	.18	.13	.23	90.	.14	.15	11.	.25	90.	.14	.10
2. YPtbB	.21	;	.27	.48	<i>TT</i> :	60:	.13	.05	.22	.12	.16	.20	.19	.20	.35
3. PPtbB	.26	.30	1	60:	.22	.53	69:	80.	.07	.12	.13	.10	.16	60.	.13
4. YPPB	.17	44.	.17	1	.28	.00	.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	80.	.38	.13	.02	;	.17	.10	08	.13	.00	04	.05	02	03
7. PPCS	.25	.22	.76	.18	.22	.21	ı	.03	04	.00	.01	.10	.13	80.	.10
8. RCC8	.19	.16	.02	.16	.17	.03	00.	ŀ	.24	.29	.27	.21	.16	.24	.14
9. RI8	.10	.18	.26	.07	.12	.13	.17	.20	ı	.20	.30	.14	.30	.12	.17
10. ERD8	.20	.20	.11	.16	.13	00.	.07	.32	.25	ŀ	.26	.19	.23	.38	.12
11. RBI8	.04	.13	.13	.05	.11	.08	.10	.23	.32	.25	I	.21	.20	.03	.30
12. RCC11	.27	.26	.15	.11	.27	.04	90.	.34	.29	.30	.26	I	.15	.27	.23
13. RI11	.05	.27	.16	.14	.21	01	.05	.12	.42	.24	.31	.39	ı	.16	.41
14. ERD11		.32	.14	.11	.30	00.	.00	.27	.27	.42	.22	.37	.27	1	.28
15. RBI11	.21	.43	.27	.16	.41	.12	.15	.21	.33	.21	.42	44.	.47	.27	1
M(SD)															
Females -	-0.14 (.81) 0.35 (.48) 0.73 (.45) 0.09 (.29)	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)	0.40 (.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 29b (68)	2.89 (.85)

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 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 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 = .003013^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;

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.

Dev Psychol. Author manuscript; available in PMC 2015 July 01.

Peck et al.

Table 5

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

			RÆ C	ultura	R/E Cultural Connection	ction					2	Œ Imj	R/E Importance	1)		
		Female	ale			Male	ه			Female	ale			Male	e	
	β	q	se	ď	θ	q	se	ď	В	q	se	d	В	q	se	þ
REI8 -> REI11	.32	.29	.12	.01	60.	.10	.12	.41	.49	.48	.10	00.	.27	.23	.10	.01
YPPB -> REI11	37	25	.20	.22	29	21	.12	60:	.31	.23	.23	.33	12	08	Ξ.	.46
YPCS -> REI11	.57	.40	.18	.03	.45	.31	.10	90.	.13	.10	.21	.63	.35	.23	.10	.02
PPPB -> REI11	.11	60:	.13	.51	12	08	80.	.29	15	12	1.	4.	.02	.02	.07	.81
PPCS -> REII1	20	15	Ξ	.19	.05	90.	80.	.63	.05	.04	.13	92.	.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.	Ξ.	.29	.30	.31	.12	.01	11.	.12	Ξ	.29
SES -> REI11	.36	.34	.10	00.	.24	.22	60.	.01	04	04	.10	69:	05	05	80.	.55
SES -> YPPB	.25	.36	.18	9.	.12	.16	1.	.25	.25	.35	.17	.00	.12	.16	1.	.25
SES -> YPCS	11.	.15	.12	.23	.21	.29	.13	.03	.11	.15	.12	.23	.21	.29	.13	.03
SES -> PPPB	.19	.23	Ξ	.03	.17	.22	Ξ.	.05	.19	.23	Π.	.03	.17	.22	Ξ	.05
SES -> PPCS	.32	.41	.10	00.	.29	.39	Ξ.	00.	.32	14.	.10	00.	.29	.39	Ξ	00.
REI8 -> YPPB	.27	.37	.19	.05	.01	.01	.19	96.	.12	.17	.22	.45	.03	.03	.15	.82
REI8 -> YPCS	.22	.29	1.	90.	.18	.27	.17	11.	14	.19	.15	.22	.26	.34	.15	.02
PPPB -> YPPB -> REI11 †	11	09	.08	.16	02	02	.03	.30	.10	80.	.08	.18	01	01	.01	.33
PPCS -> YPCS -> REI11†	.17	.13	.07	.00	.05	.04	.00	.17	.00	.03	90.	.31	90.	.03	.03	.16
11thG R/E Identity R ²		.37				.28				.45	16			.25		
χ^2 Contribution by Gender		35.29	63			15.50	0			61.87	37			46.20	0	
Fit Statistics)FI = .9	59, RIV	ISEA :	= .031, ^v	CFI = .969, RMSEA = .031, WRMR = .859	= .859		S	FI = .93	7, RM	SEA =	CFI = .937, RMSEA = .044, WRMR = 1.117	/RMR =	: 1.117	
		Ex	pecter	1 R/E	Discrim	Expected R/E Discrimination				R	Æ Bel	aviora	R/E Behavioral Involvement	rement		
		Female	ale			Male	٥			Female	916			Male	ه	
		FCIII	alc	1		Mai	اد			LOID	alle			Wia	اد	

Page 24

.28

β 72.

8.

s 80.

40

4

se p

.51

θ 12.

a | 8.

se ...

.55

.56

REI8 -> REI11

q

q

q

q

or Manuscript
<u>Z</u>
NIH-PA Author Manuscript
Author

		E	pected	I R/E	Expected R/E Discrimination	ination				×	Æ Bel	navior	R/E Behavioral Involvement	vement		
		Female	ale			Male	<u>e</u>			Female	ale			Male	e	
	β	Q	se	d	β	q	se	ď	В	q	se	ď	β	Q	æ	ď
YPPB -> REI11	47	22	.17	.19	.01	.01	80.	.94	15	09	.18	.59	06	03	60:	.70
YPCS -> REI11	.72	.36	.16	.02	.27	.15	.08	.07	.63	.42	.15	.01	.54	.34	60:	00.
PPPB -> REI11	11.	.05	11.	.62	05	03	90.	.65	.12	.08	11.	4.	10	07	.07	.36
PPCS -> REI11	26	13	60:	1.	.05	.03	90.	.63	06	04	60:	69:	90.	90.	.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	Ξ.	.11	1.	.29	.30	.31	.12	.01	11.	Π.	.12	.29
SES -> REI11	.35	.23	80.	.01	60:	.07	90.	.27	.15	.14	.08	.07	01	01	.07	68.
SES -> YPPB	.25	.37	.18	90.	.12	.16	1.	.25	.25	.35	.17	90.	.12	.16	1.	.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	4.	.10	00.	.29	.39	Ξ.	00:	.32	4.	.10	00.	.29	.39	Ξ.	00.
REI8 -> YPPB	.28	.59	.32	.07	09	15	.23	.51	.10	1.	.20	.48	.21	.33	.20	Ξ.
REI8 -> YPCS	.16	.31	.23	.18	1.	.26	.20	.18	.17	.23	.15	.13	.26	.42	.18	.02
PPPB -> YPPB -> REII1 †	15	08	.07	1.	00.	00.	.01	.47	05	03	.07	.31	00.	00.	.01	.38
PPCS -> YPCS -> REI11†	.22	11.	.07	90.	.03	.02	.02	.18	.19	.13	.07	.03	90.	.00	9.	.15
11 th G R/E Identity R ²		19.				.40				19.				.42		
χ^2 Contribution by Gender		108.80	08			87.10	0			114.18	18			110.20	00	
Fit Statistics		CFI = .894, RMSEA = .044, WRMR = 1.259	4, RM	SEA =	.044, W	/RMR :	= 1.259	_	ا	FI = .95	1, RM	SEA =	028, V	CFI = .951, RMSEA = .028, WRMR = 1.163	: 1.163	

REI8 = 8th Grade R/E Identity; REI11 = 11th 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;

 $\vec{\tau}$ = one-sided p values.