

Title Page

Parental Ethnic-Racial Socialization Practices and Children of Color's Psychosocial and  
Behavioral Adjustment: A Systematic Review and Meta-Analysis

In Press in American Psychologist Journal

Authors:

Ming-Te Wang

\*Daphne A. Henry

\*Leann V. Smith

\*James P. Huguley

University of Pittsburgh

Jiesi Guo

Australian Catholic University

Address correspondence to: Ming-Te Wang

Email: [halustayan@gmail.com](mailto:halustayan@gmail.com)

Phone: 412-624-6945

Address: 230 South Bouquet Street, Pittsburgh, PA, 15213

Note: Henry, Smith, and Huguley have equal intellectual contribution to this manuscript so they share the second authorship

Parental Ethnic-Racial Socialization Practices and Children of Color's Psychosocial and Behavioral Adjustment: A Systematic Review and Meta-Analysis

Abstract

Despite increasing empirical research documenting the association between parental ethnic-racial socialization and youth of color's psychosocial well-being, evidence on the extent to which ethnic-racial socialization practices are linked to youth outcomes and potential variation in these relations remains equivocal. In the current study, a meta-analysis of 102 studies with 803 effect sizes and 27,221 participants reveals that overall ethnic-racial socialization was positively, albeit modestly, associated with self-perceptions, interpersonal relationship quality, and internalizing behavior. Ethnic-racial socialization's overall association with externalizing behavior was non-significant. Moreover, ethnic-racial socialization's connection to psychosocial outcomes varied by the subtype that parents used, the developmental stage and race/ethnicity of the target child, and the reporter of ethnic-racial socialization. In particular, cultural socialization was positively associated with self-perceptions and interpersonal relationship quality, and negatively associated with externalizing behaviors. In addition, ethnic-racial socialization's positive association with self-perceptions was strongest in early adolescence and among African American youth. These findings underscore the complexity of parental ethnic-racial socialization practices and the need for a nuanced perspective on it. Implications for parenting practices and future research are discussed.

*Keywords:* Parental ethnic-racial socialization, parenting, psychosocial well-being, mental health, meta-analysis, children of color

Parental Ethnic-Racial Socialization Practices and Children of Color's Psychosocial and Behavioral Adjustment: A Systematic Review and Meta-Analysis

Increasing racial and ethnic diversity in the United States coupled with systemic racial stratification has inspired developmental scholars to identify protective factors for youth of color's psychological well-being. Meanwhile, parents of color commonly and proactively pass on cultural traditions and beliefs to their children for the sake of their own inherent value (Huguley, Wang, Vasquez, & Guo, 2019). Because parents of color play a central role in promoting culturally distinct assets and psychological repertoires for navigating subordinated ecologies (Hornby, 2000), elucidating the nature and consequences of these approaches is critical to the field's aim to better understand factors and processes that support positive development among ethnically and racially diverse children and youth. *Ethnic-racial socialization*<sup>1</sup>—the transmission of values, beliefs, and information about ethnicity and race—has been considered a vital cultural asset for youth of color (Hughes et al., 2006). This practice includes messages and strategies that cultivate children's ethnic-racial pride and knowledge of their heritage, inform them about the challenges they can anticipate as a member of a marginalized group, and equip them with the requisite coping skills to navigate the sociopolitical landscape of the nation (Lesane-Brown, 2006; Stevenson, 1994).

Despite a growing body of empirical research documenting the association between parental ethnic-racial socialization and youth of color's psychological well-being (Gartner, Kiang, & Supple, 2014; Neblett, Rivas-Drake, & Umaña-Taylor, 2012), estimates of the extent to which ethnic-racial socialization practices are linked to youth's psychosocial outcomes remain equivocal. Moreover, little is known about which individual and methodological characteristics

---

<sup>1</sup> As the goal of the current study is to systematically and comprehensively synthesize existing research in the area of culturally-specific parenting practices, the more inclusive term of *ethnic-racial socialization* was chosen (Brown & Krishnakumar, 2007; Hughes et al., 2006).

moderate the efficacy of ethnic-racial socialization. In response, the current study used a meta-analytic approach to synthesize the extant literature and examine the nuanced ways in which specific dimensions of ethnic-racial socialization relate to youth of color's psychosocial development. In addition, we investigated whether the nature of these associations varied as a function of four theoretically-informed moderators: the developmental stage and race/ethnicity of the target child, research design of the study, and reporter of the ethnic-racial socialization practice.

### **Ethnic-Racial Socialization and Psychosocial Development in Ecological Context**

Families of color in the United States often purposefully transmit ethnic-cultural information intergenerationally, in large measure, due to the intrinsic value that they perceive these cultural narratives and repertoires hold for their children's healthy development (Hughes et al., 2006; Stevenson, 1994). At the same time, many families of color face unique challenges related to their history of social subordination and attendant present-day disadvantage (Williams, 2000). In addition to socioeconomic inequality, youth of color are frequently exposed to race-related psychosocial stressors in the form of negative stereotypes, institutional racism and discrimination, and interpersonal prejudice (Diamond & Huguley, 2011; Pager & Shepherd, 2008). The deleterious impact of race/ethnicity-related stress and marginalization on youth of color's psychosocial development is well-documented within the literature (Spencer, 1995; Velez-Agosto, Soto-Crespo, Vizcarrondo-Oppenheimer, Vega-Molina, & Garcia Coll, 2017; Wang & Degol, 2016). Hence, the current study focuses on four of the most prominently investigated markers of psychosocial competence in ethnic-racial socialization research: self-perceptions, interpersonal relationship quality, and externalizing and internalizing behaviors. *Self-perceptions* capture youths' beliefs related to their own scholastic competence and social

acceptance as well as overall self-esteem and self-concept. *Interpersonal relationship quality* focuses on the child's social connections with others, including family members, peers, as well as their adoption of strong family-centered values. *Externalizing behaviors* refer to disruptive behavior, aggression, and behavioral dysregulation. Lastly, *internalizing behaviors* encompass emotional functioning and internal affective states including depression, anxiety, stress, and negative affect. These psychosocial outcomes represent central developmental competencies that are influenced both by racially-stratified contexts and parents' adaptive cultural responses, which jointly shape children's long-term well-being and successful transition into adulthood (Garcia Coll et al., 1996).

Parents of color often employ culturally-informed, ecologically-adaptive socialization practices that equip their children with tools to buttress their ability to contend with racial/ethnic marginalization (Garcia Coll et al., 1996; Stevenson, 1994; Suizzo, Robinson, & Pahlke, 2008). Garcia Coll and colleagues (1996) outlined a framework illustrating the adaptive developmental competencies of children of color and ways in which multiple systems of support buoy healthy development within a racist and segregated society. This integrative model positions the family system as a key context shaping children's development. By identifying family cultural practices and contextually-tailored involvement as important assets for families of color, the integrative model posits that ethnic-racial socialization plays a central promotive and protective role in children of color's psychosocial development (Garcia Coll et al., 1996). Ethnic-racial socialization, by intent, informs the lens through which children of color navigate their racialized contexts by assigning meaning to their racial/ethnic group membership, shaping beliefs about other groups and their own in-group members, and tailoring their overall expectations about intra- and inter-race/ethnic interactions (Neblett, Smalls, Ford, Nguyen, & Sellers, 2009).

Scholars have demonstrated that as parents instill racial/ethnic pride and discuss the sociohistorical realities of racism and discrimination toward people of color, they place such experiences into context and support their children's ability to cope effectively with their own negative experiences (Fischer & Shaw, 1999; Perez-Brena, Rivas-Drake, Toomey, & Umaña-Taylor, 2018; Wang & Huguley, 2012). In fact, some research has found that parental ethnic-racial socialization may buffer the negative impact of racism and discrimination on youth's self-perceptions, social relationships, antisocial behaviors, and depressive symptoms (e.g., Bannon et al., 2018; Bynum, Burton, & Best, 2007; DeCuir-Gunby, Martin, & Cooper, 2012). Yet, while multiple studies have suggested the positive impact of ethnic-racial socialization on psychosocial development, the nature, magnitude, and significant moderators of these relations have yet to be estimated and synthesized meta-analytically. Given the theoretical underpinnings and frequent empirical support for ethnic-racial socialization dimensions being associated with children of color's psychosocial outcomes, potential intricacies in these relations warrant thorough and targeted exploration.

Ethnic-racial socialization's multidimensional nature is well-established in the literature, and scholars have identified and catalogued several specific subconstructs according to their distinct forms, themes, and processes (Bentley-Edwards & Stevenson, 2015; Stevenson et al., 2002; Umaña-Taylor & Fine, 2004). Hughes et al. (2006) conducted the most comprehensive literature review of ethnic-racial socialization antecedents, dimensions, and effects on youth outcomes to date, including explicit attention to psychosocial domains. They identified four overarching dimensions of ethnic-racial socialization: (a) *cultural socialization*, which transmits messages of cultural pride and involves the sharing of ethnic and cultural traditions and history; (b) *preparation for bias* or *bias socialization*, which conveys messages that either proactively

discuss or reactively process experiences with racism and discrimination, often situating such experiences within the larger sociohistorical context; (c) *promotion of mistrust*, which encourages youth to approach interracial interactions with caution, distrust, or avoidance; and (d) *egalitarianism*, a prioritizing of the universal humanity and commonalities among different racial/ethnic groups.

Although united by their focus on adaptive cultural responses and intergroup dynamics, Hughes et al. (2006) suggested that these dimensions are distinct and shape developmental outcomes in disparate ways, although meta-analytic estimations have not been conducted. Notably, other ethnic-racial socialization dimensions that are potentially important but less well-studied have also been identified, including self-worth messages (Neblett, Chavous, & Sellers, 2009), spiritual coping (Stevenson, 1995), and bicultural approaches (Bentley-Edwards & Stevenson, 2015). Thus far, however, these additional dimensions have not been investigated adequately to be meta-analyzed; therefore, the current analysis focuses on the four principal dimensions identified by Hughes et al. (2006), which remain applicable to a wide body of parental ethnic-racial socialization research.

### **Individual and Methodological Characteristics as Moderators**

Research evaluating the effects of parental ethnic-racial socialization on major psychosocial domains is hampered by mixed findings. Such inconsistencies could be attributable to the fact that key theoretically-derived moderators are too infrequently examined in the research base, including variation by (a) ethnic-racial socialization approaches, (b) the target youth's developmental level, (c) the child's ethnic/racial group membership, and (d) the research design and the reporter of ethnic-racial socialization (Lesane-Brown, 2006; Yasui, 2015).

**Ethnic-racial socialization dimensions.** Garcia Coll et al. (1996) described multiple developmental goals for parents of color's adaptive socialization approaches. Two common socialization goals identified in ethnic-racial socialization research are ensuring that youth maintain a positive view of their own group (i.e., cultural socialization) and helping children cope with racism and discrimination (i.e., preparation for bias; Hughes et al., 2006). Scholarship has most consistently associated cultural socialization with positive psychological outcomes, including lower levels of anxiety (Bannon et al., 2009), reduced reports of anger (Stevenson et al., 1997), decreased psychological distress in the face of discrimination (Bynum, Burton, & Best, 2007), positive self-esteem (Constantine & Blackmon, 2002), and fewer depressive symptoms in children (McHale et al., 2006). Bias socialization, however, has less documented consistency in its link with psychosocial outcomes. Although Stevenson and colleagues (2002) found preparation for bias to be associated with decreased frequency and initiation of physical aggression in a youth sample, other studies have reported that no association exists between preparation for bias and psychological well-being (Davis & Stevenson, 2006; McHale et al., 2006) or found negative relations between these constructs. For example, Hughes, Witherspoon, Rivas-Drake, and West-Bay (2009) observed that preparation for bias was negatively related to self-esteem. Additional research has found that preparation for bias is associated with lower academic self-efficacy (McGill et al., 2012), decreased trust and communication in the mother-child relationship (Lambert et al., 2015), and increased aggression (Banerjee, 2012).

Compared to cultural socialization and preparation for bias research, fewer studies have examined how promotion of mistrust and egalitarian beliefs relate to psychosocial outcomes. For promotion of mistrust, the limited research has yielded mixed findings, with some work showing this practice is linked to decreased externalizing behaviors among young children (Caughy et al.,



2002), and other studies tying promotion of mistrust to increased depression (Dunbar, Perry, Cavanaugh, & Leerkes, 2015b; Gartner, Kiang, & Supple, 2014) and diminished family cohesion (Liu & Lau, 2013). Egalitarianism socialization's connection to psychosocial outcomes has rarely been studied. In the few extant studies to examine these relations, egalitarianism has been linked to poorer mental health outcomes (Barr & Neville, 2014) and increased socioemotional distress (Calzada et al., 2012).

Overall, parental ethnic-racial socialization's effects appear to vary greatly across these primary ethnic-racial socialization dimensions and psychosocial domains. Consequently, we hypothesized that subtypes of ethnic-racial socialization would differ in the magnitude and direction of their associations with psychosocial outcomes, with cultural socialization having the strongest and most consistently positive effects.

**Developmental period.** As suggested by the integrative model (Garcia Coll et al., 1996), the relation between parental ethnic-racial socialization and psychosocial outcomes likely changes across time, reflecting children's evolving developmental needs and competencies and normative changes in parental influence across developmental stages. Parents of color appear cognizant of the need to consider children's developmental readiness to receive ethnic-racial socialization messages (Lewis, 2003; Quintana, 1998). Although cultural socialization practices appear to be utilized throughout the entire span of development (Lee, Grotevant, Hellerstedt, & Gunnar, 2006; McHale et al., 2006), there is evidence that preparation for bias and promotion of mistrust are often reserved for older youth who are better able to comprehend the complexity of race relations (Hughes & Johnson, 2001). These patterns suggest that older children may be more receptive to ethnic-racial socialization messages.

Furthermore, children's relationships with family and peers as well as their cognitive and self-regulation skills change dramatically between childhood and adolescence (Sroufe, Egeland, & Carlson, 1999). Although parents remain important socializers as children enter adolescence, (Gitelson & McDermott, 2006), the range of influences on children's psychosocial development expands as the number and salience of other socialization agents grow and children's awareness of and exposure to discrimination and racial/ethnic bias increase (Steinberg & Silk, 2002). Thus, the intent, content, frequency, and effect of parental ethnic-racial socialization on youth's psychosocial outcomes can vary substantially across developmental stages. For example, whereas preparation for bias may be too cognitively complex and distressing for young children who are still exploring the meaning of race and often are less aware of bias, those same messages may benefit an adolescent who is more likely to recognize systems of oppression and encounter discrimination. Given these timing-specific differences in ethnic-racial socialization practices and their ties to psychosocial outcomes, it is likely that ethnic-racial socialization's associations with psychosocial constructs differ by child developmental stage. More specifically, we hypothesized that there would be stronger effects for adolescents than young children, given their heightened cognitive skills and the unique demands of teenagers' developmental epoch.

**Racial/ethnic group membership.** Adaptive cultures are posited to be a product of a given group's cultural, political, and economic histories and resultant contemporary social relations (Garcia Coll et al., 1996). Because different racial/ethnic groups in the United States have faced distinct sociohistorical circumstances and thus disparate degrees and manifestations of social and economic subordination, culturally-regulated goals, values, and beliefs vary substantively by race/ethnicity (Hughes et al., 2006; Priest et al., 2014). For these reasons, both parents' use of cultural and bias socialization approaches and children's perceptions of and

responses to these messages likely differ by race/ethnicity. Unfortunately, most ethnic-racial socialization research investigates a single group only or merely examines racial/ethnic differences in how frequently ethnic-racial socialization is practiced (Hughes et al., 2006; Zapolski, Garcia, Jarjoura, Lau, & Aalsma, 2016). This narrow focus limits the field's knowledge of how race/ethnicity moderates relations between ethnic-racial socialization practices and psychosocial outcomes.

Notably, some research does indicate ethnic-racial socialization's links to psychosocial outcomes differ by race/ethnicity. For example, African Americans' effective use of ethnic-racial socialization as a protective factor against the deleterious impact of discrimination has been well-documented (Bannon et al., 2009). In contrast, Huynh and Fuligni (2010) found that parental ethnic-racial socialization did not ameliorate the negative effects of discrimination on Asian American youth's self-esteem and mental health. Moreover, in a rare group comparison study, Liu and Lau (2013) investigated the associations between ethnic-racial socialization dimensions and depressive symptoms in a racially diverse sample, testing for variation across racial/ethnic groups. Results indicated that the relations between these socialization practices and depressive symptoms were significant across racial groups, though the strength of the associations differed slightly. Despite this limited work, in general, we know little about how race/ethnicity moderates ethnic-racial socialization's connections to youth psychosocial development. Because ethnic-racial socialization practices may promote healthy development by mitigating the effects of discrimination and inculcating positive attitudes towards one's group identity, we hypothesized that the strongest effect sizes would exist for African Americans, particularly when considering their unique and longstanding history of stigmatization and oppression in the United States.

**Research design.** Estimates of ethnic-racial socialization's associations with psychosocial outcomes are likely influenced by the research designs utilized, although to date no prior studies have explicitly examined this issue. A noteworthy weakness of the extant ethnic-racial socialization scholarship is that most studies are cross-sectional (Priest et al., 2014; Yasui, 2015). Given that the magnitude of the association between constructs tends to be inflated in cross-sectional studies (Crampton & Wagner, 1994; Harrison, McLaughlin, & Coalter, 1996), we must consider whether and to what extent ethnic-racial socialization's developmental effects hold in longitudinal research. Indeed, longitudinal studies present a more rigorous test of the direction and magnitude of relations by establishing temporal precedence between predictors and outcomes and improving construct validity, and as a result, they may yield smaller effect sizes. Accordingly, we hypothesized that effect sizes would be stronger for cross-sectional studies than for longitudinal research, although we expected that the associations for both designs would be significant.

**Reporter of ethnic-racial socialization.** Research has shown that associations between parenting behavior and child outcomes may differ by how the parenting constructs are measured (Barry, Frick, & Grafeman, 2008). Specifically, parental ethnic-racial socialization has typically been captured by surveys with Likert scale-based responses from parents or youth about the prevalence and frequency of ethnic-racial socialization practices (Yasui, 2015). Most parent-report studies used parents collectively as the target agent of ethnic-racial socialization. Prior research that is attentive to both parent and child reports has demonstrated discrepancies between the two and found that ethnic-racial socialization's associations with outcomes differ as a function of the reporter (Hughes, Hagelskamp, Way, & Foust, 2009; Peck et al., 2014). It has been noted that, while child-reported socialization practices reflect the socialization that they

perceived and/or received, parent reports are more often indicative of parents' intentions and/or delivered messages and practices (Yasui, 2015). Logically, a child's perceptions of parental socialization are more closely related to their developmental outcomes, as not all of the messages/practices parents report providing are perceived or internalized by their child exactly as parents intended. Furthermore, the mechanism by which socialization occurs can often be implicit and nonverbal (Lesane-Brown, 2006; Yasui, 2015), and as a result, parents may be less aware of the extent to which they have provided ethnic-racial socialization stimuli to youth. At the same time, using child reports to measure both parenting practices and youth outcomes may introduce shared-method bias, which inflates effect sizes. For all these reasons, the effect size of ethnic-racial socialization's association with psychosocial outcomes is expected to differ by informant of ethnic-racial socialization. Specifically, we expected that effect sizes would be larger for child reports of ethnic-racial socialization rather than parent reports.

### **Current Study**

To date, research on the link between ethnic-racial socialization and psychosocial adjustment has produced mixed results. Notably, associations with psychosocial outcomes appear to vary as a function of multiple theorized moderators, and attending to potential interactive effects and relative effect sizes will enable us to clarify whether and how parental ethnic-racial socialization relates to optimal psychosocial adjustment for youth of color. Accordingly, the primary goals of this study were to elucidate the associations between ethnic-racial socialization and multiple psychosocial outcomes and to investigate the moderating role of individual characteristics, research design, and reporter of ethnic-racial socialization. Taken together, the findings would pinpoint parental ethnic-racial socialization's relation to positive youth development across several salient psychosocial domains and establish consensus

regarding the developmental contexts wherein ethnic-racial socialization approaches would be most effective.

## **Method**

### **Literature Search Procedures**

Literature searches were conducted in ERIC, JSTOR, ProQuest Dissertation and Theses, PsycINFO, and Social Sciences Citation Index with a series of search terms: (“racial socialization” OR “ethnic socialization” OR “pride socialization” OR “cultural socialization” OR “preparation for bias” OR “bias socialization” OR “promotion of mistrust” OR “egalitarianism” OR “colorblindness”) AND (parent\* OR mother\* OR father\* OR patern\* OR matern\*). In addition, Social Sciences Citation Index was searched for studies citing Hughes et al. (2006) and Lesane-Brown (2006), the two most comprehensive conceptual reviews of parental ethnic-racial socialization. Searches included both published and unpublished studies in English through the end of 2018. These searches resulted in 2,268 potentially relevant studies.

To supplement searches of electronic databases, the reference lists of relevant studies were reviewed to identify eligible studies, yielding 29 additional prospective articles. Moreover, prominent researchers who had three or more articles on the topic of ethnic-racial socialization were contacted regarding any relevant documents that were not publicly available. We also reached out to researchers through mass emails to interest group listservs in relevant education and psychology research bodies. These inquiries resulted in an additional three studies. The research team then reviewed the title and abstract of identified studies. If the team judged the abstract to be eligible for inclusion based on two criteria (i.e., studies examined the relation between parental ethnic-racial socialization and psychosocial outcomes and did so among

samples that were within the range of kindergarten through college age), the full study was retained for further examination, resulting in 334 articles.

### **Criteria for Inclusion and Coder Reliability**

In addition to the two initial screening criteria, studies had to meet several other conditions to be included in the analysis. First, studies had to be correlational, including either a direct calculation of a bivariate correlation coefficient between parental ethnic-racial socialization and psychosocial outcomes, or enough information to allow for such an effect calculation. Second, studies had to employ conceptualizations of ethnic-racial socialization that fit within one or more of the four commonly explored practices (i.e., cultural socialization, preparation for bias, promotion of mistrust, and egalitarianism). Unidimensional composite scores of ethnic-racial socialization practices were also included as global measures. Measurements of ethnic-racial socialization based on all reporters were eligible for analysis. Finally, studies that focused on adopted children were excluded given the increased likelihood of multiracial families in samples of adopted children, in tandem with potential differences in the purpose and content of ethnic-racialization in multiracial adoptive family settings (Johnson et al., 2007; Lee et al., 2006). After implementing these additional qualifications and accounting for duplicate records, 102 studies were retained and coded for the research synthesis.

We used a two-cycle coding process that has demonstrated high reliability in prior studies (Rosenthal, 1991). All studies were independently coded twice, and all disagreements were resolved by a third independent coder. The initial agreement between two coders was 95% across all studies before discrepancies were discussed and resolved. The coding table and PRISMA chart can be found in the online supplemental documentation (see Table S2 and Figure S1).

### **Methods of Data Integration**

Effect sizes of the associations between ethnic-racial socialization and psychosocial outcomes were extracted from each study passing eligibility screening (Borenstein, 2009; Rosenthal, 1991). In this meta-analysis, we used a three-level SEM-based meta-analytic approach to account for dependence among the effect sizes within and between individual studies (Cheung, 2009, 2014). Specifically, a three-level SEM-based random-effects model was used to account for variation attributed to clustering within a single study while capturing variation attributable to effect size differences within studies (level 2) and across studies (level 3), as well as differences attributable to random sampling of effect sizes overall. This approach not only addresses the assumption of independence, but it also allows for exploration of heterogeneity in effect sizes by including covariates and moderator variables in the analysis (van den Noortgate & Onghena, 2003). All analyses were conducted utilizing the metaSEM package (Cheung, 2011) in R Version 3.3.1 (R Core Team, 2017). We used a three-level random effects model to calculate the overall pooled effect size (pooled  $d$ ) and three-level mixed effects model for the moderator analyses. Following Borenstein, Hedges, Higgins, and Rothstein's (2005) recommendations, analyses on correlations were transformed into Fisher's  $z$ , and all analyses were performed using the transformed values. The results, such as the summary effect and its confidence interval, were then converted back to correlation coefficients for interpretation. A detailed description of the three-level random effects meta-analyses is included in the online supplemental documentation.

In pooled effect sizes, we used  $I^2$  and  $Q$  statistics to assess heterogeneity (Higgins, Thompson, Deeks, & Altman, 2003). Cochran's (1954)  $Q$  statistic reflects the total amount of variance in the meta-analysis, whereas the  $I^2$  statistic represents heterogeneity (Higgins & Green, 2011). We used moderator analyses to explain heterogeneity in the association between ethnic-



racial socialization and youth psychosocial outcomes (Shadish & Sweeney, 1991). Moderator analyses were conducted only when there were at least four effect sizes per subgroup (Fu et al., 2011). For each moderator analyses, we calculated the proportion of explained heterogeneity variance by including the potential moderator variable ( $R^2$ ) and the heterogeneity between effect sizes in each category ( $I^2$ ).

Moreover, we relied upon the chi-square difference ( $\Delta\chi^2$ ) to investigate how well the proposed moderator explained the heterogeneity in effect sizes. As such, we reported the chi-square difference for the omnibus ANOVA test between each mixed-effects model with moderators and the original mixed-effects model to indicate whether the moderator model was significantly better fitting than the original model. Finally, we examined publication bias using a funnel plot that had the standard error plotted on the y-axis and the effect size on the x-axis (Sterne, Egger, & Moher, 2011). We then used Egger's regression asymmetry test and Begg and Mazumdar's rank correlation test to quantify the publication bias (Begg & Mazumdar, 1994; Egger, Davey Smith, Schneider, & Minder, 1997).

## Results

We identified 803 effect sizes from 102 studies with 27,221 total participants that met the inclusion criteria for analysis. Summaries of study information—including sample size, study type, effect size, ethnic-racial socialization approaches, child's race/ethnicity and developmental period, and targeted outcomes—for all articles included in the meta-analysis appear in Table S1 in the online supplementary materials.

### **Global Associations between Ethnic-Racial Socialization and Psychosocial Well-being**

We first examined ethnic-racial socialization's global relation to each psychosocial outcome (see Table 1). Overall, ethnic-racial socialization had small positive associations with

the desirable outcomes of self-perceptions ( $r = .07$ ,  $CI = .04 - .11$ ,  $p < .01$ ) and interpersonal relationships ( $r = .10$ ,  $CI = .06 - .14$ ,  $p < .001$ ), but also with the suboptimal outcome of internalizing behavior ( $r = .05$ ,  $CI = .02 - .09$ ,  $p < .01$ ). Ethnic-racial socialization was not significantly linked with externalizing behavior ( $r = -.01$ ,  $CI = -.04 - .01$ ,  $ns$ ).  $I^2$  statistics showed that there was a moderate-to-high proportion of variance in effect sizes attributable to differences between and within studies. Thus, we conducted moderator analyses to explain some of the variance. Specifically, we examined the extent to which correlations between ethnic-racial socialization and youth psychosocial well-being varied by ethnic-racial socialization dimensions, developmental period (i.e., childhood: ages 6-10 or around K-5 age; early adolescence: ages 11-13 or around middle school age; middle adolescence: ages 14-17 or around high school age; and late adolescence/emerging adulthood: ages 18-24), racial/ethnic groups (i.e., African American, Latinx, Asian American, and Native American), study design (i.e., cross-sectional and longitudinal), and reporter of ethnic-racial socialization (i.e., child reports and parent reports)<sup>2</sup>.

### **Ethnic-Racial Socialization Subtype**

The association between parental ethnic-racial socialization and youth's psychosocial well-being varied by socialization subtype (see Table 1). Self-perceptions had a small positive association with cultural socialization ( $r = .13$ ,  $CI = .09 - .16$ ,  $p < .001$ ) and a modest negative association with the promotion of mistrust ( $r = -.15$ ,  $CI = -.25 - -.04$ ,  $p < .05$ ). Interpersonal relationships were positively associated with cultural socialization ( $r = .13$ ,  $CI = .07 - .18$ ,  $p < .001$ ), and demonstrated a small but positive relationship with preparation for bias ( $r = .04$ ,  $CI = .00 - .07$ ,  $p < .05$ ). Internalizing behavior held a small but positive relationship with preparation

---

<sup>2</sup> Child's biological sex was examined as a moderator but it was not a significant factor. The majority of studies (more than 93%) used child reports to measure psychosocial outcomes; thus, the moderator analyses for reporter of the outcomes could not be tested due to the small number of studies and effect sizes for non-child-report studies.

for bias ( $r = .06$ ,  $CI = .02 - .10$ ,  $p < .01$ ) and a modest positive relationship with the promotion of mistrust ( $r = .19$ ,  $CI = .12 - .25$ ,  $p < .001$ ). Externalizing behavior held a small positive association with preparation for bias ( $r = .05$ ,  $CI = .02 - .08$ ,  $p < .01$ ), and a small negative association with cultural socialization ( $r = -.06$ ,  $CI = -.10 - -.03$ ,  $p < .001$ ). No psychosocial outcomes were associated with egalitarianism across studies.

### **Developmental Period**

As shown in Table 2, ethnic-racial socialization had small but positive associations with self-perceptions in childhood ( $r = .04$ ,  $CI = .02 - .06$ ,  $p < .001$ ) and early adolescence ( $r = .13$ ,  $CI = .08 - .17$ ,  $p < .001$ ). Regarding interpersonal relationship quality, ethnic-racial socialization exhibited small positive associations with interpersonal relationships in middle adolescence ( $r = .11$ ,  $CI = .07 - .16$ ,  $p < .001$ ) and late adolescence/emerging adulthood ( $r = .10$ ,  $CI = .02 - .18$ ,  $p < .05$ ). For internalizing behavior, ethnic-racial socialization showed a small positive association with internalizing behavior in middle adolescence ( $r = .09$ ,  $CI = .03 - .16$ ,  $p < .01$ ). Finally, ethnic-racial socialization's connection to externalizing behaviors did not vary by developmental stage.

### **Racial/Ethnic Group**

Estimates of moderations by racial/ethnic groups demonstrated that ethnic-racial socialization had small positive associations with self-perceptions among African Americans ( $r = .09$ ,  $CI = .05 - .13$ ,  $p < .001$ ; see Table 3) and Latinx ( $r = .08$ ,  $CI = .01 - .15$ ,  $p < .05$ ) and a negative association among Asian Americans ( $r = -.10$ ,  $CI = -.17 - -.02$ ,  $p < .05$ ).<sup>3</sup> Ethnic-racial socialization showed small positive associations with interpersonal relationship quality among African Americans ( $r = .10$ ,  $CI = .06 - .14$ ,  $p < .001$ ) and Latinx ( $r = .16$ ,  $CI = .03 - .29$ ,  $p < .05$ ).

---

<sup>3</sup> The sub-group analyses with Native American samples cannot be conducted due to the limited number of effect sizes.

Overall ethnic-racial socialization exhibited a moderate positive association with internalizing behavior among Asian Americans ( $r = .23$ ,  $CI = .18 - .27$ ,  $p < .001$ ). Finally, the associations between ethnic-racial socialization and externalizing behaviors did not vary by racial/ethnic group.

### **Study Design**

Overall differences by study design were not significant for any outcome (Table 4). Both longitudinal ( $r = .04$ ,  $CI = .01 - .08$ ,  $p < .05$ ) and cross-sectional ( $r = .08$ ,  $CI = .04 - .12$ ,  $p < .001$ ) studies that examined the association between ethnic-racial socialization and self-perceptions reported small but positive effects. Similarly, both longitudinal ( $r = .04$ ,  $CI = .01 - .07$ ,  $p < .01$ ) and cross-sectional ( $r = .11$ ,  $CI = .06 - .15$ ,  $p < .001$ ) research that examined ethnic-racial socialization's connection to interpersonal relationship reported consistently positive effects. The associations between ethnic-racial socialization and externalizing and internalizing behaviors were not significant under either research design.

### **Reporter of Ethnic-Racial Socialization**

Effect differences as a function of respondent were significant for two of the four psychosocial outcomes: interpersonal relationship quality and internalizing behavior (Table 5). Ethnic-racial socialization exhibited a positive association with interpersonal relationship quality for both parent and child reports; however, the effect size for child-report studies ( $r = .15$ ,  $CI = .14 - .16$ ,  $p < .001$ ) was significantly larger than the effect size among parent-report studies ( $r = .08$ ,  $CI = .03 - .13$ ,  $p < .05$ ). Ethnic-racial socialization showed a positive association with internalizing behavior for both parent and child reports, though the effect size for child-report studies was significantly larger than the effect size for parent-report studies (parent report:  $r = .10$ ,  $CI = .08 - .12$ ,  $p < .001$ ; child report:  $r = .14$ ,  $CI = .12 - .16$ ,  $p < .001$ ). Research across

parent reports and child reports consistently revealed positive links between ethnic-racial socialization and self-perceptions (parent report:  $r = .08$ ,  $CI = .05 - .11$ ,  $p < .01$ ; child report:  $r = .14$ ,  $CI = .12 - .16$ ,  $p < .001$ ) and negative links between ethnic-racial socialization and externalizing behaviors (parent report:  $r = -.09$ ,  $CI = -.07 - -.10$ ,  $p < .001$ ; child report:  $r = -.11$ ,  $CI = -.07 - -.15$ ,  $p < .001$ ).

### **Publication Bias**

Overall, the associations between ethnic-racial socialization and the four different psychosocial outcomes did not differ by type of publication (i.e., journal articles versus non-published articles or dissertations). In addition, a funnel plot of the effect sizes (see Figures S2-5) revealed no publication bias in that effect sizes were symmetrically spread across plots. This pattern was further confirmed for studies that examined ethnic-racial socialization and each psychosocial outcome with non-significant results of Egger's test and Begg and Mazumdar's rank correlation test.

### **Discussion**

Parents of color communicate a variety of messages about race and ethnicity to their children in an effort to promote positive child development (Evans et al., 2012; Reynolds & Gonzales-Backen, 2017). In particular, parental ethnic-racial socialization has been theorized to constitute a salient cultural asset for children of color that can bolster their positive self-worth and curtail the pernicious psychological effects of stigmatization and bias (Mossakowski, 2003; Neblett et al., 2012; Spencer, 1995). This meta-analysis synthesized the nuanced and sometimes contradictory findings regarding parental ethnic-racial socialization, highlighting how parents' messages about race/ethnicity were related to children's psychosocial well-being. Specifically, ethnic-racial socialization appeared to provide small-to-modest support to children of color's

self-perceptions and ability to establish positive interpersonal relationships. These limited but salutary effects, however, differed by the types of ethnic-racial socialization parents used, the developmental stage and race/ethnicity of the target child, and the reporter of ethnic-racial socialization. These findings underscore the complexity of parental ethnic-racial socialization practices and the need for a nuanced perspective on it.

### **Global Ethnic-Racial Socialization and Psychosocial Well-Being**

Globally, ethnic-racial socialization was positively tied to self-perceptions and better interpersonal relationships with family and peers. These results suggest that parental ethnic-racial socialization as a superordinate construct may potentially act as a protective factor for children of color, subtly enhancing their sense of self and connections with others. Notably, enhanced self-worth has been linked to greater relationship satisfaction, more prosocial attitudes, and increased centrality of family relationships (Armenta, Knight, Carlo, & Jacobson, 2011; Schwartz, Zamboanga, & Jarvis, 2007). Hence, ethnic-racial socialization's links to higher self-perceptions in youth of color may represent an aspect of how parents' messages about race/ethnicity contribute to youth's superior relationship quality with others. For example, teaching children to understand their identities from the point of view of both out-group and in-group members may support the development of more empathetic social-emotional skills that, in turn, facilitate the establishment of higher quality relationships. Indeed, studies have shown that members of stigmatized groups are more responsive to social cues and more likely to engage in perspective-taking during social interactions (Kaiser, Vick, & Major, 2006; Shih, 2004). Our meta-analysis of the extant literature offers limited support for these hypothesized patterns of relation, however, more targeted work is needed to delineate any underlying mechanisms.

Although the overall effects of ethnic-racial socialization were consistent but small, our results indicate that certain types of ethnic-racial socialization have more substantial associations with psychosocial outcomes than the global construct. Indeed, this result may help explain the null findings or weak effect sizes with respect to ethnic-racial socialization's ties to externalizing and internalizing behaviors. In the arena of ethnic-racial socialization research, scholars are still working to clarify theory and formulate instruments that capture the complex, multifaceted nature of this construct (Bentley-Edwards & Stevenson, 2016; Lesane-Brown, 2006; Yasui, 2015). Consequently, a major motivation for and central contribution of this meta-analysis is its investigation of key moderators of the relation between ethnic-racial socialization and psychosocial adjustment (McLeod, Weisz, et al., 2007; McLeod, Wood, et al., 2007).

### **Subtypes of Ethnic-Racial Socialization and Psychosocial Well-being**

The findings lend credence to the idea that ethnic-racial socialization's associations with psychological and behavioral functioning are nuanced, as delineated subtypes of ethnic-racial socialization showed more consistent and stronger ties with an array of psychosocial outcomes. As hypothesized, cultural socialization exhibited more consistently salubrious associations with multiple facets of psychosocial well-being. Specifically, cultural socialization exhibited positive relations with self-perceptions and interpersonal relationship quality, as well as a negative link with externalizing behaviors. Parental messages highlighting the positive features of a child's racial/ethnic and cultural identity likely relate to higher self-esteem and self-efficacy through multiple routes. One prospective pathway through which cultural socialization may be connected to conceptions of the self is by enhancing feelings of cultural entitlement or intrinsic social status (i.e., the belief that one is a worthwhile and valuable member of the society), particularly in the context of discrimination and negative racial stereotypes (ten Kate, de Koster, & van der Waal,

2017; Richardson et al., 2015). By increasing positive feelings toward one's racial/ethnic group, cultural socialization may also enhance children's bonding social capital, thereby promoting positive connections with relatives and peers (Almedom, 2005, Wang et al., 2017). In addition, socialization messages revolving around cultural heritage and pride have also been shown to buffer against maladaptive behaviors (e.g., aggression) among youth who have endured higher levels of community violence and interpersonal prejudice (Banerjee et al., 2015; Burt et al., 2012).

Preparation for bias was positively, albeit marginally, linked to relationship quality, but evinced no relation to self-perceptions. Bias socialization also had small positive associations with externalizing and internalizing behaviors. The divergent and small effects for this approach are likely attributable to the fact that preparation for bias is itself a multifaceted construct that has been characterized as such in theory but has been less consistently captured in measurement. More precisely, bias socialization can encompass messages involving awareness of the existence of racism and discrimination in isolation, as well as in conjunction with the inculcation of cognitive and behavioral coping strategies for dealing with bias (Hughes & Chen, 1997; Stevenson, 2001). When parents couple instruction about racism and prejudice with tangible strategies that arm children with requisite psychological coping tools, preparation for bias has been linked with greater self-pride ratings and perceived social support (Murry, Berkel, Brody, Miller, & Chen, 2009; Stevenson, Reed, & Bodison, 1996). However, it still remains rare for researchers to measure preparation for bias as a multidimensional construct, and most studies focus only on increasing bias and discrimination awareness (more than 75% of studies included in the meta-analysis focused solely on consciousness-raising). For example, Hughes and Chen (2001) measured bias socialization using a four-item subscale that assessed whether parents



talked to children about racial bias as well as the necessity of overachievement to combat such bias. This measure reflected that parental messages about the existence of racism were combined with messages reinforcing youth's ability to overcome discrimination via hard work and perseverance (Kuper et al., 2013). By contrast, the preparation for bias subscale employed by Banerjee and colleagues (2015) included three items focused exclusively on messages about racial/ethnic bias. The failure to differentiate between awareness-inducing and coping-focused approaches may underlie the mixed findings across multiple psychosocial outcomes in the larger research base.

Not surprisingly, promotion of mistrust was negatively associated with self-perceptions. Children and youth of color whose parents convey messages that promote distrust and suspicion and focus exclusively on prospective threats and dangers inherent in interracial/interethnic relationships may fail to develop beneficial coping strategies and self-concept beliefs. For example, Kuper, Coleman, and Mustanski (2014) found that parental messages centered on promotion of mistrust were associated with less adaptive avoidance-based coping strategies in a sample of adolescents and young adults. Avoidance-based coping strategies (versus approach-based strategies) tend to predict diminished self-efficacy and lower self-esteem (MacNeil, Esposito-Smythers, Mehlenbeck, & Weismore, 2012; Utsey, Ponterotto, Reynolds, & Cancelli, 2000), which may help account for the patterns found in this analysis.

Moreover, promotion of mistrust messages evidenced strong ties to internalizing problems. Conceptually, the promotion of mistrust seems to parallel unidimensional bias socialization strategies that focus primarily on instruction about discrimination and do not cultivate adaptive coping skills. When uncoupled from parenting behaviors that promote positive coping skills in the face of environmental stressors (Dunbar, Leerkes, Coard, Supple, & Calkins,

2017; Dunbar et al., 2015a), promotion of mistrust implicitly emphasizes avoidance-based coping behaviors (Kuper et al., 2014) and has been found to undermine children's self-efficacy (Hughes & Chen, 1999). For these reasons, the promotion of intergroup mistrust may foment increased internalizing behaviors. However, further research is needed to establish whether the absence of such adaptive coping serves as a common link when preparation for bias and the promotion of mistrust predict psychosocial outcomes negatively.

### **Variations by Developmental Period**

Our analyses revealed that ethnic-racial socialization's relations to self-perceptions were larger during early adolescence than during childhood, middle adolescence, and late adolescence/emerging adulthood. Although links between socialization messages and self-perceptions were also stronger during childhood than during middle and later adolescence/emerging adulthood, the size of the effect was relatively small. To shed light on this moderating effect, we should consider the myriad ways children's developmental skills, needs, and contexts vary across childhood and adolescence. In late middle childhood/early adolescence, contextual stressors increase for children as they transition into middle school, confront more rigorous academic content, experience the onset of more fraught relationships with parents and peers, and gain greater intellectual and social autonomy (Wang & Eccles, 2012; Wang, Hill, Hofkens, 2014; Wang, Kiunu, Degol, & Salmela-Aro, 2018). For youth of color, these normative changes are combined with burgeoning racial/ethnic identity exploration, increased awareness of racial stereotypes, and greater vulnerability to stereotype threat and the anxiety underlying it (McKown & Strambler, 2009; McKown & Weinstein, 2003; Osborne, 2007). As a result, ethnic-racial socialization may buffer children against the diminished self-esteem that can attend the transition into early adolescence (Harris-Britt et al., 2007; Murry et al., 2009). Although

developmental differences in ethnic-racial socialization's effects on other outcomes were not statistically significant, it is worth noting that the association with interpersonal relationship quality seemed to trend toward meaningfully stronger effects for older youth versus young children. If substantiated by further research, such an effect would be logical given the increased salience of social relationships and identity as children develop past the early and middle childhood years (Blakemore & Mills, 2014; French, Seidman, Allen, & Aber, 2006).

### **Variations by Race/Ethnicity**

In the analyses examining the moderating effect of race/ethnicity, two key findings emerged. Ethnic-racial socialization was more closely (and positively) correlated with self-perceptions among African Americans than other racial/ethnic groups, and more unexpectedly, it was associated with Asian Americans' diminished self-perceptions and increased internalizing problems. For African American youth, racial oppression and marginalization are inextricably woven into the fabric of the Black experience in America. Specifically, among people of color who are well-represented in the ethnic-racial socialization literature, African Americans have experienced a uniquely pervasive and persistent manifestation of racial bias and stigma (e.g., enslavement, Jim Crow segregation, racialized mass incarceration, socioeconomic inequality and residential segregation; Davis, Gardner, & Gardner, 2009; Feagin, 2014). The singular historical legacy of oppression and exploitation that African Americans have endured in the U.S. notwithstanding, other people of color have also experienced targeted systemic racism and bias in America. For example, similar to their African American peers, audit studies spotlight ongoing discrimination against Latinxs in employment, housing, and financial markets (Quillian, Pager, Hexel, & Midtbøen, 2017). Latinxs also contend with negative stereotypes painting them as criminal, alien, and less capable (Reny & Manzano, 2016). These realities may help explain

why positive associations with self-perceptions were also more pronounced for Latinx youth, though the effect size is comparatively smaller. In both cases, ethnic-racial socialization is likely a contributing protective factor against the deleterious impact of denigrating societal messages and commonly-held stereotypes on the self-esteem of African American and Latinx youth in the United States (Smith & Silva, 2011).

Meanwhile, the extant literature typically fails to consider the specific challenges Asian American families confront, and the unique developmental contexts Asian American children are embedded within that may yield substantive differences in families' adaptive responses (e.g., a higher proportion of foreign-born parents, model-minority stereotypes, considerable ethnic heterogeneity; Kiang, Tseng, & Yip, 2016). For instance, some research has suggested that Asian American parents engage in cultural socialization as well as more acculturation to mainstream or American cultural norms and identity, while only rarely engaging in conversations or consciousness-raising about discrimination and how to cope with or combat it (Choi & Hahm, 2017; Daga & Raval, 2018; Juang et al., 2016). As a result, when Asian children and youth encounter bias in majority contexts, they may have less well-developed coping skills to deal with threats to their self-perceptions and psychological well-being. Additional work also suggests that Asian American parents engage in comparatively lower levels of ethnic-racial socialization, and they may be more likely to do so in response to their children's negative experiences (Juang et al., 2016). In general, however, the current findings should be interpreted with caution due to the relatively paltry number of studies examining ethnic-racial socialization's connections to Asian American children's psychosocial well-being, and a corresponding lack of attention to how these practices may differ or hold disparate meanings across Asian families (Juang et al., 2016).

### **Variations by Study Design and Reporter of Ethnic-Racial Socialization**

Ethnic-racial socialization's associations with psychosocial outcomes did not vary significantly by study design, thereby validating the results across cross-sectional and longitudinal studies. Although these findings suggest that the strength of concurrent and longitudinal associations are equivalent, the paucity of prospective, longitudinal research about ethnic-racial socialization limits our ability to draw definitive conclusions about how these parental practices may shape children of color's psychosocial well-being over time. Moreover, the larger parenting literature reveals that what constitutes effective childrearing and confers advantage and disadvantage often differs across developmental stages and contexts. Parenting practices and priorities are shaped not only by parents' values and beliefs, but also by their children's characteristics, structural factors, and contingent circumstances (Wang & Sheikh-Khalil, 2014). For example, children's openness to and internalization of ethnic-racial socialization may be more pronounced at specific developmental stages, such as middle childhood or adolescence when, for example, they are more likely to encounter bias and/or gain a more nuanced understanding of racial identity and discrimination. Therefore, longer-term research that spans multiple development periods and employs developmentally appropriate measures of these parenting practices is required to determine more definitively whether ethnic-racial socialization has timing-specific or cumulative effects on the psychosocial well-being of youth of color.

In terms of reporter effects, associations between ethnic-racial socialization and psychosocial development varied as a function of whether parents or children were the informants of the parental socialization practices. Although the direction of effects was similar for child and parent reports, the magnitude of these relations did vary such that child reports yielded stronger associations between socialization practices and interpersonal relationship

quality and internalizing behavior. These tighter connections between children's reports and interpersonal relationship quality as well as internalizing problems are consistent with earlier findings from the ethnic-racial socialization literature comparing parent and youth informants (Hughes et al., 2009; Peck et al., 2014). Moreover, prior studies have shown that children's reports of parenting behaviors are not only better predictors of youth mental health (Barry et al., 2008) but also that these reports align more closely with independent observations of parenting practices (Scott, Briskman, & Dadds, 2011). In addition, scholars have suggested that these differential reporter effects can be traced to the central role of child and youth perspectives in predicting youth outcomes. Given that parents' socialization is contingent on youth's receptivity, children's expressed perspectives on parental socialization may underlie associations between parents' reported practices and youth outcomes (Hughes et al., 2009; Peck et al., 2014). This dynamic might explain the attenuated links between parental reports of ethnic-racial socialization and children's outcomes in comparison to child reports of ethnic-racial socialization. Collectively, these considerations highlight the important role that the informant plays in understanding parenting's effects on child development (McLeod, Weisz, & Wood, 2007), while at the same time providing further evidence of the validity of both parent and youth reports given their common directionality and significance.

Placing these findings into context is important, especially the small-to-modest effect sizes observed in much of this study. Overall, akin to the results revealed in this analysis, the strength of parenting's associations with children's mental health and behavioral functioning ranges from small to medium in the developmental literature (McLeod, Weisz, et al., 2007; McLeod, Wood, et al., 2007; Rothbaum & Weisz, 1994). In this extant literature, more general parenting dimensions tend not only to be theoretically well-defined but also consistently and

reliably measured. These attributes distinguish the overarching parenting literature base from the specific ethnic-racial socialization scholarship, which is much less consistent regarding conceptualization and measurement perspectives. Thus, a meta-analytic analysis of a more inconsistently operationalized body of measures is likely to exhibit attenuated effects relative to syntheses involving constructs with more reliably defined operationalizations and instrumentation. Given the lack of consistent measurement of ethnic-racial socialization's multiple facets (Yasui, 2015), the present findings likely represent a conservative estimate of these practices' ties to psychosocial well-being.

### **Limitations**

This study has several limitations. First, although this analysis lends credence to burgeoning research illustrating the links between ethnic-racial socialization and psychosocial outcomes, the reported associations are correlational and thus do not establish causation. Indeed, for some outcomes, the direction of effect could be reversed or, to some degree, bidirectional. That is, youth behavior and adjustment may lead to differences in parents' ethnic-racial socialization practices (Neblett et al., 2012). Relevant to directionality considerations is the fact that nearly two-thirds of the studies included in this review used a cross-sectional design, which limits our ability to parse out these potentially bidirectional associations. Future studies must employ rigorous methods (e.g., experimental studies) that support causal inference and unearth potentially reciprocal processes.

Moreover, it was beyond the scope of the current study to empirically test the prospective mechanisms underlying the link between ethnic-racial socialization and psychosocial development. Given the emerging empirical support for the role of racial identity or stereotype threat in mediating the associations between ethnic-racial socialization and psychosocial

outcomes (Banerjee et al., 2017), future research should explore hypothesized mediation effects in depth. Similarly, theoretically-salient moderators, such as immigration status and socioeconomic status, could not be considered due to data limitations across the research base. Future studies should take into consideration the role of theoretically-supported mediators and moderators to yield a more holistic picture of the pathways by which ethnic-racial socialization shapes psychosocial outcomes.

### **Future Directions**

The major contribution of this study is its robust estimation of the direction and strength of ethnic-racial socialization's associations with multiple dimensions of children's psychosocial well-being. In doing so, we not only elucidate the primary limitations affecting this body of literature, but also highlight avenues for future research. First, scholars must better situate ethnic-racial socialization within and draw key insights from the larger parenting literature. Specifically, findings from extant parenting research underscore the importance of employing multiple methods and informants, considering bidirectional effects, and accounting for the broader family climate and developmental history of the parent-child relationship (Bornstein, 2002; Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000).

Second, greater precision and nuance in how ethnic-racial socialization and its subtypes are defined and operationalized is requisite. The global construct is multidimensional, but so are several of its constituent subtypes (e.g., preparation for bias with and without coping; colorblind versus multicultural egalitarianism). Like other parenting practices, ethnic-racial socialization likely lies along a dimension in terms of quantity and quality. Capturing more fine-grained delineations will clarify how these practices relate to child development.



Finally, future studies must apply an intersectional lens to ethnic-racial socialization research. Social identities interact in complex ways with sociohistorical conditions to differentially shape families' access to resources, exposure to stressors, and adaptive responses (Crenshaw, 1991; García Coll et al., 1996; Ghavami, Katsiaficas, & Rogers, 2016).

Understanding how the interplay between intersecting identities (e.g., race/ethnicity, social class, and child and parent gender) drives factors (e.g., values, attitudes) that influence ethnic-racial socialization's content, processes, and effects is a necessary next step.

### **Conclusion**

Identifying cultural assets that foster positive development and cultivate resilience among children of color is a central focus of research and policy. Tentative evidence suggests ethnic-racial socialization may, under the right circumstances, help support children and youth of color in acquiring the social-emotional competencies and psychological resources required to navigate multiple contexts successfully. For parents, it is important to recognize that no single socialization practice is likely to completely buffer children against the consequences of racism and discrimination. Instead, parents will want to employ multiple strategies that focus on developing children's positive coping skills and ensure that the strategies they employ are developmentally appropriate and attuned to their social contexts. Ultimately, ethnic-racial socialization scholarship has great potential to elucidate which processes underlie patterns of vulnerability and resilience among children of color.

## References

References marked with an asterisk (\*) indicate studies included in the meta-analysis

- Almedom, A. M. (2005). Social capital and mental health: An interdisciplinary review of primary evidence. *Social Science & Medicine*, *61*, 943-964.
- Anglin, D. M., Link, B. G., & Phelan, J. C. (2006). Racial differences in stigmatizing attitudes toward people with mental illness. *Psychiatric Services*, *57*, 857–862.  
doi:10.1176/ps.2006.57.6.857
- Armenta, B. E., Knight, G. P., Carlo, G., & Jacobson, R. P. (2011). The relation between ethnic group attachment and prosocial tendencies: The mediating role of cultural values. *European Journal of Social Psychology*, *41*, 107-115. doi:10.1002/ejsp.742
- \*Atkin, A. L., Yoo, H. C., & Yeh, C. J. (2018). What types of racial messages protect Asian American adolescents from discrimination? A latent interaction model. *Journal of Counseling Psychology*.
- \*Banerjee, M. (2012). *Testing the moderating effects of racial socialization on the relationship between community violence exposure and academic/psychosocial outcomes in African American young adults*. Unpublished Doctoral Dissertation. Michigan State University. East Lansing, MI.
- \*Bannon, W. M., McKay, M. M., Chacko, A., Rodriguez, J. A., & Cavaleri, M. (2009). Cultural pride reinforcement as a dimension of racial socialization protective of urban African American child anxiety. *Families in Society: The Journal of Contemporary Human Services*, *90*, 79-86. doi:10.1606/1044-3894.3848
- Bannon, W. M., McKay, M. M., Chacko, A., Rodriguez, J. A., & Cavaleri, M. (2018). Cultural Pride Reinforcement as a Dimension of Racial Socialization Protective of Urban African

- American Child Anxiety. *Families in Society: The Journal of Contemporary Social Services*, *90*, 79–86. doi:10.1606/1044-3894.3848
- \*Barr, S. C., & Neville, H. A. (2014). Racial socialization, color-blind racial ideology, and mental health among Black college students: An examination of an ecological model. *Journal of Black Psychology*, *40*, 138–165.
- Barry, C. T., Frick, P. J., & Grafeman, S. J. (2008). Child versus parent reports of parenting practices: Implications for the conceptualization of child behavioral and emotional problems. *Assessment*, *15*, 294-303. doi:10.1177/1073191107312212
- Borenstein, M. (2009). *Introduction to meta-analysis*. Chichester, U.K.: John Wiley & Sons.
- Borenstein, M., Hedges, L., Higgins, J., & Rothstein, H. (2005). *Comprehensive meta-analysis (Version 2) [Computer software]*. Englewood, NJ: Biostat.
- \*Bravo, D. Y., Umaña-Taylor, A. J., Guimond, A. B., Updegraff, K. A., & Jahromi, L. B. (2014). Familism, family ethnic socialization, and Mexican-origin adolescent mothers' educational adjustment. *Cultural Diversity and Ethnic Minority Psychology*, *20*, 389–400. doi:10.1037/a0036527
- \*Brown, C. M., & Ling, W. (2012). Ethnic-racial socialization has an indirect effect on self-esteem for Asian American emerging adults. *Psychology*, *3*, 78-81.  
doi:10.4236/psych.2012.31013
- Brown, T. L., & Krishnakumar, A. (2007). Development and validation of the Adolescent Racial and Ethnic Socialization Scale (ARESS) in African American families. *Journal of Youth and Adolescence*, *36*, 1072–1085. doi:10.1007/s10964-007-9197-z
- \*Burt, C. H., Lei, M. K., & Simons, R. L. (2017). Racial discrimination, racial socialization, and crime: Understanding mechanisms of resilience. *Social Problems*, *64*, 414-438.

- Burt, C. H., Simons, R. L., & Gibbons, F. X. (2012). Racial discrimination, ethnic-racial socialization, and crime: A micro-sociological model of risk and resilience. *American Sociological Review*, *77*, 648-677. doi:10.1177/0003122412448648
- \*Bynum, M. S., Burton, E. T., & Best, C. (2007). Racism experiences and psychological functioning in African American college freshmen: Is racial socialization a buffer? *Cultural Diversity & Ethnic Minority Psychology*, *13*, 64–71. doi:10.1037/1099-9809.13.1.64
- \*Calzada, E. J., Huang, K.-Y., Anicama, C., Fernandez, Y., & Brotman, L. M. (2012). Test of a cultural framework of parenting with Latino families of young children. *Cultural Diversity and Ethnic Minority Psychology*, *18*, 285–296. doi:10.1037/a0028694
- \*Caughy, M. O. B., 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.
- \*Causey, S. T., Livingston, J., & High, B. (2015). Family structure, racial socialization, perceived parental involvement, and social support as predictors of self-esteem in African American college students. *Journal of Black Studies*, *46*, 655–677.  
doi:10.1177/0021934715592601
- \*Chávez, N. R., & French, S. E. (2007). Ethnicity-related stressors and mental health in Latino Americans: The moderating role of parental racial socialization. *Journal of Applied Social Psychology*, *37*, 1974–1998. doi:10.1111/j.1559-1816.2007.00246.x
- Cheung, M. W.-L. (2009). Constructing approximate confidence intervals for parameters with structural equation models. *Structural Equation Modeling: A Multidisciplinary Journal*, *16*, 267–294. doi:10.1080/10705510902751291

- Cheung, M. W.-L. (2011). metaSEM: meta-analysis: A structural equation modeling approach. R package version 0.5-3. 251–261. Retrieved from <http://courses.nus.edu.sg/course/psycwlm/Internet/metaSEM>
- Cheung, M. W.-L. (2014). Modeling dependent effect sizes with three-level meta-analyses: A structural equation modeling approach. . *Psychological Methods, 19*, 211–229.
- \*Daga, S. S., & Raval, V. V. (2018). Ethnic–racial socialization, model minority experience, and psychological functioning among south Asian American emerging adults: A preliminary mixed-methods study. *Asian American Journal of Psychology, 9*, 17-31.
- \*Davis, B. L., Smith-Bynum, M., Saleem, F. T., Francois, T., & Lambert, S. F. (2017). Racial socialization, private regard, and behavior problems in African American youth: Global self-esteem as a mediator. *Journal of Child and Family Studies, 26*, 709-720.
- \*Dotterer, A. M., & James, A., Jr. (2018). Can parenting microprotections buffer against adolescents’ experiences of racial discrimination? *Journal of Youth and Adolescence, 47*, 38-50.
- \*Constantine, M. G., & Blackmon, S. M. (2002). Black adolescents’ racial socialization experiences: Their relations to home, school, and peer self-esteem. *Journal of Black Studies, 32*, 322–335.
- \*Cooper, S. M., & McLoyd, V. C. (2011). Racial barrier socialization and the well- being of African American adolescents: The moderating role of mother–adolescent relationship quality. *Journal of Research on Adolescence, 21*, 895-903. doi:10.1111/j.1532-7795.2011.00749.x

- Crampton, S. M., & Wagner, J. A. (1994). Percept-percept inflation in microorganizational research: An investigation of prevalence and effect. *Journal of Applied Psychology, 79*, 67–76. doi:10.1037//0021-9010.79.1.67
- Davis, A., Gardner, B. B., & Gardner, M. R. (2009). *Deep south: A social anthropological study of caste and class* (Paperback ed.). Columbia, S.C: University of South Carolina 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*, 293–307. doi:10.1007/s10826-006-9039-8
- \*Derlan, C. L., Umaña-Taylor, A. J., Toomey, R. B., Updegraff, K. A., & Jahromi, L. B. (2015). Person–environment fit: Everyday conflict and coparenting conflict in Mexican-origin teen mother families. *Cultural Diversity and Ethnic Minority Psychology, 21*, 136–145. doi:10.1037/a0037069
- Dunbar, A. S., Leerkes, E. M., Coard, S. I., Supple, A. J., & Calkins, S. (2017). An integrative conceptual model of parental racial/ethnic and emotion socialization and links to children's social- emotional development among African American families. *Child Development Perspectives, 11*, 16-22. doi:doi:10.1111/cdep.12218
- \*Dunbar, A. S., Perry, N. B., Cavanaugh, A. M., & Leerkes, E. M. (2015a). African American parents' racial and emotion socialization profiles and young adults' emotional adaptation. *Cultural Diversity & Ethnic Minority Psychology, 21*, 409-419. doi:10.1037/a0037546
- Dunbar, A. S., Perry, N. B., Cavanaugh, A. M., & Leerkes, E. M. (2015b). African American parents' racial and emotion socialization profiles and young adults' emotional adaptation. *Cultural Diversity and Ethnic Minority Psychology, 21*, 409–419. doi:10.1037/a0037546

- Egger, M., Davey Smith, G., Schneider, M., & Minder, C. (1997). Bias in meta-analysis detected by a simple, graphical test. *British Medical Journal*, *315*, 629–634.
- Evans, G. W., & Kim, P. (2013). Childhood poverty, chronic stress, self-regulation, and coping. *Child Development Perspectives*, *7*, 43–48.
- Feagin, J. R. (2014). *Racist America: Roots, current realities, and future reparations*. New York: Routledge.
- \*Fischer, A. R., & Shaw, C. M. (1999). African Americans' mental health and perceptions of racist discrimination: The moderating effects of racial socialization experiences and self-esteem. *Journal of Counseling Psychology*, *46*, 395–407. doi:10.1037//0022-0167.46.3.395
- Franklin-Jackson, D., & Carter, R. T. (2016). The relationships between race-related stress, racial identity, and mental health for Black Americans. *Journal of Black Psychology*, *33*, 5–26. doi:10.1177/0095798406295092
- Fu, R., Gartlehner, G., Grant, M., Shamliyan, T., Sedrakyan, A., Wilt, T. J., . . . Trikalinos, T. A. (2011). Conducting quantitative synthesis when comparing medical interventions: AHRQ and the Effective Health Care Program. *Journal of Clinical Epidemiology*, *64*, 1187–1197. doi:10.1016/j.jclinepi.2010.08.010
- \*Gartner, M., Kiang, L., & Supple, A. (2014). Prospective links between ethnic socialization, ethnic and American identity, and well-being among Asian-American adolescents. *Journal of Youth and Adolescence*, *43*, 1715–1727. doi:10.1007/s10964-013-0044-0
- Garcia Coll, C., Lamberty, G., Jenkins, R., McAdoo, H. P., Crnic, K., Wasik, B. H., & García, H. V. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development*, *67*, 1891–1914. doi:10.1111/j.1467-8624.1996.tb01834.x

Garcia Coll, C., & Szalacha, L. A. (2004). The multiple contexts of middle childhood *The Future of Children* (pp. 81-97).

\*Gonzales-Backen, M., Bámaca-Colbert, M. Y., Noah, A. J., & Rivera, P. M. (2017). Cultural profiles among Mexican-origin girls: Associations with psychosocial adjustment. *Journal of Latina/o Psychology, 5*, 157-172.

Harrison, D. A., McLaughlin, M. E., & Coalter, T. M. (1996). Context, cognition, and common method variance: Psychometric and verbal protocol evidence. *Organizational Behavior and Human Decision Processes, 68*, 246–261.

Higgins, J., & Green, S. (2011). *Analysing data and undertaking meta-analyses. The Cochrane Library (Version 5.1.0)*. Chichester, UK: Wiley.

Higgins, J. P. T., Thompson, S. G., Deeks, J. J., & Altman, D. G. (2003). Measuring inconsistency in meta-analyses. *BMJ (Clinical research ed.), 327*, 557–560.  
doi:10.1136/bmj.327.7414.557

Hornby, G. (2000). *Improving parental involvement*. London; New York: Continuum.

Hughes, D. (2003). Correlates of African American and Latino Parents' messages to children about ethnicity and race: A comparative study of racial socialization. *American Journal of Community Psychology, 31*, 15-33. doi:10.1023/A:1023066418688

Hughes, D., & 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., & Johnson, D. (2001). Correlates in children's experiences of parents' racial socialization behaviors. *Journal of Marriage and Family, 63*, 981-995.  
doi:10.1111/j.1741-3737.2001.00981.x



- 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
- Huguley, J. P., Wang, M. T., Vasquez, A., & Guo, J. (2019). Parental ethnic-racial socialization practices and the construction of children of color's ethnic-racial identity: A research synthesis and meta-analysis. *American Psychologist*.
- Kaiser, C. R., Vick, S. B., & Major, B. (2006). Prejudice expectations moderate preconscious attention to cues that are threatening to social identity. *Psychological Science, 17*, 332-338. doi:10.1111/j.1467-9280.2006.01707.x
- \*Kiang, L., Supple, A. J., & Stein, G. L. (2018). Latent profiles of discrimination and socialization predicting ethnic identity and well-being among Asian American adolescents. *Journal of Research on Adolescence*.
- \*Knight, G. P., Carlo, G., Streit, C., & White, R. M. B. (2017). A model of maternal and paternal ethnic socialization of Mexican-American adolescents' self-views. *Child Development, 88*, 1885-1896.
- \*Lambert, S. F., Roche, K. M., Saleem, F. T., & Henry, J. S. (2015). Mother-adolescent relationship quality as a moderator of associations between racial socialization and adolescent psychological adjustment. *American Journal of Orthopsychiatry, 85*, 409-420. doi:10.1037/ort0000085

- Lee, R. M., Grotevant, H. D., Hellerstedt, W. L., & Gunnar, M. R. (2006). Cultural socialization in families with internationally adopted children. *Journal of family psychology : JFP : journal of the Division of Family Psychology of the American Psychological Association (Division 43)*, *20*, 571–580. doi:10.1037/0893-3200.20.4.571
- Lesane-Brown, C. L. (2006). A review of race socialization within Black families. *Developmental Review*, *26*, 400–426. doi:10.1016/j.dr.2006.02.001
- Lewis, A. E. (2003). *Race in the schoolyard: Negotiating the color line in classrooms and communities*. New Brunswick, N.J.: Rutgers University Press.
- \*Liu, L. L., & Lau, A. S. (2013). Teaching about race/ethnicity and racism matters: An examination of how perceived ethnic racial socialization processes are associated with depression symptoms. *Cultural Diversity and Ethnic Minority Psychology*, *19*, 383–394. doi:10.1037/a0033447
- \*McGill, R. K., Hughes, D., Alicea, S., & Way, N. (2012). Academic adjustment across middle school: the role of public regard and parenting. *Developmental Psychology*, *48*, 1003–1018. doi:10.1037/a0026006
- McHale, S. M., Crouter, A. C., Kim, J.-Y., Burton, L. M., Davis, K. D., Dotterer, A. M., & Swanson, D. P. (2006). Mothers' and fathers' racial socialization in African American families: Implications for youth. *Child Development*, *77*, 1387–1402. doi:10.1111/j.1467-8624.2006.00942.x
- McKown, C., & Strambler, M. J. (2009). Developmental antecedents and social and academic consequences of stereotype-consciousness in middle childhood. *Child Development*, *80*, 1643-1659. doi:10.1111/j.1467-8624.2009.01359.x

- McKown, C., & Weinstein, R. S. (2003). The development and consequences of stereotype consciousness in middle childhood. *Child Development, 74*, 498-515. doi:10.1111/1467-8624.7402012
- Mossakowski, K. N. (2003). Coping with perceived discrimination: Does ethnic identity protect mental health? *Journal of Health and Social Behavior, 44*, 318-331.
- Neblett, E. W., Rivas-Drake, D., & Umaña-Taylor, A. J. (2012). The promise of racial and ethnic protective factors in promoting ethnic minority youth development. *Child Development Perspectives, 6*, 295–303. doi:10.1111/j.1750-8606.2012.00239.x
- Neblett, E. W. J., 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.
- \*Nelson, S. C., Syed, M., Tran, A. G. T. T., Hu, A. W., & Lee, R. M. (2018). Pathways to ethnic-racial identity development and psychological adjustment: The differential associations of cultural socialization by parents and peers. *Developmental Psychology*.
- Osborne, J. W. (2007). Linking stereotype threat and anxiety. *Educational Psychology, 27*, 135-154. doi:10.1080/01443410601069929
- Pager, D., & Shepherd, H. (2008). The sociology of discrimination: Racial discrimination in employment, housing, credit, and consumer markets. *Annual Review of Sociology, 34*, 181-209. doi:10.1146/annurev.soc.33.040406.131740
- Priest, N., Walton, J., White, F., Kowal, E., Baker, A., & Paradies, Y. (2014). Understanding the complexities of ethnic-racial socialization processes for both minority and majority

- groups: A 30-year systematic review. *International Journal of Intercultural Relations*, 43, 139–155. doi:10.1016/j.ijintrel.2014.08.003
- Quintana, S. M. (1998). Children's developmental understanding of ethnicity and race. *Applied and Preventive Psychology*, 7, 27–45.
- R Core Team. (2017). *A language and environment for statistical computing*. . Vienna, Austria: R Foundation for Statistical Computing.
- Reynolds, J. E., & Gonzales-Backen, M. A. (2017). Ethnic-racial socialization and the mental health of African Americans: A critical review. *Journal of Family Theory & Review*, 9, 182-200. doi:10.1111/jftr.12192
- \*Reynolds, J. E., Gonzales-Backen, M., Allen, K. A., Hurley, E. A., Donovan, R. A., Schwartz, S. J., . . . Williams, M. (2017). Ethnic-racial identity of black emerging adults: The role of parenting and ethnic-racial socialization. *Journal of Family Issues*, 38, 2200-2224.
- Richardson, B. L., Macon, T. A., Mustafaa, F. N., Bogan, E. D., Cole-Lewis, Y., & Chavous, T. M. (2015). Associations of racial discrimination and parental discrimination coping messages with African American adolescent racial identity. *Journal of Youth and Adolescence*, 44, 1301-1317. doi:10.1007/s10964-014-0196-6
- Rosenthal, R. (1991). *Meta-analysis procedures for social sciences*. Newbury Park, CA: Sage.
- \*Sanchez, D., Smith, L. V., & Adams, W. (2018). The relationships among perceived discrimination, marianismo gender role attitudes, racial-ethnic socialization, coping styles, and mental health outcomes in Latina college students. *Journal of Latina/o Psychology*, 6, 1-15.
- Schwartz, R. C., & Feisthamel, K. P. (2009). Disproportionate diagnosis of mental disorders among African American versus European American clients: Implications for counseling

- theory, research, and practice. *Journal of Counseling & Development*, 87, 295–301.  
doi:10.1002/j.1556-6678.2009.tb00110.x
- Schwartz, S. J., Zamboanga, B. L., & Jarvis, L. H. (2007). Ethnic identity and acculturation in Hispanic early adolescents: Mediated relationships to academic grades, prosocial behaviors, and externalizing symptoms. *Cultural Diversity and Ethnic Minority Psychology*, 13, 364-373. doi:10.1037/1099-9809.13.4.364
- Scott, S., Briskman, J., & Dadds, M. R. (2011). Measuring parenting in community and public health research using brief child and parent reports. *Journal of Child and Family Studies*, 20, 343-352. doi:10.1007/s10826-010-9398-z
- Sellers, R. M., & Nicole Shelton, J. (2003). The role of racial identity in perceived racial discrimination. *Journal of Personality and Social Psychology*, 84, 1079-1092.  
doi:10.1037/0022-3514.84.5.1079
- Settersten, R. A., & Ray, B. (2010). What's going on with young people today? The long and twisting path to adulthood. *The Future of Children*, 20, 19-41. doi:10.1353/foc.0.0044
- Shadish, W. R., & Sweeney, R. B. (1991). Mediators and moderators in meta-analysis: There's a reason we don't let dodo birds tell us which psychotherapies should have prizes. *Journal of Consulting and Clinical Psychology*, 59, 883-893. doi:10.1037/0022-006X.59.6.883
- Shih, M. (2004). Positive stigma: Examining resilience and empowerment in overcoming stigma. *The ANNALS of the American Academy of Political and Social Science*, 591, 175-185.  
doi:10.1177/0002716203260099
- Smith, T. B., & Silva, L. (2011). Ethnic identity and personal well-being of people of color: A meta-analysis. *Journal of Counseling Psychology*, 58, 42-60. doi:10.1037/a0021528

- Spencer, M. B. (1995). *Old issues and new theorizing about African American youth: A phenomenological variant of ecological systems theory*. In R. L. Taylor (Ed.), *African American Youth: Their social and economic status in the United States* (pp. 37-69). Westport, CT: Praeger.
- Sroufe, L. A., Egeland, B., & Carlson, E. A. (1999). One social world: The integrated development of parent-child and peer relationships. In W. A. Collins & B. Laursen (Eds.), *Relationships as developmental contexts: The Minnesota symposia on child psychology* (Vol. 30, pp. 241-261). Mahwah, NJ: Lawrence Erlbaum Associates.
- Sterne, J., Egger, M., & Moher, D. (2011). Addressing reporting biases. In J. Higgins & S. Green (Eds.), *Cochrane handbook for systematic reviews of intervention. Version 5.1.0 (updated March 2011)*: The Cochrane Collaboration.
- Stevenson, H. C. (1994). Racial socialization in African American families: The art of balancing intolerance and survival. *The Family Journal*, 2, 190-198.  
doi:10.1177/1066480794023002
- Stevenson, H. C. (1997). Missed, dissed, and pissed": Making meaning of neighborhood risk, fear and anger management in urban Black youth. *Cultural Diversity & Mental Health*, 3, 37-52. doi:10.1037//1099-9809.3.1.37
- Stevenson, H. C., Cameron, R., Herrero-Taylor, T., & Davis, G. Y. (2002). Development of the teenager experience of racial socialization scale: Correlates of race-related socialization frequency from the perspective of Black youth. *Journal of Black Psychology*, 28, 84-106.  
doi:10.1177/0095798402028002002

- Stevenson, H. C., Reed, J., Bodison, P., & Bishop, A. (1997). Racism stress management: Racial socialization beliefs and the experience of depression and anger in African American youth. *Youth & Society, 29*, 197-222.
- Suizzo, M. A., Robinson, C., & Pahlke, E. (2008). African American mothers' socialization beliefs and goals with young children: Themes of history, education, and collective independence. *Journal of Family Issues, 29*, 287-316.
- ten Kate, J., de Koster, W., & van der Waal, J. (2017). Why are depressive symptoms more prevalent among the less educated? The relevance of low cultural capital and cultural entitlement. *Sociological Spectrum, 37*, 63-76. doi:10.1080/02732173.2016.1274248
- \*Thai, C. J., Lyons, H. Z., Lee, M. R., & Iwasaki, M. (2017). Microaggressions and self-esteem in emerging Asian American adults: The moderating role of racial socialization. *Asian American Journal of Psychology, 8*, 83-93.
- van den Noortgate, W., & Onghena, P. (2003). Multilevel Meta-Analysis: A Comparison with Traditional Meta-Analytical Procedures. *Educational and Psychological Measurement, 63*, 765-790. doi:10.1177/0013164403251027
- Umaña-Taylor, A. J., O'Donnell, M., Knight, G. P., Roosa, M. W., Berkel, C., & Nair, R. (2014). Mexican-origin early adolescents' ethnic socialization, ethnic identity, and psychosocial functioning. *The Counseling Psychologist, 42*, 170-200.
- \*Varner, F. A., Hou, Y., Hodzic, T., Hurd, N. M., Butler-Barnes, S., & Rowley, S. J. (2018). Racial discrimination experiences and African American youth adjustment: The role of parenting profiles based on racial socialization and involved-vigilant parenting. *Cultural Diversity and Ethnic Minority Psychology, 24*, 173-186.

- Velez-Agosto, N.M., Soto-Crespo, J.G., Vizcarrondo-Oppenheimer, M., Vega-Molina, S., & Garcia Coll, C. (2017). Bronfenbrenner's bioecological theory revision: Moving culture from the macro into the micro. *Perspectives on Psychological Science, 12*, 900-910.
- \*Wallace, S. A., & Fisher, C. B. (2007). Substance use attitudes among urban Black adolescents: The role of parent, peer, and cultural factors. *Journal of Youth and Adolescence, 36*, 441–451. doi:10.1007/s10964-006-9099-5
- Wang, M. T., & Degol, J. S. (2016). School climate: A review of the definition, measurement, and impact on student outcomes. *Educational Psychology Review, 28*, 315-352.
- Wang, M. T., Hill, N. E., & Hofkens, T. L. (2014). Parental involvement and African American and European American adolescents' academic, behavioral, and emotional development in secondary school. *Child Development, 85*, 2151-2168.
- Wang, M. T., & Huguley, J. (2012). Parental racial socialization as a moderator of the effects of racial discrimination on educational success among African American adolescents. *Child Development, 83*, 1716-1731.
- Wang, M. T., Kiuru, N., Degol, J. L., & Salmela-Aro, K. (2018). Friends, academic achievement, and school engagement during adolescence: A social network approach to peer influence and selection effects. *Learning and Instruction, 58*, 148-160.
- Wang, M. T., & Sheikh-Khalil, S. (2014). Does parental involvement matter for adolescent achievement and mental health in high school? *Child Development, 85*, 610-625.
- \*Wang, Y., Cham, H., Aladin, M., & Yip, T. (2019). Parental cultural socialization and adolescent private regard: Exploring mediating pathways through daily experiences. *Child Development, 90*, 19-36.



Williams, D. R. (2000). Race, stress, and mental health: Findings from the Commonwealth Minority Health Survey. In C. Hogue, M. A. Hargraves, & K. S. Collins (Eds.), *Minority health in America: Findings and policy implication from the Commonwealth Fund Minority Health Survey* (pp. 209–243). Baltimore, MD: Johns Hopkins University Press.

Table 1

*Summary of Effect Sizes for Parental Ethnic-Racial Socialization and Children of Color's Psychosocial Outcomes*

|   | <i>k</i> | <i>N</i> of samples | Average sample size | #ES | <i>r</i> | Lower CI | Upper CI | <i>I</i> <sup>2</sup> <sub>2</sub> | <i>I</i> <sup>2</sup> <sub>3</sub> | <i>R</i> <sup>2</sup> <sub>2</sub> | <i>R</i> <sup>2</sup> <sub>3</sub> | ANOVA $\Delta\chi^2$ | Q Statistic | Heterogeneity L2 vs L3 given moderators ( $\Delta\chi^2$ ) |
|---|----------|---------------------|---------------------|-----|----------|----------|----------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|----------------------|-------------|--|
| Overall Effects of Ethnic-Racial Socialization on Psychosocial Outcomes |          |                     |                     |     |          |          |          |                                    |                                    |                                    |                                    |                      |             |  |
| Self perceptions  | 43       | 50                  | 198                 | 202 | .07**    | .04      | .11      | .39                                | .34                                | —                                  | —                                  | —                    | 681         |  |
| Externalizing behavior  | 29       | 32                  | 301                 | 118 | -.01     | -.04     | .01      | .51                                | .15                                | —                                  | —                                  | —                    | 332         |  |
| Interpersonal relationship  | 28       | 34                  | 261                 | 170 | .10***   | .06      | .14      | .13                                | .52                                | —                                  | —                                  | —                    | 382         |  |
| Internalizing behavior  | 49       | 57                  | 234                 | 246 | .05**    | .02      | .09      | .31                                | .49                                | —                                  | —                                  | —                    | 1058        |  |
| Moderation Effects by Types of Ethnic-Racial Socialization              |          |                     |                     |     |          |          |          |                                    |                                    |                                    |                                    |                      |             |  |
| Self perceptions  |          |                     |                     |     |          |          |          |                                    |                                    |                                    |                                    |                      |             |  |
| Preparation for bias  | 24       | 29                  | 241                 | 55  | .02      | -.03     | .07      | .17                                | .57                                | .75                                | .00                                | 62.15***             | 145         | 4.94*  |
| Cultural socialization  | 32       | 37                  | 241                 | 96  | .13***   | .09      | .16      | .05                                | .44                                |                                    |                                    |                      | 181         |  |
| Global  | 14       | 15                  | 113                 | 27  | .07**    | .02      | .11      | .60                                | .00                                |                                    |                                    |                      | 60          |  |
| Egalitarian   | 3        | 3                   | 316                 | 5   | —        | —        | —        | —                                  | —                                  |                                    |                                    |                      | —           |  |
| Promotion of mistrust   | 7        | 7                   | 200                 | 11  | -.15*    | -.25     | -.04     | .02                                | .73                                |                                    |                                    |                      | 35          |  |
| Externalizing behavior  |          |                     |                     |     |          |          |          |                                    |                                    |                                    |                                    |                      |             |  |
| Preparation for bias  | 22       | 23                  | 116                 | 35  | .05**    | .02      | .08      | .51                                | .00                                | .85                                | .00                                | 51.32***             | 77          | 6.05*  |
| Cultural socialization  | 26       | 29                  | 226                 | 62  | -.06***  | -.10     | -.03     | .00                                | .55                                |                                    |                                    |                      | 116         |  |
| Global  | 3        | 3                   | 119                 | 3   | —        | —        | —        | —                                  | —                                  |                                    |                                    |                      | —           |  |
| Egalitarian   | 2        | 2                   | 122                 | 2   | —        | —        | —        | —                                  | —                                  |                                    |                                    |                      | —           |  |
| Promotion of mistrust   | 7        | 7                   | 134                 | 11  | .05      | -.05     | .14      | .21                                | .53                                |                                    |                                    |                      | 35          |  |
| Interpersonal relationship  |          |                     |                     |     |          |          |          |                                    |                                    |                                    |                                    |                      |             |  |
| Preparation for bias  | 11       | 15                  | 200                 | 53  | .04*     | .00      | .07      | .43                                | .01                                | .34                                | .04                                | 16.58**              | 95          | 6.08*  |
| Cultural socialization  | 22       | 27                  | 225                 | 90  | .13***   | .07      | .18      | .04                                | .68                                |                                    |                                    |                      | 232         |  |
| Global  | 7        | 7                   | 188                 | 15  | .10*     | .02      | .18      | .00                                | .38                                |                                    |                                    |                      | 21          |  |
| Egalitarian   | 3        | 3                   | 155                 | 7   | —        | —        | —        | —                                  | —                                  |                                    |                                    |                      | —           |  |
| Promotion of mistrust   | 2        | 2                   | 273                 | 5   | —        | —        | —        | —                                  | —                                  |                                    |                                    |                      | —           |  |
| Internalizing behavior  |          |                     |                     |     |          |          |          |                                    |                                    |                                    |                                    |                      |             |  |
| Preparation for bias  | 41       | 45                  | 233                 | 92  | .06**    | .02      | .10      | .62                                | .20                                | .31                                | .00                                | 58.71***             | 458         | .04  |
| Cultural socialization  | 47       | 54                  | 262                 | 139 | -.03     | -.07     | -.00     | .38                                | .40                                |                                    |                                    |                      | 695         |  |
| Global  | 13       | 15                  | 246                 | 25  | -.01     | -.08     | .07      | .06                                | .72                                |                                    |                                    |                      | 104         |  |
| Egalitarian   | 8        | 10                  | 399                 | 21  | -.02     | -.15     | .12      | .01                                | .89                                |                                    |                                    |                      | 227         |  |
| Promotion of mistrust   | 16       | 17                  | 260                 | 28  | .19***   | .12      | .25      | .46                                | .34                                |                                    |                                    |                      | 106         |  |

Note. *k* = number of studies; ES = effect size; LCI = Lower 95% Confidence Interval; UCI = Upper 95% Confidence Interval; *I*<sup>2</sup><sub>2</sub> = heterogeneity at Level 2; *I*<sup>2</sup><sub>3</sub> = heterogeneity at Level 3; *k* = number of studies; *R*<sup>2</sup><sub>2</sub> = explained variance at Level 2; *R*<sup>2</sup><sub>3</sub> = explained variance at Level 3.

Table 2

*Moderation Effects of Developmental Stage*

|  | <i>k</i> | <i>N</i> of<br>sample<br>s | Average<br>sample<br>size | #ES | <i>r</i> | Lower CI | Upper<br>CI | <i>I</i> <sup>2</sup> <sub>2</sub> | <i>I</i> <sup>2</sup> <sub>3</sub> | <i>R</i> <sup>2</sup> <sub>2</sub> | <i>R</i> <sup>2</sup> <sub>3</sub> | ANOVA<br>$\Delta\chi^2$ | Q Statistic | Heterogeneity<br>L2 vs L3 given<br>moderators ( $\Delta\chi^2$ ) |
|--|----------|----------------------------|---------------------------|-----|----------|----------|-------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------|-------------|--|
| Self perceptions                       |          |                            |                           |     |          |          |             |                                    |                                    | .00                                | .38                                | 11.90*                  |             | 1.73   |
| Childhood                              | 6        | 7                          | 347                       | 20  | .04***   | .02      | .06         | .56                                | .00                                |                                    |                                    |                         | 48          |  |
| Early adolescence                      | 11       | 14                         | 190                       | 74  | .13***   | .08      | .17         | .47                                | .19                                |                                    |                                    |                         | 211         |  |
| Middle adolescence                     | 10       | 12                         | 169                       | 41  | .04      | -.02     | .10         | .58                                | .15                                |                                    |                                    |                         | 147         |  |
| Late adolescence/Emerging<br>adulthood | 9        | 9                          | 276                       | 21  | .04      | -.05     | .13         | .47                                | .40                                |                                    |                                    |                         | 152         |  |
| Externalizing behavior                 |          |                            |                           |     |          |          |             |                                    |                                    | .00                                | .15                                | 1.43                    |             | 3.51   |
| Childhood                              | 4        | 6                          | 366                       | 22  | -.02     | -.14     | .10         | .21                                | .64                                |                                    |                                    |                         | 120         |  |
| Early adolescence                      | 5        | 5                          | 142                       | 21  | -.04     | -.09     | .01         | .30                                | .05                                |                                    |                                    |                         | 32          |  |
| Middle adolescence                     | 5        | 5                          | 211                       | 20  | .00      | -.05     | .04         | .65                                | .00                                |                                    |                                    |                         | 59          |  |
| Late adolescence/Emerging<br>adulthood | 4        | 4                          | 245                       | 19  | -.02     | -.06     | .03         | .58                                | .00                                |                                    |                                    |                         | 45          |  |
| Interpersonal<br>relationship          |          |                            |                           |     |          |          |             |                                    |                                    | .01                                | .04                                | 1.59                    |             | 4.21*  |
| Childhood                              | 5        | 6                          | 267                       | 30  | .05      | .00      | .11         | .26                                | .20                                |                                    |                                    |                         | 50          |  |
| Early adolescence                      | 4        | 6                          | 199                       | 23  | .17      | -.06     | .39         | .03                                | .88                                |                                    |                                    |                         | 103         |  |
| Middle adolescence                     | 9        | 10                         | 189                       | 56  | .11***   | .07      | .16         | .00                                | .24                                |                                    |                                    |                         | 55          |  |
| Late adolescence/Emerging<br>adulthood | 6        | 6                          | 251                       | 42  | .10*     | .02      | .18         | .32                                | .33                                |                                    |                                    |                         | 122         |  |
| Internalizing behavior                 |          |                            |                           |     |          |          |             |                                    |                                    | .00                                | .26                                | 7.73                    |             | 5.53*  |
| Childhood                              | 8        | 10                         | 295                       | 35  | .01      | -.04     | .07         | .76                                | .07                                |                                    |                                    |                         | 178         |  |
| Early adolescence                      | 6        | 6                          | 117                       | 41  | .02      | -.04     | .08         | .45                                | .10                                |                                    |                                    |                         | 92          |  |
| Middle adolescence                     | 11       | 16                         | 197                       | 110 | .09**    | .03      | .16         | .50                                | .30                                |                                    |                                    |                         | 488         |  |
| Late adolescence/Emerging<br>adulthood | 17       | 17                         | 281                       | 63  | .02      | -.04     | .08         | .56                                | .30                                |                                    |                                    |                         | 393         |  |

*Note.* *k* = number of studies; ES = effect size; LCI = Lower 95% Confidence Interval; UCI = Upper 95% Confidence Interval; *I*<sub>2</sub> = heterogeneity at Level 2; *I*<sub>3</sub> = heterogeneity at Level 3; *k* = number of studies; *R*<sub>2</sub> = explained variance at Level 2; *R*<sub>3</sub> = explained variance at Level 3.

Table 3

*Moderation Effects of Racial/Ethnic Groups*

|                            | <i>k</i> | <i>N</i> of samples | Average sample size | #ES | <i>r</i> | Lower CI | Upper CI | <i>I</i> <sup>2</sup> <sub>2</sub> | <i>I</i> <sup>2</sup> <sub>3</sub> | <i>R</i> <sup>2</sup> <sub>2</sub> | <i>R</i> <sup>2</sup> <sub>3</sub> | ANOVA $\Delta\chi^2$ | Q Statistic | Heterogeneity L2 vs L3 given moderators ( $\Delta\chi^2$ ) |
|----------------------------|----------|---------------------|---------------------|-----|----------|----------|----------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|----------------------|-------------|--|
| Self perceptions           |          |                     |                     |     |          |          |          |                                    |                                    | .00                                | .34                                | 9.38*                |             | 1.20   |
| Asian American             | 4        | 4                   | 126                 | 16  | -.10*    | -.17     | -.02     | .72                                | .00                                |                                    |                                    |                      | 56          |  |
| African American           | 24       | 29                  | 134                 | 133 | .09***   | .05      | .13      | .24                                | .31                                |                                    |                                    |                      | 274         |  |
| Latinx                     | 6        | 7                   | 359                 | 18  | .08*     | .01      | .15      | .52                                | .18                                |                                    |                                    |                      | 53          |  |
| Native American            | 1        | 1                   | 84                  | 1   | —        | —        | —        | —                                  | —                                  |                                    |                                    |                      | —           |  |
| Externalizing behavior     |          |                     |                     |     |          |          |          |                                    |                                    | .00                                | .11                                | 1.94                 |             | 3.38   |
| Asian American             | 0        | 0                   | —                   | 0   | —        | —        | —        | —                                  | —                                  |                                    |                                    |                      | —           |  |
| African American           | 17       | 17                  | 199                 | 61  | .00      | -.02     | .02      | .50                                | .00                                |                                    |                                    |                      | 120         |  |
| Latinx                     | 6        | 8                   | 257                 | 31  | -.03     | -.09     | .03      | .45                                | .22                                |                                    |                                    |                      | 91          |  |
| Native American            | 0        | 0                   | —                   | 0   | —        | —        | —        | —                                  | —                                  |                                    |                                    |                      | —           |  |
| Interpersonal relationship |          |                     |                     |     |          |          |          |                                    |                                    | .01                                | .08                                | 2.27                 |             | 4.11*  |
| Asian American             | 2        | 3                   | 141                 | 22  | —        | .00      | .11      | .47                                | .02                                |                                    |                                    |                      | 43          |  |
| African American           | 16       | 20                  | 146                 | 116 | .10***   | .06      | .14      | .14                                | .34                                |                                    |                                    |                      | 219         |  |
| Latinx                     | 7        | 9                   | 305                 | 23  | .16*     | .03      | .29      | .04                                | .87                                |                                    |                                    |                      | 107         |  |
| Native American            | 0        | 0                   | —                   | 0   | —        | —        | —        | —                                  | —                                  |                                    |                                    |                      | —           |  |
| Internalizing behavior     |          |                     |                     |     |          |          |          |                                    |                                    | .01                                | .15                                | 11.63***             |             | 11.64***   |
| Asian American             | 4        | 4                   | 143                 | 27  | .23***   | .18      | .27      | .48                                | .00                                |                                    |                                    |                      | 56          |  |
| African American           | 33       | 38                  | 220                 | 182 | .00      | -.04     | .04      | .46                                | .33                                |                                    |                                    |                      | 1061        |  |
| Latinx                     | 11       | 13                  | 267                 | 44  | .04      | -.01     | .09      | .70                                | .09                                |                                    |                                    |                      | 174         |  |
| Native American            | 1        | 1                   | 92                  | 2   | —        | —        | —        | —                                  | —                                  |                                    |                                    |                      | —           |  |

*Note.* *k* = number of studies; ES = effect size; LCI = Lower 95% Confidence Interval; UCI = Upper 95% Confidence Interval; *I*<sup>2</sup><sub>2</sub> = heterogeneity at Level 2; *I*<sup>2</sup><sub>3</sub> = heterogeneity at Level 3; *k* = number of studies; *R*<sup>2</sup><sub>2</sub> = explained variance at Level 2; *R*<sup>2</sup><sub>3</sub> = explained variance at Level 3.

Table 4

*Moderation Effects of Study Design*

|                            | <i>k</i> | <i>N</i> of samples | Average sample size | #ES | <i>r</i> | Lower CI | Upper CI | <i>I</i> <sup>2</sup> <sub>2</sub> | <i>I</i> <sup>2</sup> <sub>3</sub> | <i>R</i> <sup>2</sup> <sub>2</sub> | <i>R</i> <sup>2</sup> <sub>3</sub> | ANOVA $\Delta\chi^2$ | Q Statistic | Heterogeneity L2 vs L3 given moderators ( $\Delta\chi^2$ ) |
|----------------------------|----------|---------------------|---------------------|-----|----------|----------|----------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|----------------------|-------------|--|
| Self perceptions           |          |                     |                     |     |          |          |          |                                    |                                    | .00                                | .02                                | .44                  |             | .11  |
| Cross-sectional            | 39       | 46                  | 189                 | 179 | .08***   | .04      | .12      | .39                                | .34                                |                                    |                                    |                      | 624         |  |
| Longitudinal               | 8        | 10                  | 334                 | 23  | .04*     | .01      | .08      | .59                                | .03                                |                                    |                                    |                      | 55          |  |
| Externalizing behavior     |          |                     |                     |     |          |          |          |                                    |                                    | .00                                | .35                                | 1.85                 |             | 4.16*  |
| Cross-Sectional            | 24       | 27                  | 206                 | 96  | .00      | -.03     | .02      | .56                                | .05                                |                                    |                                    |                      | 252         |  |
| Longitudinal               | 5        | 6                   | 377                 | 17  | -.06     | -.14     | .02      | .46                                | .33                                |                                    |                                    |                      | 68          |  |
| Interpersonal relationship |          |                     |                     |     |          |          |          |                                    |                                    | .00                                | .01                                | .06                  |             | 4.15*  |
| Cross-sectional            | 26       | 32                  | 202                 | 155 | .11***   | .06      | .15      | .14                                | .51                                |                                    |                                    |                      | 350         |  |
| Longitudinal               | 5        | 5                   | 349                 | 15  | .04**    | .01      | .07      | .48                                | .00                                |                                    |                                    |                      | 28          |  |
| Internalizing behavior     |          |                     |                     |     |          |          |          |                                    |                                    | .00                                | .01                                | .29                  |             | 2.93   |
| Cross-sectional            | 53       | 61                  | 230                 | 284 | .02      | -.01     | .05      | .48                                | .34                                |                                    |                                    |                      | 1753        |  |
| Longitudinal               | 8        | 9                   | 343                 | 29  | .05      | -.03     | .12      | .89                                | .00                                |                                    |                                    |                      | 191         |  |

*Note.* *k* = number of studies; ES = effect size; LCI = Lower 95% Confidence Interval; UCI = Upper 95% Confidence Interval; *I*<sup>2</sup><sub>2</sub> = heterogeneity at Level 2; *I*<sup>2</sup><sub>3</sub> = heterogeneity at Level 3; *k* = number of studies; *R*<sup>2</sup><sub>2</sub> = explained variance at Level 2; *R*<sup>2</sup><sub>3</sub> = explained variance at Level 3.

Table 5  
*Moderation Effects of Ethnic-Racial Socialization Reporter*

|                            | <i>k</i> | <i>N</i> of samples | Average sample size | #ES | <i>r</i> | Lower CI | Upper CI | <i>I</i> <sup>2</sup> <sub>2</sub> | <i>I</i> <sup>2</sup> <sub>3</sub> | <i>R</i> <sup>2</sup> <sub>2</sub> | <i>R</i> <sup>2</sup> <sub>3</sub> | ANOVA $\Delta\chi^2$ | Q Statistic | Heterogeneity L2 vs L3 given moderators ( $\Delta\chi^2$ ) |
|----------------------------|----------|---------------------|---------------------|-----|----------|----------|----------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|----------------------|-------------|--|
| Self perceptions           |          |                     |                     |     |          |          |          |                                    |                                    | .00                                | .04                                | 4.60                 |             | .01  |
| Child reports              | 35       | 39                  | 197                 | 151 | .14***   | .12      | .16      | .25                                | .11                                |                                    |                                    |                      | 225         |  |
| Parent reports             | 11       | 14                  | 233                 | 51  | .08***   | .05      | .11      | .00                                | .13                                |                                    |                                    |                      | 31          |  |
| Observation                | 0        | 0                   | —                   | 0   | —        | —        | —        | —                                  | —                                  |                                    |                                    |                      | —           |  |
| Externalizing behavior     |          |                     |                     |     |          |          |          |                                    |                                    | .00                                | .00                                | 1.32                 |             | .16  |
| Child reports              | 23       | 24                  | 233                 | 85  | -.09***  | .07      | .10      | .12                                | .00                                |                                    |                                    |                      | 78          |  |
| Parent reports             | 8        | 10                  | 198                 | 33  | -.11***  | .07      | .15      | .00                                | .25                                |                                    |                                    |                      | 36          |  |
| Observation                | 0        | 0                   | —                   | 0   | —        | —        | —        | —                                  | —                                  |                                    |                                    |                      | —           |  |
| Interpersonal relationship |          |                     |                     |     |          |          |          |                                    |                                    | .24                                | .04                                | 8.04*                |             | 11.34**  |
| Child reports              | 19       | 22                  | 160                 | 101 | .15***   | .14      | .16      | .00                                | .26                                |                                    |                                    |                      | 128         |  |
| Parent reports             | 11       | 14                  | 254                 | 66  | .08*     | .03      | .13      | .00                                | .49                                |                                    |                                    |                      | 69          |  |
| Observation                | 1        | 1                   | 180                 | 3   | —        | —        | —        | —                                  | —                                  |                                    |                                    |                      | —           |  |
| Internalizing behavior     |          |                     |                     |     |          |          |          |                                    |                                    | .01                                | .23                                | 8.77*                |             | 1.88   |
| Child reports              | 46       | 51                  | 244                 | 256 | .14***   | .12      | .16      | .23                                | .32                                |                                    |                                    |                      | 533         |  |
| Parent reports             | 15       | 18                  | 221                 | 55  | .10***   | .08      | .12      | .00                                | .49                                |                                    |                                    |                      | 106         |  |
| Observation                | 1        | 1                   | 92                  | 2   | —        | —        | —        | —                                  | —                                  |                                    |                                    |                      | —           |  |

*Note.* *k* = number of studies; ES = effect size; LCI = Lower 95% Confidence Interval; UCI = Upper 95% Confidence Interval; *I*<sup>2</sup><sub>2</sub> = heterogeneity at Level 2; *I*<sup>2</sup><sub>3</sub> = heterogeneity at Level 3; *k* = number of studies; *R*<sup>2</sup><sub>2</sub> = explained variance at Level 2; *R*<sup>2</sup><sub>3</sub> = explained variance at Level 3.