

Racial/Ethnic Discrimination and Well-Being During Adolescence: A Meta-Analytic Review

Aprile D. Benner
University of Texas at Austin

Yijie Wang
Michigan State University

Yishan Shen
Texas State University

Alaina E. Boyle, Richelle Polk, and Yen-Pi Cheng
University of Texas at Austin

This meta-analytic study systematically investigates the relations between perceived racial/ethnic discrimination and socioemotional distress, academics, and risky health behaviors during adolescence, and potential variation in these relations. The study included 214 peer-reviewed articles, theses, and dissertations, with 489 unique effect sizes on 91,338 unique adolescents. Random-effects meta-analyses across 11 separate indicators of well-being identified significant detrimental effects. Greater perceptions of racial/ethnic discrimination were linked to more depressive and internalizing symptoms; greater psychological distress; poorer self-esteem; lower academic achievement and engagement; less academic motivation; greater engagement in externalizing behaviors, risky sexual behaviors, and substance use; and more associations with deviant peers. Metaregression and subgroup analyses indicated differences by race/ethnicity, Gender \times Race/Ethnicity interactions, developmental stage, timing of retrospective measurement of discrimination, and country. Overall, this study highlights the pernicious effects of racial/ethnic discrimination for adolescents across developmental domains and suggests who is potentially at greater risk.

Keywords: racial/ethnic discrimination, adolescence, socioemotional well-being, academics, risky behaviors

Supplemental materials: <http://dx.doi.org/10.1037/amp0000204.supp>

The demographics of the U.S. are rapidly shifting. Although non-Hispanic Whites continue to make up the majority of the U.S. population (64%), representation of Latino (16%), African American (12%), and Asian American (5%) individuals is not insubstantial (U.S. Census Bureau, 2010). Disaggregating demographics by child and adolescent versus adult populations highlights the nuances of demographic changes in the United States. Whereas racial/ethnic minorities comprised 33% of the adult population in 2010, they

comprised 46% of the child and adolescent population (i.e., under Age 18; O'Hare, 2011), and non-Hispanic White children and adolescents are projected to be the numeric minority by 2020 (U.S. Census Bureau, 2014).

These shifts in population demographics in the United States are complicated by both ongoing challenges with race relations and the clear disparities that exist between African Americans and Latinos versus Whites across numerous facets of daily living and well-being. In a recent survey by the

This article was published Online First July 19, 2018.

Aprile D. Benner, Department of Human Development and Family Sciences, University of Texas at Austin; Yijie Wang, Department of Human Development and Family Studies, Michigan State University; Yishan Shen, Department of School of Family and Consumer Sciences, Texas State University; Alaina E. Boyle, Richelle Polk, and Yen-Pi Cheng, Department of Human Development and Family Sciences, University of Texas at Austin.

We would like to acknowledge the support of funding from the William T. Grant Foundation and the National Science Foundation to Aprile Benner, and from the National Institute of Child Health and Human Development to the Population Research Center, University of Texas at

Austin (P2CHD042849). Opinions reflect those of the authors and not necessarily those of the granting agencies. The authors would like to thank Sandra Graham, Elizabeth Gershoff, and Tasha Beretvas for their advice with various aspects of the meta-analysis. We also thank our research assistants, including George Ponton, Lauren McCarthy, and Sydney Sadler, for their assistance as well as all of the authors who provided us with data to be included in this meta-analysis.

Correspondence concerning this article should be addressed to Aprile D. Benner, 1 University Station A2702, Department of Human Development and Family Sciences, University of Texas Austin, Austin, TX 78750. E-mail: abenner@prc.utexas.edu



Aprile D. Benner

Pew Research Center (2015), half of respondents indicated that racism is “a big problem” in the United States, and almost 60% agreed that more needs to be done to achieve racial equality. Moreover, African Americans and Latinos were much less likely to endorse fair treatment in various public spaces (e.g., in dealings with police, in schools, and in stores and restaurants) than their White counterparts (Pew Research Center, 2013). Recent media attention to the police shootings of young Black teens including Michael Brown in Ferguson, Missouri, Tamir Rice in Cleveland, Ohio, and Laquan McDonald in Chicago, Illinois, place these disparities in perceived differential treatment into bold relief.

Racial/ethnic disparities also exist across numerous life course outcomes, including poorer educational performance and attainment, lower labor force participation, and higher rates of teenage pregnancy, arrests and incarceration, poverty, and morbidity and mortality for African Americans and Latinos compared with Whites (Kena et al., 2015; Peterson & Krivo, 2005; Pew Research Center, 2013; Snyder & Dillow, 2013; Ventura, Mathews, Hamilton, Sutton, & Abma, 2011). Relatedly, evidence persists for differential treatment across racial/ethnic groups in health care, employment, the judicial system, financial and consumer markets, and the housing sector (Bales & Piquero, 2012; Krivo & Kaufman, 2004; Mouw & Kalleberg, 2010; Pager & Shepherd, 2008; Smedley, Stith, & Nelson, 2009). Although much of these disparities are documented for African American and Latino versus White populations, Asian Americans also face disadvantages that leave them vulnerable to stigmatization and mistreatment. For example, Asian American youth are often labeled as “model minorities” who are

expected as a group to excel academically, yet larger perpetual foreigner stereotypes also label Asian Americans as a monolithic “other” who are viewed as foreigners despite nativity status or generational family ties to the United States (Kim, 1999).

It is both within and because of this larger contextual backdrop that experiences of discrimination are critical to understand. Discrimination is “any behavior which denies individuals or groups of people equality of treatment which they may wish” (Stroebe & Insko, 1989, p. 50). Discrimination can be perpetrated based on a number of different social identities and characteristics that are vulnerable to stigmatization (e.g., gender, weight, sexual orientation; Schmitt, Branscombe, Postmes, & Garcia, 2014). In the current meta-analysis, we focus on race/ethnicity as a key social identity subject to stigmatization, as certain racial/ethnic groups are often devalued in the larger society and in the eyes of others (Crocker, Major, & Steele, 1998).

Linking Racial/Ethnic Discrimination to Child and Adolescent Well-Being

Much of what we know about the pernicious effects of racial/ethnic discrimination is based on adult populations—as an example, 77% of the studies in Schmitt and colleagues’ (2014) recent meta-analysis of discrimination (broadly defined) and psychological well-being included only adult populations—yet children and adolescents of color are not immune to discriminatory mistreatment tied to race/ethnicity. Indeed, reports of being followed by store clerks or store guards, receiving poor service at a restaurant, getting a lower grade than deserved, or being called a racially insulting name are all-too-common occurrences for racial/ethnic minority youth (Fisher, Wallace, & Fenton, 2000; Rosenbloom & Way, 2004). The commonplace nature of racial/ethnic discrimination during the early life course has driven recent integrative models of minority child development (García Coll et al., 1996; Mistry, Contreras, & Pufall-Jones, 2014) to incorporate race/ethnicity and race/ethnicity-based mistreatment as central drivers of young people’s growth and development.

Understanding of difference—particularly in regard to race/ethnicity—occurs quite early in the life course. Evidence suggests that infants as young as 6 months old recognize differences in race/ethnicity (Katz, 2003), and in-group preferences are observed as early as the preschool years (Aboud, 2003; Bigler, Brown, & Markell, 2001; Patterson & Bigler, 2006). Awareness of cultural stereotypes tied to skin color and out-group prejudices begin to emerge in middle childhood (Aboud & Amato, 2001; Augoustinos & Rosewarne, 2001), and by Age 10, many children can recognize both overt and more covert discriminatory actions (McKown & Weinstein, 2003; Verkuyten, Kinket, & van der Wielen, 1997). Early adolescence is also when young



Yijie Wang

people begin to understand and articulate the implications of race for one's daily life, and at this stage of development, they begin to consider their own ethnic identity and how others view their racial/ethnic group (Quintana & McKown, 2008; Umaña-Taylor, 2016). By late adolescence, youth have a more nuanced grasp of abstract notions of racism and privilege and the implications of these for individuals' experiences in society (Karcher & Fischer, 2004; Quintana & McKown, 2008). Moreover, racial/ethnic disparities in health and well-being are thought to take root in adolescence, with reverberating repercussions across the life course (Sanders-Phillips, Settles-Reaves, Walker, & Brownlow, 2009). As such, adolescence is a critical time to investigate the repercussions of racial/ethnic discrimination, as the social-cognitive and identity developmental processes that young people experience and work through at this time in the life course are the foundations for perceiving racial/ethnic discrimination and its consequences (C. S. Brown & Bigler, 2005).

In our meta-analysis, we examine whether adolescents' perceptions of racial/ethnic discrimination are linked to their socioemotional distress, academic success, and risky health behaviors, with particular attention to specific aspects of functioning within each domain. These represent the central developmental competencies highlighted by García Coll and colleagues' (1996) integrative model. Although several existing meta-analyses have investigated the link between discrimination and broader domains of mental or physical health, few have statistically examined differences in the strength of the association between discrimination and specific facets of socioemotional distress or well-being (either via direct relations or moderation analy-

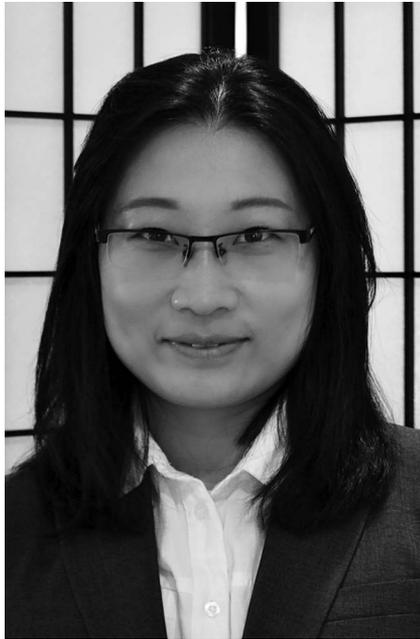
ses; see Lee & Ahn, 2011, 2012; Pieterse, Todd, Neville, & Carter, 2012; Schmitt et al., 2014). Yet the various facets of socioemotional distress and well-being have been differentially linked to one another and to life course outcomes. For example, self-esteem has been found to influence later depression, health, and job satisfaction in a causal manner, but the reverse causal direction was not found for these relations (Orth, Robins, & Widaman, 2012). As such, greater attention to the links between racial/ethnic discrimination and the individual facets of socioemotional distress and well-being is needed. Moreover, no existing meta-analyses have investigated the links between racial/ethnic discrimination and either academics or risky health behaviors—two foci of the current study.

Potential Moderators of the Effects of Racial/Ethnic Discrimination During Adolescence

In addition to examining the extent to which perceived racial/ethnic discrimination is a key driver of well-being, our meta-analytic study also places attention on whether these links are conditioned by characteristics of the adolescent, the study, and the discrimination measure.

Race/Ethnicity and Gender

To fully understand the impact of discrimination on adolescents from diverse backgrounds, we employ an intersectionality framework (Andersen & Collins, 2015; Cole, 2009) to investigate variations in the developmental implications of discrimination by race/ethnicity and gender and their interactions. This framework acknowledges the multiple social identities that adolescents possess and the pernicious effects of possessing multiple stigmatized identities, while also asserting that the salience and potential stigma associated with identities is context dependent (Purdie-Vaughns & Eibach, 2008). Race/ethnicity is a primary source of social stratification that delineates Whites from their racial/ethnic minority counterparts (Fuligni, Hughes, & Way, 2009). Qualitative work suggests that experiences of racial/ethnic discrimination may vary across groups, and quantitative research indicates that the effects of racial/ethnic discrimination may look quite different based on the race/ethnicity of the reporter/target (Greene, Way, & Pahl, 2006; Rosenbloom & Way, 2004; Seaton, Caldwell, Sellers, & Jackson, 2008). In particular, cultural stereotypes in the United States associate being Black or Latino and male with dangerousness, violence, and threat (K. P. Jones, Peddie, Gilrane, King, & Gray, 2016). These stereotypes likely fuel differences in discriminatory treatment, such that males tend to report greater experiences of discrimination than their female counterparts and tend to attribute discriminatory treatment substantially more often to race/ethnicity (Kessler, Mickelson, & Williams, 1999; Noguera, 2003;



Yishan Shen

Pérez, Fortuna, & Alegría, 2008). In addition to these mean differences, there is some empirical evidence that the link between discrimination and well-being varies by gender, at least within African American and Latino samples (Brody et al., 2006; Chavous, Rivas-Drake, Smalls, Griffin, & Coghurn, 2008; Wiehe, Aalsma, Liu, & Fortenberry, 2010). The intersectionality framework (Andersen & Collins, 2015; Cole, 2009) suggests that investigating differential effects by race/ethnicity or gender alone provides an incomplete picture given the multiple identities adolescents possess. As such, we integrate Race \times Gender interactions into moderation analyses.

Developmental Period

Adolescence is a developmental period rife with physical, social, and cognitive changes, but how the links between discrimination and well-being shift with advances in thinking and identity development is unclear. Advances in formal operational thought, deductive and inductive reasoning skills, the ability to understand abstract concepts (e.g., egalitarianism, civil liberties and rights), and the engagement in social perspective taking all facilitate young people's thinking about race/ethnicity (Inhelder & Piaget, 1958; Kuhn, 2009; Smetana & Villalobos, 2009). It may be that as cognitive development unfolds, it leaves early adolescents especially vulnerable to the long-term effects of social marginalization, as they are only gradually acquiring the more sophisticated cognitions (i.e., formal operational thinking) and adaptive coping skills, such as social support seeking and primary control coping, that help them better manage their experiences of racial/ethnic discrimination (Brittian,

Toomey, Gonzales, & Dumka, 2013; Edwards & Romero, 2008; Seaton, 2010). In contrast, as young people age, they have more well-formed notions of their own ethnic identity and how others view their racial/ethnic group (Seaton, Yip, & Sellers, 2009; Umaña-Taylor et al., 2014), and they are more likely to encounter discriminatory treatment (Benner & Graham, 2011; Brody et al., 2006), all of which may make late adolescents more vulnerable to discrimination's negative effects.

Timing of Retrospective Measurement

Discrimination experiences vary according to the time frame participants are asked to use. Although reports of discrimination within one's lifetime are rather common for racial/ethnic minority adolescents, rates of discrimination reported on any given day are quite low (Huynh & Fuligni, 2010). Parallel to this, the effects of perceived discrimination may also vary based on the referenced time. Some measures of perceived racial/ethnic discrimination either specify lifetime experiences or are nonspecific in their designation of time, whereas other studies ask adolescents to reflect on their experiences in a more time-limited way (i.e., last 2 weeks, last 6 months). To the extent that the effects of discrimination on adolescents' well-being are cumulative in nature, then perceived racial/ethnic discrimination reported over one's lifetime would likely be more potent for adolescent well-being than more recent experiences of discrimination (e.g., discriminatory treatment over the past 3 months). This is consistent with cumulative risk theories of child development (Rutter, 1979; Sameroff, Seifer, Zax, & Barocas, 1987), which suggest that risks accumulate and compound across time, compromising children and adolescents' growth and development.

Specific Versus General Perpetrator of Discrimination

The majority of studies examining racial/ethnic discrimination during adolescence use general measures, but limited evidence suggests that the effects of racial/ethnic discrimination may vary depending on both the perpetrator and the outcome under study. For example, the relations between academic outcomes and racial/ethnic discrimination are often stronger when considering teachers versus peers as the perpetrators (Benner & Graham, 2013; Chavous et al., 2008). Similarly, differential relations across perpetrators have also been observed for associations between racial/ethnic discrimination and both self-esteem and depressive symptoms (Fisher et al., 2000; Greene et al., 2006), all of which suggest needed attention to variation by perpetrator. Consistent with this empirical work, bioecological theory (Bronfenbrenner, 1979) asserts that proximal contexts of adolescent development exert stronger influences on devel-



Alaina E. Boyle

opmental domains most closely tied to the context. As such, discrimination perpetrated by educators, for example, would be expected to be most closely tied to the academic domain, whereas peer-perpetrated discrimination would be most closely tied to socioemotional distress and risky behaviors.

Country of Residence

Race/ethnicity is a particularly salient identity component for adolescents, and there is extensive evidence that American adolescents' experiences of racial/ethnic discrimination are quite common (Umaña-Taylor, 2016). Although the historical treatment of minorities through slavery and conquest, and more recently in the treatment of Latinos and Asian Americans, who predominate the shifting immigration trends of the last half century make the United States a unique context for understanding the consequences of racial/ethnic discrimination (Feagin, Vera, & Batur, 2001; Sigelman & Welch, 1991; Yetman, 1999; Young & Takeuchi, 1998), other countries have also struggled with race relations historically (Leach, 2005). As such, we investigate potential variation in the links between discrimination and adolescents' outcomes between the United States and other countries as a means of examining the generalizability of our findings given the literature is heavily weighted to U.S. samples.

Prior Reviews of the Consequences of Discrimination for Well-Being

Since 2000, 11 qualitative reviews and meta-analyses have been conducted on the consequences of discrimination

for individual well-being. These reviews fall into two primary categories—those focused on discrimination broadly defined (including racial/ethnic discrimination along with discrimination tied to other potentially stigmatized identities, such as gender and sexual orientation; K. P. Jones et al., 2016; Pascoe & Smart Richman, 2009; Schmitt et al., 2014) and those focused solely on racial/ethnic discrimination (Dolezsar, McGrath, Herzig, & Miller, 2014; Paradies, 2006; Priest et al., 2013; D. R. Williams & Mohammed, 2009; D. R. Williams, Neighbors, & Jackson, 2003), with three of these including studies on a single racial/ethnic group (African Americans in Pieterse et al., 2012; Asian Americans in Lee & Ahn, 2011; Latinos in Lee & Ahn, 2012). Although these meta-analyses and qualitative reviews have made substantial progress in synthesizing what we know about the links between discrimination and well-being, our current meta-analysis fills substantive gaps in these existing summaries.

First, key developmental dynamics of adolescence (e.g., individuation, disjunctions in brain development, advances in formal operational thought, neurobiological plasticity, engagement in social perspective taking; Chambers, Taylor, & Potenza, 2003; Côté, 2009; Dahl, 2004; Inhelder & Piaget, 1958; Killen & Stangor, 2001) suggest that adolescence is a particularly sensitive period of development. The integrative model of child and adolescent development (García Coll et al., 1996), which serves as the foundation for our meta-analysis, was built on the recognition of the developmental sensitivity during this time in the life course. Yet, to date, only one qualitative review has focused exclusively on the implications of racial/ethnic discrimination for children and young people under Age 18 (Priest et al., 2013), and only two meta-analyses attended to developmental period as a moderator (Lee & Ahn, 2012; Schmitt et al., 2014). Findings on potential age effects were equivocal, likely because of inconsistencies in age cutoffs; Schmitt and colleagues (2014) compared children (under Age 13), adolescents (Age 13–18 years), and adults (over Age 18), whereas Lee and Ahn (2012) compared Latinos under versus over Age 16. Thus, a comprehensive investigation of the strength of the effects of racial/ethnic discrimination on well-being during adolescence and across developmental stages within adolescence is greatly needed. Moreover, more careful attention to age effects will suggest whether intervention efforts should be targeted at specific times during adolescence.

In addition, we focus on multiple facets of development that extend beyond the oft-examined mental health consequences of discrimination. Only one qualitative review has examined the link between racial/ethnic discrimination and risky behaviors, and no meta-analyses or qualitative reviews have examined the association between racial/ethnic discrimination and academics. Given the critical nature that academic success and risky health behaviors play for sub-



Richelle Polk

sequent development across the life course (Institute of Medicine & National Research Council, 2014), synthesis of the effects of racial/ethnic discrimination on these competencies fills a clear hole in the extant knowledge base. We further build on this by examining key moderators at the individual, study, and measurement levels to comprehensively understand who is at particular risk and how we can best understand these risks. Although prior meta-analyses on discrimination have tested ethnicity moderators within larger pan-ethnic groups (e.g., Chinese vs. Indian vs. Korean within Asian American samples: Lee & Ahn, 2011; Latino ethnic groups: Lee & Ahn, 2012), no meta-analyses have investigated differential effects in the links between racial/ethnic discrimination and outcomes across pan-ethnic groups, nor have any investigated gender or Race \times Gender interactions. Similarly, attention to potential moderation effects by the characteristics of the discrimination measure (i.e., perpetrator, retrospective measurement timing) has not been previously considered in published meta-analyses on this topic.

Finally, it is also important to stress that the focus of our meta-analytic study is squarely on the consequences of perceptions of discrimination tied to race/ethnicity. This is in contrast to prior meta-analyses and qualitative reviews that have (a) examined discrimination quite broadly, often including mistreatment tied to race/ethnicity along with other potentially stigmatized identities (K. P. Jones et al., 2016; Pascoe & Smart Richman, 2009; Priest et al., 2013; Schmitt et al., 2014); (b) conflated personal experiences of racial/ethnic discrimination with perceptions of how other group members are treated and valued by society (Paradies, 2006; Schmitt et al., 2014); or (c) integrated studies that

manipulated experiences of discrimination experimentally (Paradies, 2006; Pascoe & Smart Richman, 2009; Priest et al., 2013; D. R. Williams & Mohammed, 2009). As such, our inclusion strategy provides a cleaner estimate of the relations between personally experienced racial/ethnic discrimination and well-being across developmental domains.

Method

Literature Search

We conducted literature searches in PsycINFO, ERIC, Social Sciences Citation Index, Sociological Abstracts, and ProQuest using the term “adoles*” combined with each of the three terms related to discrimination, including “discrim*,” “racism,” and “prejudice” (i.e., three separate searches per database). The search included studies published only in English through the end of 2016. This search resulted in 15,359 articles in peer-reviewed journals, 338 book chapters, and 819 theses/dissertations. The research team then reviewed the 16,516 abstracts (as available) to identify those meeting the following criteria: (a) measured perceptions of personally experienced racial/ethnic discrimination, (b) included adolescents (mean ages ranged between 10 and 20), and (c) included quantitative data. In total, 757 studies either met the inclusion criteria, could not be excluded based on the content of the abstract, or did not include an abstract. The 757 studies were then read and double-coded. The interrater reliability was $r = .83$ to 1.00 for continuous variables, and $\kappa = .77$ to 1.00 for the categorical or string variables. Discrepancies in coding were resolved via consensus after consulting the original study during coding review meetings.

We excluded 449 of the 757 coded studies based on the following criteria: (a) no measure of personally experienced racial/ethnic discrimination, (b) no relevant outcomes, (c) no quantitative data or reprint of prior work, or (d) outside the targeted age range (i.e., adolescence). Of the remaining 308 studies, 82 were missing test statistics necessary to calculate effect sizes. We e-mailed authors, and 44 provided bivariate data. Of the resulting 270 studies with necessary data, 122 studies used unique data, whereas 148 studies had overlap in the data sets analyzed. Because of analysis requirements around data independence (Lipsey & Wilson, 2001), for each outcome under analysis, we included only one study from each larger data set. We selected the study with the larger sample size for inclusion; when sample sizes were comparable, selections were made based on publication type, study design, and developmental period. We selected peer-reviewed studies over unpublished ones. We also selected cross-sectional correlations over longitudinal ones. When a study included correlations at multiple waves or multiple developmental periods, we selected correlations with a relatively larger sample size (usually Wave 1 data);



Yen-Pi Cheng

if correlations across multiple waves had similar sample sizes, we selected data in the developmental period that was less represented in our analytic data. This resulted in the exclusion of 56 studies, for a total of 214 studies (171 peer-reviewed articles, 43 theses/dissertations) included in the final meta-analysis for the 11 well-being indicators. For the meta-analysis of the three larger developmental domains (i.e., socioemotional, academic, behavioral), we used 190 of the 214 studies (149 peer-reviewed articles, 41 theses/dissertations) that provided independent effect sizes within domain.

Measuring Racial/Ethnic Discrimination

The vast majority of measures used to assess perceived racial/ethnic discrimination were retrospective: Adolescents were asked to reflect either over their lives or over a specified amount of time (e.g., last 2 weeks) and rate the frequency with which they experienced discriminatory treatment. The exception was the quite limited number of studies that used daily diary techniques (e.g., Huynh & Fuligni, 2010). In total, studies in our meta-analysis used 44 different discrimination measures; additionally, 20 studies combined multiple measures into a single discrimination scale, four created a new measure for the study, and 22 studies used a single item or did not provide information for the measure source. Most discrimination measures were general assessments that did not identify a particular perpetrator of the mistreatment; thus, what we learned about the repercussions of racial/ethnic discrimination in adolescence in our meta-analysis is heavily weighted to effects of general (rather than perpetrator-specific) experiences.

Analyses

Our analyses examined effect sizes for the relations between perceived discrimination and three developmental domains (i.e., socioemotional distress, academics, risky health behaviors). The analyses included 314 unique effect sizes on 91,297 unique adolescents. We also examined the relations between racial/ethnic discrimination and 11 adolescent well-being indicators across socioemotional distress and well-being (i.e., depression, other internalizing symptoms, positive well-being, self-esteem), academics (i.e., performance and achievement, school engagement, academic motivation), and risky health behaviors (i.e., externalizing behaviors, risky sex behaviors, substance use, association with deviant peers). This set of analyses included 489 unique effect sizes on 91,338 unique adolescents.

We used random-effects models to estimate mean effect sizes. Random-effects models assume that studies differ beyond sampling errors and that true effect sizes vary across studies (Raudenbush, 2009). In determining effect sizes, we transformed all correlation coefficients to the Fisher's z scale using the following equation:

$$Z = \frac{1}{2} \ln\left(\frac{1+r}{1-r}\right).$$

We used the following calculation for the transformation of unadjusted odds ratios to correlation coefficients and then to Fisher's z :

$$r = \frac{d}{\sqrt{d^2 + a}}, \quad d = \log OR \times \frac{\sqrt{3}}{\pi}.$$

All summary effect sizes were then transformed back to weighted correlations (that take into account both sample size and heterogeneity) for interpretation. When violations to independence assumptions occurred, we used the shifting unit-of-analysis approach, creating an average effect size so that each article could only contribute one effect to any given analysis (Borenstein, Hedges, Higgins, & Rothstein, 2009; H. M. Cooper, 1998); this average effect size was then used in the random effects model. We assessed homogeneity of effect sizes using Cochran's Q tests and I^2 statistics (Higgins, Thompson, Deeks, & Altman, 2003), and we created forest plots displaying the effect size and weight for each study. We explored evidence of publication bias using three approaches: funnel plots with Egger's tests (e.g., Begg's tests; Sterne, Egger, & Moher, 2008), trim-and-fill analyses (Duval & Tweedie, 2000) to estimate effect sizes adjusted for publication bias, and metaregression analyses to examine whether effect sizes differed by published versus unpublished works. We examined the moderating effects of gender, race/ethnicity, Gender \times Race/Ethnicity, developmental period, measurement retrospective timing, perpetrator of discriminatory treatment, study design, and country using metaregression and subgroup anal-

yses (Borenstein et al., 2009). All analyses were conducted in STATA 13.1 (StataCorp, 2013).

Results

The Relation Between Perceived Racial/Ethnic Discrimination and Adolescent Well-Being

Summaries of study information—including sample size, study type, discrimination measurement, mean age, gender and racial/ethnic breakdown, and targeted outcomes—for all studies contained in the meta-analysis are shown in Table S1 in the online supplemental materials. A summary of effect size information (i.e., weighted mean effect size, 95% confidence interval, heterogeneity) for all relations is presented in Table 1. Tables S2 (socioemotional distress), S3 (academics), and S4 (health and behavior) in the online supplemental materials present individual study correlations between discrimination and adolescent well-being as well as forest plots displaying correlation coefficients and sample size weights for each study.

Socioemotional distress. We first examined the relation between perceived racial/ethnic discrimination and the broad well-being domain of socioemotional distress. In total, 126 studies included data on this link (144 unique effect sizes as some studies reported separate estimates for different racial/ethnic groups or gender groups). We observed a small to moderate effect size between discrimination and socioemotional distress ($r = .24$; this and all subsequent coefficients transformed from weighted mean effect size) based on J. Cohen's (1992) criteria ($r = .10$ as a small effect size, $r = .30$ as a moderate effect size, and $r = .50$ as a large effect size). Here, the correlations between discrimination and positive psychological outcomes (i.e., positive well-being, self-esteem) were reverse coded so

that all relations were in the same direction. We then examined the relation between perceived racial/ethnic discrimination and the three specific aspects of adolescents' socioemotional distress and well-being. In total, 76 studies included data on the relation between perceived racial/ethnic discrimination and depression (e.g., depressive symptoms, depressed affect; 87 unique effect sizes), 58 for other internalizing symptoms (e.g., anxiety, loneliness, stress, somatic symptoms; 64 unique effect sizes), 30 for positive well-being (e.g., life satisfaction, prosocial behaviors, self-control; 33 unique effect sizes), and 47 for general self-esteem/self-worth (55 unique effect sizes). The strongest correlations observed were between discrimination and depression ($r = .26$), and between discrimination and internalizing symptoms ($r = .26$), which were both small to moderate in size. Correlations of a smaller effect size were observed for the relation between perceived race/ethnic discrimination and positive well-being ($r = -.14$) and self-esteem ($r = -.17$).

Academics. In total, 73 studies included data on the relation between perceived racial/ethnic discrimination and the broad well-being domain of academic outcomes (89 unique effect sizes). We observed a small effect size between discrimination and academics ($r = -.10$). We then examined the relation between perceived race/ethnic discrimination and three distinct aspects of adolescents' academic performance. In total, 47 studies included data on the relation between discrimination and achievement (e.g., GPA, achievement test scores; 56 unique effect sizes), 21 for school engagement (e.g., attendance, engagement; 25 unique effect sizes), and 42 for academic motivation (e.g., academic efficacy, utility value of education; 51 unique effect sizes). Significant correlations were observed for the relations between perceived race/ethnic discrimination and

Table 1
Summary of Effect Sizes for Racial/Ethnic Discrimination and Adolescent Well-Being

Well-Being indicators	<i>k</i>	<i>N</i>	Mean ES	95% CI	<i>z</i>	Mean correlation	Homogeneity (<i>Q</i>)	<i>I</i> ²
Socioemotional	144	69,966	.24***	[.22, .26]	23.05	.24	828.87***	83%
Depression	87	46,143	.27***	[.24, .29]	18.43	.26	659.47***	87%
Internalizing symptoms	64	22,098	.27***	[.24, .30]	16.99	.26	297.76***	79%
Positive well-being	33	19,795	-.14***	[-.18, -.09]	-6.13	-.14	213.11***	85%
Self-esteem	55	22,665	-.17***	[-.19, -.14]	-13.16	-.17	136.33**	60%
Academic	89	35,873	-.10***	[-.12, -.07]	-7.66	-.10	379.38***	77%
Achievement	56	26,566	-.09***	[-.13, -.05]	-4.37	-.09	458.77***	88%
School engagement	25	19,243	-.14***	[-.19, -.09]	-5.66	-.14	205.44***	88%
Motivation	51	26,566	-.11***	[-.14, -.08]	-6.89	-.11	149.99***	67%
Behavioral	81	52,502	.20***	[.17, .22]	15.62	.20	510.82***	84%
Externalizing behaviors	63	37,495	.24***	[.21, .27]	16.28	.24	369.99***	83%
Risky sex behaviors	8	6,511	.16*	[.04, .29]	2.55	.16	96.96***	93%
Substance use	33	33,470	.13***	[.10, .16]	9.49	.13	139.19***	77%
Deviant peer affiliations	14	6,514	.15***	[.08, .22]	3.98	.15	97.34***	87%

Note. Although effect sizes were used in the actual meta-analysis, we transformed effect sizes back to correlation for interpretation. *k* = number of studies; *N* = number of participants in all studies; ES = effect size; CI = confidence interval.

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

GPA ($r = -.09$), school engagement ($r = -.14$), and motivation ($r = -.11$), with all correlations small to moderate in size.

Risky health behaviors. Finally, we examined the relation between perceived racial/ethnic discrimination and the broad well-being domain of risky health behaviors. In total, 71 studies included data on this relation (81 unique effect sizes). We observed a small to moderate effect size between discrimination and risky health behaviors ($r = .20$). We also examined the relation between perceived racial/ethnic discrimination and four specific aspects of adolescents' risky health behaviors. In total, 53 studies (63 unique effect sizes) included data on the relation between discrimination and externalizing behaviors (e.g., delinquency, anger), 29 for substance use (e.g., alcohol use, smoking; 33 unique effect sizes), 12 for affiliation with deviant peers (e.g., peer deviance, peer substance use; 14 unique effect sizes), and seven for risky sexual behaviors (e.g., unprotected sex, number of sexual partners; eight unique effect sizes). The strongest correlation observed was between perceived racial/ethnic discrimination and externalizing behaviors ($r = .24$), which was small to moderate in size. Small correlations were observed for the relation between discrimination and substance use ($r = .13$), affiliations with deviant peers ($r = .15$), and risky sexual behaviors ($r = .16$).

Tests of heterogeneity and publication bias. We observed significant heterogeneity in effect sizes for all broad well-being domains and more specific indicators based on Cochran's Q tests. I^2 statistics showed that there were

moderate to high proportions of variance in effect sizes attributed to heterogeneity for all well-being domains and all indicators within each domain (e.g., depression, achievement), meaning that there were substantial variations in effect sizes across studies rather than sampling error (see Table 1). This suggested that investigating moderators of the relation between discrimination and well-being was needed.

Estimates for publication bias are displayed in Table 2. We observed some evidence of publication bias based on funnel plot results (see Figures S1a to S1c in the online supplemental materials). Funnel plots display effect sizes by study precision (i.e., standard errors of the effect sizes), and data without publication bias are expected to form a symmetrical pattern around the estimated mean effect size. However, we observed some asymmetries for the funnel plots in the present study. Moreover, the asymmetry of funnel plots was significant for two of the three well-being domains (i.e., socioemotional, behavioral) and 7 of the 11 well-being indicators (i.e., depression, other internalizing symptoms, self-esteem, achievement, externalizing behaviors, risky sexual behaviors, substance use). However, subsequent trim-and-fill analyses showed that the relations between racial/ethnic discrimination and all well-being domains/indicators (including those identified as problematic by the funnel plots, with the exception of risky sexual behaviors) remained significant after adjusting for publication bias. Additionally, as shown in Table 2, although unpublished studies tended to report weaker relations between perceived racial/ethnic discrimination and adolescent well-

Table 2
Publication Bias in Effect Sizes for Racial/Ethnic Discrimination and Adolescent Well-Being

Well-being indicators	Funnel plot symmetry test Egger's test			N of trimmed studies	Trim-and-fill analysis			Publication type			
	B	SE	T		Filled ES	95% CI	z	Meta-regression		k	
								B	SE	Published	Not
Socioemotional	1.37	.33	4.15***	44	.18***	[.16, .20]	16.62	-.06	.03*	115	29
Depression	1.60	.50	3.21**	29	.19***	[.16, .22]	12.82	-.08	.03*	69	18
Internalizing symptoms	1.43	.57	2.50*	19	.22***	[.18, .25]	12.96	-.01	.05	55	9
Positive well-being	-.57	.71	-.80	6	-.10***	[-.15, -.06]	-4.38	-.10	.06	25	8
Self-esteem	-1.35	.33	-4.03*	19	-.12***	[-.09, -.15]	-8.59	-.01	.03	45	10
Academic	-.59	.41	-1.44	0	-.10***	[-.12, -.07]	-7.66	.05	.03*	53	26
Achievement	-1.69	.62	-2.72**	0	-.09***	[-.13, -.05]	-4.37	.07	.04	29	27
School engagement	-.88	.99	-.89	0	-.14***	[-.19, -.09]	-5.66	-.06	.09	20	5
Motivation	-.14	.79	-.18	6	-.13***	[-.16, -.10]	-7.65	.06	.03	27	24
Behavioral	1.98	.43	4.64***	27	.13***	[.10, .15]	9.48	-.07	.03*	61	20
Externalizing behaviors	2.01	.45	4.44***	22	.17***	[.14, .20]	11.03	-.08	.04*	47	16
Risky sex behaviors	4.75	1.26	3.78**	5	-.02	[-.13, .10]	-.29	—	—	8	0
Substance use	1.66	.56	2.97**	12	.08***	[.05, .11]	5.35	-.02	.05	30	3
Deviant peer affiliations	-.48	1.77	-.27	0	.15***	[.08, .22]	3.98	-.16	.10	11	3

Note. We did not conduct meta-regression analyses for publication type when there were less than three unpublished studies. Although effect sizes were used in the meta-analyses, we transformed effect sizes back to correlations for interpretation purposes. SE = standard error; ES = effect size; CI = confidence interval.

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

being indicators, only a few effects for publication type (i.e., published vs. unpublished study) emerged as significant.

The Moderating Role of Adolescent, Measurement, and Study Characteristics

Our final set of analyses examined the extent to which correlations between perceived racial/ethnic discrimination and adolescent well-being varied by the gender or racial/ethnic distribution of the samples, developmental period (i.e., early, middle, or late adolescence), retrospective measurement timing (i.e., how far in the past adolescents were asked to reflect on when providing estimates of perceived racial/ethnic discrimination), perpetrator of discriminatory treatment (i.e., peers, educators, institution, general/unspecified), study design (i.e., cross-sectional, longitudinal), or country (i.e., United States, international; we also compared the United States, Europe, and Australia, the sources of the majority of the studies in the meta-analysis). For significant moderators, relevant tables are included in the article; when no evidence of moderation was observed, relevant tables are included in the [supplementary materials](#).

Gender. Among the 190 studies that provided independent effect sizes for the three developmental domains (i.e., socioemotional, academic, behavioral), the vast majority provided gender distributions for their samples (181 or 95%), which were used for metaregression analyses. In total, 39 studies provided independent test statistics (i.e., correlations, unadjusted odds ratios) separately for males and/or females, which were used for the subgroup analyses. We did not observe significant effects for the moderating role of gender from metaregression or subgroup analyses, suggesting that the overall observed effects from each meta-analysis are consistent across boys and girls. Estimates for gender effects are displayed in [Table S5](#) of the online supplemental materials.

Race/ethnicity. All but one study provided the racial/ethnic composition of their samples, which was used in metaregression analyses. In total, 149 studies (78%) included separate, independent test statistics for individual racial/ethnic groups because either the sample consisted of only a single racial/ethnic group or the study disaggregated test statistics by race/ethnicity; these studies were used to compare racial/ethnic differences in subgroup analyses. We observed five significant sets of differences in racial/ethnic effects (see [Table 3](#)). The negative association between perceived racial/ethnic discrimination and socioemotional distress was stronger when the sample was composed of more adolescents of Asian or Latino descent (vs. more adolescents of African descent) based on metaregression. Similarly, subgroup analyses also demonstrated a stronger link between discrimination and socioemotional distress for adolescents of Asian descent than adolescents of African descent. Additionally, we also observed a stronger link

between perceived discrimination and academics for adolescents of Latino descent versus African descent in metaregression and subgroup analyses.

Gender \times Race/Ethnicity. In total, 24 studies (13%) provided separate, independent test statistics for both gender and racial/ethnic groups. We were able to compare four Gender \times Racial/Ethnic Groups (i.e., African-descent males and females, Latinos, Latinas), as only these groups had adequate representation for each developmental domain. As shown in [Table 4](#), for the metaregression, the negative effect of racial/ethnic discrimination on academics was stronger for samples consisting of more males of Latino descent compared with those of African descent. For subgroup differences, we observed a stronger effect of discrimination on academics for Latino males compared with African-descent males and Latino females.

Developmental period. In total, 36 studies included early adolescents (Age 10–13), 60 of middle adolescents (Age 14–16), and 32 of late adolescents (Age 17 and older). We excluded 58 studies that either had missing or large (i.e., standard deviation >1.5) age spans. Estimates for the effects of developmental period are shown in [Table 5](#). Based on both metaregression and subgroup analyses, the positive association between perceived racial/ethnic discrimination and socioemotional distress was stronger in early adolescence than in late adolescence. Moreover, the negative association between perceived racial/ethnic discrimination and academics was stronger in mid-adolescence than in early adolescence.

Retrospective measurement timing. In total, 12 studies (6%) queried lifetime experiences of racial/ethnic discrimination, 126 studies (66%) did not specify the timing of the discriminatory experiences, and the remaining 52 studies (27%) specifically asked about discrimination experienced over the past year or less. Estimates for the effects of retrospective measurement timing are shown in [Table 6](#). The positive association between perceived racial/ethnic discrimination and socioemotional distress was weaker for studies that queried lifetime experiences of racial/ethnic discrimination compared with studies that did not specify the timing of the discriminatory experiences (based on both metaregression and subgroup analyses) and studies that asked about discrimination within the past year or less (based on subgroup analyses). Additionally, the negative association between perceived discrimination and academics was stronger for studies that did not have a specific timing than studies that asked for lifetime experiences of discrimination and discrimination within the past year or less (based on subgroup analyses). The negative effect of discrimination on academics was also stronger for studies that asked for discrimination within the past year or less compared with studies that asked for lifetime discrimination experiences (based on metaregression analyses).

Table 3
Effects of Race/Ethnicity on Correlations Between Racial/Ethnic Discrimination and Adolescent Well-Being and Subgroup Analyses by Race/Ethnicity

Well-being domains	Race/ethnicity effect from meta-regression		Group differences		Subgroup analyses																
	Predictor	B	SE	Q	df	AF			LA			AS			NA						
						ES	95% CI	r	k	ES	95% CI	r	k	ES	95% CI	r	k	ES	95% CI	r	k
Socioemotional	LA vs. AF	.06	.03*	3.09	1	.20***	[.16, .25]	.20	43	.26***	[.21, .30]	.25	40	.28***	[.22, .33]	.27	21	.23***	[.14, .32]	.23	8
	AS vs. AF	.07	.03*	4.40	1*																
	NA vs. AF	.02	.05	.22	1																
	AS vs. LA	.01	.03	.21	1																
Academic	NA vs. LA	-.03	.05	.18	1																
	NA vs. AS	-.03	.05	.57	1																
	LA vs. AF	-.07	.03*	7.44	1**	-.04*	[-.09, -.00]	-.04	35	-.14***	[-.19, -.09]	-.14	23	-.12**	[-.20, -.04]	-.12	10	-.14*	[-.25, -.02]	-.14	6
	AS vs. AF	-.06	.04	2.85	1																
Behavioral	NA vs. AF	-.09	.06	2.23	1																
	AS vs. LA	-.01	.05	.08	1																
	NA vs. LA	-.02	.06	.01	1																
	NA vs. AS	-.02	.06	.04	1																
	LA vs. AF	-.00	.03	.08	1	.19***	[.14, .24]	.19	25	.20***	[.16, .25]	.20	26	.19***	[.09, .29]	.19	7	.19*	[.07, .30]	.19	5
	AS vs. AF	-.02	.05	.00	1																
	NA vs. AF	-.01	.07	.01	1																
	AS vs. LA	-.02	.05	.05	1																
NA vs. LA	-.01	.07	.06	1																	
NA vs. AS	.01	.08	.00	1																	

Note. Meta-regression tested the effect for the proportion of a given racial/ethnic group in the sample compared to the proportion of the reference group in the sample. Predictors with the same reference group were tested simultaneously in the same meta-regression model. Subgroup analyses compared mean effect sizes between two given groups. SE = standard error; df = degrees of freedom; ES = effect size; CI = confidence interval; AF = African; LA = Latino; AS = Asian; NA = Native.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4
Effects of Gender by Race/Ethnicity on Correlations Between Racial/Ethnic Discrimination and Adolescent Well-Being and Subgroup Analyses by Gender and Race/Ethnicity

Well-being domains	Gender by race/ethnicity effect from meta-regression			Group differences			Subgroup analyses														
	Predictor	B	SE	Q	df	ES	AM			AF			LM			LF					
							r	k	ES	95% CI	r	k	ES	95% CI	r	k	ES	95% CI	r	k	ES
Socioemotional	AF vs. AM	.09	.06	.33	1	.18**	[.09, .32]	.18	9	.24***	[.07, .41]	.24	5	.32***	[.15, .48]	.31	3	.27***	[.16, .37]	.26	6
	LM vs. AM	.11	.06	1.82	1																
	LF vs. AM	.10	.05	1.47	1																
	LM vs. AF	.03	.06	.26	1																
	LF vs. AF	.03	.06	.08	1																
Academic	LF vs. LM	.04	.07	1.14	1																
	AF vs. AM	-.07	.06	.82	1	.07	[-.05, .19]	.07	7	-.02	[-.16, .12]	-.02	5	-.17*	[-.32, -.03]	-.17	4	-.07	[-.17, .03]	-.07	5
	LM vs. AM	-.17	.07*	6.76	1**																
	LF vs. AM	-.05	.06	3.58	1																
	LM vs. AF	-.08	.06	2.04	1																
Behavioral	LF vs. AF	.04	.06	.32	1																
	LF vs. LM	.10	.07	3.93	1*																
	AF vs. AM	-.02	.10	.16	1	.19**	[.06, .31]	.19	5	.23*	[.06, .40]	.23	3	.30***	[.13, .47]	.29	2	.33***	[.19, .47]	.32	3
	LM vs. AM	-.03	.09	1.27	1																
	LF vs. AM	.00	.07	2.63	1																
LM vs. AF	-.01	.08	.10	1																	
LF vs. AF	.02	.08	.44	1																	
LF vs. LM	.03	.11	.07	1																	

Note. Meta-regression tested the effect for the proportion of a given Gender × Race Group in the sample compared to the proportion of the reference group in the sample. Predictors with the same reference group were tested simultaneously in the same meta-regression model. Subgroup analyses compared mean effect sizes between two given groups. SE = standard error; df = degrees of freedom; ES = effect size; CI = confidence interval; AM = African American male; AF = African American female; LM = Latino male; LF = Latino female.

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

This document is copyrighted by the American Psychological Association or one of its allied publishers. This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

Table 5
Effects of Developmental Stage on Correlations Between Racial/Ethnic Discrimination and Adolescent Well-Being and Subgroup Analyses by Developmental Stage

Well-being domains	Developmental stage effect from meta-regression		Group differences		Subgroup analyses												
	Predictor	B	SE	Q	df	Early adolescence			Middle adolescence			Late adolescence					
						ES	95% CI	r	k	ES	95% CI	r	k	ES	95% CI	r	k
Socioemotional	Mid vs. Early	-.04	.03	1.79	1	.28***	[.23, .33]	.27	24	.24***	[.21, .27]	.24	49	.21***	[.17, .25]	.21	26
	Late vs. Early	-.06	.03*	5.56	1*												
	Late vs. Mid	-.03	.03	.89	1												
Academic	Mid vs. Early	-.08	.04*	4.33	1*	-.05	[-.10, .01]	-.05	16	-.12***	[-.17, -.08]	-.12	31	-.06*	[-.12, -.00]	-.06	14
	Late vs. Early	-.02	.04	.19	1												
	Late vs. Mid	.06	.04	2.67	1												
Behavioral	Mid vs. Early	-.02	.03	.56	1	.21***	[.18, .25]	.21	21	.19***	[.16, .23]	.19	24	.17***	[.12, .23]	.17	13
	Late vs. Early	-.04	.04	1.43	1												
	Late vs. Mid	-.02	.04	.35	1												

Note. Meta-regression tested the effect of a given developmental stage compared to the reference developmental stage. Predictors with the same reference group were tested simultaneously in the same meta-regression model. Subgroup analyses compared mean effect sizes between two given groups. *SE* = standard error; *df* = degrees of freedom; *ES* = effect size; *CI* = confidence interval. * *p* < .05. ** *p* < .01. *** *p* < .001.

Table 6
Effects for Timing of Retrospective Measurement on Correlations Between Racial/Ethnic Discrimination and Adolescent Well-Being and Subgroup Analyses by Timing

Well-being domains	Retrospective timing effect from meta-regression				Group differences			Subgroup analyses									
	Predictor	B	SE	Q	df	General			Ever			1 year or less					
						ES	95% CI	r	k	ES	95% CI	r	k	ES	95% CI	r	k
Socioemotional	Ever vs. General	-.14	.03***	17.81	1***	.26***	[.23, .29]	.25	92	.12***	[.06, .18]	.12	15	.22***	[.18, .25]	.22	37
	1 year or less vs. General	-.04	.02	3.81	1												
	1 year or less vs. Ever	.05	.03	8.28	1**												
Academic	Ever vs. General	-.06	.04	7.33	1**	-.12***	[-.15, -.10]	-.12	63	-.02	[-.09, .05]	-.02	7	-.06**	[-.11, -.02]	-.06	19
	1 year or less vs. General	-.03	.03	4.17	1*												
	1 year or less vs. Ever	.10	.03***	.65	1												
Behavioral	Ever vs. General	-.10	.05	2.47	1	.21***	[.18, .25]	.21	46	.15***	[.07, .22]	.15	10	.18***	[.13, .22]	.18	25
	1 year or less vs. General	-.04	.05	1.46	1												
	1 year or less vs. Ever	.03	.04	.51	1												

Note. Meta-regression tested the effect of a given timing of retrospective measurement compared to the reference timing. Predictors with the same reference group were tested simultaneously in the same meta-regression model. Subgroup analyses compared mean effect sizes between two given groups. *SE* = standard error; *df* = degrees of freedom; *ES* = effect size; *CI* = confidence interval. * *p* < .05. ** *p* < .01. *** *p* < .001.

Perpetrator of discrimination. The majority of studies (78%) included in our meta-analysis used only general measures of discrimination. In contrast, 32 studies included source-specific measures of racial/ethnic discrimination, and an additional 10 used both general and source-specific measures. Because of limitations in the available studies using perpetrator-specific measures, our moderation analyses were limited to comparisons of general versus each of the peer-, institution-, and educator-perpetrated discrimination (see Table S6 of the online supplemental materials). We did not observe significant differences between general discrimination with any of the perpetrator-specific discrimination for any of the three developmental domains.

Country of residence. In total, 173 studies were U.S. based. Among the 17 studies from other countries, nine were from Europe, four were from Australia, and four were from other countries (e.g., i.e., Argentina, Brazil, Israel, Canada). Estimates for the effects of countries are shown in Tables 7 and 8. We first compared effect sizes between the United States and all international studies (see Table 7). Three significant findings emerged. The positive association between perceived racial/ethnic discrimination and socioemotional distress was stronger in the United States than other countries. This was observed in both metaregression and subgroup analyses. In contrast, the negative association between perceived racial/ethnic discrimination and academics was stronger in other countries than in the United States based on subgroup analyses. We then compared effect sizes among U.S., European, and Australian studies (see Table 8). The negative association between perceived racial/ethnic discrimination and academics was stronger in Australia than the United States based on both metaregression and subgroup analyses.

Discussion

We investigated the link between perceived racial/ethnic discrimination and adolescents' health and well-being using meta-analytic techniques. Prior meta-analyses and qualitative reviews on discrimination have generally focused on adults' experiences, yet a multitude of research suggests

adolescence is a sensitive period of development characterized by rapid cognitive/neurological and social changes that may put youth of color at particular risk (Chambers et al., 2003; Côté, 2009; Dahl, 2004). The results of our analyses highlight the current state of knowledge of racial/ethnic discrimination in adolescence, and our findings have broad implications for both how we study racial/ethnic discrimination during adolescence and the areas in which future inquiry is particularly needed.

We observed that perceived racial/ethnic discrimination was consistently linked to poorer youth adjustment across socioemotional (depression, other internalizing symptoms, self-esteem, and positive well-being), academic (achievement, engagement, motivation), and behavioral domains (externalizing behaviors, substance use, deviant peer associations, risky sex behaviors). The effect sizes for socioemotional distress and well-being we observed for the adolescent samples included in our meta-analysis were generally similar to or larger than those found in meta-analyses focused on racial/ethnic discrimination in adult populations (Pascoe & Smart Richman, 2009; Schmitt et al., 2014) and in meta-analyses on effects of general experiences of victimization in childhood and adolescence (Hawker & Boulton, 2000; Nakamoto & Schwartz, 2010; Reijntjes, Kamphuis, Prinzie, & Telch, 2010). In contrast, our work represents the first efforts to quantify in a meta-analytic frame the strength of effects of racial/ethnic discrimination on adolescents' academics and risky health behaviors. The consistent relations we identified are of particular concern given the long-term linkages between depression, anxiety, substance use, aggression, hostility, and poor academic performance and engagement with individual's subsequent morbidity and mortality rates in the later life course (Kiecolt-Glaser, McGuire, Robles, & Glaser, 2002; Lopez, Mathers, Ezzati, Jamison, & Murray, 2006; Rehm, Gmel, Sempos, & Trevisan, 2003; Rugulies, 2002). Our findings also provide consistent evidence for integrative models of minority child development that

Table 7
Country Effects (United States vs. International) on Correlations Between Racial/Ethnic Discrimination and Adolescent Well-Being and Subgroup Analyses by Countries

Well-being domains	Country effect from meta-regression Predictor	Country effect from meta-regression		Group differences		Subgroup analyses							
		B	SE	Q	df	United States				International			
						ES	95% CI	r	k	ES	95% CI	r	k
Socioemotional	International vs. United States	-.07	.03*	6.13	1*	.24***	[.22, .26]	.24	128	.17***	[.12, .22]	.17	16
Academic	International vs. United States	-.08	.04	4.86	1*	-.09***	[-.11, -.06]	-.09	81	-.18***	[-.25, -.10]	-.18	8
Behavioral	International vs. United States	-.01	.05	.07	1	.19***	[.17, .22]	.19	76	.15***	[.10, .27]	.15	5

Note. SE = standard error; df = degrees of freedom; ES = effect size; CI = confidence interval.

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

Table 8
Country Effects (United States, European vs. Australian) on Correlations Between Racial/Ethnic Discrimination and Adolescent Well-Being and Subgroup Analyses by Countries

Well-being domains	Country effect from meta-regression			Group differences		Subgroup analyses						
	Predictor	B	SE	Q	df	United States		European		Australian		
Socioemotional	Europe vs. US	-.02	.04	.39	1	.24	.22	.22	.22	.15	.15	.15
	Australia vs. US	-.09	.06	2.72	1	[.22, .26]	[.15, .29]	[.15, .29]	[.15, .29]	[.04, .26]	[.04, .26]	[.04, .26]
Academic	Australia vs. Europe	.06	.03	1.23	1							
	Europe vs. US	-.03	.07	.25	1	-.09	-.12	-.12	-.12	-.21	-.21	-.21
	Australia vs. US	-.12	.05*	5.96	1*	[-.11, -.06]	[-.24, -.00]	[-.24, -.00]	[-.24, -.00]	[-.30, -.12]	[-.30, -.12]	[-.30, -.12]
	Australia vs. Europe	-.09	.06	1.82	1							

Note. We did not conduct subgroup analysis among United States, European, and Australian samples on behavioral outcomes because there were no independent effect sizes for Australian samples. SE = standard error; df = degrees of freedom; ES = effect size; CI = confidence interval.

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

posit the direct role that discrimination and prejudice play in the development of youth of color.

Evidence of Heterogeneity in Effect Sizes

Racial/ethnic discrimination tended to pose a greater risk for Asian-descent and Latino youth’s socioemotional well-being compared with those of African descent, but Latino youth’s academics compared with those of African descent. These differential effects are consistent with other scholarship on mean racial/ethnic differences. For example, prior studies have documented greater depressive symptoms and lower self-esteem among Asian Americans compared with Latinos, African Americans, and Whites (J. S. Brown, Meadows, & Elder, 2007; Twenge & Crocker, 2002). Latinos also tend to exhibit higher levels of depression than their White and African American peers (Harris, Gordon-Larsen, Chantala, & Udry, 2006; Twenge & Nolen-Hoeksema, 2002) and are more likely to drop out of secondary school and less likely to attain a bachelor’s degree or higher versus their White, Asian American, and African American peers (Kena et al., 2015). Our study findings suggest that these mean differences in socioemotional adjustment (particularly challenging for youth of Asian and Latino descent) and academics (particularly challenging for Latino youth) may be driven, at least in part, by experiences of discrimination. Future research, however, is needed to determine whether Latino and Asian American youth are experiencing similar or greater levels of discrimination than their African American peers to support this conclusion. The weaker findings for adolescents of African descent may also reflect parents’ socialization efforts, as African American families are more likely to employ socialization strategies that prepare their children for the bias they may face in multiple contexts of their daily lives (Else-Quest & Morse, 2015). It is also possible that stronger effects for African American youth may be observed for other developmental domains not assessed in the current meta-analysis, such as effects of physical health. Prior meta-analyses have documented stronger effects in the link between discrimination and hypertension for African American adults (Dolezsar et al., 2014), and it is possible that cardiovascular risk factors in adolescence (e.g., overweight status, blood pressure) may be similarly more susceptible to discrimination in African American adolescent populations.

There is also some evidence that gender further conditions variations by race, such that racial/ethnic discrimination was more detrimental to Latino males’ academics (vs. Latinas and African-descent males). The particular disadvantages for Latino males are consistent with cumulative risk, perpetual foreigner, and intersectional theories (Cheryan & Monin, 2005; Cole, 2009; Sameroff et al., 1987), which suggest that young people simultaneously hold multiple social identities that can leave them vulnerable to mistreat-

ment, and the accumulation of risks tied to these identities can be particularly detrimental for well-being. As such, both perceived nativity (i.e., perpetual foreigner stereotypes) and gender (with males more at risk academically than females; Crosnoe & Benner, 2015) would place Latino adolescents at heightened risks for the ill effects of discrimination. However, given that African American males typically report experiences of institutional and educational discrimination that are more severe and persistent than those from other racial/ethnic groups, some scholars have posited that these early and ongoing experiences of discrimination may have particular detrimental repercussions for African American boys (Chavous et al., 2008; Smith, Allen, & Danley, 2007). As such, greater attention to potential Race \times Gender variation by the perpetrator, chronicity, and severity of experiences of discrimination is warranted. Clearly, there is still much empirical work needed examining how the links between discrimination and well-being vary by race/ethnicity and gender.

Our moderation analyses also dug deeper into the issue of developmental timing effects by investigating whether the relations between racial/ethnic discrimination and well-being varied across different stages of adolescence. We observed some evidence that racial/ethnic discrimination had higher stakes for younger (vs. older) adolescents' socioemotional distress. This lends some credence to our hypothesis that as they age, adolescents have a larger array of social-cognitive resources from which they can draw, which serve to protect older adolescents against some of the challenges they face socioemotionally when encountering discriminatory treatment. Such findings are consistent with a review on the coping literature that documents developmentally graded differences in effective coping skills across childhood and adolescence (Skinner & Zimmer-Gembeck, 2007). The developmental timing effects looked different in the academic domain, in which we observed a larger effect size of racial/ethnic discrimination in middle versus early adolescence. Middle adolescence generally overlaps with the transition to high school when students often struggle with the new educational environment and a more challenging and high-stakes academic curricula (Benner, 2011). Managing this transition may disrupt adolescents' ability to manage racial/ethnic discrimination, thus resulting in greater challenges to academic adjustment at this stage of the life course. Moreover, there is evidence that discrimination perpetrated by educators is increasing from early to mid-adolescence (Hughes, Del Toro, Harding, Way, & Rarick, 2016), which may also contribute to the heightened effects of discrimination during this time period. Greater attention to changes in experiences of discrimination and concomitant changes in well-being across adolescence is necessary to more comprehensively unpack developmental differences in these associations.

In terms of retrospective timing of racial/ethnic discrimination measures, although we expected a larger effect size for discrimination reported over one's lifetime compared with more recent experiences of discrimination based on theories of cumulative risk, our findings showed an opposite pattern. In both socioemotional and academic domains, lifetime discrimination showed a smaller effect size than more recent discriminatory experiences, and discrimination with no specific reference of timing had the largest effect size. We suspect that discrimination with no timing reference is likely tapping into the experiences that are most salient, followed by recent discrimination experiences within a year, and thus they may be more strongly linked to well-being compared with lifetime experiences of discrimination. Moreover, the problem of memory bias in self-reports of discrimination may be particularly an issue for recall over a longer period of time (D. R. Williams & Mohammed, 2009). Our findings in combination with this extant research suggest that in future work, scholars may want to consider alternative methods to assessing discriminatory experiences with lifetime measures. These could include more daily diary studies to gain greater information on day-to-day experiences and how these might accumulate across short time frames as well as more long-term longitudinal studies in which discrimination data could be aggregated across multiple time points that span several years.

Based on prior theoretical and empirical work, we hypothesized that the perpetrator of discrimination would moderate the effects of discrimination on outcomes. For example, when the proximal contexts of adolescents' lives—their schools, neighborhoods, and communities (Bronfenbrenner & Morris, 1998; García Coll et al., 1996)—are characterized by experiences of racial/ethnic discrimination, they are more likely to be inhibiting environments detrimental to healthy development, particularly when others within the environment fail to respond to the discriminatory treatment in adequately supportive ways (DuBois, Burk-Braxton, Swenson, Tevendale, & Hardesty, 2002; García Coll et al., 1996). Moreover, adolescents who recognize their proximal contexts as hostile or unwelcoming are more likely to disengage with that environment (Benner, Crosnoe, & Eccles, 2015; Farkas, 2003). Unfortunately, we lacked sufficient studies to comprehensively test these hypotheses, as measurement of discrimination by perpetrator is rarely disaggregated. As such, no firm conclusions can be drawn until more empirical work using perpetrator-specific discrimination measures is conducted.

Future Directions for Research on Adolescents' Experiences of Discrimination

The past three decades have seen a major increase in attention to issues of racial/ethnic discrimination in adolescence, but in reviewing the current body of literature on the

topic, we have identified substantial gaps in our knowledge base that could be addressed in future research. These include thinking more critically about how the field measures racial/ethnic discrimination with adolescent populations, investigating and clearly reporting processes and contextual characteristics that might moderate the link between racial/ethnic discrimination and adolescent well-being, and placing a greater focus on the intersection of discrimination tied to race/ethnicity and mistreatment linked to other social identities vulnerable to stigmatization.

Measuring racial/ethnic discrimination in adolescent populations. In total, more than 40 different measures of racial/ethnic discrimination were used by the studies included in our meta-analysis. All varied in the defined timing window and in the identified perpetrator of the discriminatory treatment. Although there is certainly broad overlap among many of these measures, each includes unique aspects that likely introduce random error variation into our current study. More measurement work is needed to analyze specific aspects of racial/ethnic discrimination (e.g., timing reference, perpetrator, overt discrimination vs. microaggressions, personally experienced vs. witnessed, in-person vs. online). Moreover, although qualitative studies consistently identify racial/ethnic discrimination as an all too common experience in the lives of racial/ethnic minority youth (Romero, Gonzalez, & Smith, 2015; Rosenbloom & Way, 2004), survey and daily diary methods tend to document lower levels of mistreatment (Huynh & Fuligni, 2010; Rivas-Drake, Hughes, & Way, 2009). Whether these differences reflect issues with the quantitative measures employed, most of which are modified versions of instruments used with adult populations, or some other measurement artifact remains to be seen. Greater attention to the measurement of racial/ethnic discrimination, however, was a primary concern of the National Research Council's Panel on Methods for Assessing Discrimination (Blank, Dabady, & Citro, 2004), which concluded that "data collection sponsors should support research on question wording and survey design that can lead to improvements in survey-based measures relating to perceived experiences of racial discrimination" (Blank et al., 2004, p. 10).

More careful measurement work that examines the content and overlap of the vast number of discrimination measures is greatly needed. Similarly, qualitative investigations of the discriminatory experiences adolescents currently face is also critically important, as most of the discrimination measures currently used to assess discrimination during this point in the life course are somewhat dated (typically 15 to 20 years old). Given the larger political climate, the current context of reception for immigrants in the United States, and the heightened role of social media in the lives of youth, it

is possible that the types of discriminatory experiences adolescents encounter in their daily lives is evolving.

Interpersonal processes and contextual characteristics as potential moderators. The integrative model of minority child and adolescent development (García Coll et al., 1996) is typically utilized to identify the potential mechanisms by which discrimination might exert indirect effects on adolescent well-being; however, in their conceptualization of the pervasive role that discrimination and prejudice play in the lives of young people, García Coll and colleagues (1996) also acknowledge that interpersonal interactions, cultural processes, and social structures have the potential to modify the effects of discrimination on youth in positive or negative ways. To this end, several existing studies of racial/ethnic discrimination in adolescence have identified the protective role that warm and supportive parents (Brody et al., 2006; Juang & Alvarez, 2010), nurturing and positive friendships (Brody et al., 2006; Grossman & Liang, 2008), and positive interracial climates (Benner & Graham, 2013) play in buffering the pernicious effects of discrimination, as well as the role of school and neighborhood racial/ethnic composition play in exacerbating the challenges of experiencing discrimination (Benner & Graham, 2011; Seaton & Yip, 2009). Scholars investigating racial/ethnic discrimination in adolescence, however, do not commonly attend to the potential moderating role of the proximal contexts of adolescents' daily lives, and many studies that do focus on contexts either lack the data necessary for meta-analytic tests of moderation (i.e., beta coefficients of the interaction effects, *r*-squared values of the outcomes, total number of model parameters) or have null moderation effects and report no statistical estimates. How contextual and individual assets and resources can attenuate the effects of racial discrimination and promote resilience during adolescence is critical for designing intervention and prevention efforts that support the healthy growth and development of adolescents, and thus more attention (and more detailed reporting) is needed on this important line of inquiry.

Attention to other social identities vulnerable to stigmatization. Social stratification and the resulting differential treatment tend to occur on multiple levels and pertain to multiple social markers. In addition to race/ethnicity, other social identities possessed by youth, such as being poor, obese, or a sexual minority, can also elicit marginalization and mistreatment (Eisenberg, Neumark-Sztainer, & Story, 2003; Haines, Neumark-Sztainer, Wall, & Story, 2007; Puhl & Latner, 2007; Toomey, Ryan, Diaz, Card, & Russell, 2010), and these social identities also show substantial overlap in many cases (Adler & Rehkopf, 2008; Braveman, Egerter, & Williams, 2011; Isaacs & Schroeder, 2004; Singh, Kogan, & van Dyck, 2010; Y. Wang & Beydoun, 2007). The developmental and social psychological research base, however, has historically insufficiently re-

ognized the fact that many youth possess multiple, intersecting social identities that make them vulnerable to stigmatization and that these identities may privilege youth in one setting while subjugating them in another (Hancock, 2007; McCall, 2005). Whether the effects of intersecting identities are cumulative or more nuanced is an open question.

Limitations

The current meta-analytic study comprehensively synthesizes the literature on the consequences of racial/ethnic discrimination for adolescents' well-being, but some limitations and caveats should be noted. First, publication bias is a common concern with meta-analyses, as the reliance on published studies systematically skews the magnitude of effects sizes (Sutton, 2009). We conducted a number of analyses to examine potential publication bias, and the evidence for publication bias was weak, suggesting that publication bias is not a substantial threat to our conclusions. Second, although we identified significant effect sizes capturing the negative relations between racial/ethnic discrimination and a host of developmental outcomes, such findings are based on meta-analyses of observational rather than experimental studies. As such, no definitive conclusions about causality can be made. The potential for third (omitted) variable bias is less likely given the consistent significance of effect sizes across three domains of adjustment (i.e., socioemotional distress, academics, risky health behaviors) and all individual indicators within these domains. Moreover, studies experimentally manipulating discriminatory treatment typically document similar effect sizes to those observed in observational research (Schmitt et al., 2014). Ethical issues in experimentally manipulating discriminatory experiences with child and adolescent populations will necessarily limit the use of experimental designs with younger populations; however, longitudinal studies with adolescents that integrate a host of potential confounds and the use advanced statistical methods such as autoregressive cross-lagged techniques can purge much of the intraindividual, or omitted error, bias and better document the directionality of effects (Little, Preacher, Selig, & Card, 2007; Mayer & Carroll, 1988; Singer & Willett, 2003).

Third, for our metaregression and subgroup analyses testing moderation, some analyses were underpowered. To test as many potential moderators as possible, we focused on broad developmental domains rather than individual well-being indicators. Although this resulted in larger numbers of effect sizes for moderation analyses (greater than five in general), a few statistics were still underpowered. In part, our challenges with moderator analyses relate to a larger issue of disaggregating test statistics. Although it is currently standard practice to provide bivariate relations in

peer-reviewed publications, very rarely do authors disaggregate such statistics by subgroup. This substantially limits the types of moderation that can be examined. For example, only 25 studies included in this meta-analysis provided disaggregated Gender \times Ethnicity test statistics, limiting both the groups we could examine and our power to detect group differences. Similarly, we could not test for other potential moderators of interest, such as nativity or socioeconomic status, because this information is rarely consistently reported in studies, and test statistics are generally not disaggregated by these characteristics. As such, there is much left to learn about how the links between racial/ethnic discrimination and adolescents' well-being might vary across individuals and contexts.

Summary and Conclusions

The findings reported in our meta-analysis clearly illustrate the pernicious effects of racial/ethnic discrimination across multiple domains of adolescents' health and well-being, including their mental health, their engagement in risky health behaviors, and their educational success. The psychological, behavioral, and academic burdens posed by racial/ethnic discrimination during adolescence, coupled with evidence that experiences of discrimination persist across the life course for persons of color, point to discrimination as a clear contributor to the racial/ethnic health disparities observed for African American, Latino, and Native American populations compared with their White counterparts (Mays, Cochran, & Barnes, 2007; D. R. Williams & Sternthal, 2010). There is some evidence for variation of effects by individual and study characteristics (i.e., race/ethnicity, Race/Ethnicity \times Gender, developmental period, retrospective timing, country), but much more work is needed to clearly elucidate who is most at risk for racial/ethnic discrimination and what contexts buffer or exacerbate such risks.

There is, however, comprehensive evidence of the far-reaching effects of racial/ethnic discrimination for youth, and as such, future scholarship must also begin investigating intervention and prevention efforts. To date, the intervention science is quite limited but suggests benefits of self-affirmation activities that reduce stereotype threat responses (Bowen, Wegmann, & Webber, 2013; G. L. Cohen, Garcia, Apfel, & Master, 2006) and family-centered interventions that give children and adolescents tools for dealing with experiences of discrimination (Brody, Kogan, & Chen, 2012). Yet in addition to ameliorating the effects of racial/ethnic discrimination at the individual level, we must also work toward preventing the occurrence of discriminatory treatment on a larger scale. How to combat the prejudicial and stereotype views held by adult authority figures and peers is an open question. In their review of prejudice reduction pro-

grams, Paluck and Green (2009) identify potential in prevention efforts that facilitate more intergroup contact and cooperation. Although the costs of such programs are likely high, the economic and social costs of continuing to ignore adolescents' experiences of racial/ethnic discrimination are even higher.

References

References marked with an asterisk indicate studies included in the meta-analysis.

- *Abbassi-Zoabi, M. J. (2012). *Discrimination, ethnic identity, and social support as predictors of self-efficacy in Arab American adolescents* (Unpublished doctoral dissertation). Fordham University, New York, NY.
- *Abel, N. R. (2013). *Trait emotional intelligence, perceived discrimination, and academic achievement among African American and Latino/o high school students: A study of academic resilience* (Unpublished doctoral dissertation). Minnesota State University, Mankato, MN.
- Aboud, F. E. (2003). The formation of in-group favoritism and out-group prejudice in young children: Are they distinct attitudes? *Developmental Psychology, 39*, 48–60. <http://dx.doi.org/10.1037/0012-1649.39.1.48>
- Aboud, F. E., & Amato, M. (2001). Developmental and socialization influences on intergroup bias. In R. Brown & S. L. Gaertner (Eds.), *Blackwell's handbook of social psychology* (pp. 65–85). Boston, MA: Blackwell.
- Adler, N. E., & Rehkopf, D. H. (2008). U.S. disparities in health: Descriptions, causes, and mechanisms. *Annual Review of Public Health, 29*, 235–252. <http://dx.doi.org/10.1146/annurev.publhealth.29.020907.090852>
- *Ahmed, S. R., Kia-Keating, M., & Tsai, K. H. (2011). A structural model of racial discrimination, acculturative stress, and cultural resources among Arab American adolescents. *American Journal of Community Psychology, 48*, 181–192. <http://dx.doi.org/10.1007/s10464-011-9424-3>
- *Alderete, E., Gregorich, S. E., Monteban, M., Kaplan, C. P., Mejia, R., Livaudais-Toman, J., & Pérez-Stable, E. J. (2016). Effect of appreciation for Indigenous cultures and exposure to racial insults on alcohol and drug use initiation among multiethnic Argentinean youth. *Preventive Medicine, 85*, 60–68. <http://dx.doi.org/10.1016/j.ypmed.2015.12.017>
- *Alfaro, E. C., Umaña-Taylor, A. J., Gonzales-Backen, M. A., Bámaca, M. Y., & Zeiders, K. H. (2009). Latino adolescents' academic success: The role of discrimination, academic motivation, and gender. *Journal of Adolescence, 32*, 941–962. <http://dx.doi.org/10.1016/j.adolescence.2008.08.007>
- *Alliman-Brissett, A. E., & Turner, S. L. (2010). Racism, parent support, and math-based career interests, efficacy, and outcome expectations among African American adolescents. *Journal of Black Psychology, 36*, 197–225. <http://dx.doi.org/10.1177/0095798409351830>
- Andersen, M., & Collins, P. H. (2015). *Race, class, & gender: An anthology*. Boston, MA: Cengage Learning.
- *Anyon, Y., Ong, S. L., & Whitaker, K. (2014). School-based mental health prevention for Asian American adolescents: Risk behaviors, protective factors, and service use. *Asian American Journal of Psychology, 5*, 134–144. <http://dx.doi.org/10.1037/a0035300>
- Augoustinos, M., & Rosewarne, D. L. (2001). Stereotype knowledge and prejudice in children. *British Journal of Developmental Psychology, 19*, 143–156. <http://dx.doi.org/10.1348/026151001165912>
- Bales, W. D., & Piquero, A. R. (2012). Racial/ethnic differentials in sentencing to incarceration. *Justice Quarterly, 29*, 742–773. <http://dx.doi.org/10.1080/07418825.2012.659674>
- *Barker, O. (2014). *Cultural assets as moderators to the impact of psychosocially toxic factors on academic performance and social skills among adolescents of African descent* (Unpublished doctoral dissertation). Howard University, Washington, DC.
- *Barr, J. A. (1999). *Ethnic identity and adolescent functioning: An analysis of situated identities* (Unpublished doctoral dissertation). Stanford University, Stanford, CA.
- *Baysu, G., Celeste, L., Brown, R., Verschuere, K., & Phalet, K. (2016). Minority adolescents in ethnically diverse schools: Perceptions of equal treatment buffer threat effects. *Child Development, 87*, 1352–1366. <http://dx.doi.org/10.1111/cdev.12609>
- *Behnke, A. O., Plunkett, S. W., Sands, T., & Bamaca-Colbert, M. Y. (2011). The relationship between Latino adolescents' perceptions of discrimination, neighborhood risk, and parenting on self-esteem and depressive symptoms. *Journal of Cross-Cultural Psychology, 42*, 1179–1197. <http://dx.doi.org/10.1177/00220221110383424>
- Benner, A. D. (2011). The transition to high school: Current knowledge, future directions. *Educational Psychology Review, 23*, 299–328. <http://dx.doi.org/10.1007/s10648-011-9152-0>
- Benner, A. D., Crosnoe, R., & Eccles, J. S. (2015). Schools, peers, and prejudice in adolescence. *Journal of Research on Adolescence, 25*, 173–188. <http://dx.doi.org/10.1111/jora.12106>
- Benner, A. D., & Graham, S. (2011). Latino adolescents' experiences of discrimination across the first 2 years of high school: Correlates and influences on educational outcomes. *Child Development, 82*, 508–519. <http://dx.doi.org/10.1111/j.1467-8624.2010.01524.x>
- *Benner, A. D., & Graham, S. (2013). The antecedents and consequences of racial/ethnic discrimination during adolescence: Does the source of discrimination matter? *Developmental Psychology, 49*, 1602–1613. <http://dx.doi.org/10.1037/a0030557>
- *Benner, A. D., & Kim, S. Y. (2009). Experiences of discrimination among Chinese American adolescents and the consequences for socioemotional and academic development. *Developmental Psychology, 45*, 1682–1694. <http://dx.doi.org/10.1037/a0016119>
- *Berkel, C., Knight, G. P., Zeiders, K. H., Tein, J.-Y., Roosa, M. W., Gonzales, N. A., & Saenz, D. (2010). Discrimination and adjustment for Mexican American adolescents: A prospective examination of the benefits of culturally-related values. *Journal of Research on Adolescence, 20*, 893–915. <http://dx.doi.org/10.1111/j.1532-7795.2010.00668.x>
- Bigler, R. S., Brown, C. S., & Markell, M. (2001). When groups are not created equal: Effects of group status on the formation of intergroup attitudes in children. *Child Development, 72*, 1151–1162. <http://dx.doi.org/10.1111/1467-8624.00339>
- *Birman, D., Trickett, E., & Buchanan, R. M. (2005). A tale of two cities: Replication of a study on the acculturation and adaptation of immigrant adolescents from the former Soviet Union in a different community context. *American Journal of Community Psychology, 35*, 83–101. <http://dx.doi.org/10.1007/s10464-005-1891-y>
- Blank, R. M., Dabady, M., & Citro, C. F. (2004). *Measuring racial discrimination*. Washington, DC: National Academies Press.
- *Bodkin-Andrews, G. H., Denson, N., & Bansel, P. (2013). Teacher racism, academic self-concept, and multiculturalism: Investigating adaptive and maladaptive relations with academic disengagement and self-sabotage for Indigenous and non-Indigenous Australian students. *Australian Psychologist, 48*, 226–237. <http://dx.doi.org/10.1111/j.1742-9544.2012.00669.x>
- *Bodkin-Andrews, G. H., Seaton, M., Nelson, G. F., Craven, R. G., & Yeung, A. S. (2010). Questioning the general self-esteem vaccine: General self-esteem, racial discrimination, and standardised achievement across Indigenous and non-Indigenous students. *Journal of Psychologists and Counsellors in Schools, 20*, 1–21. <http://dx.doi.org/10.1375/ajgc.20.1.1>
- Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2009). *Introduction to meta-analysis*. Chichester, UK: Wiley. <http://dx.doi.org/10.1002/9780470743386>

- *Borsato, G. N. (2008). *Perceived discrimination, racial/ethnic identity, and adjustment among Asian American and Latino early adolescents* (Unpublished doctoral dissertation). Stanford University, Stanford, CA.
- Bowen, N. K., Wegmann, K. M., & Webber, K. C. (2013). Enhancing a brief writing intervention to combat stereotype threat among middle-school students. *Journal of Educational Psychology, 105*, 427–435. <http://dx.doi.org/10.1037/a0031177>
- *Bowman, M. A. (2012). *Predictors of reactive aggression among African American and European American children: The role of perceived discrimination, racial socialization, and negative affect* (Unpublished doctoral dissertation). State University of New York, Albany, NY.
- Braveman, P., Egerter, S., & Williams, D. R. (2011). The social determinants of health: Coming of age. *Annual Review of Public Health, 32*, 381–398. <http://dx.doi.org/10.1146/annurev-publhealth-031210-101218>
- *Briones, E., Verkuyten, M., Cosano, J., & Taberero, C. (2012). Psychological adaptation of Moroccan and Ecuadorean immigrant adolescents in Spain. *International Journal of Psychology, 47*, 28–38. <http://dx.doi.org/10.1080/00207594.2011.569722>
- *Brittian, A. S., O'Donnell, M., Knight, G. P., Carlo, G., Umaña-Taylor, A. J., & Roosa, M. W. (2013). Associations between adolescents' perceived discrimination and prosocial tendencies: The mediating role of Mexican American values. *Journal of Youth and Adolescence, 42*, 328–341. <http://dx.doi.org/10.1007/s10964-012-9856-6>
- *Brittian, A. S., Toomey, R. B., Gonzales, N. A., & Dumka, L. E. (2013). Perceived discrimination, coping strategies, and Mexican origin adolescents' internalizing and externalizing behaviors: Examining the moderating role of gender and cultural orientation. *Applied Developmental Science, 17*, 4–19. <http://dx.doi.org/10.1080/10888691.2013.748417>
- *Brody, G. H., Beach, S. R. H., Chen, Y.-F., Obasi, E., Philibert, R. A., Kogan, S. M., & Simons, R. L. (2011). Perceived discrimination, serotonin transporter linked polymorphic region status, and the development of conduct problems. *Development and Psychopathology, 23*, 617–627. <http://dx.doi.org/10.1017/S0954579411000046>
- Brody, G. H., Chen, Y.-F., Murry, V. M., Ge, X., Simons, R. L., Gibbons, F. X., . . . Cutrona, C. E. (2006). Perceived discrimination and the adjustment of African American youths: A five-year longitudinal analysis with contextual moderation effects. *Child Development, 77*, 1170–1189. <http://dx.doi.org/10.1111/j.1467-8624.2006.00927.x>
- *Brody, G. H., Kogan, S. M., & Chen, Y. F. (2012). Perceived discrimination and longitudinal increases in adolescent substance use: Gender differences and mediational pathways. *American Journal of Public Health, 102*, 1006–1011. <http://dx.doi.org/10.2105/AJPH.2011.300588>
- Bronfenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. *American Psychologist, 34*, 844–850. <http://dx.doi.org/10.1037/0003-066X.34.10.844>
- Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology: Vol. 1. Theoretical models of human development* (5th ed., pp. 993–1028). Hoboken, NJ: Wiley.
- *Brown, C., Langille, D., Tanner, J., & Asbridge, M. (2014). Health-compromising behaviors among a multi-ethnic sample of Canadian high school students: Risk-enhancing effects of discrimination and acculturation. *Journal of Ethnicity in Substance Abuse, 13*, 158–178. <http://dx.doi.org/10.1080/15332640.2013.852075>
- Brown, C. S., & Bigler, R. S. (2005). Children's perceptions of discrimination: A developmental model. *Child Development, 76*, 533–553. <http://dx.doi.org/10.1111/j.1467-8624.2005.00862.x>
- Brown, J. S., Meadows, S. O., & Elder, G. H., Jr. (2007). Race-ethnic inequality and psychological distress: Depressive symptoms from adolescence to young adulthood. *Developmental Psychology, 43*, 1295–1311. <http://dx.doi.org/10.1037/0012-1649.43.6.1295>
- *Buchanan, R. L., & Smokowski, P. R. (2009). Pathways from acculturation stress to substance use among Latino adolescents. *Substance Use & Misuse, 44*, 740–762. <http://dx.doi.org/10.1080/10826080802544216>
- *Butler-Barnes, S. T., Chavous, T. M., Hurd, N., & Varner, F. (2013). African American adolescents' academic persistence: A strengths-based approach. *Journal of Youth and Adolescence, 42*, 1443–1458. <http://dx.doi.org/10.1007/s10964-013-9962-0>
- *Cano, M. Á., Schwartz, S. J., Castillo, L. G., Romero, A. J., Huang, S., Lorenzo-Blanco, E. I., . . . Szapocznik, J. (2015). Depressive symptoms and externalizing behaviors among Hispanic immigrant adolescents: Examining longitudinal effects of cultural stress. *Journal of Adolescence, 42*, 31–39. <http://dx.doi.org/10.1016/j.adolescence.2015.03.017>
- *Cardoso, J. B., Goldbach, J. T., Cervantes, R. C., & Swank, P. (2016). Stress and multiple substance use behaviors among Hispanic adolescents. *Prevention Science, 17*, 208–217. <http://dx.doi.org/10.1007/s11211-015-0603-6>
- *Cassidy, C., O'Connor, R. C., Howe, C., & Warden, D. (2004). Perceived discrimination and psychological distress: The role of personal and ethnic self-esteem. *Journal of Counseling Psychology, 51*, 329–339. <http://dx.doi.org/10.1037/0022-0167.51.3.329>
- *Cavanaugh, A. M. (2015). *Examining linkages among sources of racial-ethnic discrimination and Latino adolescents' psychosocial and academic outcomes: Are culturally-relevant factors protective?* (Unpublished doctoral dissertation). University of North Carolina at Greensboro, Greensboro, NC.
- *Cervantes, R. C., Fisher, D. G., Córdova, D., Jr., & Napper, L. E. (2012). The Hispanic Stress Inventory–Adolescent Version: A culturally informed psychosocial assessment. *Psychological Assessment, 24*, 187–196. <http://dx.doi.org/10.1037/a0025280>
- Chambers, R. A., Taylor, J. R., & Potenza, M. N. (2003). Developmental neurocircuitry of motivation in adolescence: A critical period of addiction vulnerability. *The American Journal of Psychiatry, 160*, 1041–1052. <http://dx.doi.org/10.1176/appi.ajp.160.6.1041>
- Chavous, T. M., Rivas-Drake, D., Smalls, C., Griffin, T., & Cogburn, C. (2008). Gender matters, too: The influences of school racial discrimination and racial identity on academic engagement outcomes among African American adolescents. *Developmental Psychology, 44*, 637–654. <http://dx.doi.org/10.1037/0012-1649.44.3.637>
- *Chen, X. (2003). *Life stressors, anger and internalization, and substance abuse among American Indian adolescents in the Midwest: An empirical test of general strain theory* (Unpublished doctoral dissertation). Iowa State University, Ames, IA.
- Cheryan, S., & Monin, B. (2005). “Where are you really from?": Asian Americans and identity denial. *Journal of Personality and Social Psychology, 89*, 717–730. <http://dx.doi.org/10.1037/0022-3514.89.5.717>
- *Choi, Y., Harachi, T. W., Gillmore, M. R., & Catalano, R. F. (2006). Are multiracial adolescents at greater risk? Comparisons of rates, patterns, and correlates of substance use and violence between monoracial and multiracial adolescents. *American Journal of Orthopsychiatry, 76*, 86–97. <http://dx.doi.org/10.1037/0002-9432.76.1.86>
- *Clark, R., Coleman, A. P., & Novak, J. D. (2004). Brief report: Initial psychometric properties of the everyday discrimination scale in black adolescents. *Journal of Adolescence, 27*, 363–368. <http://dx.doi.org/10.1016/j.adolescence.2003.09.004>
- *Clark, R., & Gochett, P. (2006). Interactive effects of perceived racism and coping responses predict a school-based assessment of blood pressure in Black youth. *Annals of Behavioral Medicine, 32*, 1–9. http://dx.doi.org/10.1207/s15324796abm3201_1
- *Cogburn, C. D. (2010). *Racial cognition and school-based racial discrimination: The role of racial identity, racial identity exploration and critical race consciousness in adaptive academic and psychological functioning among African American adolescents* (Unpublished doctoral dissertation). University of Michigan, Ann Arbor, MI.
- Cohen, G. L., Garcia, J., Apfel, N., & Master, A. (2006). Reducing the racial achievement gap: A social-psychological intervention. *Science, 313*, 1307–1310. <http://dx.doi.org/10.1126/science.1128317>

- Cohen, J. (1992). A power primer. *Psychological Bulletin*, *112*, 155–159. <http://dx.doi.org/10.1037/0033-2909.112.1.155>
- *Coker, T. R., Elliott, M. N., Kanouse, D. E., Grunbaum, J. A., Schwebel, D. C., Gilliland, M. J., . . . Schuster, M. A. (2009). Perceived racial/ethnic discrimination among fifth-grade students and its association with mental health. *American Journal of Public Health*, *99*, 878–884. <http://dx.doi.org/10.2105/AJPH.2008.144329>
- Cole, E. R. (2009). Intersectionality and research in psychology. *American Psychologist*, *64*, 170–180. <http://dx.doi.org/10.1037/a0014564>
- *Cooke, C. L., Bowie, B. H., & Carrère, S. (2014). Perceived discrimination and children's mental health symptoms. *Advances in Nursing Science*, *37*, 299–314. <http://dx.doi.org/10.1097/ANS.0000000000000047>
- Cooper, H. M. (1998). *Synthesizing research: A guide for literature reviews*. Newbury Park, CA: Sage.
- *Cooper, S. M. (2005). *Racial socialization, perceptions of school discrimination and the educational outcomes of African American male and female adolescents* (Unpublished doctoral dissertation). University of Michigan, Ann Arbor, MI.
- *Cooper, S. M., Brown, C., Metzger, I., Clinton, Y., & Guthrie, B. (2013). Racial discrimination and African American adolescents' adjustment: Gender variation in family and community social support, promotive and protective factors. *Journal of Child and Family Studies*, *22*, 15–29. <http://dx.doi.org/10.1007/s10826-012-9608-y>
- *Copeland-Linder, N., Lambert, S. F., Chen, Y.-F., & Ialongo, N. S. (2011). Contextual stress and health risk behaviors among African American adolescents. *Journal of Youth and Adolescence*, *40*, 158–173. <http://dx.doi.org/10.1007/s10964-010-9520-y>
- *Correa-Velez, I., Gifford, S. M., & Barnett, A. G. (2010). Longing to belong: Social inclusion and wellbeing among youth with refugee backgrounds in the first three years in Melbourne, Australia. *Social Science & Medicine*, *71*, 1399–1408. <http://dx.doi.org/10.1016/j.socscimed.2010.07.018>
- Côté, J. E. (2009). Identity formation and self-development in adolescence. In R. M. Lerner & L. D. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd ed., pp. 266–304). Hoboken, NJ: Wiley.
- *Coutinho, M. T., & Blustein, D. L. (2014). Cape Verdean immigrants' career development and school engagement: Perceived discrimination as a moderator. *Journal of Career Development*, *41*, 341–358. <http://dx.doi.org/10.1177/0894845313495589>
- Crocker, J., Major, B., & Steele, C. M. (1998). Social stigma. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology* (4th ed., pp. 504–554). Boston, MA: McGraw-Hill.
- Crosnoe, R., & Benner, A. D. (2015). Children at school. In R. M. Lerner, M. H. Bornstein, & T. Leventhal (Eds.), *Handbook of child psychology and developmental science, Vol. 4: Ecological settings and processes* (pp. 268–304). Hoboken, NJ: Wiley. <http://dx.doi.org/10.1002/9781118963418.childpsy407>
- *Cruz, S. (2016). *A longitudinal study of ethnic discrimination, ethnic-racial identity, gender, and educational values among Latina/o early adolescents* (Unpublished doctoral dissertation). Arizona State University, Tempe, AZ.
- *Cunningham, J. A. (2012). *Towards a multidimensional model of adaptation for African American adolescents exposed to racial discrimination* (Unpublished doctoral dissertation). Loyola University, Chicago, IL.
- *Curtis, C. W. (2008). *Race matters: Racial identity and protection against the negative influences of racism* (Unpublished doctoral dissertation). University of Virginia, Charlottesville, VA.
- Dahl, R. E. (2004). Adolescent brain development: A period of vulnerabilities and opportunities. In R. E. Dahl & L. P. Spear (Eds.), *Adolescent brain development: Vulnerabilities and opportunities* (pp. 1–22). New York, NY: New York Academy of Sciences.
- *Davis, B. L. (2016). *Black, male, and high-achieving: An examination of a risk factor and cultural resources for Black male academic achievement* (Unpublished doctoral dissertation). University of Maryland, College Park, MD.
- *Davis, A. N., Carlo, G., Schwartz, S. J., Unger, J. B., Zamboanga, B. L., Lorenzo-Blanco, E. I., . . . Martinez, M. M. (2016). The longitudinal associations between discrimination, depressive symptoms, and prosocial behaviors in US Latino/a recent immigrant adolescents. *Journal of Youth and Adolescence*, *45*, 457–470. <http://dx.doi.org/10.1007/s10964-015-0394-x>
- *DeGarmo, D. S., & Martinez, C. R., Jr. (2006). A culturally informed model of academic well-being for Latino youth: The importance of discriminatory experiences and social support. *Family Relations: An Interdisciplinary Journal of Applied Family Studies*, *55*, 267–278. <http://dx.doi.org/10.1111/j.1741-3729.2006.00401.x>
- *Delgado, M. Y., Updegraff, K. A., Roosa, M. W., & Umaña-Taylor, A. J. (2011). Discrimination and Mexican-origin adolescents' adjustment: The moderating roles of adolescents', mothers', and fathers' cultural orientations and values. *Journal of Youth and Adolescence*, *40*, 125–139. <http://dx.doi.org/10.1007/s10964-009-9467-z>
- *Deng, S., Kim, S. Y., Vaughan, P. W., & Li, J. (2010). Cultural orientation as a moderator of the relationship between Chinese American adolescents' discrimination experiences and delinquent behaviors. *Journal of Youth and Adolescence*, *39*, 1027–1040. <http://dx.doi.org/10.1007/s10964-009-9460-6>
- *Doane, L. D., & Zeiders, K. H. (2014). Contextual moderators of momentary cortisol and negative affect in adolescents' daily lives. *Journal of Adolescent Health*, *54*, 536–542. <http://dx.doi.org/10.1016/j.jadohealth.2013.10.007>
- Dolezar, C. M., McGrath, J. J., Herzig, A. J. M., & Miller, S. B. (2014). Perceived racial discrimination and hypertension: A comprehensive systematic review. *Health Psychology*, *33*, 20–34. <http://dx.doi.org/10.1037/a0033718>
- *Dotterer, A. M. (2006). *The ecology of children and adolescents' academic adjustment* (Unpublished doctoral dissertation). Pennsylvania State University, State College, PA.
- *Dotterer, A. M., & Lowe, K. (2015). Perceived discrimination, parenting, and academic adjustment among racial/ethnic minority adolescents. *Journal of Applied Developmental Psychology*, *41*, 71–77. <http://dx.doi.org/10.1016/j.appdev.2015.08.003>
- *Dotterer, A. M., McHale, S. M., & Crouter, A. C. (2009). Sociocultural factors and school engagement among African American youth: The roles of racial discrimination, racial socialization and ethnic identity. *Applied Developmental Science*, *13*, 61–73. <http://dx.doi.org/10.1080/10888690902801442>
- *DuBois, D. L., Burk-Braxton, C., Swenson, L. R., Tevendale, H. D., & Hardesty, J. L. (2002). Race and gender influences on adjustment in early adolescence: Investigation of an integrative model. *Child Development*, *73*, 1573–1592. <http://dx.doi.org/10.1111/1467-8624.00491>
- Duval, S., & Tweedie, R. (2000). A nonparametric "trim and fill" method of accounting for publication bias in meta-analysis. *Journal of the American Statistical Association*, *95*, 89–98.
- *Eccles, J. S., Wong, C. A., & Peck, S. C. (2006). Ethnicity as a social context for the development of African-American adolescents. *Journal of School Psychology*, *44*, 407–426. <http://dx.doi.org/10.1016/j.jsp.2006.04.001>
- *Edwards, L. M., & Romero, A. J. (2008). Coping with discrimination among Mexican descent adolescents. *Hispanic Journal of Behavioral Sciences*, *30*, 24–39. <http://dx.doi.org/10.1177/0739986307311431>
- Eisenberg, M. E., Neumark-Sztainer, D., & Story, M. (2003). Associations of weight-based teasing and emotional well-being among adolescents. *Archives of Pediatrics & Adolescent Medicine*, *157*, 733–738. <http://dx.doi.org/10.1001/archpedi.157.8.733>
- *Ellis, B. H., MacDonald, H. Z., Klunk-Gillis, J., Lincoln, A., Struin, L., & Cabral, H. J. (2010). Discrimination and mental health among Somali refugee adolescents: The role of acculturation and gender. *American*

- Journal of Orthopsychiatry*, 80, 564–575. <http://dx.doi.org/10.1111/j.1939-0025.2010.01061.x>
- Else-Quest, N. M., & Morse, E. (2015). Ethnic variations in parental ethnic socialization and adolescent ethnic identity: A longitudinal study. *Cultural Diversity and Ethnic Minority Psychology*, 21, 54–64. <http://dx.doi.org/10.1037/a0037820>
- *El-Sheikh, M., Tu, K. M., Saini, E. K., Fuller-Rowell, T. E., & Buckhalt, J. A. (2016). Perceived discrimination and youths' adjustment: Sleep as a moderator. *Journal of Sleep Research*, 25, 70–77. <http://dx.doi.org/10.1111/jsr.12333>
- *English, D., Lambert, S. F., & Ialongo, N. S. (2016). Adding to the education debt: Depressive symptoms mediate the association between racial discrimination and academic performance in African Americans. *Journal of School Psychology*, 57, 29–40. <http://dx.doi.org/10.1016/j.jsp.2016.05.007>
- *Fallah, N. (2014). *Familial, academic, and interpersonal predictors of attributional style in Latino youth* (Unpublished doctoral dissertation). The University of North Carolina at Greensboro, Greensboro, NC.
- Farkas, G. (2003). Racial disparities and discrimination in education: What do we know, how do we know it, and what do we need to know? *Teachers College Record*, 105, 1119–1146. <http://dx.doi.org/10.1111/1467-9620.00279>
- Feagin, J. R., Vera, H., & Batur, P. (2001). *White racism: The basics*. New York, NY: Routledge.
- *Fields, A. R. (2014). *The effects of systemic racism on the academic achievement of African American male adolescents* (Unpublished doctoral dissertation). Western Michigan University, Ann Arbor, MI.
- *Fisher, C. B., Wallace, S. A., & Fenton, R. E. (2000). Discrimination distress during adolescence. *Journal of Youth and Adolescence*, 29, 679–695. <http://dx.doi.org/10.1023/A:1026455906512>
- *Flores, E., Tschanz, J. M., Dimas, J. M., Pasch, L. A., & de Groat, C. L. (2010). Perceived racial/ethnic discrimination, posttraumatic stress symptoms, and health risk behaviors among Mexican American adolescents. *Journal of Counseling Psychology*, 57, 264–273. <http://dx.doi.org/10.1037/a0020026>
- Fuligni, A. J., Hughes, D. L., & Way, N. (2009). Ethnicity and immigration. In R. M. Lerner & L. D. Steinberg (Eds.), *Handbook of adolescent psychology* (3rd ed., pp. 527–569). Hoboken, NJ: Wiley.
- *Fuller-Rowell, T. E., Cogburn, C. D., Brodish, A. B., Peck, S. C., Malanchuk, O., & Eccles, J. S. (2012). Racial discrimination and substance use: Longitudinal associations and identity moderators. *Journal of Behavioral Medicine*, 35, 581–590. <http://dx.doi.org/10.1007/s10865-011-9388-7>
- *Galliher, R. V., Jones, M. D., & Dahl, A. (2011). Concurrent and longitudinal effects of ethnic identity and experiences of discrimination on psychosocial adjustment of Navajo adolescents. *Developmental Psychology*, 47, 509–526. <http://dx.doi.org/10.1037/a0021061>
- García Coll, C., Lambert, G., Jenkins, R., McAdoo, H. P., Crnic, K., Wasik, B. H., & Vázquez García, H. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development*, 67, 1891–1914. <http://dx.doi.org/10.2307/1131600>
- *Garcia-Reid, P. (2003). *Pathways to school engagement among Latino youth in an urban middle school context: The influence of social support, sense of ethnic pride, and perception of discrimination* (Unpublished doctoral dissertation). Fordham University, New York, NY.
- *Gaylord-Harden, N. K., & Cunningham, J. A. (2009). The impact of racial discrimination and coping strategies on internalizing symptoms in African American youth. *Journal of Youth and Adolescence*, 38, 532–543. <http://dx.doi.org/10.1007/s10964-008-9377-5>
- *Ghazarian, S. R. (2008). *Perceived discrimination and academic achievement among Latino adolescents: A risk and resiliency model* (Unpublished doctoral dissertation). The University of North Carolina at Greensboro, Greensboro, NC.
- *Gibbons, F. X., Etcheverry, P. E., Stock, M. L., Gerrard, M., Weng, C. Y., Kiviniemi, M., & O'Hara, R. E. (2010). Exploring the link between racial discrimination and substance use: What mediates? What buffers? *Journal of Personality and Social Psychology*, 99, 785–801. <http://dx.doi.org/10.1037/a0019880>
- *Gibbons, F. X., O'Hara, R. E., Stock, M. L., Gerrard, M., Weng, C. Y., & Wills, T. A. (2012). The erosive effects of racism: Reduced self-control mediates the relation between perceived racial discrimination and substance use in African American adolescents. *Journal of Personality and Social Psychology*, 102, 1089–1104. <http://dx.doi.org/10.1037/a0027404>
- *Gibbons, F. X., Roberts, M. E., Gerrard, M., Li, Z., Beach, S. R. H., Simons, R. L., . . . Philibert, R. A. (2012). The impact of stress on the life history strategies of African American adolescents: Cognitions, genetic moderation, and the role of discrimination. *Developmental Psychology*, 48, 722–739. <http://dx.doi.org/10.1037/a0026599>
- *Gonzalez, E. (2016). *Ethnic-racial attitudes and indigenous identity among Oaxaqueño/a adolescents and young adults* (Unpublished doctoral dissertation). University of California, Santa Cruz, CA.
- *Gonzalez, L. M., Stein, G. L., Kiang, L., & Cupito, A. M. (2014). The impact of discrimination and support on developmental competencies in Latino adolescents. *Journal of Latina/o Psychology*, 2, 79–91. <http://dx.doi.org/10.1037/lat0000014>
- *Gray, C. M. K., & Montgomery, M. J. (2012). Links between alcohol and other drug problems and maltreatment among adolescent girls: Perceived discrimination, ethnic identity, and ethnic orientation as moderators. *Child Abuse & Neglect*, 36, 449–460. <http://dx.doi.org/10.1016/j.chiabu.2012.03.002>
- *Greene, M. L., Way, N., & Pahl, K. (2006). Trajectories of perceived adult and peer discrimination among Black, Latino, and Asian American adolescents: Patterns and psychological correlates. *Developmental Psychology*, 42, 218–236. <http://dx.doi.org/10.1037/0012-1649.42.2.218>
- *Griffin, C. B. (2014). *School racial climate and the academic achievement of African American high school students: The mediating role of school engagement* (Unpublished doctoral dissertation). University of South Carolina, Columbia, SC.
- *Grossman, J. M., & Liang, B. (2008). Discrimination distress among Chinese American adolescents. *Journal of Youth and Adolescence*, 37, 1–11. <http://dx.doi.org/10.1007/s10964-007-9215-1>
- *Guthrie, B. J., Young, A. M., Williams, D. R., Boyd, C. J., & Kintner, E. K. (2002). African American girls' smoking habits and day-to-day experiences with racial discrimination. *Nursing Research*, 51, 183–190. <http://dx.doi.org/10.1097/00006199-200205000-00007>
- Haines, J., Neumark-Sztainer, D., Wall, M., & Story, M. (2007). Personal, behavioral, and environmental risk and protective factors for adolescent overweight. *Obesity*, 15, 2748–2760. <http://dx.doi.org/10.1038/oby.2007.327>
- Hancock, A.-M. (2007). When multiplication doesn't equal quick addition: Examining intersectionality as a research paradigm. *Perspectives on Politics*, 5, 63–79. <http://dx.doi.org/10.1017/S1537592707070065>
- Harris, K. M., Gordon-Larsen, P., Chantala, K., & Udry, J. R. (2006). Longitudinal trends in race/ethnic disparities in leading health indicators from adolescence to young adulthood. *Archives of Pediatrics & Adolescent Medicine*, 160, 74–81. <http://dx.doi.org/10.1001/archpedi.160.1.74>
- *Harris-Britt, A., Valrie, C. R., Kurtz-Costes, B., & Rowley, S. J. (2007). Perceived racial discrimination and self-esteem in African American youth: Racial socialization as a protective factor. *Journal of Research on Adolescence*, 17, 669–682. <http://dx.doi.org/10.1111/j.1532-7795.2007.00540.x>
- *Hartshorn, K. J. S., Whitbeck, L. B., & Hoyt, D. R. (2012). Exploring the relationships of perceived discrimination, anger, and aggression among North American Indigenous adolescents. *Society and Mental Health*, 2, 53–67. <http://dx.doi.org/10.1177/2156869312441185>

- *Harven, A. M. (2015). *Black and Latino adolescents' perceptions of racial discrimination and school adjustment: Parent educational advocacy and friendship support as protective factors* (Unpublished doctoral dissertation). University of California, Los Angeles, CA.
- Hawker, D. S. J., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry*, *41*, 441–455. <http://dx.doi.org/10.1111/1469-7610.00629>
- *Henry, J. S. (2014). *The unique promotive and protective effects of racial socialization: A comparison of racial socialization and general positive parenting practices for African American youth exposed to racial discrimination* (Unpublished doctoral dissertation). The George Washington University, Washington, DC.
- Higgins, J. P. T., Thompson, S. G., Deeks, J. J., & Altman, D. G. (2003). Measuring inconsistency in meta-analyses. *BMJ: British Medical Journal*, *327*, 557–560. <http://dx.doi.org/10.1136/bmj.327.7414.557>
- *Hughes, D., Del Toro, J., Harding, J. F., Way, N., & Rarick, J. R. (2016). Trajectories of discrimination across adolescence: Associations with academic, psychological, and behavioral outcomes. *Child Development*, *87*, 1337–1351. <http://dx.doi.org/10.1111/cdev.12591>
- *Huo, N., Stein, G. L., & Gonzalez, L. M. (2016). Acculturation conflict among Latino youth: Discrimination, ethnic identity, and depressive symptoms. *Cultural Diversity and Ethnic Minority Psychology*, *22*, 377–385. <http://dx.doi.org/10.1037/cdp0000070>
- *Huynh, V. W. (2011). *Ethnic microaggressions and the health and well-being of Latino and Asian American adolescents* (Unpublished doctoral dissertation). University of California, Los Angeles, CA.
- *Huynh, V. W. (2012). Ethnic microaggressions and the depressive and somatic symptoms of Latino and Asian American adolescents. *Journal of Youth and Adolescence*, *41*, 831–846. <http://dx.doi.org/10.1007/s10964-012-9756-9>
- *Huynh, V. W., & Fuligni, A. J. (2010). Discrimination hurts: The academic, psychological, and physical well-being of adolescents. *Journal of Research on Adolescence*, *20*, 916–941. <http://dx.doi.org/10.1111/j.1532-7795.2010.00670.x>
- Inhelder, B., & Piaget, J. (1958). *The growth of logical thinking: From childhood to adolescence*. New York, NY: Basic Books. <http://dx.doi.org/10.1037/10034-000>
- Institute of Medicine & National Research Council. (2014). *Investing in the health and well-being of young adults*. Washington, DC: The National Academies Press.
- Isaacs, S. L., & Schroeder, S. A. (2004). Class—the ignored determinant of the nation's health. *The New England Journal of Medicine*, *351*, 1137–1142. <http://dx.doi.org/10.1056/NEJMs040329>
- *Jaramillo, J., Mello, Z. R., & Worrell, F. C. (2015). Ethnic identity, stereotype threat, and perceived discrimination among Native American adolescents. *Journal of Research on Adolescence*, *26*, 769–775. <http://dx.doi.org/10.1111/jora.12228>
- Jones, K. P., Peddie, C. I., Gilrane, V. L., King, E. B., & Gray, A. L. (2016). Not so subtle: A meta-analytic investigation of the correlates of subtle and overt discrimination. *Journal of Management*, *42*, 1588–1613. <http://dx.doi.org/10.1177/0149206313506466>
- *Jones, M. D. (2008). *Longitudinal and reciprocal effects of ethnic identity and experiences of discrimination on psychosocial adjustment of Navajo (Diné) adolescents* (Unpublished doctoral dissertation). Utah State University, Logan, UT.
- *Juang, L. P., & Alvarez, A. A. (2010). Discrimination and adjustment among Chinese American adolescents: Family conflict and family cohesion as vulnerability and protective factors. *American Journal of Public Health*, *100*, 2403–2409. <http://dx.doi.org/10.2105/AJPH.2009.185959>
- *Juang, L. P., & Cookston, J. T. (2009). Acculturation, discrimination, and depressive symptoms among Chinese American adolescents: A longitudinal study. *The Journal of Primary Prevention*, *30*, 475–496. <http://dx.doi.org/10.1007/s10935-009-0177-9>
- *Kam, J. A., & Bamaca-Colbert, M. Y. (2013). Supportive parenting as a moderator of perceived ethnic/racial discrimination's associations with psychological and academic adjustment: A comparison between Mexican-origin females in early and middle adolescence. *Communication Research*, *40*, 645–668. <http://dx.doi.org/10.1177/0093650212441362>
- *Kam, J. A., Castro, F. G., & Wang, N. (2015). Parent-child communication's attenuating effects on Mexican early adolescents' perceived discrimination, depressive symptoms, and substance use. *Human Communication Research*, *41*, 204–225. <http://dx.doi.org/10.1111/hcre.12043>
- *Kam, J. A., & Cleveland, M. J. (2011). Perceived discrimination as a risk factor for Latina/o youth's substance use: Do parent- and peer-based communication and relationship resources act as protective factors? *Health Communication*, *26*, 111–124. <http://dx.doi.org/10.1080/10410236.2010.539180>
- *Kang, H.-K., & Burton, D. L. (2014). Effects of racial discrimination, childhood trauma, and trauma symptoms on juvenile delinquency in African American incarcerated youth. *Journal of Aggression, Maltreatment & Trauma*, *23*, 1109–1125. <http://dx.doi.org/10.1080/10926771.2014.968272>
- *Kapke, T. L., Gerdes, A. C., & Lawton, K. E. (2016). Global self-worth in Latino youth: The role of acculturation and acculturation risk factors. *Child & Youth Care Forum*, *46*, 307–333. <http://dx.doi.org/10.1007/s10566-016-9374-x>
- Karcher, M. J., & Fischer, K. W. (2004). A developmental sequence of skills in adolescents' intergroup understanding. *Journal of Applied Developmental Psychology*, *25*, 259–282. <http://dx.doi.org/10.1016/j.appdev.2004.04.001>
- Katz, P. A. (2003). Racists or tolerant multiculturalists? How do they begin? *American Psychologist*, *58*, 897–909. <http://dx.doi.org/10.1037/0003-066X.58.11.897b>
- Kena, G., Musu-Gillette, L., Robinson, J., Wang, X., Rathbun, A., Zhang, J., . . . Dunlop Velez, E. (2015). *The condition of education 2015 (NCES 2015-144)*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- *Kern, B. L. (2014). *Fathers' parenting behaviors and risks for adolescent aggression in African American and Latino boys* (Unpublished doctoral dissertation). Oklahoma Christian University, Oklahoma City, OK.
- Kessler, R. C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior*, *40*, 208–230. <http://dx.doi.org/10.2307/2676349>
- *Kiang, L., & Johnson, N. C. (2013). Relationship-specific variability in adolescents' ethnic self-labeling preferences. *Journal of Adolescence*, *36*, 815–823. <http://dx.doi.org/10.1016/j.adolescence.2013.07.002>
- *Kiang, L., Witkow, M. R., & Thompson, T. L. (2016). Model minority stereotyping, perceived discrimination, and adjustment among adolescents from Asian American backgrounds. *Journal of Youth and Adolescence*, *45*, 1366–1379. <http://dx.doi.org/10.1007/s10964-015-0336-7>
- *Kiang, L., Supple, A. J., Stein, G. L., & Gonzalez, L. M. (2012). Gendered academic adjustment among Asian American adolescents in an emerging immigrant community. *Journal of Youth and Adolescence*, *41*, 283–294. <http://dx.doi.org/10.1007/s10964-011-9697-8>
- Kiecolt-Glaser, J. K., McGuire, L., Robles, T. F., & Glaser, R. (2002). Emotions, morbidity, and mortality: New perspectives from psychoneuroimmunology. *Annual Review of Psychology*, *53*, 83–107. <http://dx.doi.org/10.1146/annurev.psych.53.100901.135217>
- Killen, M., & Stangor, C. (2001). Children's social reasoning about inclusion and exclusion in gender and race peer group contexts. *Child Development*, *72*, 174–186. <http://dx.doi.org/10.1111/1467-8624.00272>

- Kim, C. J. (1999). The racial triangulation of Asian Americans. *Politics & Society*, 27, 105–138. <http://dx.doi.org/10.1177/0032329299027001005>
- *Kim, T. Y. (2015). *The influence of perceived racial discrimination on depressive symptoms and school outcomes among Asian American adolescents* (Unpublished doctoral dissertation). The University of Chicago, Chicago, IL.
- *Kogan, S. M., Yu, T., Allen, K. A., Pocock, A. M., & Brody, G. H. (2015). Pathways from racial discrimination to multiple sexual partners among male African American adolescents. *Psychology of Men & Masculinity*, 16, 218–228. <http://dx.doi.org/10.1037/a0037453>
- *Kolarcik, P., Geckova, A. M., Reijneveld, S. A., & Van Dijk, J. P. (2015). The mediating effect of discrimination, social support and hopelessness on self-rated health of Roma adolescents in Slovakia. *International Journal for Equity in Health*, 14, 1–10. <http://dx.doi.org/10.1186/s12939-015-0270-z>
- Krivo, L. J., & Kaufman, R. L. (2004). Housing and wealth inequality: Racial-ethnic differences in home equity in the United States. *Demography*, 41, 585–605. <http://dx.doi.org/10.1353/dem.2004.0023>
- Kuhn, D. (2009). Adolescent thinking. In R. M. Lerner & L. D. Steinberg (Eds.), *Handbook of adolescent psychology: Vol. 1. Individual bases for adolescent development* (3rd ed., pp. 152–186). Hoboken, NJ: Wiley.
- *Kulis, S., Marsiglia, F. F., & Nieri, T. (2009). Perceived ethnic discrimination versus acculturation stress: Influences on substance use among Latino youth in the Southwest. *Journal of Health and Social Behavior*, 50, 443–459. <http://dx.doi.org/10.1177/002214650905000405>
- *Lambert, S. F., Herman, K. C., Bynum, M. S., & Ialongo, N. S. (2009). Perceptions of racism and depressive symptoms in African American adolescents: The role of perceived academic and social control. *Journal of Youth and Adolescence*, 38, 519–531. <http://dx.doi.org/10.1007/s10964-009-9393-0>
- *Lambert, S. F., Robinson, W. L., & Ialongo, N. S. (2014). The role of socially prescribed perfectionism in the link between perceived racial discrimination and African American adolescents' depressive symptoms. *Journal of Abnormal Child Psychology*, 42, 577–587. <http://dx.doi.org/10.1007/s10802-013-9814-0>
- Leach, C. W. (2005). Against the notion of a “new racism.” *Journal of Community & Applied Social Psychology*, 15, 432–445. <http://dx.doi.org/10.1002/casp.841>
- Lee, D. L., & Ahn, S. (2011). Racial discrimination and Asian mental health: A meta-analysis. *The Counseling Psychologist*, 39, 463–489. <http://dx.doi.org/10.1177/0011000010381791>
- Lee, D. L., & Ahn, S. (2012). Discrimination against Latina/os: A meta-analysis of individual-level resources and outcomes. *The Counseling Psychologist*, 40, 28–65. <http://dx.doi.org/10.1177/0011000011403326>
- *Lee, J. P., Lee, R. M., Hu, A. W., & Kim, O. M. (2015). Ethnic identity as a moderator against discrimination for transracially and transnationally adopted Korean American adolescents. *Asian American Journal of Psychology*, 6, 154–163. <http://dx.doi.org/10.1037/a0038360>
- Lipsey, M. W., & Wilson, D. B. (2001). *Practical meta-analysis*. Thousand Oaks, CA: Sage.
- Little, T. D., Preacher, K. J., Selig, J. P., & Card, N. A. (2007). New developments in latent variable panel analyses of longitudinal data. *International Journal of Behavioral Development*, 31, 357–365. <http://dx.doi.org/10.1177/0165025407077757>
- *Liu, J., Mustanski, B., Dick, D., Bolland, J., & Kertes, D. A. (2016). Risk and protective factors for comorbid internalizing and externalizing problems among economically disadvantaged African American youth. *Development and Psychopathology*. Advance online publication. <http://dx.doi.org/10.1017/S0954579416001188>
- Lopez, A. D., Mathers, C. D., Ezzati, M., Jamison, D. T., & Murray, C. J. L. (2006). Global and regional burden of disease and risk factors, 2001: Systematic analysis of population health data. *Lancet*, 367, 1747–1757. [http://dx.doi.org/10.1016/S0140-6736\(06\)68770-9](http://dx.doi.org/10.1016/S0140-6736(06)68770-9)
- *Lorenzo-Blanco, E. I., & Unger, J. B. (2015). Ethnic discrimination, acculturative stress, and family conflict as predictors of depressive symptoms and cigarette smoking among Latina/o youth: The mediating role of perceived stress. *Journal of Youth and Adolescence*, 44, 1984–1997. <http://dx.doi.org/10.1007/s10964-015-0339-4>
- *Lorenzo-Blanco, E. I., Unger, J. B., Ritt-Olson, A., Soto, D., & Baezconde-Garbanati, L. (2013). A longitudinal analysis of Hispanic youth acculturation and cigarette smoking: The roles of gender, culture, family, and discrimination. *Nicotine & Tobacco Research*, 15, 957–968. <http://dx.doi.org/10.1093/ntr/nts204>
- *Martin, M. J., McCarthy, B., Conger, R. D., Gibbons, F. X., Simons, R. L., Cutrona, C. E., & Brody, G. H. (2011). The enduring significance of racism: Discrimination and delinquency among Black American youth. *Journal of Research on Adolescence*, 21, 662–676. <http://dx.doi.org/10.1111/j.1532-7795.2010.00699.x>
- *Mattison, E., & Aber, M. S. (2007). Closing the achievement gap: The association of racial climate with achievement and behavioral outcomes. *American Journal of Community Psychology*, 40, 1–12. <http://dx.doi.org/10.1007/s10464-007-9128-x>
- Mayer, L. S., & Carroll, S. S. (1988). Measures of dependence for cross-lagged panel models. *Sociological Methods & Research*, 17, 93–120. <http://dx.doi.org/10.1177/0049124188017001005>
- Mays, V. M., Cochran, S. D., & Barnes, N. W. (2007). Race, race-based discrimination, and health outcomes among African Americans. *Annual Review of Psychology*, 58, 201–225.
- McCall, L. (2005). The complexity of intersectionality. *Signs: Journal of Women in Culture and Society*, 30, 1771–1800. <http://dx.doi.org/10.1086/426800>
- McKown, C., & Weinstein, R. S. (2003). The development and consequences of stereotype consciousness in middle childhood. *Child Development*, 74, 498–515. <http://dx.doi.org/10.1111/1467-8624.7402012>
- *Melandar, L. A., Hartshorn, K. J. S., & Whitbeck, L. B. (2013). Correlates of bullying behaviors among a sample of North American Indigenous adolescents. *Journal of Adolescence*, 36, 675–684. <http://dx.doi.org/10.1016/j.adolescence.2013.05.003>
- *Middlebrook, K. (2010). *American Indian adolescents' ethnic identity and school identification: Relationships with academic achievement, perceived discrimination, and educational utility* (Unpublished doctoral dissertation). University of California, Berkeley, CA.
- *Milburn, N. G., Batterham, P., Ayala, G., Rice, E., Solorio, R., Desmond, K., . . . Rotheram-Borus, M. J. (2010). Discrimination and mental health problems among homeless minority young people. *Public Health Reports*, 125, 61–67. <http://dx.doi.org/10.2307/41434749>
- Mistry, J., Contreras, M. M., & Pufall-Jones, E. (2014). Childhood socialization and academic performance of bicultural youth. In V. Benet-Martínez & Y.-Y. Hong (Eds.), *The Oxford handbook of multicultural identity* (pp. 355–378). New York, NY: Oxford University Press.
- *Moosmann, D. A. V., Roosa, M. W., & Knight, G. P. (2014). Generational patterns in Mexican Americans' academic performance in an unwelcoming political context. *Journal of Applied Developmental Psychology*, 35, 102–110. <http://dx.doi.org/10.1016/j.appdev.2013.11.005>
- Mouw, T., & Kalleberg, A. L. (2010). Occupations and the structure of wage inequality in the United States, 1980s to 2000s. *American Sociological Review*, 75, 402–431. <http://dx.doi.org/10.1177/0003122410363564>
- *Mroczkowski, A. L., & Sánchez, B. (2015). The role of racial discrimination in the economic value of education among urban, low-income Latina/o youth: Ethnic identity and gender as moderators. *American Journal of Community Psychology*, 56, 1–11. <http://dx.doi.org/10.1007/s10464-015-9728-9>
- *Nair, R. L., White, R. M. B., Roosa, M. W., & Zeiders, K. H. (2013). Cultural stressors and mental health symptoms among Mexican Americans: A prospective study examining the impact of the family and

- neighborhood context. *Journal of Youth and Adolescence*, 42, 1611–1623. <http://dx.doi.org/10.1007/s10964-012-9834-z>
- Nakamoto, J., & Schwartz, D. (2010). Is peer victimization associated with academic achievement? A meta-analytic review. *Social Development*, 19, 221–242. <http://dx.doi.org/10.1111/j.1467-9507.2009.00539.x>
- *Neblett, E. W., Jr., Philip, C. L., Cogburn, C. D., & Sellers, R. M. (2006). African American adolescents' discrimination experiences and academic achievement: Racial socialization as a cultural compensatory and protective factor. *Journal of Black Psychology*, 32, 199–218. <http://dx.doi.org/10.1177/0095798406287072>
- *Neblett, E. W., Jr., White, R. L., Ford, K. R., Philip, C. L., Nguyễn, H. X., & Sellers, R. M. (2008). Patterns of racial socialization and psychological adjustment: Can parental communications about race reduce the impact of racial discrimination? *Journal of Research on Adolescence*, 18, 477–515. <http://dx.doi.org/10.1111/j.1532-7795.2008.00568.x>
- *Neto, F. (2009). Predictors of mental health among adolescents from immigrant families in Portugal. *Journal of Family Psychology*, 23, 375–385. <http://dx.doi.org/10.1037/a0015831>
- *Niwa, E. Y., Way, N., & Hughes, D. L. (2014). Trajectories of ethnic-racial discrimination among ethnically diverse early adolescents: Associations with psychological and social adjustment. *Child Development*, 85, 2339–2354.
- Noguera, P. A. (2003). The trouble with Black boys: The role and influence of environmental and cultural factors on the academic performance of African American males. *Urban Education*, 38, 431–459. <http://dx.doi.org/10.1177/0042085903038004005>
- *Nyborg, V. M., & Curry, J. F. (2003). The impact of perceived racism: Psychological symptoms among African American boys. *Journal of Clinical Child and Adolescent Psychology*, 32, 258–266. http://dx.doi.org/10.1207/S15374424JCCP3202_11
- O'Hare, W. (2011). *The changing child population of the United States: Analysis of data from the 2010 Census*. Baltimore, MD: Annie E. Casey Foundation.
- *Omma, L., & Petersen, S. (2015). Health-related quality of life in indigenous Sami schoolchildren in Sweden. *Acta Paediatrica*, 104, 75–83. <http://dx.doi.org/10.1111/apa.12786>
- *Oppedal, B., Røysamb, E., & Heyerdahl, S. (2005). Ethnic group, acculturation, and psychiatric problems in young immigrants. *Journal of Child Psychology and Psychiatry*, 46, 646–660. <http://dx.doi.org/10.1111/j.1469-7610.2004.00381.x>
- Orth, U., Robins, R. W., & Widaman, K. F. (2012). Life-span development of self-esteem and its effects on important life outcomes. *Journal of Personality and Social Psychology*, 102, 1271–1288. <http://dx.doi.org/10.1037/a0025558>
- *Özdemir, S. B., & Stattin, H. (2014). Why and when is ethnic harassment a risk for immigrant adolescents' school adjustment? Understanding the processes and conditions. *Journal of Youth and Adolescence*, 43, 1252–1265. <http://dx.doi.org/10.1007/s10964-013-0038-y>
- 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. <http://dx.doi.org/10.1146/annurev.soc.33.040406.131740>
- Paluck, E. L., & Green, D. P. (2009). Prejudice reduction: What works? A review and assessment of research and practice. *Annual Review of Psychology*, 60, 339–367. <http://dx.doi.org/10.1146/annurev.psych.60.110707.163607>
- Paradies, Y. (2006). A systematic review of empirical research on self-reported racism and health. *International Journal of Epidemiology*, 35, 888–901. <http://dx.doi.org/10.1093/ije/dyl056>
- *Park, I. J., Wang, L., Williams, D. R., & Alegría, M. (2017). Does anger regulation mediate the discrimination–mental health link among Mexican-origin adolescents? A longitudinal mediation analysis using multilevel modeling. *Developmental Psychology*, 53, 340–352. <http://dx.doi.org/10.1037/dev0000235>
- Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin*, 135, 531–554. <http://dx.doi.org/10.1037/a0016059>
- *Patel, S. G., Salahuddin, N. M., & O'Brien, K. M. (2008). Career decision-making self-efficacy of Vietnamese adolescents: The role of acculturation, social support, socioeconomic status, and racism. *Journal of Career Development*, 34, 218–240. <http://dx.doi.org/10.1177/0894845307308488>
- Patterson, M. M., & Bigler, R. S. (2006). Preschool children's attention to environmental messages about groups: Social categorization and the origins of intergroup bias. *Child Development*, 77, 847–860. <http://dx.doi.org/10.1111/j.1467-8624.2006.00906.x>
- Pérez, D. J., Fortuna, L., & Alegría, M. (2008). Prevalence and correlates of everyday discrimination among U.S. Latinos. *Journal of Community Psychology*, 36, 421–433. <http://dx.doi.org/10.1002/jcop.20221>
- *Perreira, K. M., Fuligni, A., & Potochnick, S. (2010). Fitting in: The roles of social acceptance and discrimination in shaping the academic motivations of Latino youth in the U.S. Southeast. *Journal of Social Issues*, 66, 131–153. <http://dx.doi.org/10.1111/j.1540-4560.2009.01637.x>
- Peterson, R. D., & Krivo, L. J. (2005). Macrostructural analyses of race, ethnicity, and violent crime: Recent lessons and new directions for research. *Annual Review of Sociology*, 31, 331–356. <http://dx.doi.org/10.1146/annurev.soc.31.041304.122308>
- Pew Research Center. (2013). *King's dream remains an elusive goal; Many Americans see racial disparities*. Washington, DC: Pew Research Center.
- Pew Research Center. (2015). *Across racial lines, more say nation needs to make changes to achieve racial equality*. Washington, DC: Pew Research Center.
- *Phinney, J. S., Madden, T., & Santos, L. J. (1998). Psychological variables as predictors of perceived ethnic discrimination among minority and immigrant adolescents. *Journal of Applied Social Psychology*, 28, 937–953. <http://dx.doi.org/10.1111/j.1559-1816.1998.tb01661.x>
- Pieterse, A. L., Todd, N. R., Neville, H. A., & Carter, R. T. (2012). Perceived racism and mental health among Black American adults: A meta-analytic review. *Journal of Counseling Psychology*, 59, 1–9. <http://dx.doi.org/10.1037/a0026208>
- *Piña-Watson, B., Dornhecker, M., & Salinas, S. R. (2015). The impact of bicultural stress on Mexican American adolescents' depressive symptoms and suicidal ideation: Gender matters. *Hispanic Journal of Behavioral Sciences*, 37, 342–364. <http://dx.doi.org/10.1177/0739986315586788>
- *Prelow, H. M., Danoff-Burg, S., Swenson, R. R., & Pulgiano, D. (2004). The impact of ecological risk and perceived discrimination on the psychological adjustment of African American and European American youth. *Journal of Community Psychology*, 32, 375–389. <http://dx.doi.org/10.1002/jcop.20007>
- Priest, N., Paradies, Y., Trenerry, B., Truong, M., Karlsen, S., & Kelly, Y. (2013). A systematic review of studies examining the relationship between reported racism and health and wellbeing for children and young people. *Social Science & Medicine*, 95, 115–127. <http://dx.doi.org/10.1016/j.socscimed.2012.11.031>
- *Priest, N., Perry, R., Ferdinand, A., Paradies, Y., & Kelaheer, M. (2014). Experiences of racism, racial/ethnic attitudes, motivated fairness and mental health outcomes among primary and secondary school students. *Journal of Youth and Adolescence*, 43, 1672–1687. <http://dx.doi.org/10.1007/s10964-014-0140-9>
- Puhl, R. M., & Latner, J. D. (2007). Stigma, obesity, and the health of the nation's children. *Psychological Bulletin*, 133, 557–580. <http://dx.doi.org/10.1037/0033-2909.133.4.557>
- Purdie-Vaughns, V., & Eibach, R. P. (2008). Intersectional invisibility: The distinctive advantages and disadvantages of multiple subordinate-group identities. *Sex Roles*, 59, 377–391. <http://dx.doi.org/10.1007/s11199-008-9424-4>

- *Quattrochi, G. E. (2014). *The relationship between perceived discrimination and hope for the future, global self worth and academic competence: In a multi-racial/ethnic, low income sample of school age children* (Unpublished doctoral dissertation). Purdue University, West Lafayette, IN.
- Quintana, S. M., & McKown, C. (2008). Introduction: Race, racism, and the developing child. In S. M. Quintana & C. McKown (Eds.), *Handbook of race, racism, and the developing child* (pp. 1–15). Hoboken, NJ: Wiley.
- Raudenbush, S. W. (2009). Analyzing effect sizes: Random-effects models. In H. Cooper, L. V. Hedges, & J. C. Valentine (Eds.), *The handbook of research synthesis and meta-analysis* (2nd ed., pp. 295–315). New York, NY: Russell Sage Foundation.
- Rehm, J., Gmel, G., Sempos, C. T., & Trevisan, M. (2003). Alcohol-related morbidity and mortality. *Alcohol Research & Health*, 27, 39–51.
- Reijntjes, A., Kamphuis, J. H., Prinzie, P., & Telch, M. J. (2010). Peer victimization and internalizing problems in children: A meta-analysis of longitudinal studies. *Child Abuse & Neglect*, 34, 244–252. <http://dx.doi.org/10.1016/j.chiabu.2009.07.009>
- *Richards, S. M. (2011). *Mexican American youths' academic outcomes: The role of ethnic and academic socialization in buffering discrimination* (Unpublished master's thesis). Utah State University, Logan, UT.
- *Riina, E. M., Martin, A., Gardner, M., & Brooks-Gunn, J. (2013). Context matters: Links between neighborhood discrimination, neighborhood cohesion and African American adolescents' adjustment. *Journal of Youth and Adolescence*, 42, 136–146. <http://dx.doi.org/10.1007/s10964-012-9804-5>
- *Rivas-Drake, D., Hughes, D., & Way, N. (2008). A closer look at peer discrimination, ethnic identity, and psychological well-being among urban Chinese American sixth graders. *Journal of Youth and Adolescence*, 37, 12–21. <http://dx.doi.org/10.1007/s10964-007-9227-x>
- Rivas-Drake, D., Hughes, D., & Way, N. (2009). A preliminary analysis of associations among ethnic racial socialization, ethnic discrimination, and ethnic identity among urban sixth graders. *Journal of Research on Adolescence*, 19, 558–584. <http://dx.doi.org/10.1111/j.1532-7795.2009.00607.x>
- *Roberts, D. D. (1997). *Racial/ethnic identity as a buffer to discrimination among low-income African-American adolescents: An examination of academic performance* (Unpublished doctoral dissertation). Temple University, Philadelphia, PA.
- *Roberts, M. E., Gibbons, F. X., Gerrard, M., Weng, C.-Y., Murry, V. M., Simons, L. G., . . . Lorenz, F. O. (2012). From racial discrimination to risky sex: Prospective relations involving peers and parents. *Developmental Psychology*, 48, 89–102. <http://dx.doi.org/10.1037/a0025430>
- *Roche, C., & Kuperminc, G. P. (2012). Acculturative stress and school belonging among Latino youth. *Hispanic Journal of Behavioral Sciences*, 34, 61–76. <http://dx.doi.org/10.1177/0739986311430084>
- *Rodriguez, R. (2007). *Latino youths' high school adjustment: The risk and protective factors of perceived discrimination and ethnic identity* (Unpublished doctoral dissertation). Stanford University, Stanford, CA.
- *Rodríguez-Hidalgo, A. J., Ortega-Ruiz, R., & Zych, I. (2014). Peer victimization and ethnic-cultural peer victimization: self-esteem and school relations between different cultural groups of students in Andalusia, Spain. *Revista de Psicodidáctica*, 19, 191–210. <http://dx.doi.org/10.1387/RevPsicodidact.7909>
- *Rollins, V. B., & Valdez, J. N. (2006). Perceived racism and career self-efficacy in African American adolescents. *Journal of Black Psychology*, 32, 176–198. <http://dx.doi.org/10.1177/0095798406287109>
- *Romero, A. J., Edwards, L. M., Fryberg, S. A., & Orduña, M. (2014). Resilience to discrimination stress across ethnic identity stages of development. *Journal of Applied Social Psychology*, 44, 1–11. <http://dx.doi.org/10.1111/jasp.12192>
- Romero, A. J., Gonzalez, H., & Smith, B. A. (2015). Qualitative exploration of adolescent discrimination: Experiences and responses of Mexican-American parents and teens. *Journal of Child and Family Studies*, 24, 1531–1543.
- *Romero, A. J., & Roberts, R. E. (2003). The impact of multiple dimensions of ethnic identity on discrimination and adolescents' self-esteem. *Journal of Applied Social Psychology*, 33, 2288–2305. <http://dx.doi.org/10.1111/j.1559-1816.2003.tb01885.x>
- Rosenbloom, S. R., & Way, N. (2004). Experiences of discrimination among African American, Asian American, and Latino adolescents in an urban high school. *Youth & Society*, 35, 420–451. <http://dx.doi.org/10.1177/0044118X03261479>
- *Rosenthal, L., Earnshaw, V. A., Carroll-Scott, A., Henderson, K. E., Peters, S. M., McCaslin, C., & Ickovics, J. R. (2015). Weight- and race-based bullying: Health associations among urban adolescents. *Journal of Health Psychology*, 20, 401–412. <http://dx.doi.org/10.1177/1359105313502567>
- Rugulies, R. (2002). Depression as a predictor for coronary heart disease. a review and meta-analysis. *American Journal of Preventive Medicine*, 23, 51–61. [http://dx.doi.org/10.1016/S0749-3797\(02\)00439-7](http://dx.doi.org/10.1016/S0749-3797(02)00439-7)
- Rutter, M. (1979). Protective factors in children's responses to stress and disadvantage. In M. W. Kent & J. E. Rolf (Eds.), *Primary prevention of psychopathology: Vol. 3. Social competence in children* (pp. 49–74). Hanover, NH: University Press of New England.
- *Sales, J. M., Brown, J. L., Swartzendruber, A. L., Smearman, E. L., Brody, G. H., & DiClemente, R. (2015). Genetic sensitivity to emotional cues, racial discrimination and depressive symptoms among African-American adolescent females. *Frontiers in Psychology*, 6, 854. <http://dx.doi.org/10.3389/fpsyg.2015.00854>
- Sameroff, A., Seifer, R., Zax, M., & Barocas, R. (1987). Early indicators of developmental risk: Rochester Longitudinal Study. *Schizophrenia Bulletin*, 13, 383–394. <http://dx.doi.org/10.1093/schbul/13.3.383>
- *Sanchez, D., Whittaker, T. A., & Hamilton, E. (2016a). Perceived discrimination, peer influence and sexual behaviors in Mexican American preadolescents. *Journal of Youth and Adolescence*, 45, 928–944. <http://dx.doi.org/10.1007/s10964-016-0420-7>
- *Sanchez, D., Whittaker, T. A., Hamilton, E., & Zayas, L. H. (2016b). Perceived discrimination and sexual precursor behaviors in Mexican American preadolescent girls: The role of psychological distress, sexual attitudes, and marianismo beliefs. *Cultural Diversity and Ethnic Minority Psychology*, 22, 395–407. <http://dx.doi.org/10.1037/cdp0000066>
- *Sanchez, Y. M., Lambert, S. F., & Cooley-Strickland, M. (2013). Adverse life events, coping and internalizing and externalizing behaviors in urban African American youth. *Journal of Child and Family Studies*, 22, 38–47. <http://dx.doi.org/10.1007/s10826-012-9590-4>
- *Sanderson, M., Coker, A. L., Roberts, R. E., Tortolero, S. R., & Reiningier, B. M. (2004). Acculturation, ethnic identity, and dating violence among Latino ninth-grade students. *Preventive Medicine: An International Journal Devoted to Practice and Theory*, 39, 373–383. <http://dx.doi.org/10.1016/j.ypmed.2004.01.034>
- Sanders-Phillips, K., Settles-Reaves, B., Walker, D., & Brownlow, J. (2009). Social inequality and racial discrimination: Risk factors for health disparities in children of color. *Pediatrics*, 124(Suppl. 3), S176–S186. <http://dx.doi.org/10.1542/peds.2009-1100E>
- *Sangalang, C. C. (2013). *Racial discrimination, ethnic identity, and depression among Cambodian American adolescents* (Unpublished doctoral dissertation). University of California, Los Angeles, CA.
- *Santana, V., Almeida-Filho, N., Roberts, R., & Cooper, S. P. (2007). Skin colour, perception of racism and depression among adolescents in urban Brazil. *Child and Adolescent Mental Health*, 12, 125–131. <http://dx.doi.org/10.1111/j.1475-3588.2007.00447.x>
- Schmitt, M. T., Branscombe, N. R., Postmes, T., & Garcia, A. (2014). The consequences of perceived discrimination for psychological well-being: A meta-analytic review. *Psychological Bulletin*, 140, 921–948. <http://dx.doi.org/10.1037/a0035754>

- *Schwartz, S. J., Unger, J. B., Des Rosiers, S. E., Huang, S., Baezconde-Garbanati, L., Lorenzo-Blanco, E. I., . . . Szapocznik, J. (2012). Substance use and sexual behavior among recent Hispanic immigrant adolescents: Effects of parent-adolescent differential acculturation and communication. *Drug and Alcohol Dependence*, *125*(Suppl. 1), S26–S34. <http://dx.doi.org/10.1016/j.drugalcdep.2012.05.020>
- *Schwartz, S. J., Unger, J. B., Lorenzo-Blanco, E. I., Des Rosiers, S. E., Villamar, J. A., Soto, D. W., . . . Szapocznik, J. (2014). Perceived context of reception among recent Hispanic immigrants: Conceptualization, instrument development, and preliminary validation. *Cultural Diversity and Ethnic Minority Psychology*, *20*, 1–15. <http://dx.doi.org/10.1037/a0033391>
- *Scott, A. L. (2009). "Ignored burden": Perceptions of racism in school contexts and academic engagement among African-American adolescents (Unpublished doctoral dissertation). University of California, Berkeley, CA.
- *Seaton, E. K. (2009). Perceived racial discrimination and racial identity profiles among African American adolescents. *Cultural Diversity and Ethnic Minority Psychology*, *15*, 137–144. <http://dx.doi.org/10.1037/a0015506>
- *Seaton, E. K. (2010). The influence of cognitive development and perceived racial discrimination on the psychological well-being of African American youth. *Journal of Youth and Adolescence*, *39*, 694–703. <http://dx.doi.org/10.1007/s10964-009-9438-4>
- Seaton, E. K., Caldwell, C. H., Sellers, R. M., & Jackson, J. S. (2008). The prevalence of perceived discrimination among African American and Caribbean Black youth. *Developmental Psychology*, *44*, 1288–1297. <http://dx.doi.org/10.1037/a0012747>
- *Seaton, E. K., Caldwell, C. H., Sellers, R. M., & Jackson, J. S. (2010). An intersectional approach for understanding perceived discrimination and psychological well-being among African American and Caribbean Black youth. *Developmental Psychology*, *46*, 1372–1379. <http://dx.doi.org/10.1037/a0019869>
- *Seaton, E. K., Neblett, E. W., Upton, R. D., Hammond, W. P., & Sellers, R. M. (2011). The moderating capacity of racial identity between perceived discrimination and psychological well-being over time among African American youth. *Child Development*, *82*, 1850–1867. <http://dx.doi.org/10.1111/j.1467-8624.2011.01651.x>
- *Seaton, E. K., Upton, R., Gilbert, A., & Volpe, V. (2014). A moderated mediation model: Racial discrimination, coping strategies, and racial identity among Black adolescents. *Child Development*, *85*, 882–890. <http://dx.doi.org/10.1111/cdev.12122>
- *Seaton, E. K., & Yip, T. (2009). School and neighborhood contexts, perceptions of racial discrimination, and psychological well-being among African American adolescents. *Journal of Youth and Adolescence*, *38*, 153–163. <http://dx.doi.org/10.1007/s10964-008-9356-x>
- Seaton, E. K., Yip, T., & Sellers, R. M. (2009). A longitudinal examination of racial identity and racial discrimination among African American adolescents. *Child Development*, *80*, 406–417. <http://dx.doi.org/10.1111/j.1467-8624.2009.01268.x>
- *Sellers, R. M., Copeland-Linder, N., Martin, P. P., & Lewis, R. L. H. (2006). Racial identity matters: The relationship between racial discrimination and psychological functioning in African American adolescents. *Journal of Research on Adolescence*, *16*, 187–216. <http://dx.doi.org/10.1111/j.1532-7795.2006.00128.x>
- *Seol, K. O., Yoo, H. C., Lee, R. M., Park, J. E., & Kyeong, Y. (2016). Racial and ethnic socialization as moderators of racial discrimination and school adjustment of adopted and nonadopted Korean American adolescents. *Journal of Counseling Psychology*, *63*, 294–306. <http://dx.doi.org/10.1037/cou0000120>
- *Shin, J. Y., D'Antonio, E., Son, H., Kim, S.-A., & Park, Y. (2011). Bullying and discrimination experiences among Korean-American adolescents. *Journal of Adolescence*, *34*, 873–883. <http://dx.doi.org/10.1016/j.adolescence.2011.01.004>
- *Shrake, E. K., & Rhee, S. (2004). Ethnic identity as a predictor of problem behaviors among Korean American adolescents. *Adolescence*, *39*, 601–622.
- Sigelman, L., & Welch, S. (1991). *Black Americans' views of racial inequality: The dream deferred*. New York, NY: Cambridge University Press.
- *Simons, R. L., Murry, V., McLoyd, V., Lin, K.-H., Cutrona, C., & Conger, R. D. (2002). Discrimination, crime, ethnic identity, and parenting as correlates of depressive symptoms among African American children: A multilevel analysis. *Development and Psychopathology*, *14*, 371–393. <http://dx.doi.org/10.1017/S0954579402002109>
- Singer, J. D., & Willett, J. B. (2003). *Applied longitudinal data analysis: Modeling change and event occurrence*. New York, NY: Oxford University Press. <http://dx.doi.org/10.1093/acprof:oso/9780195152968.001.0001>
- Singh, G. K., Kogan, M. D., & van Dyck, P. C. (2010). Changes in state-specific childhood obesity and overweight prevalence in the United States from 2003 to 2007. *Archives of Pediatrics & Adolescent Medicine*, *164*, 598–607. <http://dx.doi.org/10.1001/archpediatrics.2010.84>
- Skinner, E. A., & Zimmer-Gembeck, M. J. (2007). The development of coping. *Annual Review of Psychology*, *58*, 119–144. <http://dx.doi.org/10.1146/annurev.psych.58.110405.085705>
- *Smalls, C., White, R., Chavous, T., & Sellers, R. M. (2007). Racial ideological beliefs and racial discrimination experiences as predictors of academic engagement among African American adolescents. *Journal of Black Psychology*, *33*, 299–330. <http://dx.doi.org/10.1177/0095798407302541>
- Smedley, B. D., Stith, A. Y., & Nelson, A. R. (2009). *Unequal treatment: Confronting racial and ethnic disparities in health care*. Washington, DC: National Academies Press.
- Smetana, J. G., & Villalobos, M. (2009). Social cognition development in adolescence. In R. M. Lerner & L. D. Steinberg (Eds.), *Handbook of adolescent psychology: Vol. 1. Individual bases for adolescent development* (3rd ed., pp. 187–228). Hoboken, NJ: Wiley.
- Smith, W. A., Allen, W. R., & Danley, L. L. (2007). "Assume the position . . . you fit the description": Psychosocial experiences and racial battle fatigue among African American male college students. *American Behavioral Scientist*, *51*, 551–578. <http://dx.doi.org/10.1177/0002764207307742>
- *Smokowski, P. R., & Bacallao, M. L. (2006). Acculturation and aggression in Latino adolescents: A structural model focusing on cultural risk factors and assets. *Journal of Abnormal Child Psychology*, *34*, 657–673. <http://dx.doi.org/10.1007/s10802-006-9049-4>
- *Smokowski, P. R., & Bacallao, M. L. (2007). Acculturation, internalizing mental health symptoms, and self-esteem: Cultural experiences of Latino adolescents in North Carolina. *Child Psychiatry and Human Development*, *37*, 273–292. <http://dx.doi.org/10.1007/s10578-006-0035-4>
- *Smokowski, P. R., Bacallao, M., & Buchanan, R. L. (2009). Interpersonal mediators linking acculturation stressors to subsequent internalizing symptoms and self-esteem in Latino adolescents. *Journal of Community Psychology*, *37*, 1024–1045. <http://dx.doi.org/10.1002/jcop.20346>
- *Smokowski, P. R., Chapman, M. V., & Bacallao, M. L. (2007). Acculturation risk and protective factors and mental health symptoms in immigrant Latino adolescents. *Journal of Human Behavior in the Social Environment*, *16*, 33–55. <http://dx.doi.org/10.1300/J0911350802107710>
- Snyder, T. D., & Dillow, S. A. (2013). *Digest of education statistics 2012 (NCES 2014–015)*. Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.
- *Spelman, V. M. (2014). *Acculturation, ethnic identity and resilience against gang-related activities in Latino youth* (Unpublished doctoral dissertation). Pace University, New York, NY.
- StataCorp. (2013). *Stata statistical software: Release 13*. College Station, TX: Author.

- *Steele, J. L. (2011). *Adolescent substance use and general social strain theory: The influence of race/ethnic-related strains and protective factors* (Unpublished doctoral dissertation). University of Akron, Akron, OH.
- *Stein, G. L., Supple, A. J., Huq, N., Dunbar, A. S., & Prinstein, M. J. (2016). A longitudinal examination of perceived discrimination and depressive symptoms in ethnic minority youth: The roles of attributional style, positive ethnic/racial affect, and emotional reactivity. *Developmental Psychology, 52*, 259–271. <http://dx.doi.org/10.1037/a0039902>
- *Stein, G. L., Gonzalez, L. M., & Huq, N. (2012). Cultural stressors and the hopelessness model of depressive symptoms in Latino adolescents. *Journal of Youth and Adolescence, 41*, 1339–1349. <http://dx.doi.org/10.1007/s10964-012-9765-8>
- *Stein, G. L., Kiang, L., Supple, A. J., & Gonzalez, L. M. (2014). Ethnic identity as a protective factor in the lives of Asian American adolescents. *Asian American Journal of Psychology, 5*, 206–213. <http://dx.doi.org/10.1037/a0034811>
- Sterne, J. A. C., Egger, M., & Moher, D. (2008). Addressing reporting biases. In J. P. T. Higgins & S. Green (Eds.), *Cochrane handbook for systematic reviews of interventions* (pp. 298–333). Chichester, UK: Wiley. <http://dx.doi.org/10.1002/9780470712184.ch10>
- *Stevens-Watkins, D., Brown-Wright, L., & Tyler, K. (2011). Brief report: The number of sexual partners and race-related stress in African American adolescents: Preliminary findings. *Journal of Adolescence, 34*, 191–194. <http://dx.doi.org/10.1016/j.adolescence.2010.02.003>
- Stroebe, W., & Insko, C. A. (1989). Stereotypes, prejudice, and discrimination: Changing conceptions in theory and research. In D. Bar-Tal, C. F. Graumann, A. W. Kruglanski, & W. Stroebe (Eds.), *Stereotypes and prejudice: Changing conceptions* (pp. 3–34). New York, NY: Springer. http://dx.doi.org/10.1007/978-1-4612-3582-8_1
- *Suarez-Morales, L., & Lopez, B. (2009). The impact of acculturative stress and daily hassles on pre-adolescent psychological adjustment: Examining anxiety symptoms. *The Journal of Primary Prevention, 30*, 335–349. <http://dx.doi.org/10.1007/s10935-009-0175-y>
- Sutton, A. J. (2009). Publication bias. In H. Cooper, L. V. Hedges, & J. C. Valentine (Eds.), *The handbook of research synthesis and meta-analysis* (2nd ed., pp. 435–452). New York, NY: Russell Sage Foundation.
- *Szalacha, L. A., Erkut, S., García Coll, C., Alarcón, O., Fields, J. P., & Ceder, I. (2003). Discrimination and Puerto Rican children's and adolescents' mental health. *Cultural Diversity and Ethnic Minority Psychology, 9*, 141–155. <http://dx.doi.org/10.1037/1099-9809.9.2.141>
- *Tabbah, R., Miranda, A. H., & Wheaton, J. E. (2016). Intricacies of school relationships and the well-being of Arab American youth: Implications for school psychologists. *Contemporary School Psychology, 20*, 315–326. <http://dx.doi.org/10.1007/s40688-016-0089-7>
- *Thoma, B. C., & Huebner, D. M. (2013). Health consequences of racist and antigay discrimination for multiple minority adolescents. *Cultural Diversity and Ethnic Minority Psychology, 19*, 404–413. <http://dx.doi.org/10.1037/a0031739>
- *Thomas, O. N., Caldwell, C. H., Faison, N., & Jackson, J. S. (2009). Promoting academic achievement: The role of racial identity in buffering perceptions of teacher discrimination on academic achievement among African American and Caribbean Black adolescents. *Journal of Educational Psychology, 101*, 420–431. <http://dx.doi.org/10.1037/a0014578>
- *Thompson, A. R., & Gregory, A. (2011). Examining the influence of perceived discrimination during African American adolescents' early years of high school. *Education and Urban Society, 43*, 3–25. <http://dx.doi.org/10.1177/0013124510379827>
- *Thompson, G. N. (2014). *The relationship between teacher-based discrimination, academic adjustment, psychological well-being, and student-teacher relationship quality among African American adolescents* (Unpublished doctoral dissertation). University of Illinois at Urbana-Champaign, Champaign, IL.
- Toomey, R. B., Ryan, C., Diaz, R. M., Card, N. A., & Russell, S. T. (2010). Gender-nonconforming lesbian, gay, bisexual, and transgender youth: School victimization and young adult psychosocial adjustment. *Developmental Psychology, 46*, 1580–1589. <http://dx.doi.org/10.1037/a0020705>
- *Toomey, R. B., Umaña-Taylor, A. J., Updegraff, K. A., & Jahromi, L. B. (2013). Ethnic identity development and ethnic discrimination: Examining longitudinal associations with adjustment for Mexican-origin adolescent mothers. *Journal of Adolescence, 36*, 825–833. <http://dx.doi.org/10.1016/j.adolescence.2013.06.004>
- *Tummala-Narra, P., & Claudius, M. (2013). Perceived discrimination and depressive symptoms among immigrant-origin adolescents. *Cultural Diversity and Ethnic Minority Psychology, 19*, 257–269. <http://dx.doi.org/10.1037/a0032960>
- Twenge, J. M., & Crocker, J. (2002). Race and self-esteem: Meta-analyses comparing Whites, Blacks, Hispanics, Asians, and American Indians and comment on Gray-Little and Hafdahl (2000). *Psychological Bulletin, 128*, 371–408. <http://dx.doi.org/10.1037/0033-2909.128.3.371>
- Twenge, J. M., & Nolen-Hoeksema, S. (2002). Age, gender, race, socioeconomic status, and birth cohort difference on the children's depression inventory: A meta-analysis. *Journal of Abnormal Psychology, 111*, 578. <http://dx.doi.org/10.1037/0021-843X.111.4.578>
- *Tynes, B. M., Del Toro, J., & Lozada, F. T. (2015). An unwelcomed digital visitor in the classroom: The longitudinal impact of online racial discrimination on academic motivation. *School Psychology Review, 44*, 407–424. <http://dx.doi.org/10.17105/SPR-15-0095.1>
- *Tynes, B. M., Giang, M. T., Williams, D. R., & Thompson, G. N. (2008). Online racial discrimination and psychological adjustment among adolescents. *Journal of Adolescent Health, 43*, 565–569. <http://dx.doi.org/10.1016/j.jadohealth.2008.08.021>
- *Tynes, B. M., Umaña-Taylor, A. J., Rose, C. A., Lin, J., & Anderson, C. J. (2012). Online racial discrimination and the protective function of ethnic identity and self-esteem for African American adolescents. *Developmental Psychology, 48*, 343–355. <http://dx.doi.org/10.1037/a0027032>
- Umaña-Taylor, A. J. (2016). A post-racial society in which ethnic-racial discrimination still exists and has significant consequences for youths' adjustment. *Current Directions in Psychological Science, 25*, 111–118. <http://dx.doi.org/10.1177/0963721415627858>
- Umaña-Taylor, A. J., Quintana, S. M., Lee, R. M., Cross, W. E., Jr., Rivas-Drake, D., Schwartz, S. J., . . . Ethnic and Racial Identity in the 21st Century Study Group. (2014). Ethnic and racial identity during adolescence and into young adulthood: An integrated conceptualization. *Child Development, 85*, 21–39. <http://dx.doi.org/10.1111/cdev.12196>
- *Umaña-Taylor, A. J., Tynes, B. M., Toomey, R. B., Williams, D. R., & Mitchell, K. J. (2015). Latino adolescents' perceived discrimination in online and offline settings: An examination of cultural risk and protective factors. *Developmental Psychology, 51*, 87–100. <http://dx.doi.org/10.1037/a0038432>
- *Umaña-Taylor, A. J., & Updegraff, K. A. (2007). Latino adolescents' mental health: Exploring the interrelations among discrimination, ethnic identity, cultural orientation, self-esteem, and depressive symptoms. *Journal of Adolescence, 30*, 549–567. <http://dx.doi.org/10.1016/j.adolescence.2006.08.002>
- *Umaña-Taylor, A. J., Updegraff, K. A., & Gonzales-Backen, M. A. (2011). Mexican-origin adolescent mothers' stressors and psychosocial functioning: Examining ethnic identity affirmation and familism as moderators. *Journal of Youth and Adolescence, 40*, 140–157. <http://dx.doi.org/10.1007/s10964-010-9511-z>
- *Umaña-Taylor, A. J., Wong, J. J., Gonzales, N. A., & Dumka, L. E. (2012). Ethnic identity and gender as moderators of the association between discrimination and academic adjustment among Mexican-origin adolescents. *Journal of Adolescence, 35*, 773–786. <http://dx.doi.org/10.1016/j.adolescence.2011.11.003>

- U.S. Census Bureau. (2010). *Census redistricting data (Public Law 94–171) Summary File, Tables P1 and P2*. Washington, DC: Author.
- U.S. Census Bureau. (2014). *Table 10: Projections of the population by sex, Hispanic origin, and race for the United States: 2015 to 2060 (NP2014-T10)*. Washington, DC: U.S. Census Bureau, Population Division.
- *Van Buren, E. (2004). *School experiences among African-American and Latino adolescents: Effects on ethnic identity and school adjustment* (Unpublished doctoral dissertation). University of California, Los Angeles, CA.
- *Vedder, P., Sam, D. L., & Liebkind, K. (2007). The acculturation and adaptation of Turkish adolescents in North-Western Europe. *Applied Development Science, 11*, 126–136. <http://dx.doi.org/10.1080/10888690701454617>
- *Verkuyten, M. (1998). Perceived discrimination and self-esteem among ethnic minority adolescents. *The Journal of Social Psychology, 138*, 479–493. <http://dx.doi.org/10.1080/00224549809600402>
- Ventura, S. J., Mathews, T., Hamilton, B. E., Sutton, P. D., & Abma, J. C. (2011). *Adolescent pregnancy and childbirth—United States, 1991–2008*. CDC Health Disparities and Inequalities Report—United States, 2011. Atlanta, GA: Centers for Disease Control and Prevention.
- Verkuyten, M., Kinket, B., & van der Wielen, C. (1997). Preadolescents' understanding of ethnic discrimination. *The Journal of Genetic Psychology: Research and Theory on Human Development, 158*, 97–112. <http://dx.doi.org/10.1080/00221329709596655>
- *Volpe, V. V. (2013). *Peer racial discrimination, temperament and academics among Black adolescents* (Unpublished master's thesis). University of North Carolina at Chapel Hill, Chapel Hill, NC.
- *Wakefield, E. O. H. (2014). *Perceived racism and stigma among youths with sickle cell disease: An exploratory study* (Unpublished doctoral dissertation). University of Hartford, Hartford, CT.
- Wang, Y., & Beydoun, M. A. (2007). The obesity epidemic in the United States—gender, age, socioeconomic, racial/ethnic, and geographic characteristics: A systematic review and meta-regression analysis. *Epidemiologic Reviews, 29*, 6–28. <http://dx.doi.org/10.1093/epirev/mxm007>
- *Walsh, S. D., Fogel-Grinvald, H., & Shneider, S. (2015). Discrimination and ethnic identity as predictors of substance use and delinquency among immigrant adolescents from the FSU and Ethiopia in Israel. *Journal of Cross-Cultural Psychology, 46*, 942–963. <http://dx.doi.org/10.1177/0022022115588951>
- *Wang, M. T., & Huguley, J. P. (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. <http://dx.doi.org/10.1111/j.1467-8624.2012.01808.x>
- *Wells, T. L. (1995). *Learned effectiveness: The role of self-efficacy, racial identity and perceptions of racism in the adaptive functioning of African American youth* (Unpublished doctoral dissertation). California School of Professional Psychology, Los Angeles, CA.
- *Whitbeck, L. B., Hoyt, D. R., Chen, X., & Stubben, J. D. (2002). Predictors of gang involvement among American Indian adolescents. *Journal of Gang Research, 10*, 11–26.
- *Whitbeck, L. B., Hoyt, D. R., McMorris, B. J., Chen, X., & Stubben, J. D. (2001). Perceived discrimination and early substance abuse among American Indian children. *Journal of Health and Social Behavior, 42*, 405–424. <http://dx.doi.org/10.2307/3090187>
- Wiehe, S. E., Aalsma, M. C., Liu, G. C., & Fortenberry, J. D. (2010). Gender differences in the association between perceived discrimination and adolescent smoking. *American Journal of Public Health, 100*, 510–516. <http://dx.doi.org/10.2105/AJPH.2009.169771>
- Williams, D. R., & Mohammed, S. A. (2009). Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine, 32*, 20–47. <http://dx.doi.org/10.1007/s10865-008-9185-0>
- Williams, D. R., Neighbors, H. W., & Jackson, J. S. (2003). Racial/ethnic discrimination and health: Findings from community studies. *American Journal of Public Health, 93*, 200–208. <http://dx.doi.org/10.2105/AJPH.93.2.200>
- Williams, D. R., & Sternthal, M. (2010). Understanding racial-ethnic disparities in health: Sociological contributions. *Journal of Health and Social Behavior, 51*(Suppl.), S15–S27. <http://dx.doi.org/10.1177/0022146510383838>
- *Williams, J. L., Aiyer, S. M., Durkee, M. I., & Tolan, P. H. (2014). The protective role of ethnic identity for urban adolescent males facing multiple stressors. *Journal of Youth and Adolescence, 43*, 1728–1741. <http://dx.doi.org/10.1007/s10964-013-0071-x>
- *Wong, C. A., Eccles, J. S., & Sameroff, A. (2003). The influence of ethnic discrimination and ethnic identification on African American adolescents' school and socioemotional adjustment. *Journal of Personality, 71*, 1197–1232. <http://dx.doi.org/10.1111/1467-6494.7106012>
- *Woods, T. A. (2006). *Racial socialization, racial identity, and achievement in the context of perceived discrimination: Understanding the development of African American middle school youth* (Unpublished doctoral dissertation). University of North Carolina at Chapel Hill, Chapel Hill, NC.
- Yetman, N. R. (1999). *Voices from slavery: 100 authentic slave narratives*. New York, NY: Dover.
- *Yip, T. (2015). The effects of ethnic/racial discrimination and sleep quality on depressive symptoms and self-esteem trajectories among diverse adolescents. *Journal of Youth and Adolescence, 44*, 419–430. <http://dx.doi.org/10.1007/s10964-014-0123-x>
- Young, K., & Takeuchi, D. T. (1998). Racism. In L. C. Lee & N. W. S. Zane (Eds.), *Handbook of Asian American psychology* (pp. 401–432). Thousand Oaks, CA: Sage.
- *Zapolski, T. C., Fisher, S., Hsu, W. W., & Barnes, J. (2016). What can parents do? Examining the role of parental support on the negative relationship among racial discrimination, depression, and drug use among African American youth. *Clinical Psychological Science, 4*, 718–731. <http://dx.doi.org/10.1177/2167702616646371>
- *Zeiders, K. H., Doane, L. D., & Roosa, M. W. (2012). Perceived discrimination and diurnal cortisol: Examining relations among Mexican American adolescents. *Hormones and Behavior, 61*, 541–548. <http://dx.doi.org/10.1016/j.yhbeh.2012.01.018>

Received November 3, 2016

Revision received July 1, 2017

Accepted August 15, 2017 ■