
Deborah Rivas-Drake  
Brown University

Moin Syed  
University of Minnesota

Adriana Umaña-Taylor  
Arizona State University

Carol Markstrom  
West Virginia University

Sabine French  
University of Illinois at Chicago

Seth J. Schwartz  
University of Miami

Richard Lee  
University of Minnesota

Ethnic and Racial Identity in the 21st Century Study Group

One point of intersection in ethnic and racial identity research is the conceptual attention paid to how positively youth feel about their ethnicity or race, or positive ethnic–racial affect. This article reports results of a series of meta-analyses based on 46 studies of this dimension and psychosocial, academic, and health risk outcomes among ethnic and racial minority youth. The overall pattern of results suggests that positive ethnic–racial affect exhibited small to medium associations (r range = |.11| to |.37|) with depressive symptoms, positive social functioning, self-esteem, well-being, internalizing, externalizing, academic achievement, academic attitudes, and health risk outcomes. Implications for theory and research about the role of positive ethnic–racial affect among youth growing up in an increasingly diverse society are discussed.

Scholarly endeavors to explicate ethnic and racial identity processes and their implications for youth have generated a rich and complex array of studies. Because the self begins to develop during childhood and adolescence, these developmental periods represent critical formative windows during which many ethnic and racial identity dimensions become relevant (Umaña-Taylor et al., in press). The implications of ethnic and racial identity have been heavily examined in empirical studies over the past several decades, focusing on how ethnic and racial identity is linked to well-being, psychological distress, and academic adjustment (Rivas-Drake et al., in press). The findings to date, however, have been inconsistent, and the literature has suffered from a lack of specificity in the dimensions of ethnic and racial identity that are examined. In the present meta-analysis, we sought to provide a unified perspective that cuts across models of ethnic and racial identity by focusing on one common dimension, positive ethnic–racial affect, or how youth feel about their ethnicity and race, and its association with adjustment among diverse minority children and adolescents.

Ethnic and Racial Identity

Scholars have frequently made a distinction between ethnic identity and racial identity. Although
there is no consensus about how these terms and constructs differ, Cokley (2007) suggested that ethnic identity refers to individuals’ feelings of pride, involvement, and belongingness with their cultural background (see also Phinney, 1990), whereas racial identity refers to identities developed in response to race-based oppression and social stratification (see also Sellers, Smith, Shelton, Rowley, & Chavous, 1998). Despite these seemingly clear definitions, ethnic identity and racial identity are difficult to separate both in terms of measurement and individuals’ lived experiences (Quintana, 2007; Umaña-Taylor et al., in press).

There are, however, some apparent differences between ethnic and racial identity in terms of the theories, measures, and samples that are used. For example, for Asian American and Latino samples, researchers typically reference Phinney’s (1990) developmental model of ethnic identity and often use the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992). For African American samples, researchers often utilize Cross’s (1991) Nigrescence theory, as measured historically by the Racial Identity Attitudes Scale (RIAS; Helms & Parham, 1996) and contemporarily by the Cross Racial Identity Scale (CRIS; Vandiver, Cross, Worrell, & Flaherty-Smith, 2002), or Sellers’ Multidimensional Model of Racial Identity, as measured with the Multidimensional Inventory of Black Identity (MIBI; Sellers et al., 1998). Hence, much research with Asian American and Latino samples has focused on ethnic identity, and research with African American samples has focused more on racial identity. In addition, although studies of the RIAS have advanced our understanding of racial identity and adolescent adjustment (e.g., Spencer, Noll, Stoltzfus, & Harpalani, 2001), the measure does not assess positive ethnic–racial affect as a distinct dimension; rather, it assesses endorsement of the original Nigrescence stages (e.g., Encounter) which also does not reflect the more current, revised Nigrescence theory (see Vandiver et al., 2002, for a full discussion of this issue). The CRIS, which does map onto revised Nigrescence theoretical formulations, includes a subscale to assess the construct of self-hatred, which is the inverse of positive ethnic–racial affect and thus relevant to our current purposes; however, studies using the CRIS with noncollege youth have focused on psychometric and classification issues (e.g., Gardner-Kitt & Worrell, 2007).

Nevertheless, the empirical literature is not so clearly divided. Although ethnic identity is often studied with Asian Americans and Latinos, and racial identity among African Americans, it is not always the case. For example, Yip, Seaton, and Sellers (2006) used the MEIM, a measure of ethnic identity, in their life-span study of African Americans, and Rivas-Drake, Hughes, and Way (2009) used the MIBI, a measure of racial identity, in a study that included Puerto Rican and Chinese American adolescents (see also French, Coleman, & DiLorenzo, 2013). Furthermore, in an empirical examination that tested multiple measures of ethnic and racial identity, Casey-Cannon, Coleman, Knudtson, and Velazquez (2011) demonstrated significant overlap across measures, in some cases finding correlations above .90. In addition, in their meta-analysis of the association between ethnic identity, specifically, and adjustment, Smith and Silva (2011) did not find evidence of moderation across ethnic or racial groups. Ethnic identity thus appears to operate similarly regardless of ethnic or racial grouping—a finding that appears contrary to the common delineations in existing empirical work—whereby scholars focus on ethnic or racial identity based on their ethnic–racial population of interest.

Taken together, the literatures on ethnic and racial identity tend to reflect differences in research tradition and practices rather than core differences in the meaning of the underlying constructs (see also Quintana, 2007; Worrell & Gardner-Kitt, 2006). Distinctions can certainly be made, and in some circumstances are warranted, but there remains considerable conceptual and measurement overlap that must be considered (Casey-Cannon et al., 2011). In this study, we examined both ethnic and racial identity to get the broadest possible understanding of how these aspects of identity relate to adjustment. Accordingly, we henceforth use the hybrid term ethnic–racial identity to reflect our combination of these constructs (see Umaña-Taylor et al., in press, for more detail regarding the conceptual rationale for this metaconstruct).

The Multidimensionality of Ethnic–Racial Identity

The body of research on ethnic–racial identity underscores that it is conceptually and empirically multidimensional (cf. Ashmore, Deaux, & McLaughlin-Volpe, 2004; Quintana, 2007). In the youth development literature, ethnic–racial identity includes process-related components, such as a period of search or exploration of what it means to be a member of a particular ethnic or racial group and of coming to terms with its role in one’s life (Umaña-Taylor, Yazedjian, & Bámaca-Gómez, 2004). This literature also notes that ethnic–racial identity includes components that reflect the content of the
identity being developed, such as the extent to which ethnic–racial identity: (a) is consistent over time (Bernal, Knight, Garza, Ocampo, & Cota, 1990); (b) is salient in specific situations (Sellers et al., 1998); (c) is characteristically important or central to one’s self (Luhtanen & Crocker, 1992; Sellers et al., 1998); (d) reflects knowledge of or participation in the behaviors, rituals, or ceremonies that are characteristic of the group(s) to which one belongs (Quintana & Vera, 1999); (e) is regarded positively or negatively (e.g., group esteem, affirmation, pride, private regard; Cross & Cross, 1998; Luhtanen & Crocker, 1992; Sellers et al., 1998); and (f) is perceived to be evaluated positively or negatively by others (e.g., public regard; Luhtanen & Crocker, 1992; Sellers et al., 1998).

Thus, multidimensionality is a common feature to all major contemporary models of ethnic and racial identity (e.g., Phinney & Ong, 2007; Sellers et al., 1998; Umaña-Taylor et al., 2004). Although the dimensions themselves are not uniform across models, each model contains cognitive, behavioral, and affective components. Many studies use different combinations of dimensions, making comparisons across studies difficult. Determining the implications of ethnic–racial identity for young people’s psychosocial functioning can thus be a challenging task. Indeed, some studies focus on centrality and its association with adjustment (e.g., Fuligni, Witkow, & Garcia, 2005); others focus on affirmation and its association with adjustment (e.g., Romero & Roberts, 2003); and still other studies use composite measures of multiple ethnic–racial identity dimensions, with no way of determining how each dimension is linked with adjustment (e.g., Bracey, Bámaca, & Umaña-Taylor, 2004). In short, the lack of consistency in the conceptualization (see Umaña-Taylor et al., in press) and measurement (see Schwartz et al., in press) of ethnic–racial identity across studies poses significant challenges to generating a meaningful synthesis of this literature.

However, one area of concurrence across the major frameworks and the empirical work underlying the study of ethnic–racial identity is youth’s positive affect about their ethnicity or race (e.g., private regard, group esteem, affirmation, commitment, pride). For ease of discussion, we use the term positive ethnic–racial affect to refer to the construct in these studies that captures, in essence, how good, happy, and proud youth feel about their ethnicity or race. Major contemporary theories of ethnic–racial identity (e.g., Cross, 1991; Phinney & Ong, 2007; Sellers, Rowley, Chavous, Shelton, & Smith, 1997; Umaña-Taylor et al., 2004) appear to agree that positive ethnic–racial affect is a prominent dimension of youth’s ethnic–racial identity. Extant narrative reviews of the empirical literature also support the prominence of positive ethnic–racial affect, as it has been the most consistently studied (cf. Quintana, 2007; Williams, Tolan, Durkee, Francois, & Anderson, 2012) and appears to be the most consistently examined across multiple ethnic and racial groups.

To more fully capture nuances in the implications of ethnic–racial identity for normative development, the current meta-analysis was designed to examine the association between positive ethnic–racial affect and a broad range of indicators of adjustment (e.g., depressive symptoms, academic achievement, substance use). The compilation of studies that collectively captured multiple areas of youth adjustment across major ethnic and racial groups facilitated a much-needed synthesis of the literature to provide direction for future research and intervention focused on various indicators of youth adjustment, including uncovering which associations were (and were not) consistent across major ethnic and racial groups and, thus, providing opportunities for universal versus group-specific approaches for intervention.

Recent Meta-Analytic Work

It is important to note findings from a recent meta-analysis of ethnic identity by Smith and Silva (2011), in which the authors concluded that ethnic identity—assessed with both composite (e.g., affirmation and exploration combined) and single-dimension measures—was positively associated with psychological adjustment and mental health across the life span (although the associations weakened with increasing age). The present meta-analysis significantly builds on and extends this prior work in four ways. First, we focus on childhood and adolescence, which represent critical formative periods for understanding the implications of ethnic–racial identity constructs for adjustment (cf. Umaña-Taylor et al., in press). Second, Smith and Silva’s (2011) analysis included only studies of ethnic identity, whereas we include studies of racial as well as ethnic identity. Third, we focused exclusively on one identity dimension (positive ethnic–racial affect), rather than on multiple dimensions (e.g., a composite of multiple scales within a measure), in an attempt to more precisely articulate the effects of this specific dimension on youth adjustment (cf. Schwartz et al., in press). Fourth, we
extended the methodological scope by including academic and health risk-related outcomes in addition to other traditionally studied psychosocial outcomes.

Positive Ethnic–Racial Affect and Youth Outcomes

Two prevailing, contemporary theories emphasize the importance of positive ethnic–racial affect in the adjustment of ethnic and racial groups. First, principles of social identity theory (Tajfel & Turner, 1986), such as attachment and positive affect toward groups to which one belongs, have contributed greatly to the inclusion of positively evaluating one's ethnic or racial group as a key dimension of ethnic–racial identity models (i.e., affirmation in Phinney, 1992; private regard in Sellers et al., 1998; affirmation in Umaña-Taylor et al., 2004). Social identity theory also underlies the hypothesis that favorable in-group evaluations will be linked with a positive sense of self (e.g., self-esteem) and, by extension, other psychosocial outcomes (Umaña-Taylor, 2011). Second, Phinney’s (1990) conceptualization of ethnic identity, which integrates Marcia’s (1980) operationalization of Erikson’s (1968) ideas with the aforementioned tenets from social identity theory, posits that formulating a strong and positive ethnic identity is an important life task for, and that ethnicity represents a critical domain for identity development among, ethnic minority group members (cf. Umaña-Taylor, 2011). Within Phinney’s model, youth must achieve a secure identification with their ethnic group, which includes viewing their ethnicity in a positive manner, if they are to evidence adaptive psychosocial functioning. In sum, the major theoretical underpinnings of contemporary studies commonly emphasize valence (what we are referring to as positive ethnic–racial affect), either alone or alongside strength of identification in predicting youth adjustment.

Theoretical assertions regarding linkages between positive ethnic–racial affect—variously termed ethnic or racial pride, private regard, group esteem, or affirmation, as examples—and psychosocial outcomes are borne out in studies of children and adolescents from diverse groups, including African American (e.g., Caldwell, Zimmerman, Bernat, Sellers, & Notaro, 2002; Mandara, Gaylord-Harden, Richards, & Ragsdale, 2009; Sellers, Copleland-Linder, Martin, & Lewis, 2006), Latino (e.g., Romero & Roberts, 2003; Umaña-Taylor, Gonzales-Backen, & Guimond, 2009), and, to a lesser extent, Asian American (e.g., Rivas-Drake, Hughes, & Way, 2008) and American Indian (e.g., Newman, 2005) youth. Moreover, there is some (although substantially less) evidence that the predictive role of positive ethnic–racial affect extends beyond psychological outcomes such as self-esteem and well-being to include associations with positive academic outcomes (e.g., motivation and achievement; Adelabu, 2008; Berkel et al., 2010; Hughes et al., 2009; Supple, Ghazarian, Frabutt, Plunkett, & Sands, 2006) and with health compromising activities such as substance use and sexual risk behaviors (Marsiglia, Kulis, & Hecht, 2001). However, there are inconsistencies in the extant literature in that although a number of studies find that positive ethnic–racial affect is promotive of positive outcomes, others find no association (e.g., Caldwell et al., 2002) or a negative association (e.g., Borrero & Yeh, 2011; Seaton, Nebllett, Upton, Hammond, & Sellers, 2011) at the bivariate level. Thus, a systematic meta-analysis seems warranted to clarify the overall patterns.

Moderating Factors

In the current meta-analytic review, we sought to synthesize quantitative investigations of associations between positive ethnic–racial affect and adjustment to help clarify some inconsistencies among extant studies. Accordingly, we examined several relevant potential moderating variables: pan-ethnic category, gender, developmental period, and measure of positive ethnic–racial affect.

Pan-Ethnic Category

Although Phinney’s (1993) model of ethnic identity suggests that positive ethnic–racial affect carries universally positive implications for adjustment, other models suggest that the extent to which positive ethnic–racial affect will be facilitative of adjustment may vary based on ethnic or racial group, the developmental period under study (cf. Umaña-Taylor et al., 2004), or the specific measure used (cf. Syed et al., 2013). The salience of ethnic identity for minority individuals and groups is clearly established by social identity theory (Tajfel & Turner, 1986). According to social identity theory, individuals are more aware of their group identities when they are members of minority groups, particularly when such groups are lacking in social power. Thus, the ethnic stratification of the United States imbues greater meaning to ethnicity among American ethnic minority groups compared to the White majority (similar processes operate for gender, sexual orientation,
social class, able-bodiedness, etc.). The present meta-analytic study tested the extent to which the associations between positive ethnic–racial affect and youth adjustment were consistent across youth from four major U.S. ethnic and racial minority groups: African American, Latino, Asian American and Pacific Islander, and American Indian. Notably, however, ethnic and racial identity theories offer little to no guidance on whether there should be differences between or among ethnic minority groups. Indirect evidence is available from work on social dominance theory (Sidanius & Pratto, 1999), which is concerned with how social structures are organized in terms of status and power. African Americans and Latinos have been rated as having lower social status than Asian Americans (both by self-report and other report; Sidanius, Pratto, & Rabinowitz, 1994), and this lower status has been linked to stronger ethnic identities (Levin, Sidanius, Rabinowitz, & Federico, 1998). Thus, the best available evidence suggests that associations between ethnic identity and adjustment will be stronger for African Americans and Latinos than for Asian Americans (American Indians were not included in the studies referenced here).

Gender

Ethnic and racial identity theories also offer little guidance on the extent to which gender should moderate the linkages between ethnic–racial identity dimensions and adjustment; the direction of the predicted associations should presumably be similar for boys and girls. Moreover, a lack of gender differences was noted by Smith and Silva (2011) in their recent meta-analysis of ethnic identity and well-being, and the few studies that find gender differences in patterns of association between ethnic or racial identity and adjustment are notable exceptions (e.g., Jones & Galliher, 2007). However, no meta-analysis of positive ethnic–racial affect, specifically, has tested the assumption that associations with adjustment should be similar among boys and girls. Thus, we explored gender as a moderator in the present meta-analysis.

Developmental Period

With respect to potential moderation by the developmental period under study, the emphasis placed on identity formation (Erikson, 1968) along with the increased exposure to different social experiences that accompanies adolescence is likely to render ethnicity and race more salient during this period (Umana-Taylor et al., in press). Although the strength of this association in adolescence versus childhood has not been empirically examined, given the important role of identity formation during adolescence (Erikson, 1968), coupled with the increased emphasis placed on identification with ethnic–racial groups during adolescence relative to childhood (Huang & Stormshak, 2011), it is likely that the associations will be stronger during adolescence than during childhood. In this study, we were able to examine developmental variation by using mean age of the sample as a continuous moderator as well as by examining differences across school level of the sample (i.e., elementary, middle, and high).

Measure of Positive Ethnic–Racial Affect

The association between positive ethnic–racial affect and adjustment could vary according to the measure of positive ethnic–racial affect used, as the measures differ in potentially important ways (see Schwartz et al., in press; see also Syed et al., 2013). The most widely used measure of ethnic identity (Smith & Silva, 2011), the MEIM, has three primary versions: 14-item (Phinney, 1992), 12-item (Roberts et al., 1999), and 6-item (Phinney & Ong, 2007). Each version includes a subscale that assesses positive ethnic–racial affect, and the item content within this subscale is largely consistent across the MEIM versions despite variations in its title (i.e., affirmation, affirmation and belonging, commitment). A commonly used measure of racial identity, the MIBI (Sellers et al., 1998) includes a private regard subscale, which is similar to racial pride and assesses positive and negative attitudes toward being a member of one’s racial group. Yet another measure, the Ethnic Identity Scale (EIS; Umaña-Taylor et al., 2004), includes a separate subscale for the affective (affirmation) dimension consisting of six EIS items that are negatively worded (e.g., “I am not happy with my ethnicity”). Finally, some studies use ad hoc measures, such as single-item measures assessing racial pride (e.g., Byrd & Chavous, 2009). Although these variations in measurement do not lend themselves to clearly defined hypotheses, they do suggest that we should explore how the choice of measure may moderate the association between positive ethnic–racial affect and adjustment.

The Current Meta-Analysis

To our knowledge, no meta-analyses focusing specifically on positive ethnic–racial affect (e.g., affirmation, private regard) are currently available in the literature. Thus, the goals of this meta-analysis are to
(a) synthesize what is known about positive ethnic–racial affect, which reflects one of the most commonly examined dimensions of ethnic–racial identity, in research with children and adolescents and (b) examine the relation of positive ethnic–racial affect with adjustment in multiple domains: academic achievement and attitudes, anxiety, depressive symptoms, externalizing, internalizing, health risk behaviors and attitudes (e.g., substance use), positive social functioning (e.g., social competencies), self-esteem, and well-being. Drawing on several ethnic and racial identity theories and on the literature reviewed earlier, we hypothesized that positive ethnic–racial affect would be positively related to psychosocial and academic adjustment and negatively related to health risk outcomes. Following the literature suggesting that these associations might vary according to pan-ethnic category and by developmental period, we examined whether positive ethnic–racial affect was similarly promotive among the four largest pan-ethnic minority groups in the United States (African American, Latino, Asian American and Pacific Islander, and American Indian) and we compared effects of positive ethnic–racial affect in childhood and adolescent groups. Finally, we explored potential differences in associations according to gender and to the way in which positive ethnic–racial affect was assessed.

Method

Eligibility Criteria

The goal of our literature search was to identify available research studies that examined links between positive ethnic–racial affect and adjustment. Several criteria were used to select eligible quantitative studies: (a) inclusion of a African American, Latino, Asian American and Pacific Islander, or American Indian sample; (b) inclusion of child or adolescent, noncollege student sample; (c) inclusion of a community-based sample (i.e., excluding residential, clinical, or adjudicated samples); and (d) provision of results for analyses based on a measure of positive ethnic or racial affect, disaggregated from other dimensions (e.g., affirmation, commitment, private regard, racial pride). Sample items from pertinent measures are summarized in Table 1. The literature search was limited to articles published in peer-reviewed journals to maximize methodological soundness, but we systematically examined potential publication bias to account for a potentially larger mean effect size (ES) in published versus unpublished studies (discussed in detail later; cf. Rothstein, Sutton, & Borenstein, 2005). Studies could be published in any language (but no non-English studies met the selection criteria); translation assistance from fluent speakers of the non-English languages (e.g., German) was obtained as needed during the initial screening process.

Search Strategies and Selection of Studies

We conducted the literature search in October 2012 by means of three strategies. First, we searched in PsycINFO, PsycArticles, ERIC (i.e., these three databases were searched through the EBSCO platform); Medline; and Web of Science using the keywords (“eth* identi*” OR “rac* identi*” OR “cultural* identi*” OR “indigenous* identi*”); full electronic search strategies for each database can be obtained from the first author upon request). Second, we searched the websites of journals deemed most likely to publish studies on positive ethnic–racial affect and adjustment to identify any ahead-of-print articles that could potentially meet our eligibility criteria (we also checked the most recent issue of each journal to locate potential recent publications not yet available in the electronic databases). Specifically, we manually searched the online first and most recent issues of 25 journals identified by Web of Science as having the most articles on ethnic or racial identity (full list available from the first author upon request). Lastly, we screened the references of the most recent relevant meta-analysis (Smith & Silva, 2011) to identify any additional articles for potential inclusion.

To document the results of our literature searches, we followed the PRISMA guidelines (Moher, Liberati, Tetzlaff, & Altman, 2009; see Figure 1), which is the reporting standard for systematic reviews. Specifically, we found 7,621 articles, and from this initial set we removed 1,508 duplicates. We screened the remaining 6,113 articles. We performed the selection process with a two-step approach. In the first step, titles and abstracts of the retrieved references were screened. From this first selection, a total of 770 references were selected for further consideration. In the second step, the full-text articles for these screened references were examined to determine whether they met eligibility criteria; after all exclusions (see Figure 1), the final sample comprised 46 studies. In both steps, the first author checked all references and a trained rater rated a subsample of studies (50 studies in the first step and 100 studies in the second step). We computed the percentage of agreement between the two raters to establish interrater
reliability, which was found to be acceptable (i.e., 100% and 77% in the first and second steps, respectively), and all discrepancies were resolved through discussion.

Coding

From each study, we extracted data regarding: (a) sample characteristics (i.e., age: mean, standard deviation; percentage of girls; ethnic or racial composition; U.S. region; urban setting; school level of the sample; years spent in the United States; generations of residence in the United States; percentage of U.S. born; language spoken at home; average family income, percentage of fathers employed, percentage of mothers employed, paternal educational level, maternal educational level), (b) study characteristics (i.e., cross-sectional vs. longitudinal vs. longitudinal but data drawn from one wave only; measure used to assess positive ethnic–racial affect: name of the scale, number of items, and Cronbach’s alpha; and measure used to assess adjustment: name of the scale, number of items, self- or other informant, and Cronbach’s alpha), (c) year and language of publication, and (d) data necessary to compute an ES for each study (e.g., correlation, sample size).

A trained independent researcher coded all the studies with respect to criteria (a) through (d) listed earlier, and the first author coded a subset (10) of all studies to compute interrater reliability. Percent agreement of codings across all categories combined was high (87.3%) and discrepancies were resolved through discussion.

Statistical Analyses

First, we computed an ES for each primary study. As bivariate correlations were the most common statistic used in studies (45 of 46) for reporting associations between positive ethnic–racial affect and adjustment, we employed Pearson’s $r$ as the final ES metric. When multiple correlations for the same outcome (e.g., academic achievement) were reported in a given study, they were averaged to obtain one ES for that outcome within the study. According to Cohen’s (1988) criteria, correlations of .10, .25, and .45 are considered small, medium, and large, respectively. However, Cohen also argued that ES magnitude should be interpreted within the

<table>
<thead>
<tr>
<th>Type of measure (construct)</th>
<th>Source</th>
<th>Items or sample items provided in article</th>
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<tbody>
<tr>
<td>MEIM based (affirmation, affirmation and belonging)</td>
<td>Newman, Sontag, and Salvato (2006)</td>
<td>I am happy that I am a member of the group I belong to I have a strong sense of belonging to my own ethnic group I have a lot of pride in my ethnic group and its accomplishments</td>
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<tr>
<td>MIBI based (private regard)</td>
<td>Wallace and Fisher (2007)</td>
<td>I feel good about the people in my ethnic group I feel that the people in my ethnic group have made major accomplishments and advancements I believe that I have many strengths because I am a member of my ethnic group</td>
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<td>Fuligni et al. (2005)</td>
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<td></td>
<td>Hurd, Sánchez, Zimmerman, and Caldwell (2012)</td>
<td>I am proud of Black people I feel that the Black community has made many valuable contributions to this society I am happy that I am Black I feel good about people from my ethnic group I am proud to be part of my ethnic group</td>
</tr>
<tr>
<td></td>
<td>Rivas-Drake et al. (2008)</td>
<td>I am happy that I am my ethnicity I feel good about the people in my ethnic group</td>
</tr>
<tr>
<td>Ad hoc or other (affirmation, pride)</td>
<td>Huo et al. (2010)</td>
<td>I am proud to be a member of my ethnic group People should be proud of their color I feel good about my culture and heritage</td>
</tr>
<tr>
<td></td>
<td>Smith, Atkins, and Connell (2003)</td>
<td>My feelings about my ethnicity are mostly negative (R) I feel negatively about my ethnicity (R) I wish I were of a different ethnicity (R) I am not happy with my ethnicity (R) If I could choose, I would prefer to be of a different ethnicity (R) I dislike my ethnicity (R)</td>
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<td></td>
<td>Umaña-Taylor et al. (2009)</td>
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Note. MEIM = Multigroup Ethnic Identity Measure; MIBI = Multidimensional Inventory of Black Identity; R = reverse scored.
context of the study topic; therefore, we reference the recent overall ES reported in the most recent relevant meta-analysis of ethnic identity (i.e., .17; Smith & Silva, 2011) as a meaningful basis of interpretation.

Second, we pooled ES across studies to obtain an overall ES. We used the inverse variance method with the random effects model as a conservative approach to account for different sources of variation among studies (i.e., within-study and between-studies variations). A further advantage of the random effects model is that it allows for generalizability of the meta-analytic findings beyond the studies included in the current synthesis (Hedges & Vevea, 1998).

Third, we looked for potential outliers (i.e., ES with standardized residuals higher than |2|). We examined the stability of the results with a sensitivity analysis, by means of a “one study removed” procedure that determines whether the overall ES changes significantly when recalculated after the removal of a particular ES. If the results with and without the potential outliers were comparable, the potential outliers were not excluded from the analyses.

Fourth, we examined heterogeneity across studies by computing both $Q$ and $I^2$ statistics (Huedo-Medina, Sánchez-Meca, Marin-Martínez, & Botella, 2006). A significant $Q$ value indicates heterogeneity of results among studies. $I^2$ estimates the proportion of observed variance that reflects real differences in ES, where values of 25%, 50%, and 75% that might be considered as low, moderate, and high, respectively (Higgins, Thompson, Deeks, & Altman, 2003).
Fifth, we conducted two publication bias analyses to control for the fact that published studies may have a larger mean ES than unpublished studies (cf. Rothstein et al., 2005). First, we computed a fail-safe number (Rosenthal, 1979). This number provides the number of studies with nonsignificant findings necessary to make the overall ES nonsignificant. Rosenthal (1979) proposed a fail-safe N higher than \((5k + 10)\) as supporting absence of publication bias (where \(k\) refers to the number of studies included in the meta-analysis). Second, we used the trim and fill procedure, which is a nonparametric iterative statistical technique that evaluates the effect of potential data censoring on the result of the meta-analysis (Duval & Tweedie, 2000). Adopting this procedure, a funnel plot is constructed of each study’s ES against its precision. This plot should be shaped as a funnel if no data censor is present. However, as smaller or nonsignificant studies are less likely to be published, studies in the bottom left-hand (if the ES is positive; otherwise, if the ES is negative the missing studies are likely in the bottom right-hand) corner of the plot are often omitted. Thus, the \(k\) rightmost (if the ES is positive) studies considered to be symmetrically unmatched are trimmed. These trimmed studies are then replaced and their missing counterparts imputed as mirror images of the trimmed studies. This allows for the computation of an estimated ES and its 95% confidence interval. In this method, absence of publication bias is evaluated by zero trimmed studies, or in the presence of trimmed studies, by trivial differences between the observed and the estimated ES.

Sixth, we conducted moderator analyses to test our hypotheses regarding relevant factors that might explain differences in the strength of the association between positive ethnic–racial affect and adjustment. Specifically, we tested categorical moderators (i.e., pan-ethnic category, school level of the sample, and measure of positive ethnic–racial affect) by means of subgroup analyses and we tested continuous moderators (i.e., mean age and percentage of girls in the study samples) through metaregressions. We also conducted a preliminary check of the moderating role of quality of measurement (i.e., Cronbach’s alpha values and number of items in the measure), but as none of these was significant they are not discussed in the analyses presented here.

Finally, as our purpose was to investigate associations between positive ethnic–racial affect and specific dimensions of adjustment we examined each construct (e.g., self-esteem, anxiety) separately. This resulted in a series of meta-analyses—one for each outcome. For each meta-analysis, we followed the data analytic steps reported earlier.

Results

Descriptive Characteristics of Studies Included in the Meta-Analysis

Characteristics of 46 studies included in the meta-analysis are reported in Table 2. All studies were published in English. Study sample sizes ranged from 34 to 750; the mean age of participants was 14.34 (range = 8.24–17.81 years); 54.88% of the participants were girls (range = 0–100). Each study contributed data for at least one sample and outcome, although several contributed data to analyses of multiple outcomes. Data from a total of 51 single-group samples were available (26 African American, 8 Latino, 7 Asian American, and 3 Native American), and 7 samples included a mixture of different ethnic groups. Studies were conducted across a somewhat broad array of U.S. regions, but mainly (69.57%) in urban settings. Almost half of the studies (47.83%) involved high school samples. The most common approach to measuring positive ethnic–racial affect was MEIM based (employed in 47.83% of studies), followed by those that were MIBI based (28.26% of studies).

Information regarding immigration status (years spent in the United States; generations of residence in the United States; percentage of participants born in the United States; language spoken at home), family socioeconomic status level of acculturation, and perceived discrimination are not reported in Table 2 because most studies did not report these characteristics or do so in a comparable manner (information is available from the first author upon request). Thus, it was necessary to exclude these variables from the plan of analysis.

Ten individual outcomes were examined: anxiety, depressive symptoms, externalizing problems, internalizing problems, positive social functioning, self-esteem, well-being, academic achievement, academic or school attitudes, and health risk behaviors or attitudes. Subsequently, to obtain power to conduct moderation analyses, these outcomes were grouped into three broader categories. Academic outcomes (i.e., achievement and attitudes) were collapsed into academic adjustment. The remaining outcomes were collapsed according to the direction of the predicted associations. Specifically, anxiety, depressive symptoms, externalizing problems, internalizing problems, and health risk outcomes were combined into negative adjustment.
<table>
<thead>
<tr>
<th>Study name</th>
<th>Sample size</th>
<th>Age (M ± SD)</th>
<th>% Girls</th>
<th>Ethnicity</th>
<th>U.S. region</th>
<th>Urbanity</th>
<th>Type of school</th>
<th>Type of design</th>
<th>Ethnic identity measurea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelabu (2008)</td>
<td>661</td>
<td>15</td>
<td>58.73</td>
<td>African American</td>
<td>Other</td>
<td>Mixed</td>
<td>Middle and high</td>
<td>Cross-sectional</td>
<td>MEIM</td>
</tr>
<tr>
<td>Arbona, Jackson, McCoy, and Blakely (1999)</td>
<td>330</td>
<td>52</td>
<td></td>
<td>Mixed sampleb (43% African American, 57% Latino)</td>
<td>Southwest</td>
<td>Urban</td>
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<td>Middle</td>
<td>MEIM (3, .55/.56)</td>
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<tr>
<td>Belgrave et al. (2000)</td>
<td>212</td>
<td>11.2</td>
<td>100</td>
<td>African American</td>
<td>Other</td>
<td>Urban</td>
<td>Elementary</td>
<td>Cross-sectional</td>
<td>MEIM (5, .63)</td>
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<tr>
<td>Berkel et al. (2010)</td>
<td>750</td>
<td>10.42 ± 0.55</td>
<td>48.7</td>
<td>Mexican American</td>
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<td>Urban</td>
<td>Elementary</td>
<td>Longitudinal</td>
<td>Other (ad hoc) (4, .71)</td>
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<tr>
<td>Borrero and Yeh (2011)</td>
<td>406</td>
<td>17.81 ± 1.21</td>
<td>52.2</td>
<td>Mixed sample (32% Black, 12.8% Latino, 79.1% Asian American, 4.9% Multiracial)</td>
<td>California (San Francisco)</td>
<td>Urban</td>
<td>High</td>
<td>Cross-sectional</td>
<td>Other (EIS) (6, .95)</td>
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<tr>
<td>Brook, Rosenberg, Brook, Balka, and Meade (2004)</td>
<td>80</td>
<td>8.6 ± 0.94</td>
<td>47.5</td>
<td>Mixed sample (31.25% African American, 65% Puerto Ricans, 1.25% Hispanic not from Puerto Rico, 2.5% identified themselves both as African American and Puerto Rican)</td>
<td>Northeast (New York City)</td>
<td>Urban</td>
<td></td>
<td>Cross-sectional</td>
<td>MEIM (4, .57)</td>
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<tr>
<td>Butler-Barnes et al. (2012)</td>
<td>158</td>
<td>17.08 ± 0.60</td>
<td>0</td>
<td>African American</td>
<td>Southeast (Maryland)</td>
<td>Other (suburban)</td>
<td>High</td>
<td>Longitudinal (data from one wave)</td>
<td>MIBI (4, .76)</td>
</tr>
<tr>
<td>Byrd and Chavous (2009)</td>
<td>564</td>
<td>12.27 ± 0.57</td>
<td>44</td>
<td>African American</td>
<td>Southeast (Maryland)</td>
<td>Other (suburban)</td>
<td>Middle</td>
<td>Longitudinal (data from one wave)</td>
<td>Other (ad hoc) (1)</td>
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<tr>
<td>Byrd and Chavous (2011)</td>
<td>359</td>
<td>47</td>
<td></td>
<td>African American</td>
<td>Southeast (Maryland)</td>
<td>Other (mixed)</td>
<td>High</td>
<td>Longitudinal (data from one wave)</td>
<td>MIBI (6, .77)</td>
</tr>
<tr>
<td>Study name</td>
<td>Sample size</td>
<td>Age (M ± SD)</td>
<td>% Girls</td>
<td>Ethnicity</td>
<td>U.S. region</td>
<td>Urbanity</td>
<td>Type of school</td>
<td>Type of design</td>
<td>Ethnic identity measure&lt;sup&gt;a&lt;/sup&gt;</td>
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<tr>
<td>Caldwell et al. (2002)</td>
<td>521</td>
<td>17.48 ± 0.62</td>
<td>53</td>
<td>African American</td>
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<td>Urban</td>
<td>High</td>
<td>Longitudinal</td>
<td>MIBI (3, .67)</td>
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<tr>
<td>Chavous et al. (2003)</td>
<td>606</td>
<td>17.51 ± 0.63</td>
<td>52.64</td>
<td>African American</td>
<td>Midwest</td>
<td>Urban</td>
<td>High</td>
<td>Longitudinal</td>
<td>MIBI (3, .67)</td>
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<tr>
<td>Farver, Narang, and Bhadha (2002)</td>
<td>180</td>
<td>16.0 ± 1.8</td>
<td>55</td>
<td>Asian Indian</td>
<td>California</td>
<td>Urban</td>
<td>High</td>
<td>Cross-sectional</td>
<td>MEIM (5, .88)</td>
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<tr>
<td>Fiaui and Hishinuma (2009)</td>
<td>92</td>
<td>16.34 ± 1.12</td>
<td>55.4</td>
<td>Samoan</td>
<td>Other</td>
<td>High</td>
<td>Cross-sectional</td>
<td>Other (ad hoc)</td>
<td>(3)</td>
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<tr>
<td>Fuligni et al. (2005)&lt;sup&gt;d&lt;/sup&gt;</td>
<td>415</td>
<td>14.86 ± 0.38</td>
<td>52</td>
<td>Mixed sample (58.07% Mexican, 41.93% Chinese)</td>
<td>California</td>
<td>Urban</td>
<td>High</td>
<td>Cross-sectional</td>
<td>MIBI (8, .76/29)</td>
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<tr>
<td>Gaylord-Harden et al. (2007)</td>
<td>227</td>
<td>12.55 ± 0.69</td>
<td>63</td>
<td>African American</td>
<td>Midwest</td>
<td>Urban</td>
<td>Middle</td>
<td>Longitudinal</td>
<td>MEIM (5, .81)</td>
</tr>
<tr>
<td>Ghavami et al. (2011)&lt;sup&gt;f&lt;/sup&gt;</td>
<td>211</td>
<td>14.2 ± 0.65</td>
<td>53.85</td>
<td>Mixed sample (3.32% African American/Black, 82.94% Latino, 13.74% Asian American)</td>
<td>California</td>
<td>Urban</td>
<td>High</td>
<td>Cross-sectional</td>
<td>MEIM (4, .81)</td>
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<tr>
<td>Gillen-O’Neel et al. (2011)&lt;sup&gt;d&lt;/sup&gt;</td>
<td>284</td>
<td>8.56 ± 1.13</td>
<td>56.76</td>
<td>Mixed sample (10.64% African American, 24.17 Dominican, 28.16 Chinese)</td>
<td>Northeast</td>
<td>Urban</td>
<td>Elementary</td>
<td>Cross-sectional</td>
<td>MIBI (2, r = .39)</td>
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<tr>
<td>Greene, Way, and Pahl (2006)</td>
<td>136</td>
<td>T2: 14.81 ± 0.65</td>
<td>51</td>
<td>Mixed sample (12% Black, 2% West Indian, 3% Puerto Rican, 7% Dominican American, 5% other Latino, 39% Chinese American, 3% non-Chinese Asian American)</td>
<td>Northeast</td>
<td>Urban</td>
<td>High</td>
<td>Longitudinal</td>
<td>MEIM (5, .79/28)</td>
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<tr>
<td>Study name</td>
<td>Sample size</td>
<td>Age ($M \pm SD$)</td>
<td>% Girls</td>
<td>Ethnicity</td>
<td>U.S. region</td>
<td>Urbanity</td>
<td>Type of school</td>
<td>Type of design</td>
<td>Ethnic identity measure&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>Huo et al. (2010)&lt;sup&gt;d&lt;/sup&gt;</td>
<td>504</td>
<td>16.36 ± 0.83</td>
<td>57</td>
<td>Mixed sample&lt;sup&gt;b&lt;/sup&gt; (15.87% African American, 52.38% Latino, 31.75% Asian American)</td>
<td>California (Los Angeles)</td>
<td>Urban</td>
<td>High</td>
<td>Cross-sectional</td>
<td>Other (ad hoc) (3, .79/.83)</td>
</tr>
<tr>
<td>Hurd et al. (2012)</td>
<td>541</td>
<td>17.8 ± 0.64</td>
<td>54</td>
<td>African American</td>
<td>Midwest</td>
<td>Urban</td>
<td>High</td>
<td>Longitudinal</td>
<td>MIBI (3, .66)</td>
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<tr>
<td>Irving and Hudley (2008)</td>
<td>115</td>
<td>100 African American</td>
<td></td>
<td>California (Southern California)</td>
<td>Urban</td>
<td>High</td>
<td>High</td>
<td>Cross-sectional</td>
<td>MEIM (7, .74)</td>
</tr>
<tr>
<td>Jones and Galliher (2007)</td>
<td>137</td>
<td>15.24 ± 0.99</td>
<td>52.6</td>
<td>Navajo</td>
<td>Other</td>
<td>High</td>
<td>Longitudinal</td>
<td>Longitudinal</td>
<td>MEIM (7)</td>
</tr>
<tr>
<td>Kaplan et al. (2009)</td>
<td>34</td>
<td>12.35 ± 0.77</td>
<td>100</td>
<td>Latino</td>
<td>Other</td>
<td>Middle</td>
<td>Longitudinal (As there was no control group, data for the meta-analysis were selected from baseline)</td>
<td>MEIM (7)</td>
<td></td>
</tr>
<tr>
<td>Kiang, Gonzales-Backen, Yip, Witkow, and Fuligni (2006)</td>
<td>415</td>
<td>14.83 ± 0.38</td>
<td>51</td>
<td>Mixed sample&lt;sup&gt;b&lt;/sup&gt; (52% Mexican, 48% Chinese)</td>
<td>California (Los Angeles)</td>
<td>Urban</td>
<td>High</td>
<td>Longitudinal (data from one wave)</td>
<td>MIBI (8, .65/.72)</td>
</tr>
<tr>
<td>Kiang et al. (2012)</td>
<td>172</td>
<td>14.97 ± 0.84</td>
<td>58</td>
<td>Asian</td>
<td>Southeast</td>
<td>High</td>
<td>Longitudinal (data from one wave)</td>
<td>MEIM (5, .93)</td>
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<tr>
<td>Mandara et al. (2009)</td>
<td>259 (waves 2/3)</td>
<td>12.55 ± 0.69</td>
<td>61.39</td>
<td>African American</td>
<td>Midwest (Chicago)</td>
<td>Urban</td>
<td>Middle</td>
<td>Longitudinal</td>
<td>MEIM (5, .73/.80)</td>
</tr>
<tr>
<td>Marsiglia et al. (2001)&lt;sup&gt;d&lt;/sup&gt;</td>
<td>256</td>
<td>12.65 ± 0.72</td>
<td>51</td>
<td>Mixed sample&lt;sup&gt;b&lt;/sup&gt; (18.36% African American, 81.64% Mexican American)</td>
<td>Southwest</td>
<td>Urban</td>
<td>Middle</td>
<td>Cross-sectional</td>
<td>Other (ad hoc) (7, .76)</td>
</tr>
<tr>
<td>Study name</td>
<td>Sample size</td>
<td>Age (M ± SD)</td>
<td>% Girls</td>
<td>Ethnicity</td>
<td>U.S. region</td>
<td>Urbanity</td>
<td>Type of school</td>
<td>Type of design</td>
<td>Ethnic identity measurea</td>
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<tr>
<td>Murry et al. (2005)</td>
<td>332</td>
<td>11.2</td>
<td>54</td>
<td>African American</td>
<td>Southeast (Georgia)</td>
<td>Other (rural)</td>
<td>Longitudinal</td>
<td>Other (Inventory of Black Identity) (3, .65)</td>
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<tr>
<td>Nasim et al. (2007)</td>
<td>114</td>
<td>16.9 ± 1.71</td>
<td>47</td>
<td>African American, Black, or mixed</td>
<td>Northeast</td>
<td>Urban</td>
<td>Middle and high</td>
<td>Intervention (data for the study from baseline)</td>
<td>MEIM (.85)</td>
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<tr>
<td>Newman (2005)</td>
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<td>13.6 ± 1.5</td>
<td>53</td>
<td>Lumbee Indian</td>
<td>Southeast (North Carolina)</td>
<td>Other (rural)</td>
<td>Middle</td>
<td>Longitudinal (data from one wave)</td>
<td>MEIM (5, .83)</td>
</tr>
<tr>
<td>Newman et al. (2006)</td>
<td>134</td>
<td>T1: 13.6 ± 1.5, T2: 15.5 ± 1.18</td>
<td>57</td>
<td>Lumbee Indian</td>
<td>Southeast (North Carolina)</td>
<td>Other (rural)</td>
<td>T1: middle, T2: high</td>
<td>Longitudinal</td>
<td>MEIM (5, .91)</td>
</tr>
<tr>
<td>Perreira, Fuligni, and Potochnick (2010)</td>
<td>459</td>
<td>15.06 ± 0.69</td>
<td>53</td>
<td>Latino</td>
<td>Other (Los Angeles and North Carolina)</td>
<td>Urban</td>
<td>High</td>
<td>Cross-sectional</td>
<td>MEIM (.87)</td>
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<tr>
<td>Rivas-Drake et al. (2008)</td>
<td>203</td>
<td>11.32 ± 0.62</td>
<td>48</td>
<td>Mixed sampleb (58.62% African American, 41.38% Chinese)</td>
<td>Northeast (New York City)</td>
<td>Urban</td>
<td>Middle</td>
<td>Cross-sectional</td>
<td>MIBI (3, .82)</td>
</tr>
<tr>
<td>Seaton (2009)</td>
<td>322</td>
<td>T1: 16</td>
<td>53</td>
<td>African American</td>
<td>Northeast</td>
<td>Urban</td>
<td>High</td>
<td>Cross-sectional</td>
<td>MIBI (3, .67)</td>
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<tr>
<td>Seaton et al. (2011)</td>
<td>388</td>
<td>T1: 13.74 ± 1.28, T2: 14.74 ± 1.21, T3: 15.78 ± 1.20</td>
<td>59</td>
<td>African American</td>
<td>Midwest</td>
<td>Middle and high</td>
<td>Longitudinal</td>
<td>MIBI (2)</td>
<td></td>
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<tr>
<td>Sellers et al. (2006)</td>
<td>271</td>
<td>T1: 13.8 ± 1.21, T2: 14.8 ± 1.20, T3: 15.8 ± 1.20</td>
<td>61</td>
<td>African American</td>
<td>Midwest</td>
<td>Urban</td>
<td>Middle and high</td>
<td>Longitudinal (data from one wave)</td>
<td>MIBI (3, .72)</td>
</tr>
<tr>
<td>Shin (2011)</td>
<td>88</td>
<td>8.24 ± 0.69</td>
<td>60.2</td>
<td>African American</td>
<td>Northeast</td>
<td>Urban</td>
<td>Elementary</td>
<td>Other (ad hoc) (8, .68)</td>
<td>MEIM (5, .74)</td>
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<tr>
<td>Smith et al. (2003)</td>
<td>98</td>
<td>57</td>
<td>57</td>
<td>African American</td>
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<td>Urban</td>
<td>Elementary</td>
<td>Other (PRISM) (2, .61)</td>
<td>MEIM (5, .74)</td>
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<td>Smith et al. (2009)</td>
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<td>Urban</td>
<td>Elementary</td>
<td>Longitudinal (data from one wave)</td>
<td>MEIM (5, .74)</td>
</tr>
<tr>
<td>Study name</td>
<td>Sample size</td>
<td>Age (M ± SD)</td>
<td>% Girls</td>
<td>Ethnicity</td>
<td>U.S. region</td>
<td>Urbanity</td>
<td>Type of school</td>
<td>Type of design</td>
<td>Ethnic identity measurea</td>
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<tr>
<td>Thompson and Kiang (2010)</td>
<td>165</td>
<td>14.97 ± 0.84</td>
<td>59</td>
<td>Asian American</td>
<td>Southeast</td>
<td>High</td>
<td>Longitudinal</td>
<td>(data from one wave)</td>
<td>MIBI (4, .89)</td>
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<td>Townsend et al. (2010)</td>
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<td>13</td>
<td>100</td>
<td>African American</td>
<td>Northeast</td>
<td>Urban</td>
<td>Middle</td>
<td>Longitudinal</td>
<td>MEIM (7, .78)</td>
</tr>
<tr>
<td>Umaña-Taylor et al. (2009)</td>
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<td>15.31 ± 0.75</td>
<td>49.5</td>
<td>Latino</td>
<td>Midwest</td>
<td>High</td>
<td>Longitudinal</td>
<td>Other (EIS)</td>
<td>Other (ad hoc) (7, .75)</td>
</tr>
<tr>
<td>Umaña-Taylor, Wong, Gonzales, and Dumka (2012)</td>
<td>178</td>
<td>13.0 ± 0.53</td>
<td>53</td>
<td>Mexican origin</td>
<td>Southwest</td>
<td>Urban</td>
<td>Middle</td>
<td>Longitudinal</td>
<td>(ethnic identity measured only in Wave 1)</td>
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<td>Yasui et al. (2004)</td>
<td>82</td>
<td>12.3 ± 0.86</td>
<td>58</td>
<td>African American</td>
<td>Other (Portland, Oregon)</td>
<td>Urban</td>
<td>Middle</td>
<td>Longitudinal</td>
<td>MEIM (5, .91)</td>
</tr>
<tr>
<td>Yip and Fulgni (2002)</td>
<td>96</td>
<td>16.43 ± 1.02</td>
<td>54.2</td>
<td>Chinese</td>
<td>Northeast (New York City)</td>
<td>Urban</td>
<td>High</td>
<td>Longitudinal</td>
<td>MEIM (5, .84)</td>
</tr>
</tbody>
</table>

Note. EIS = Ethnic Identity Scale; MEIM = derived from Multigroup Ethnic Identity Measure; MIBI = derived from original or adapted Multidimensional Inventory of Black Identity or MIBI Teen; PRISM = Parent-Child-Teacher Racial-Ethnic Identity Socialization Measure.

aThe number of items and the reliability are reported in parentheses. bEffect sizes reported separately for each ethnic group. cSelected Samoan youth in Hawaii. dData taken only from ethnic minority groups. eOnly Study I fit the eligibility criteria.
social functioning, self-esteem, and well-being were combined into positive adjustment. Thus, we performed a meta-analysis for each outcome as well as category. Results are reported in Table 3. These results refer to cross-sectional studies and to baseline data from longitudinal studies (see the Ancillary Analyses section for additional results of longitudinal studies). For ease of presentation, the results for each individual outcome are provided within the explanation of results for the three broader categories.

**Academic Adjustment**

We found 25 studies, including a combined total of 7,822 participants, examining associations between positive ethnic–racial affect and academic adjustment (Table 3). Overall results indicated that positive ethnic–racial affect was positively ($r = .18$) and significantly related to academic adjustment, an effect of small magnitude by Cohen’s (1988) criteria. Further analyses indicated that the same result was obtained analyzing each outcome separately, $Q(1) = .00$, $p = .96$. Thus, positive ethnic–racial affect was similarly and positively related to both academic achievement and academic or school attitudes (see Figure 2).

Inspection of potential outliers indicated that results of Borrero and Yeh (2011) and Yasui, Dorham, and Dishion (2004) were potential outliers. However, results of sensitivity analyses revealed that results of the meta-analysis for academic outcomes conducted with and without the potential outliers were similar (e.g., ES for overall academic adjustment were .17 and .18, respectively). Given the stability of meta-analytic findings, we chose the conservative approach of not excluding potential outliers from the analyses.

In addition, results of heterogeneity analyses indicated significant and large heterogeneity both in the meta-analysis for overall academic adjustment and in the meta-analyses for academic achievement and academic or school attitudes individually. Assessment of publication bias was conducted via the methods described earlier. According to both methods, there was no evidence of potential publication bias in the meta-analysis on academic adjustment or in the in-depth analysis on academic achievement. In the meta-analysis for academic or school attitudes, the fail-safe number exceeded Rosenthal’s rule of thumb, but the trim and fill method detected six studies to be trimmed. However, in this latter case the observed and the estimated ES were similar and both significant, suggesting that the potential impact of publication bias was minimal. Taking together results of both methods, it is reasonable to conclude that the impact of publication bias was minimal.

Moderator tests were conducted only in the meta-analysis for overall academic adjustment so as to preserve adequate statistical power. Results of

Table 3

<table>
<thead>
<tr>
<th>Summary statistics</th>
<th>Heterogeneity</th>
<th>Assessment of publication bias</th>
</tr>
</thead>
<tbody>
<tr>
<td>$k$</td>
<td>$N$</td>
<td>$r$</td>
</tr>
<tr>
<td>Academic adjustment</td>
<td>25</td>
<td>7,822</td>
</tr>
<tr>
<td>Academic achievement</td>
<td>13</td>
<td>4,593</td>
</tr>
<tr>
<td>Academic/school attitudes</td>
<td>19</td>
<td>6,464</td>
</tr>
<tr>
<td>Negative adjustment</td>
<td>26</td>
<td>5,840</td>
</tr>
<tr>
<td>Anxiety</td>
<td>6</td>
<td>1,698</td>
</tr>
<tr>
<td>Depressive symptoms</td>
<td>12</td>
<td>2,373</td>
</tr>
<tr>
<td>Externalizing problems</td>
<td>7</td>
<td>1,928</td>
</tr>
<tr>
<td>Internalizing problems</td>
<td>4</td>
<td>1,573</td>
</tr>
<tr>
<td>Health risk behaviors/attitudes</td>
<td>10</td>
<td>1,518</td>
</tr>
<tr>
<td>Positive adjustment</td>
<td>27</td>
<td>6,089</td>
</tr>
<tr>
<td>Positive social functioning</td>
<td>6</td>
<td>1,246</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>21</td>
<td>4,083</td>
</tr>
<tr>
<td>Well-being</td>
<td>8</td>
<td>2,530</td>
</tr>
</tbody>
</table>

Note. Results refer to cross-sectional studies and to baseline data from longitudinal studies. $k =$ number of studies; $N =$ total number of participants; $r =$ Pearson’s correlation; CI = confidence interval. $^*$Value below Rosenthal’s (1979) cutoff.

$p < .05$. **$p < .01$. ***$p < .001$. 
Figure 2. Forest plot of effect sizes (ES) for (a) academic achievement and (b) academic/school attitudes.
metaregressions revealed that the sample mean age ($\beta = -0.02, p = .11$) and percentage of girls in the sample ($\beta = 0.00, p = .26$) were not statistically significant moderators. However, as shown in Table 4, the ES were found to vary significantly as a function of the measure used to assess positive ethnic–racial affect. Specifically, the overall correlation between positive ethnic–racial affect and academic adjustment was found to be stronger in studies employing MEIM-based measures.

**Negative Adjustment**

We found 26 studies, with a combined total of 5,840 participants, examining associations between positive ethnic–racial affect and overall negative adjustment (Table 3). Overall results indicated that positive ethnic–racial affect was negatively ($r = -0.18$) and significantly related to negative adjustment, an effect of small magnitude by Cohen’s criteria and comparable to that reported by Smith and Silva (2011).

Further analyses highlighted that results varied as a function of study outcomes, $Q(4) = 16.95, p < .01$. As shown in Table 3, positive ethnic–racial affect was negatively and significantly associated with depressive symptoms, externalizing and internalizing problem behaviors, and health risk outcomes, whereas the link with anxiety was not significant. Interestingly, stronger relations were observed with depressive symptoms (medium ES) and health risk outcomes (medium ES) as compared to other adjustment problems (see online Supporting Information Figures S1 and S2, respectively).

Inspection of potential outliers indicated that the study by Yasui et al. (2004) was a potential outlier. However, results of sensitivity analysis revealed that results of the meta-analysis for negative adjustment conducted with and without this study were similar ($-0.18$ and $-0.14$, respectively). Given the stability of meta-analytic findings, the Yasui et al. (2004) study was not excluded from analysis.

In addition, results of heterogeneity analyses indicated significant and large heterogeneity in the meta-analysis for negative adjustment as well as in the individual analyses for depressive symptoms, externalizing problems, and risk behaviors or attitudes; however, in the meta-analyses for anxiety and internalizing problems results were found to be homogeneous across studies.

Assessment of publication bias indicated that, according to both Rosenthal’s (1979) fail-safe number and Duval and Tweedie’s (2000) trim and fill method, there was no evidence of potential publication bias in the meta-analysis on negative adjustment or in the in-depth analyses for depressive symptoms and risk behaviors or attitudes (evaluation of publication bias was not conducted for anxiety because the ES for this outcome was not significant). In the meta-analyses for externalizing and internalizing problems the fail-safe numbers were below Rosenthal’s rule of thumb, but the trim and fill method indicated that no studies should be trimmed. Thus, we concluded that the results of the meta-analyses for externalizing and internalizing problem behaviors were trustworthy.

Moderator tests were performed in the meta-analysis for overall negative adjustment. Results of metaregressions revealed that neither sample mean age ($\beta = 0.02, p = .15$) nor percentage of girls ($\beta = 0.00, p = .87$) was a statistically significant moderator. Results of subgroup analyses used to test categorical moderators indicated, similar to what was found for academic adjustment, that measure of positive ethnic–racial affect was a significant moderator (see Table 4). In this case, larger correlations were found in studies relying on MEIM- and MIBI-based measures as compared to other measures (i.e., EIS, ad hoc).

**Positive Adjustment**

We found 27 studies, with a combined total of 6,089 participants, examining associations between positive ethnic–racial affect and overall positive adjustment (see Table 3). Overall, results indicated that positive ethnic–racial affect was positively ($r = 0.26$) and significantly related to positive adjustment, an effect of medium magnitude by Cohen’s criteria and comparable to that reported by Smith and Silva (2011).

Further analyses indicated that results were not statistically different according to the specific positive outcome examined, $Q(2) = 1.28, p = .53$. As displayed in Table 3, positive ethnic–racial affect was positively and significantly associated with favorable social functioning, self-esteem, and well-being (see online Supporting Information Figure S1).

Inspection of potential outliers indicated that studies by Yasui et al. (2004) and Seaton et al. (2011) were potential outliers. However, results of sensitivity analysis revealed that results of the meta-analysis for positive adjustment conducted with and without these studies were similar ($0.26$ and $0.25$, respectively). Given the stability of meta-analytic findings, these two studies were not excluded from the analyses.
### Table 4
Results of Categorical Moderator Analyses

<table>
<thead>
<tr>
<th>Moderator</th>
<th>Academic adjustment</th>
<th>Negative adjustment</th>
<th>Positive adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$k$</td>
<td>$N$</td>
<td>$r$ [95% CI]</td>
</tr>
<tr>
<td><strong>Pan-ethnic category</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian American and Pacific Islander</td>
<td>4</td>
<td>677</td>
<td>.22*** [11, .34]</td>
</tr>
<tr>
<td>Latino</td>
<td>4</td>
<td>1,651</td>
<td>.27*** [.18, .37]</td>
</tr>
<tr>
<td>American Indian</td>
<td>1</td>
<td>135</td>
<td>.26** [.10, .42]</td>
</tr>
<tr>
<td>Pooled samples</td>
<td>3</td>
<td>1,105</td>
<td>.012 [-.18,.19]</td>
</tr>
<tr>
<td><strong>School level of sample</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>5</td>
<td>1,856</td>
<td>.24*** [.11,.36]</td>
</tr>
<tr>
<td>Middle</td>
<td>4</td>
<td>1,091</td>
<td>.30* [.06,.54]</td>
</tr>
<tr>
<td>High</td>
<td>15</td>
<td>4,214</td>
<td>.13*** [.07,.20]</td>
</tr>
<tr>
<td>Middle and high</td>
<td>1</td>
<td>661</td>
<td>.24*** [.17,.31]</td>
</tr>
<tr>
<td><strong>Measure of positive ethnic-racial affect</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEIM based</td>
<td>9</td>
<td>2,706</td>
<td>.25*** [.17,.33]</td>
</tr>
<tr>
<td>MIBI based</td>
<td>7</td>
<td>2,528</td>
<td>.10*** [.05,.15]</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>2,588</td>
<td>.19** [.05,.33]</td>
</tr>
</tbody>
</table>

*Note. $Q =$ contrast between subsets of studies.

*Pooled samples refer to studies that include more than one ethnic group for which separate data for each ethnic group were not reported.

$p < .05. **p < .01. ***p < .001.
In addition, results of heterogeneity analyses indicated significant and large heterogeneity in the meta-analysis for positive adjustment as well as in the individual analyses for positive social functioning, self-esteem, and well-being. Assessment of publication bias indicated no evidence of potential publication bias in the meta-analysis on positive adjustment or in the in-depth analyses on positive social functioning and self-esteem. However, in the meta-analysis for well-being, although the fail-safe number was above Rosenthal’s rule of thumb, the trim and fill method indicated that two studies should be trimmed and that the estimated ES was not statistically significant. Thus, whereas there is confidence in the results regarding overall positive adjustment, positive social functioning, and self-esteem, findings pertaining to well-being warrant greater caution.

Moderator tests were performed in the meta-analysis for overall positive adjustment. Results of metaregressions indicated that the sample mean age (β = −.01, p = .81) and percentage of girls (β = .01, p = .27) were not statistically significant moderators. Although numerical age was not a significant moderator, results of subgroup analyses (see Table 4) suggest that school level was a significant moderator. Specifically, correlations of greater magnitude were found in studies conducted involving high school samples. Type of measure was not a significant moderator.

Ancillary Analyses of Longitudinal Studies

A total of seven longitudinal studies presented data for two or more waves. However, they examined different outcomes, thus limiting the possibility to perform additional analyses. Self-esteem was the only outcome for which at least two studies with multiple waves were available. Results of analyses conducted in this subset of studies indicated that correlations between positive ethnic–racial affect and self-esteem (Wave 1: k = 5, N = 984, r = .25 [.13, .37], p < .001; Wave 2: k = 5, N = 993, r = .22 [.14, .30], p < .001; Wave 3: k = 2, N = 446, r = .23 [.15, .32], p < .001; and Wave 4: k = 2, N = 429, r = .30 [.09, .59], p < .01) were consistent across waves, Q(3) = 0.46, p = .93.

Discussion

As evinced by recent issues of Child Development (2006) and Child Development Perspectives (2012) dedicated to providing new insights into normative development among youth of color, conceptual and empirical interest in the role of ethnic and racial processes in childhood and adolescence is growing. The field of ethnic–racial identity, in particular, has burgeoned in the 21st century. However, the literature to date has been fragmented in ways that preclude definitive conclusions. In this study, we sought to synthesize and test using meta-analysis, one of the most commonly studied dimensions of ethnic–racial identity. Specifically, we reasoned that the constructs of affirmation, private regard, and pride conceptually converge to contribute to individuals’ positive affect about their ethnic or racial group. The overlap can be partially explained by the roots of their conceptualizations in social identity theory in which positive evaluations of one’s ethnic or racial group are deemed to be key components of ethnic–racial identity (Ashmore et al., 2004).

The present research synthesis suggests that positive ethnic–racial affect has important and wide-ranging implications for youth’s adjustment. Although the bulk of the literature base regarding this construct in childhood and adolescence has focused on psychological outcomes, the variety of pertinent domains clearly extends to academic and health risk outcomes as well. With regard to the primary goal of the study to examine variation in the association of positive ethnic–racial affect with youth outcomes across these domains, the metaanalytic findings overwhelmingly suggest that more positive ethnic–racial affect is correlated with more favorable psychosocial adjustment and with reduced health risks. Anxiety is the only outcome for which no significant association was found with positive ethnic–racial affect, which is interesting given that the associations for depressive symptoms and internalizing, two closely related mental health outcomes, were significantly different from zero. In addition, the largest ES were observed for positive social functioning (e.g., social competencies, peer acceptance; medium), depressive symptoms (medium), and health risks (e.g., sexual and substance use outcomes; medium). By contrast, ES for all other psychosocial and academic outcomes were small.

There were few significant moderators of the association between positive ethnic–racial affect and adjustment. Age, gender, and pan-ethnic category did not significantly moderate any of the study findings, suggesting that the associations operate similarly across the various groups reflected in this study. Although age was not a significant moderator of the three outcomes, school level was a significant moderator for positive...
adjustment, with the association being strongest for high school students and weakest for elementary school students. These finding should be interpreted with caution, however, because there was only one study conducted with elementary students (N = 632).

Finally, the measure of positive ethnic–racial affect used in the study was a significant moderator for academic adjustment and negative adjustment, but not positive adjustment. For academic adjustment, the associations were moderate for MEIM-based and other measures, whereas they were small for MIBI-based studies. In contrast, for negative adjustment, the associations were moderate for MEIM-based and MIBI-based studies, but nonsignificant for studies using other measures. Thus, the MEIM-based measures seemed to be most robust, as they are significant and of similar magnitude regardless of the type of outcome being assessed, followed by MIBI-based measures. Additional meta-analytic research is needed to determine whether the patterns for negative adjustment are sustained once more studies relying on other measures are conducted. Overall, however, the small substantive differences in the manner in which the different measures generally related to adjustment outcomes converge with prior theory and research, suggesting that positive ethnic–racial affect is beneficial for youth.

**Strengths and Limitations**

There are several strengths of the meta-analytic approach to research synthesis undertaken in this article. With careful attention to conceptualization and measurement issues in the predictors and outcomes assessed, meta-analysis can be a quite valuable method for understanding the broader context of the studies examined. In this case, it also helps provide new insights into major conceptual and methodological issues in the field. This is the first systematic review of its kind to examine the breadth of U.S. youth samples and outcomes contained in this study while simultaneously focusing (appropriately) on a particular dimension of ethnic–racial identity (i.e., positive ethnic–racial affect) and disaggregating particular outcomes and measures to gain clarity in the reported associations.

A related strength of the study is that it is theoretically embedded and builds upon existing empirical work. The focus of this study was on one dimension of ethnic–racial identity; namely, positive ethnic–racial affect subsumes similar constructs implicit to positive group feelings (e.g., racial pride, private regard, group esteem, or affirmation). The findings of the meta-analysis support theoretical statements about the consequence of this aspect of ethnic–racial identity. Social identity theory posits that positive in-group evaluations are linked to positive psychosocial outcomes, such as self-esteem (Tajfel & Turner, 1986), as well as to other psychosocial outcomes as suggested by Umana-Taylor (2011). Certainly the current findings provided support for these suppositions. Likewise, Phinney’s (1990) psychosocially based conceptualizations frame the development of a positive ethnic identity as relevant to ethnically embedded individuals. Furthermore, positive regard and secure identification with one’s ethnic group are asserted to be related to healthy and adaptive functioning. In short, theoretical notions on positive ethnic–racial affect were statistically shown to be significant relative to adaptive and positive functioning across domains of well-being diverse adolescents.

At the same time, the present meta-analytic results also possess several limitations that merit additional discussion. First, due to the limited number of studies available in which others’ reports of youth outcomes could be compared with youth’s reports of the same outcomes, we were unable to test outcomes separately based on reporter (e.g., self-report on externalizing problems vs. parent report of youth externalizing problems). It is possible that the ES could be larger if studies were limited to self-reports, given that it is well documented that cross-reporter associations are more difficult to detect than within-reporter effects. If there were no differences in ES based on reporter, however, such a finding would provide greater confidence in the conclusions drawn, suggesting that regardless of who is reporting on the particular indicator of youth adjustment, the association emerges. Furthermore, such a finding would eliminate any concerns regarding single-reporter bias. Relatedly, it would be interesting to examine the outcomes that demonstrate the strongest effects when other reporters’ accounts are examined, and perhaps the outcomes that emerged as significant correlates of positive ethnic–racial affect across reporters may signal the indicators of adjustment that may benefit most from interventions focused on positive ethnic–racial affect.

Second, because our aim was to perform a quantitative review, we could not focus on the numerous qualitative and mixed methods studies on ethnic–racial identity. Research on ethnic–racial identity has used increasingly diverse methods beyond rating-scale surveys, including interview (Charmaraman & Grossman, 2010), narrative (Syed...
Indeed, research with college-going emerging adults has found associations between positive ethnic–racial affect and adjustment that are quite consistent with the present meta-analysis (e.g., Lee & Yoo, 2004; Syed & Azmitia, 2009; Yip, 2005). Despite these findings, there may be a host of different moderators of the association between positive ethnic–racial affect and adjustment beyond the adolescent years, as life becomes increasingly complex and identity domains that had been previously viewed as separate begin to interact to a greater degree (e.g., ethnicity and gender, ethnicity and career; see Azmitia, Syed, & Radmacher, 2008; Umaña-Taylor et al., 2004). A future meta-analysis that explores these complexities would be an important contribution to the literature.

Implications and Future Directions

Several important implications of the present results should be noted. First, as we have seen, positive ethnic–racial affect is similarly associated with a host of youth outcomes among youth from the largest pan-ethnic minority categories in the United States. With regard to psychosocial and health risk outcomes, all but anxiety evidenced an association with positive ethnic–racial affect, and indeed, these results are very much consistent with the view of several ethnic and racial identity theories’ proposition that the valence of the identity matters. With regard to academic adjustment, the present meta-analysis provides further empirical evidence refuting the notion that ethnic or racial identity may be associated with less positive dispositions toward school and academic achievement, as posited by oppositional culture theory (see Warikoo & Carter, 2009, for a discussion and critique of this perspective). The direction and ES for the majority of studies analyzed were positive for both attitudes toward academics and school and for academic performance.

In this article, not only was positive ethnic–racial affect conceptually reasoned to represent an important dimension of ethnic–racial identity, but these expectations were empirically supported in terms of connections to psychosocial, academic, and health outcomes among adolescents from four major U.S. ethnic–racial groups. We recommend continued forays into this line of inquiry, such as meta-analyses of other dimensions of ethnic and racial identity. For instance, Phinney and Ong (2007) and Ashmore et al. (2004) delineated conceptual dimensions of ethnic identity that have also been operationalized for measurement—self-categorization and labeling, commitment and attachment, exploration, ethnic
behaviors, values and beliefs, and importance and salience, as well as ethnic vis-à-vis national identifications. It would be important to determine in what ways these other dimensions of ethnic–racial identity are similar versus different in their relations to academic, psychosocial, and health outcomes. Such insights could be instructive in determining what aspects of ethnic–racial identity might be most important to target in intervention efforts.

In conclusion, although neither ethnic nor racial identity should be considered a panacea by any means, given the complexity of identity in the lives of ethnic and racial minority youth, this study suggests that at least one dimension—positive ethnic–racial affect—is a relevant and important mechanism by which race and ethnicity are implicated in the lives and adjustment of ethnic minority youth (primarily adolescents). Future inquiries into ethnic and racial identity that are pertinent to multiple ethnic minority groups will help to provide additional insights into the role of ethnic and racial processes in the normative development of diverse youth.

References

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


### Supporting Information

Additional supporting information may be found in the online version of this article at the publisher’s website:

**Figure S1.** Forest Plot of Effect Sizes (ES) for (A) Anxiety, (B) Depressive Symptoms, (C) Externalizing Problems, (D) Internalizing Problems, (E) Positive Social Functioning, (F) Self-Esteem, and (G) Well-Being.

**Figure S2.** Forest Plot of Effect Sizes (ES) for Health Risk Outcomes.