

Perceived Racism and Mental Health Among Black American Adults: A Meta-Analytic Review

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The literature indicates that perceived racism tends to be associated with adverse psychological and physiological outcomes; however, findings in this area are not yet conclusive. In this meta-analysis, we systematically reviewed 66 studies (total sample size of 18,140 across studies), published between January 1996 and April 2011, on the associations between racism and mental health among Black Americans. Using a random-effects model, we found a positive association between perceived racism and psychological distress ($r = .20$). We found a moderation effect for psychological outcomes, with anxiety, depression, and other psychiatric symptoms having a significantly stronger association than quality of life indicators. We did not detect moderation effects for type of racism scale, measurement precision, sample type, or type of publication. Implications for research and practice are discussed.

Keywords: perceived racism, mental health, Black Americans, meta-analysis

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Perceived racism or racial discrimination and its psychological correlates have garnered much attention over the past two decades. Supported by conceptual models of racism-related stress (Clark, Anderson, Clark, & Williams, 1999; Harrell, 2000) and psychometrically sound instrumentation (Kressin, Raymond, & Manze, 2008; Utsey, 1998), findings in general indicate that perceptions of racism are inversely associated with psychological well-being and positively associated with psychological distress. In their review of the literature on community samples, Williams, Neighbors, and Jackson (2003) concluded that discrimination and racism are “generally associated with poor health status” and that the “association was the strongest in the case of mental health” compared to physical health (p. 202). This conclusion has been supported by subsequent narrative reviews across sample types. For example, Paradies (2006) reviewed 138 studies examining the association between perceived racism and health published from 2000 to 2004, and Williams and Mohammed (2009) reviewed an additional 115

empirical studies published from 2005 to 2007. The 253 studies included in these two reviews reflected an international perspective and included European, Asian, African, and Middle Eastern countries, as well as Australia. On the basis of the reviews, the authors also concluded that perceptions of racism tend to be negatively associated with both mental and physical health. This conclusion was echoed in Carter’s (2007) review of the literature with only U.S. samples. However, it should be noted that the findings in these reviews are not conclusive and also are not specific to Black Americans.

Most of the literature reviews examining the link between perceived racism and mental health are narrative reviews. We found two published meta-analyses addressing the relations between discrimination and mental health (Lee & Ahn, 2011; Pascoe & Richman, 2009). Findings from the latter review supported earlier conclusions outlining the adverse influence of perceived discrimination on mental health. In particular, Pascoe and Richman (2009) found a negative small average correlation ($r = -.16$) between perceived discrimination and mental health across 105 studies. In this study the independent effects of racial discrimination were not separated from non-race-based discrimination such as gender discrimination. Among Asian and Asian American samples, Lee and Ahn (2011) also found a small average correlation between perceived racism and psychological distress ($r = .23$). Collectively, these findings suggest a significant link between perceived discrimination and mental health among marginalized groups. These findings, however, do not provide evidence for the association between perceived racism and mental health among Black Americans.

The current study therefore was designed to examine the association between perceptions of racism and mental health among

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Black Americans through a statistical review of the empirical literature. There are a number of advantages of meta-analysis over narrative reviews of the literature. As illustrated by Pascoe and Richman (2009), meta-analysis provides the ability to estimate the strength of the relation between variables such as perceived discrimination and mental health while also allowing for control of such important factors as variation in instrumentation, scientific rigor of research, and potential for publication bias. Another benefit of meta-analysis is the ability to calculate a weighted effect size to account for the variance in sample sizes of the studies included in the systematic review. Our exclusive focus on Black Americans in this study was guided by the following: (a) the fact that Black Americans on average report higher levels of exposure to racism and discrimination than do other racially marginalized groups (Kessler, Mickelson, & Williams, 1999; Pieterse, Carter, Evans, & Walter, 2010; Sanders Thompson, 2006); (b) the initial conceptual models of racism-related stress largely draw on the experiences of Black Americans; (c) to date there has not been an empirical review of the relation between perceived racism and mental health among Black Americans; and (d) the nature of race-related health disparities within American society (Brondolo, Gallo, & Myers, 2009). The Institute of Medicine's "Unequal Treatment" report (Smedley, Stith, & Nelson, 2003) as well as the Surgeon General's (U.S. Department of Health and Human Services, 2001) report on race, ethnicity, and culture in mental health have identified racism and racial discrimination as major contributing factors in the more negative health outcomes experienced by Black Americans. As such, a more definite statement on the relation between perceived racism and mental health, based on a statistical review of the literature, has potential to provide needed clarity in current discussions on the health and well-being of Black Americans.

Racism, Mental Health, and Black Americans

The influence of racial discrimination on Black individuals has been widely documented in a vast body of interdisciplinary literature. Works by DuBois (1898), Fanon (1963; 1967), and Feagin (2001), though separated by a century in time, speak to a common theme—experiences of racism exact a significant psychological toll on people. Racism has been defined as an ideology of racial superiority followed by discriminatory and prejudicial behavior in three domains: individual, institutional, and cultural (Jones, 1972, 1997; Neville & Pieterse, 2009). Jones and Carter (1996) defined racism as

the transformation of racial prejudice into individual racism through the use of power directed against racial group(s) and their members, who are defined as inferior by individuals, institutional members and leaders, and which is reflected in policy and procedures with the intentional and unintentional support and participation of the entire race and dominant culture. (p. 3)

Discrimination, on the other hand, is the negative actions and behaviors that are directed at a person or group because of their marginal social status (Jones & Carter, 1996). For most marginal or oppressed groups, unfair treatment or inequality characterizes their experiences. Perceived racism therefore can occur on multiple levels (interpersonal, institutional, cultural) and can be appraised as stressful (racism-related stress). Thus, a Black person

can report exposure (frequency) to racism and/or racial discrimination, the extent to which the event is experienced as stressful (appraisal), or both (Carter, 2007).

Theoretical models that outline the psychological influence of racism have drawn heavily on Lazarus and Folkman's (1984) transactional model of stress and describe stress associated with racism-related experiences as influencing social status and psychological resources (Clark et al., 1999; Harrell, 2000). Guided by these conceptual models as well as the presence of psychometrically sound measures of perceived racism (see Utsey, 1998, for a review), researchers have produced a significant amount of empirical work focused on various psychological outcomes associated with perceived racism. Klonoff, Landrine, and Ullman's (1999) study illustrates the typical approach to examining mental health in the context of perceived frequency and stressfulness of racist events. Klonoff et al. used the Schedule of Racist Events (Landrine & Klonoff, 1996) and the Hopkins Symptom Checklist (Derogatis, Lipman, Rickles, Uhlenhuth, & Covi, 1974) as measures of mental health. Although Klonoff et al.'s study is reflective of both the methodology and findings associated with perceived racism research among Black Americans, it is important to note that these findings are not conclusive. In their review of the empirical literature focused on perceived racism among Black Americans, Williams and Williams-Norris (2000) identified some studies in which a statistically significant association between perceived racism and mental health was not identified (e.g., Fischer & Shaw, 1999). Furthermore, more recent studies have suggested that when variables such as generic life stress are included in the statistical models, the effect of perceived racism decreases and in some instances disappears (Ong, Fuller-Rowe, & Burrow, 2009; Pieterse & Carter, 2007; Woods-Giscombe & Lobel, 2008). Thus, research findings suggest perceived racism is positively associated with psychological distress; however, variability in the findings could be associated with the manner in which racism and mental health are operationalized. Thus, findings might vary depending upon whether researchers assessed only exposure (frequency of racial encounters), perceptions of stress associated with racism (appraisal of the racial encounter), or both. Additionally, findings might vary based on the specific outcome measure used.

The primary method for assessing perceived racism among Black Americans involves using a self-report measure or an interview format that allows for the documentation of the frequency and/or appraisal of stressfulness of each perceived racial discrimination experience (Kressin et al., 2008; Utsey, 1998). The commonly used measures in the literature include the Everyday Discrimination Scale (Williams, Yu, Jackson, & Anderson, 1997), the Experiences of Discrimination Scale (Krieger, 1990), the Index of Race-Related Stress (IRRS; Utsey & Ponterotto, 1996), the Racism and Life Experiences Scales (RaLES; Harrell, 1997), the Perceived Racism Scale (McNeilly et al., 1996), and the Schedule of Racist Events (SRE; Landrine & Klonoff, 1996). Additionally, researchers have used items taken from the National Survey of Black Americans (NSBA; Jackson et al., 1996) or have created items for their specific study. In studies that use measures with very little psychometric support, the scales have ranged from single-item measures to atheoretical measures where minimal if any psychometric support is provided. In fact, Kressin et al. (2008) found that roughly 50% of racial discrimination measures identi-

fied in the literature do not have corresponding psychometric data. In the assessment of psychological functioning, a wide range of well-established outcome measures has been used to examine the influence of racism and discrimination on mental health. These measures include the Mental Health Inventory (Veit & Ware, 1983), Brief Symptom Inventory-18 (Derogatis, 2001), Hopkins Symptoms Checklist (Derogatis et al., 1974), Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977), Beck Anxiety Inventory (Beck, Epstein, Brown, & Steer, 1988), Rosenberg Self-Esteem Scale (Rosenberg, 1965), Symptom Checklist-90 (Derogatis, 1994), Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983), and the Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffen, 1985). All measures are self-report, with some prescribing a specific time frame on which the respondent needs to reflect.

Given that the assessment of psychological constructs is influenced both by theoretical specificity and by consistency of measurement (Cronbach, 1947; Cronbach & Meehl, 1953), some of the equivocal findings in the literature may be due to inconsistencies in how perceived racism and mental health are measured (Williams & William-Morris, 2000). As noted above, the research reflects significant variability in the operationalization of perceived racism. Some studies focus on frequency of racist incidents, and others focus on appraisal of stress associated with racism. Additionally, there are differences in the psychological outcome measured; some studies include assessments of general psychological distress, and others examine specific psychological symptoms such as depression, anxiety, somatization, and paranoia (Carter, 2007). Therefore, the extent to which findings in the perceived racism–mental health literature are reflective of variability associated with the manner in which both racism and mental health are operationalized is unclear.

Purpose of Study and Research Question

The current research sought to explore the magnitude of the relation between perceived racism and mental health among Black Americans. In this study, we used the Pearson product–moment correlation (i.e., r) as the measure of effect size. Guided by Pascoe and Richman’s (2009) meta-analytic review, we included several moderator variables in order to examine the influence of these variables on the strength of the perceived racism–mental health association. Moderator variables are important when conducting a meta-analytic review because identifying and testing moderators provides a more specific understanding of the association between study variables that contributes to further refinement of theory (Rosenthal & DiMatteo, 2001). On the basis of our review of the literature, we identified five potential moderators. First, there are many ways in which perceived racism is operationalized and measured in the literature. Thus, we explored the moderating role of the type of the racism scale used in the study by comparing scales assessing frequency of racism incidents versus appraised stressfulness of perceived racism. Next, we explored whether measurement precision moderated the overall effect. The self-report measures used to assess perceived racism vary in terms of psychometric support. In the current research, we specifically examined the reliability of measures used to assess perceived racism as an indicator of measurement precision. Third, we examined the moderating role of sample type (i.e., samples drawn from

college student populations vs. community-based samples) because the experiences of college students might be different from those in community samples (Swim, Hyers, Cohen, Fitzgerald, & Bylsma, 2003). Fourth, we explored publication type as a moderator. Finally, we tested whether the strength of association was different for specific mental health outcomes, such as depression, quality of life, or general distress.

Method

Study Selection

We conducted a literature search to identify studies that met the following inclusion criteria: (a) studies that included a specific analysis of mental health indicators associated with perceived racism, (b) studies that focused on Black American adults in the United States, and (c) studies published in peer-reviewed journals or dissertations between 1996 and 2011. To start the search, we examined previously published reviews (e.g., Carter, 2007; Paradies, 2006; Williams & Williams-Morris, 2000) and followed with an extensive literature search using databases that included PsycINFO, MEDLINE, Social Sciences Abstracts, CINAHL (Cumulative Index to Nursing and Allied Health Literature), and Social Work Abstracts. For this search we included the research terms *racism*, *racial discrimination*, *ethnic discrimination*, *racist*, *Black*, *African American*, *racial trauma*, *racial oppression*, *racial harassment*, and *perceived racism*. This search resulted in the identification of 138 empirical investigations. We next examined the identified studies to ensure that they contained mental health indicators (physical health indicators were excluded) and enough statistical information to calculate an effect size for associations between perceived racism and mental health. In cases where dissertations were later published as articles, the published article was used. Sixty-six studies with a combined sample size of $N = 18,140$ met these inclusion criteria and constituted the data set for this study.

Training and Coding Procedures

The coding team consisted of five graduate students and one undergraduate student. Before study coding began, the first and third authors developed a coding manual that was used by the first author to train the coders. The training included (a) a general review of psychological theory pertaining to racism and psychological outcome, (b) identification of measures of perceived racism and psychological outcomes, (c) instruction on the psychometric properties of the racism-related measures, (d) identification of the appropriate effect size, and (e) identification of moderator information (described below). The instruction and practice coding sessions took place over several weeks. Coding on the full set of studies began only after a 90% interrater agreement was established during the practice sessions.

Moderator Coding

Five moderator variables were coded for each study by examining additional information about each effect size and study. The first moderator, *racism scale type*, was based on the perceived racism scale used in the correlation. Racism scale type was coded

as assessing frequency (i.e., how often the person experienced an incident) or appraisal (i.e., the level of stress associated with each incident). Studies containing only frequency or appraisal effect sizes were coded in this way. Consistent with Spengler et al. (2009), studies containing both frequency and appraisal effect sizes were coded as “combined.” We created the combined category because the study was the unit of analysis, which is described in greater detail below. The second moderator, *measurement precision*, was based on the reported reliability estimate of the racism scale for each reported effect size in the current study. We coded scales with a reliability of $< .70$ as having low precision and those with a reliability of $\geq .70$ as having high precision; as for the racism scale type coding, studies containing both high and low precision scales were coded as “combined.” For the third moderator, *sample type*, we classified studies as community, college, or “combined” samples. For the fourth moderator, *publication type*, we coded each study as a published journal article or dissertation.

For the fifth moderator, *outcome type*, we classified the outcome used in each individual effect size according to mental health clusters: (a) anxiety or depression, (b) psychiatric symptoms (somatic, posttraumatic stress disorder [PTSD], obsessive-compulsive disorder, psychotic processes, paranoia, but not anxiety or depression), (c) life satisfaction or self-esteem, and (d) general distress (e.g., distress, well-being, mental health). The selection of these mental health clusters as unique outcome types was guided by distinctions in the literature in relation to the prevalence and severity of mental distress (World Health World Mental Health Consortium, 2004). Because most studies included many different types of mental health outcomes (e.g., depression and life satisfaction), it was not tenable to create a combined category or to consider the study as the unit of analysis for the outcome type moderator. Instead, we classified each effect into one of the mental health clusters and then used a shifting unit of analysis approach to examine moderation, as described below (Cooper, 2010). For all moderators, any coding discrepancies were resolved through discussion by the first and second authors.

Data Integration and Analytic Plan

The Pearson product-moment correlation was selected as our measure of effect size because our research question focused on associations between perceived racism and mental distress, most often assessed with a correlation. All correlations were coded to represent a positive association between mental distress and racial discrimination. For example, we reversed the direction of association for variables indicating mental health and well-being. Most studies (86%) reported more than one correlation between experiences of racism and mental distress, such as correlations between experiences of racism with both depression and anxiety. This resulted in 331 correlations across the 66 studies. Because the sample from each study should contribute only once to the combined effect size and we wanted to avoid violating assumptions of independence, we selected the study as the unit of analysis (Cooper, 2010). Therefore, as recommended by Borenstein, Hedges, Higgins, and Rothstein (2009) and Cooper (2010), we averaged all correlations within one study to create one effect size for each study. Because we planned to test measurement precision as a moderator, we did not correct for measurement error (Hunter & Schmidt, 1994; Quintana & Minami, 2006). When no correlation

coefficient was reported, procedures from Borenstein (2009) were followed to convert other statistical information (e.g., simple regression coefficients with standard deviations, odds ratios, and dichotomous racism measures) to a correlation coefficient. For example, simple regression coefficients were multiplied by (SD_x/SD_y) to obtain the correlation, whereas for other effects the standardized mean difference (i.e., d) was calculated for independent groups and then converted to a correlation. As recommended by Cooper (2010), studies reporting only multiple regression coefficients were not included because these represent partial correlations. Studies with multiethnic samples were included if effect sizes were reported separately for Black Americans.

We used a random-effects model when aggregating effect sizes from each study for the overall effect size and weighted the contribution of each study's effect size by the inverse of its variance (Hedges & Olkin, 1985; Quintana & Minami, 2006). We used a random-effects model, as our purpose was to generalize to the population of studies examining perceived racism and mental health (Hedges & Vevea, 1998). As recommended by Hedges and Olkin (1985) we used Fisher's r to Z transformation to convert correlations before aggregating effect sizes across studies. As recommended by methodologists (Borenstein et al., 2009; Hedges & Pigott, 2004; Overton, 1998), we used a mixed-effects model for the moderation analyses, where aggregated studies within each level of the moderator are considered random and the levels of the moderator variable are fixed. This approach allows for testing differences between levels of the moderator and is more conservative than a fixed-effects approach (Hedges & Pigott, 2004; Overton, 1998). We used Comprehensive Meta-Analysis Version 2.2.057 (Borenstein, Hedges, Higgins, & Rothstein, 2010) for all analyses.

Because of the multiple types of outcomes within each study for the outcome type moderator, we used a shifting unit of analysis approach to retain as many effects as possible while minimizing violations of statistical independence (Cooper, 2010). For this moderator we shifted the unit of analysis from the study to each effect size (Cooper, 2010). Each effect was first classified into one of the four levels of the outcome type moderator. If multiple effects from the same study were present in the same level of the moderator, these effects were averaged to contribute only one effect. For example, if one study contained two effects for psychiatric symptoms and three effects for general distress, the two psychiatric effects would be averaged to contribute one effect to psychiatric symptoms and the three general distress effects would be averaged to contribute one effect to general distress. After completion of this initial step of including only one effect per study for each level of the moderator, effects were aggregated and tested with the same mixed-effects approach as other moderators (Hedges & Pigott, 2004). Although some studies may contribute effects to more than one level of the moderator and possibly violate statistical independence, this shifting unit of analysis approach balances including as much data as possible and minimizing such violations (Cooper, 2010).

Publication Bias and Counternull

We used three methods to determine whether publication bias was present in our sample of studies. Publication bias is the tendency of published studies to contain significant effect sizes

with large sample sizes, whereas other unpublished studies that include nonsignificant effects may also exist (Duval & Tweedie, 2000b). We first examined funnel plots to determine if publication bias was present (Egger, Smith, Schneider, & Minder, 1997). Funnel plots use the size of effect, precession of the estimate, and sample size to produce a plot that resembles a symmetric inverted funnel if no publication bias is present (Egger et al., 1997). Second, we examined Egger's regression intercept where a non-significant intercept provides statistical evidence for a lack of bias (Egger et al., 1997). Third, as recommended by Quintana and Minami (2006), we computed the fail-safe N that indicates the number of unpublished studies with an average effect size of 0 that would have to be published to overturn the results. We used Rosenthal's (1979) fail-safe N and his criterion that the value should be over five times greater (i.e., $5k + 10$) than the number of studies in the meta-analysis (in this case, 340 studies). If bias was present we planned to use Duval and Tweedie's (2000a, 2000b) trim and fill method of imputing studies to adjust for this bias. We also planned to present the counternull value for nonsignificant findings (Quintana & Minami, 2006; Rosenthal & Rubin, 1994; Rosnow & Rosenthal, 2003).

Results

Overall Effect Size (r) Aggregated Across All Studies

As displayed in Table 1, the aggregated correlation between perceived racism and psychological distress for 66 studies when

using a random-effects model was $r = .20$, 95% CI [0.17, 0.22]. This significant correlation indicates that greater perceived racism was associated with greater psychological distress and that we can be 95% confident that the association in the population falls between $r = .17$ and $r = .22$. To assess for publication bias we examined the funnel plot, which was rather symmetric and did not appear to show bias (available upon request from the authors). Moreover, Egger's regression intercept was not significant, indicating a lack of bias, $t(64) = 1.01$, $p = .32$, 95% CI [-0.61, 1.85]. The fail-safe N was 9,825 studies, which surpassed Rosenthal's criteria of 340 described earlier. These results provided graphical and statistical support that publication bias was not present; therefore, trim and fill procedures were not used. A counternull is not presented because the effect size was significant.

Moderators

Before testing for moderators we examined the homogeneity statistic, Q , to explore potential variability among effect sizes (Hedges & Olkin, 1985). A significant Q statistic indicates possible systematic differences in the effect size among studies and provides justification to examine moderators to account for such differences (Quintana & Minami, 2006). As expected, the Q statistic was significant. This indicates heterogeneity and provided further justification to examine moderators, $Q(65) = 177.51$, $p < .05$.

We then tested each moderator by examining the statistic, where a significant result indicates different mean effect sizes between

Table 1
Weighted Mean Effect Sizes for Association Between Perceived Racism and Mental Health

Variable and levels	Between-group effect (Q_B^*)	k	Mean weighted effect size (r_{i+})	95% CI for r_{i+}	
				<i>LL</i>	<i>UL</i>
All studies		66	.20	0.17	0.22
Racism scale type	2.56				
Frequency		29	.22	0.18	0.25
Appraisal		4	.14	0.04	0.24
Combined		33	.19	0.15	0.23
Measurement precision	1.58				
High		47	.20	0.17	0.23
Low		1	.18	-0.02	0.35
Combined		5	.15	0.06	0.24
Missing		13	.22	0.15	0.28
Sample type	2.34				
Community		33	.19	0.15	0.23
College		22	.23	0.19	0.27
Combined		11	.18	0.10	0.25
Publication type	0.01				
Journal article		48	.20	0.17	0.23
Dissertation		12	.20	0.12	0.27
Outcome type ^a	15.11*				
Anxiety/depression		29	.20 _{a,c}	0.16	0.23
Psychiatric symptoms		12	.27 _a	0.20	0.34
Life satisfaction/self-esteem		17	.12 _{b,c}	0.06	0.17
General distress		26	.24 _a	0.19	0.28

Note. CI = confidence interval; *LL* = lower limit; *UL* = upper limit.

^a A shifting unit of analysis approach was used for outcome type. Effect sizes for variable levels not sharing subscripts are significantly different ($p < .05$), using a Bonferroni-corrected significance level for six comparisons of .008.

* $p < .05$.

different levels of the moderator (Hedges & Pigott, 2004). As displayed in Table 1, the moderators of racism scale type, measurement precision, sample type, and publication type did not exhibit differences in the mean effect size between levels of the moderator; however, outcome type was significant. Follow-up contrast tests, formed following Hedges and Pigott (2004), used a Bonferroni-adjusted significance level of $.05/6$ (i.e., $.008$). Results showed that the effects for psychiatric symptoms ($r = .27$) and general distress ($r = .24$) were significantly stronger than the effect for life satisfaction/self-esteem ($r = .12$). All other pairwise comparisons were nonsignificant.

Discussion

Narrative and meta-analysis reviews have documented the link between perceived discrimination and mental health. This is the first meta-analysis focusing on this association specifically for Black Americans, a population that has reported on average more incidents of racism than other racial minority groups and for which racism has resulted in a range of health disparities. Meta-analysis was employed to account for individual study variation and to determine the strength of the possible effect of racism-related stress on Black Americans. Findings suggest that the mental health of Black Americans is negatively impacted by exposure to racism. More specifically, the greater the exposure to and appraised stressfulness of racist events, the greater the likelihood of reporting mental distress. Moreover, effects for psychiatric symptoms and general distress were stronger than effects for life satisfaction and self-esteem.

When the moderating effects of type of psychological outcome (e.g., depression, anxiety, somatization, PTSD) are examined, the findings lend support to theorists who are calling for experiences of racism to be considered within the context of trauma (Carter, 2007; Helms, Nicolas, & Green, 2010). Somatization, interpersonal sensitivity, and anxiety are common responses to trauma (Carlson, 1997) and in fact have a strong correlation with PTSD diagnosis (Moreau & Zisook, 2002). Although we recognize that the current findings do not reflect a sole examination of PTSD, it is nevertheless important to note that among Black Americans, negative psychological responses to racism carry many features associated with trauma. Additionally, the findings of the current meta-analysis are consistent with a growing empirical literature that has reported positive associations between negative racial experiences and trauma-related symptoms (Ford, 2008; Khaylis, Waelde, & Brice, 2007; Pieterse et al., 2010). Findings also suggest that the relationship between perceived racism and self-reported depression and anxiety is quite robust, providing an important reminder that experiences of racism may play an important role in the health disparities phenomenon. To illustrate, Black Americans have been noted to have higher rates of hypertension, and hypertension has been associated with stress and depression (Heard, Whitfield, Edwards, Bruce & Beech, 2011). Given the significant physical morbidity associated with depression and anxiety (Sala, Cox, & Sareen, 2008) and the finding that depression is associated with increased noncompliance with medical care (DiMatteo, Lepper, & Croghan, 2000), the interrelationship between experiences of racism, psychological functioning, and physical health should be more clearly explicated (Mays, Cochran, & Barnes, 2007) and examined in future research.

The fact that precision of measurement did not appear to influence the strength of the association between perceptions of racism and mental health was a surprise. Yet, it should be noted that the majority of studies used measures that evidence acceptable reliability estimates. This is an encouraging finding, given the fact that some racial discrimination studies either do not report psychometric data or use measures that do not appear to have high reliability (Kressin et al., 2008). Based on our review, however, it appears that racism and racial discrimination studies on Black Americans do not follow this trend. Finally, the lack of significant moderation findings for sample type, publication type, and racism scale type suggest that the relationship between perceived racism and mental health for Black Americans is quite robust. Irrespective of differences in the assessment of perceived racism, as well as differences in types of sample, the experience of racism among Black Americans is ubiquitous and is shown in this study to be associated with psychological distress.

Limitations and Future Directions

This study provides one of the first meta-analyses to document the strength of association between perceived racism and mental health among Black American adults. As with all studies, there are some limitations to be addressed. In regard to outcome measures, the majority of studies employ measures of depression or anxiety. As such, the comparison across outcomes was likely influenced by the smaller number of articles assessing specific psychiatric symptoms. It is unclear how an increase in these types of studies would alter the effect size reported in the current investigation; however, this does suggest the need for future research to examine associations between perceptions of racism and specific types of psychological distress beyond self-reported depression and anxiety. Additionally, analyzing moderators simultaneously would strengthen future research.

A further limitation was our inability to control for the potential effects of general life stress in the association between perceived discrimination and mental health. The role of general life stress has been noted to be a potential confound when measuring racism-related stress. Studies have indicated that the effects of racism-related stress tend to diminish when controlling for general life stress (Pieterse & Carter, 2007; Woods-Giscombe & Lobel, 2008). Investigators tend to treat racism-related stress or perceived racism as a distinct type of stress and do not take into account the potentially confounding role of general life stress. Given that racism is a ubiquitous event for Black Americans, the failure to attend to the overlap between racism-related stress and general life stress in the extant literature might be associated with a potential underestimation of the relationship between actual racism and mental health among this population. Future studies that specifically explore the overlap between racism-related stress and general life stress might provide further clarity as to the experience and correlates of racism for Black Americans.

Based on the current review, it appears that there is a general need for greater specificity in this area of research. For example, studies could focus on specific time periods in which the racial discrimination experience or racist event occurred (e.g., 2 weeks, past month) as well as focus on the impact of specific setting or location of the discrimination (e.g., work, online, school). These types of examination might produce a better understanding of the

range of potentially relevant moderators in the perceived discrimination–mental health link (National Research Council, 2004). Additionally, the ongoing refinement of measures designed to assess the frequency and stressfulness of perceived racism are needed in order to have greater confidence in the findings. New assessment tools utilizing item response analysis (Fox & Jones, 1998; Harvey & Hammer, 1999) would be useful in linking specific types of racist events with specific types of outcomes. Finally, extant racism-related stress measures tend not to include items that reflect processes such as stereotype threat (Steele, 1997), implicit bias and aversive racism (Pearson, Dovidio, & Gaertner, 2009), and internalized racism (Speight, 2007) and therefore limit the type of racism that participants might in fact experience and be able to report. Thus, even though the current findings reveal that the association between perceived racism and mental health is quite robust and tends not to vary along factors such as sample or racism scale type, there is still a need for greater specificity with regard to the influence of specific types of racism on the mental health of Black Americans.

Clinical and Training Implications

Scholars note that an accurate assessment protocol is the foundation of effective psychotherapeutic intervention (Ridley, Li, & Hill, 1998). Given the growing appreciation of the role of racism in the psychological health of Black Americans, we believe that an assessment of racism-related experiences should be part of a standard intake protocol when working with Black American clients. Assessing trauma is a routine aspect of the intake interview (Sommers-Flanagan & Sommers-Flanagan, 2009); therefore, when working with Black clients the assessment of trauma should be expanded to include experiences of race-related trauma and stress (Carter, 2007). With regard to therapeutic interventions, providing Black clients with a framework in which to understand and make sense of the psychological toll associated with exposure to racism might also ameliorate the sense of powerlessness and shame that is often experienced by individuals who encounter various forms of race-based oppression (Franklin, Boyd-Franklin, & Kelly, 2006). Additionally, the focus of counseling and psychotherapy could include the establishment of adaptive coping mechanisms and the teaching of strategies for empowerment and resistance (Pieterse, Howitt, & Naidoo, 2011). Research indicates that Black Americans who endorse the resistance of anti-Black messages and attitudes also report higher levels of self-esteem (Pierre & Mahalik, 2005).

Finally, in view of the ongoing presence of racism within American society, antiracism activism should be a central aspect of the training of counselors and counseling psychologists (Pieterse, 2009). This approach is entirely consistent with counseling psychology's growing focus on social justice (Miller & Sendrowitz, 2011).

Summary and Conclusion

In sum, findings from the current meta-analysis support the notion that perceived racism is associated with adverse psychological outcomes. Ongoing investigations should focus on examining the potential moderating effect of various psychosocial variables, such as religious orientation, racial socialization, social

support, and antiracism activism. Additionally, clinicians should be cognizant of the manner in which racism shapes the lives of Black Americans, and counseling psychology educators should include antiracism advocacy in their teaching curricula. These are critical steps toward ameliorating the adverse psychological outcomes associated with perceived racism among Black American adults.

References

- References marked with an asterisk indicate studies included in the meta-analysis. For a complete list, go to <http://dx.doi.org/10.1037/a0026208.supp>
- Beck, A. T., Epstein, N., Brown, G., & Steer, R. A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology, 56*, 893–897. doi:10.1037/0022-006X.56.6.893
- Borenstein, M. (2009). Effect sizes for continuous data. In H. Cooper, L. V. Hedges, & J. C. Valentine (Eds.), *Handbook of research synthesis and meta-analysis* (2nd ed., pp. 221–235). New York, NY: Russell Sage Foundation.
- Borenstein, M., Hedges, L. V., Higgins, J. P., & Rothstein, H. R. (2009). *Introduction to meta-analysis*. London, England: Wiley.
- Borenstein, M., Hedges, L. V., Higgins, J. P., & Rothstein, H. R. (2010). *Comprehensive Meta-Analysis Version 2.2.057* [Computer software]. Englewood, NJ: Biostat.
- Brondolo, E., Gallo, L. C., & Myers, H. F. (2009). Race, racism and health: Disparities, mechanisms, and interventions. *Journal of Behavioral Medicine, 32*, 1–8. doi:10.1007/s10865-008-9190-3
- Carlson, E. B. (1997). *Trauma assessments: A clinician's guide*. New York, NY: Guilford Press.
- Carter, R. T. (2007). Racism and psychological and emotional injury: Recognizing and assessing race-based traumatic stress. *Counseling Psychologist, 35*, 13–105. doi:10.1177/0011000006292033
- Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans: A biopsychosocial model. *American Psychologist, 54*, 805–816. doi:10.1037/0003-066X.54.10.805
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*, 385–396. doi:10.2307/2136404
- Cooper, H. (2010). *Research synthesis and meta-analysis: A step-by-step approach* (4th ed.). Thousand Oaks, CA: Sage.
- Cronbach, L. J. (1947). Test "reliability": Its meaning and determination. *Psychometrika, 12*, 1–16. doi:10.1007/BF02289289
- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin, 52*, 281–302. doi:10.1037/h0040957
- Derogatis, L. R. (1994). *Symptom Checklist-90-R (SCL-90-R). Administration, scoring and procedures manual* (3rd ed.). Minneapolis, MN: National Computer Systems.
- Derogatis, L. R. (2001). *Brief Symptom Inventory (BSI)-18. Administration, scoring and procedures manual*. Minneapolis, MN: National Computer Systems.
- Derogatis, L. R., Lipman, R. S., Rickles, K., Uhlenhuth, E., & Covi, L. (1974). The Hopkins Symptom Checklist: A self-report symptom inventory. *Behavioral Science, 19*, 1–15. doi:10.1002/bs.3830190102
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffen, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment, 49*, 71–75. doi:10.1207/s15327752jpa4901_13
- DiMatteo, M. R., Lepper, H. S., & Croghan, T. W. (2000). Depression is a risk factor for noncompliance with medical treatment: Meta-analysis of the effects of anxiety and depression on patient adherence. *Archives of Internal Medicine, 160*, 2101–2107. doi:10.1001/archinte.160.14.2101
- DuBois, W. E. B. (1898, January). The study of the Negro problems.

- Annals of the American Academy of Political and Social Science*, *XI*, 1–23.
- Duval, S., & Tweedie, R. (2000a). A nonparametric “trim and fill” method of accounting for publication bias in meta-analysis. *Journal of the American Statistical Association*, *96*, 89–98. doi:org/10.2307/2669529
- Duval, S., & Tweedie, R. (2000b). Trim and fill: A simple funnel plot-based method of testing and adjusting for publication bias in meta-analysis. *Biometrics*, *56*, 455–463. doi:10.1111/j.0006-341X.2000.00455.x
- Egger, M., Smith, G. D., Schneider, M., & Minder, C. (1997). Bias in meta-analysis detected by a simple, graphical test. *British Medical Journal*, *315*, 629–634.
- Fanon, F. (1963). *The wretched of the earth*. New York, NY: Grove Press.
- Fanon, F. (1967). *Black skin, White masks*. New York, NY: Grove Press.
- Feagin, J. R. (2001). *Racist America: Roots, current realities, and future directions*. New York, NY: Routledge.
- *Fischer, A. R., & Shaw, C. M. (1999). African Americans’ mental health and perceptions of racial discrimination: The moderating effects of racial socialization experiences and self-esteem. *Journal of Counseling Psychology*, *46*, 395–407. doi:10.1037/0022-0167.46.3.395
- Ford, J. D. (2008). Trauma, posttraumatic stress disorder, and ethnoracial minorities: Toward diversity and cultural competence in principles and practices. *Clinical Psychology: Science and Practice*, *15*, 62–67. doi:10.1111/j.1468-2850.2008.00110.x
- Fox, C. M., & Jones, J. A. (1998). Uses of Rasch modeling in counseling psychology research. *Journal of Counseling Psychology*, *45*, 30–45. doi:10.1037/0022-0167.45.1.30
- Franklin, A. J., Boyd-Franklin, N., & Kelly, S. (2006). Racism and invisibility, race-related stress, emotional abuse and psychological trauma for people of color. *Journal of Emotional Abuse*, *6*, 9–30. doi:10.1300/J135v06n02_02
- Harrell, S. P. (1997). *The Racism and Life Experiences Scales (RaLES)*. Unpublished manuscript, California School of Professional Psychology.
- Harrell, S. P. (2000). A multidimensional conceptualization of racism-related stress: Implications for the well-being of people of color. *American Journal of Orthopsychiatry*, *70*, 42–57. doi:10.1037/h0087722
- Harvey, R. J., & Hammer, A. L. (1999). Item response theory. *Counseling Psychologist*, *27*, 353–383. doi:10.1177/0011000099273004
- Heard, E., Whitfield, E. K., Edwards, C. L., Bruce, M. A., & Beech, B. M. (2011). Mediating effects of social support on the relationship among perceived stress, depression, and hypertension in Africa Americans. *Journal of the National Medical Association*, *103*, 116–122.
- Hedges, L., & Olkin, I. (1985). *Statistical methods for meta-analysis*. San Diego, CA: Academic Press.
- Hedges, L. V., & Pigott, T. D. (2004). The power of statistical tests for moderators in meta-analysis. *Psychological Methods*, *9*, 426–445. doi:10.1037/1082-989X.9.4.426
- Hedges, L. V., & Vevea, J. L. (1998). Fixed- and random-effects models in meta-analysis. *Psychological Methods*, *3*, 486–504.
- Helms, J. E., Nicholas, G., & Green, C. E. (2010). Racism and ethnoviolence as trauma: Enhancing professional training. *Traumatology*, *16*, 53–63. doi:10.1177/1534765610389595
- Hunter, J. E., & Schmidt, F. L. (1994). Correcting for sources of artificial variation across studies. In H. Cooper & L. V. Hedges (Eds.), *The handbook of research synthesis* (pp. 323–336). New York, NY: Russell Sage Foundation.
- *Jackson, J. S., Brown, T. N., Williams, D. R., Torres, M., Sellers, S. L., & Brown, K. (1996). Racism and the physical and mental health status of African Americans: A thirteen year national panel study. *Ethnicity & Disease*, *6*, 132–147.
- Jones, J. M. (1972). *Prejudice and racism*. New York, NY: McGraw-Hill.
- Jones, J. M. (1997). *Prejudice and racism* (2nd ed.) New York, NY: McGraw Hill.
- Jones, J. M., & Carter, R. T. (1996). Racism and white racial identity: Merging realities. In B. Bowser & R. Hunt (Eds.), *Impacts of racism on white America* (2nd ed., pp. 1–23). Thousand Oaks, CA: Sage.
- 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.
- *Khaylis, A., Waelde, L., & Brice, E. (2007). The role of ethnic identity in the relationship of race-related stress to PTSD symptoms among young adults. *Journal of Trauma and Dissociation*, *8*, 91–105. doi:10.1300/J229v08n04_06
- *Klonoff, E. A., Landrine, H., & Ullman, J. B. (1999). Racial discrimination and psychiatric symptoms among Blacks. *Cultural Diversity and Ethnic Minority Psychology*, *5*, 329–339. doi:10.1037/1099-9809.5.4.329
- Kressin, N. R., Raymond, K. L., & Manze, M. (2008). Perceptions of race/ethnicity discrimination: A review of measures and evaluation of their usefulness for the health care setting. *Journal of Health Care for the Poor and Underserved*, *19*, 697–730. doi:10.1353/hpu.0.0041
- Krieger, N. (1990). Racial and gender discrimination: Risk factors for high blood pressure? *Social Science & Medicine*, *30*, 1273–1281. doi:10.1016/0277-9536(90)90307-E
- *Landrine, H., & Klonoff, E. A. (1996). The Schedule of Racist Events: A measure of racial discrimination and a study of its negative physical and mental health consequences. *Journal of Black Psychology*, *22*, 144–168. doi:10.1177/00957984960222002
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.
- Lee, D. L., & Ahn, S. (2011). Racial discrimination and Asian mental health: A meta-analysis. *Counseling Psychologist*, *39*, 463–489. doi:10.1177/0011000010381791
- Mays, V. M., Cochran, S. D., & Barnes, N. W. (2007). Race, race-based discrimination, and health outcomes among Black Americans. *Annual Review of Psychology*, *58*, 201–225. doi:10.1146/annurev.psych.57.102904.190212
- *McNeilly, M. D., Anderson, N. B., Armstead, C. A., Clark, R., Corbett, M., Robinson, E. L., . . . Lepisto, E. M. (1996). The Perceived Racism Scale: A multidimensional assessment of the experience of White racism among African Americans. *Ethnicity & Disease*, *6*, 154–166.
- Miller, M. J., & Sendrowitz, K. (2011). Counseling psychology trainees’ social justice interest and commitment. *Journal of Counseling Psychology*, *58*, 159–169. doi:10.1037/a0022663
- Moreau, C., & Zisook, S. (2002). Rationale for a posttraumatic stress spectrum disorder. *Psychiatric Clinics of North America*, *25*, 775–790.
- National Research Council. (2004). *Measuring racial discrimination*. Washington, DC: National Academies Press.
- Neville, H. A., & Pieterse, A. L. (2009). Racism, White supremacy, and resistance: Contextualizing Black American experiences. In H. A. Neville, B. N. Tynes, & S. O. Utsey (Eds.), *Handbook of African American psychology* (pp. 159–174). Thousand Oaks, CA: Sage.
- *Ong, A. D., Fuller-Rowell, T., & Burrow, A. L. (2009). Racial discrimination and the stress process. *Journal of Personality and Social Psychology*, *96*, 1259–1271. doi:10.1037/a0015335
- Overton, R. C. (1998). A comparison of fixed-effects and mixed (random-effects) models for meta-analysis tests of moderator variable effects. *Psychological Methods*, *3*, 354–379.
- Paradies, Y. (2006). A systematic review of empirical research on self-reported racism and health. *International Journal of Epidemiology*, *35*, 888–901. doi:10.1093/ije/dyl056
- Pascoe, E. A., & Richman, L. S. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin*, *135*, 531–554. doi:10.1037/a0016059
- Pearson, A. F., Dovidio, J. F., & Gaertner, S. L. (2009). The nature of contemporary prejudice: Insights from aversive racism. *Social and Personality Compass*, *3*, 1–25. doi:10.1111/j.1751-9004.2009.00183.x

- Pierre, M. R., & Mahalik, J. R. (2005). Examining African self-consciousness and black racial identity as predictors of Black men's psychological well-being. *Cultural Diversity and Ethnic Minority Psychology, 11*, 28–40. doi:10.1037/1099-9809.11.1.28
- Pieterse, A. L. (2009). Teaching anti-racism in counselor training: Reflections on a course. *Journal of Multicultural Counseling and Development, 37*, 141–152.
- *Pieterse, A. L., & Carter, R. T. (2007). An examination of the relationship between general life stress, racism-related stress, and psychological health among Black men. *Journal of Counseling Psychology, 54*, 101–109. doi:10.1037/0022-0167.54.1.10
- Pieterse, A. L., Carter, R. T., Evans, S. A., & Walter, R. A. (2010). An exploratory examination of the associations among racial and ethnic discrimination, racial climate, and trauma-related symptoms in a college student population. *Journal of Counseling Psychology, 57*, 255–263. doi:10.1037/a0020040
- Pieterse, A. L., Howitt, D., & Naidoo, A. V. (2011). Racial oppression, colonization and self-efficacy: Towards an empowerment model for individuals of African heritage. In E. Mpofu (Ed.), *Counseling people of African ancestry* (pp. 93–108). London, England: Cambridge University Press.
- Quintana, S. M., & Minami, T. (2006). Guidelines for meta-analysis of counseling psychology research. *Counseling Psychologist, 34*, 839–877. doi:10.1177/0011000006286991
- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385–401. doi:10.1177/014662167700100306
- Ridley, C. R., Li, L. C., & Hill, C. L. (1998). Multicultural assessment: Reexamination, reconceptualization, and practical implications. *Counseling Psychologist, 26*, 827–912. doi:10.1177/0011000098266001
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rosenthal, R. (1979). The “file drawer problem” and tolerance for null results. *Psychological Bulletin, 86*, 638–641.
- Rosenthal, R., & DiMatteo, M. R. (2001). Meta-analysis: Recent developments in quantitative methods for literature reviews. *Annual Review of Psychology, 52*, 59–83.
- Rosenthal, R., & Rubin, D. B. (1982). A simple, general purpose display of magnitude of experimental effect. *Journal of Educational Psychology, 71*, 166–169.
- Rosnow, R. L., & Rosenthal, R. (2003). Effect sizes for experimenting psychologists. *Canadian Journal of Experimental Psychology, 57*, 221–237.
- Sala, T., Cox, B. J., & Sareen, J. (2008). Anxiety disorders and physical illness comorbidity. In M. J. Zolensky & J. A. J. Smits (Eds.), *Anxiety in health behaviors and physical illness* (pp. 131–154). New York, NY: Springer.
- Sanders Thompson, V. L. (2006). Coping responses and the experience of discrimination. *Journal of Applied Social Psychology, 36*, 1198–1214.
- Smedley, B. D., Stith, A. Y., & Nelson, A. R. (Eds.). (2003). *Unequal treatment: Confronting racial and ethnic disparities in health care*. Washington, DC: National Academic Press.
- Sommers-Flanagan, J., & Sommers-Flanagan, R. (2009). *Clinical interviewing* (4th ed.). Hoboken, NJ: Wiley.
- Speight, S. L. (2007). Internalized racism: One more piece of the puzzle. *Counseling Psychologist, 35*, 126–136. doi:10.1177/0011000006295119
- Spengler, P. M., White, M. J., Ægisdóttir, S., Maugherman, A. S., Anderson, L. A., Cook, R. S., . . . Rush, J. D. (2009). The meta-analysis of clinical judgment project: Effects of experience on judgment accuracy. *Counseling Psychologist, 37*, 350–399. doi:10.1177/0011000006295149
- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist, 52*, 613–629.
- Swim, J. K., Hyers, L. L., Cohen, L. L., Fitzgerald, D. C., & Bylsma, W. H. (2003). African American college students' experiences with everyday racism: Characteristics of and responses to incidents. *Journal of Black Psychology, 29*, 38–67. doi:10.1177/0095798402239228
- U.S. Department of Health and Human Services. (2001). *Mental health: Culture, race, and ethnicity: A supplement to Mental Health: A Report of the Surgeon General*. Washington, DC: Author.
- Utsey, S. O. (1998). Assessing the stressful effects of racism: A review of instrumentation. *Journal of Black Psychology, 24*, 269–288. doi:10.1177/00957984980243001
- *Utsey, S. O., & Ponterotto, J. G. (1996). Development and validation of the Index of Race-Related Stress (IRRS). *Journal of Counseling Psychology, 43*, 1–12. doi:10.1037/0022-0167.43.4.490
- Veit, C. T., & Ware, J. E. (1983). The structure of psychological distress and well-being in general populations. *Journal of Consulting and Clinical Psychology, 51*, 730–742.
- Williams, D. R., & Mohammed, S. A. (2009). Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine, 32*, 20–47. doi: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. doi:10.2105/AJPH.93.2.200
- Williams, D. R., & Williams-Morris, R. (2000). Racism and mental health: The African American experience. *Ethnicity & Health, 5*, 243–268. doi:10.1080/713667453
- Williams, D. R., Yu, Y., Jackson, J., & Anderson, N. (1997). Racial differences in physical and mental health: Socioeconomic status, stress, and discrimination. *Journal of Health Psychology, 2*, 335–351.
- *Woods-Giscombe, C. L., & Lobel, M. (2008). Race and gender matter: A multidimensional approach to conceptualizing and measuring stress in African American women. *Cultural Diversity and Ethnic Minority Psychology, 14*, 173–182. doi:10.1037/1099-9809.14.3.17
- World Health World Mental Health Consortium. (2004). Prevalence, severity and unmet need for treatment of mental disorders in the World Health Organization World Mental Health surveys. *JAMA, 291*, 2581–2590. doi:10.1001/jama.291.21.2581

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