Journal of Racial and Ethnic Health Disparities (2020) 7:785–806
https://doi.org/10.1007/s40615-020-00726-6

Health and Health-Related Correlates of Internalized Racism Among Racial/Ethnic Minorities: a Review of the Literature

Drexler James[1]

Received: 21 November 2019 / Revised: 30 January 2020 / Accepted: 9 February 2020 / Published online: 21 February 2020

Abstract

Internalized racism (IR) is a form of racism that leads people to internalize beliefs and stereotypes about their racial/ethnic (RE) group and/or about themselves because of their RE group membership. However, relative to other forms of racism research investigating the relationship IR and health is lacking. Thus, in an attempt to promote research on IR, this paper reviews and summarizes 112 empirical quantitative studies—representing nearly three decades of research published between January 1990 to December 2018—that examine the health and health-related correlates of IR among racial/ethnic minorities. Collectively, evidence from this review suggests that (1) IR is negatively associated with health via decrements in positive core self-evaluation; (2) IR exacerbates the relationship between other stressors and ill health; (3) IR mediates the relationship between discrimination and health; and (4) IR is a self-protective strategy that protects against ill health. Using the accumulated evidence, this review presents new conceptualizations of IR, along with specific recommendations on how to improve the scientific study of IR among racial/ethnic minorities.

Keywords Internalized racism · Internalized racial oppression · Racism · Racial health disparities · Stigma · Internalized stigma · Internalized racial dominance

US racial/ethnic minorities have shorter life expectancies and poorer physical and mental health than their US non-Hispanic White counterparts (Substance Abuse and Mental Health Services Administration [SAMHS], [108]). Previous and extensive work shows that these racial/ethnic health disparities are the result of factors such as disproportionate exposure to environmental hazards, unequal access to and quality of health services (e.g., health insurance coverage), and racial discrimination [1, 86]. However, although internalized racism contributes to these racial/ethnic health disparities, it is relatively understudied relative to other race-related factors such as discrimination [129]. This is problematic especially given the 2001 US Surgeon General report highlighting internalized negative racial stereotypes as a predictor of ill health among racial/ethnic minority populations [121].

Thus, in an attempt to bring attention to, and promote research on IR, this paper summarizes historical and contemporary theorizing about IR. The paper then reviews the health and health-related correlates of IR among racial/ethnic minority populations. The paper is organized into three sections. The first section answers the question *What is internalized racism*?, provides a brief history and review of IR's phenomenology, and explains the relationship between IR and health among racial/ethnic minorities. The second section presents quantitative associations between IR and health and health-related behaviors that are extracted from already published peer-review articles. The third section uses the extracted quantitative evidence to rethink the internalized racism-health relationship among racial/ethnic minorities. Last, the paper concludes with specific recommendations to improve the scientific study of IR.

What Is Internalized Racism?

One of Many Brief Histories

In *The Souls of Black Folks*, Du Bois ([33] [1903]) introduced *double consciousness* to describe the struggles Black/African

Electronic supplementary material The online version of this article (https://doi.org/10.1007/s40615-020-00726-6) contains supplementary material, which is available to authorized users.

✉ Drexler James
jamesd@denison.edu

[1] Department of Psychology, Denison University, 100 West College Street, Granville, OH 43023, USA

Americans encounter when trying to embrace an American identity that devalues Blackness and a Black identity that is constructed with anti-Black sentiments, images, and stereotypes. Du Bois' ([33] [1903]) *double consciousness* refers to the psychological tribulations Black/African Americans' experience when constructing their personhood as a Black person and an American citizen. However, Du Bois ([33] [1903]) argued that having either identity orientation (i.e., *American* or *Black*) is psychologically damaging to Black/African Americans because anti-Blackness is a fundamental component of a "Black American" identity. This, Du Bois ([33] [1903]) argued, lead Black/African Americans to internalize negative beliefs about themselves and their group. Du Bois' ([33] [1903]) double consciousness is often presented as the first written scholarly account of IR.

Almost 30 years after Du Bois ([33] [1903]), Clark and Clark [18] produced one of the first empirical research on IR. In their study, Clark and Clark [18] made 200 African American children choose the "nice" doll—or the doll they preferred—from a pair of white- or dark-skinned dolls. From the study sample, 66% of the children preferred the white doll. Although Clark and Clark [18] concluded that the results show evidence of how membership to stigmatized group affects self-esteem and self-concept, many scholars have since interpreted these findings as empirical evidence of the psychologically damaging consequences of IR among African Americans.

Later, placing IR as a global phenomenon Fanon [35] contended that all native populations previously (or continuingly) colonized by European powers experience IR in the form of a *colonial mentality*. According to Fanon [35], IR manifests after colonist forcefully enter into a territory and construct institutions and systems—through cultural recreation, cultural imposition—that enforce their superiority and the inferiority of the colonized. Fanon [35] argued that as a result, these institutions and systems then support structures that benefit the colonizer politically, socially, and economically through a recursive, dynamic, and historically cumulative process. This, according to Fanon [35], then leads the colonized to feel inferior about themselves, feel self-doubt, embody the culture of the colonizer, and construct their self-concept through the perspective of the colonizer.

Subsequently, reintroducing Du Bois' ([33] [1903]) position of IR as a component of Black/African American racial identity, Cross [22] situated IR as the first developmental stage of "becoming Black" in America in the five-stage Black identity developmental model. Briefly, Cross's [22] Nigrescence model describes the racial identity developmental phases of Black/African Americans beginning with a racial identity dominated by pro-White/anti-Black bias. In Cross's [22] Nigrescence development model, IR is the inceptive crux of Black/African American racial identity.

Since Cross [22], IR has largely been conceptualized as "the internalization, among racial/ethnic minorities, of negative views about their racial/ethnic group, including themselves as racial/ethnic group members" [67, 90, 107]. Indeed, IR is thought to affect how people perceive their racial/ethnic group (i.e., group-focused IR), in addition to how people perceive themselves as a member of said racial/ethnic group (i.e., self-focused IR). However, some have suggested that past and current conceptualizations have reduced IR to "the internalization of negative stereotypes" For example, Cokley [20] states that contemporary conceptualizations of IR focus too heavily on "blacks' self-hatred," while Kohli et al. [68] argue that contemporary definitions do not capture the complexities of racism and the impact of IR on racial/ethnic minorities. Thus, against this definitional over-simplification, Kohli et al. [68] define IR as "the conscious and unconscious acceptance of a racial hierarchy in which whites are consistently ranked above People of Color…[that] goes beyond the internalization of stereotypes imposed by the white majority …[to] the internalization of the beliefs, values, and worldviews inherent in white supremacy that can potentially result in negative self or racial group perceptions" (p. 2).

Are Positive Views, Ideologies, Worldviews, and Stereotypes Included in Conceptualizations of IR?

Although generally defined as negative prejudices, bigotry, stereotypes, and flawed generalizations toward/about racial minorities, *racism* can also be defined as norms, ideologies, or behaviors that perpetuate racial inequality [11] institutionally, interpersonally, and/or culturally [59, 69, 122]. For example, Bonilla-Silva [8] defines racisms as an ethno-racial social-hierarchical system that produces disparities in life chances among ethno-racial groups. Similarly, Berman and Paradies [5] define racism as systems and/or ideologies that maintain or exacerbate inequality of opportunity among ethno-racial groups by disadvantaging ethno-racial minority groups and/or privileging ethno-racial majority groups. Both Berman and Paradies [5] and Bonilla-Silva [8] definitions suggest that any norm, ideology, or behavior—negative or positive—that supports, maintains, legitimizes, or perpetuates racial inequality constitutes racism (see *racial hierarchy-enhancing ideologies*; [102]).

Reflecting these definitions of racism, some scholars have defined IR in ways that capture both positively and negatively valanced racial hierarchy-enhancing ideologies. For example, Berman and Paradies [5] suggest that IR occurs when "an individual incorporates ideologies within their world views which serve to maintain or exacerbate the unequal distribution of opportunity across ethno-racial groups" (p. 4). Similarly, Bivens [7] conceptualizes IR as a form of racism that

"supports the supremacy and dominance of the dominating group by maintaining or participating in the set of attitudes, behaviors, social structures and ideologies that undergird the dominating group's power". (p. 2). Together, both Bivens [7] and Berman and Paradies [5] suggest that IR is the internalization of racial/ethno-specific norms, ideologies, or behaviors that perpetuate racial inequality. However, conceptualizations of IR that refer to both positive and negative norms, ideologies, or behaviors are scant. To address this blind spot in IR conceptualization, some have argued for the inclusion of positively valanced norms, ideologies, or behaviors in conceptualizations of IR.

For example, relative to other racial/ethnic minority groups in the US context, Asian Americans are positively stereotyped as hardworking, intelligent, and successful [52]. These positive stereotypes about Asian Americans suggest that their successes, relative to other racial minorities—but not White Americans—are a result of their strong values emphasizing hard work, achievement, and belief in the American dream [132]. Lee et al. [70] suggest that these seemingly positive stereotypes have led Asian Americans to internalize and identify with these model minority myths in an effort to maintain overall positive evaluations of their group. However, scholars purport that although positive, internalizing these model minority myths represent a form of IR because they (1) oversimplify the economic and educational realities of Asian Americans, (2) constrain Asian Americans to stereotypic activities and means of self-expression, and (3) ignore the accumulated history and contemporary dynamics necessary to understand the individual, institutional, and cultural racist experiences of Asian Americans [66, 99, 110]. Thus, although seemingly positive, these model minority myths support and maintain anti-racial/ethnic (in this instance Asian) hierarchies (see also [97]).

For example, Gupta et al. [44] found that among Asian Americans, endorsing positive Asian American stereotypes was related to higher levels of psychological distress and more negative attitudes toward help-seeking. Other work shows that among Black college students associating Black faces with stereotypic traits such as athletic, rhythmic, and cool predicted less interest in, and perceived importance of, a college education ([23] as cited in [24]). These examples highlight how seemingly positive stereotypes about one's racial/ethnic group might constrain them to stereotypic activities, perpetuate racial/ethnic health disparities, and lessen interest in domains that challenge existing racial/ethnic hierarchies [25].

Interestingly, related work show that racial/ethnic minorities have a negative view of positive group stereotypes. For example, Asian Americans exposed to positive (vs. none) own-group stereotypes from an out-group member were more likely to believe that the out-group member also ascribed negative stereotypes to their group [105]. These negative stereotype beliefs then lead the targets to perceive the out-group member as more prejudiced. Here, the authors purport that positive stereotypes "constitute a form of prejudice in targets' minds because they raise in targets the expectation that negative stereotypes are also being applied to them" ([105], p. 952). This suggests that racial/ethnic minorities might perceive positive stereotypes as a form of prejudice—perhaps because they are aware of the social implications of conforming to stereotypes (irrespective of valence) generally. Nevertheless, if internalizing positive norms, ideologies, and stereotypes legitimize and maintain anti-racial/ethnic minority hierarchies [61, 64, 105], then that too should be included in conceptualizations of IR.

Is Internalized Racism Exclusive to Racial/Ethnic Minorities?

Largely, IR is conceptualized as the internalization of stereotypes among members of racial/ethnic minority groups [90, 107]. This conceptualization of IR suggests that only racial/ethnic minorities can internalize racism, which can be problematic given different definitions of racism. For example, if racism is defined as "prejudice and discrimination, where prejudice is differential assumptions about the abilities, motives, and intents of others by race, and discrimination is differential actions toward others by race" ([60], p. 300), then it follows that anyone can be racist, and that logically, anyone, regardless of whether they belong to a minority or majority racial/ethnic group, can internalize racism.

Equally, if racism is defined as a social system of privilege/oppression based on racial group designations—for example, "a system of dominance, power, and privilege based on racial-group designations; rooted in the historical oppression of a group…and occurring in circumstances where members of the dominant group create or accept their societal privilege…" (Harrell, 200, p. 43)—and that IR necessitates the internalization of racial hierarchy-enhancing ideologies, then members of any racial/ethnic group can internalize racism—albeit for different reasons. For example, in the US context, a White person internalizing beliefs about their racial superiority and a Black person internalizing beliefs about their racial inferiority each legitimize and maintain anti-racial/ethnic minority hierarchies, albeit through different means. Due to these differences in how IR manifests as a function of one's racial/ethnic group positioning in the racial hierarchy, Berman and Paradies [5] discuss IR as two forms: *internalized racial dominance* and *internalized racial oppression*.

Internalized racial dominance is the internalization, among members of a dominant, privileged, or powerful racial/ethnic group, of attitudes, beliefs, or ideologies about the inferiority of other racial/ethnic groups and/or the superiority of their own racial/ethnic group [5, 115]). According to Pheterson [88] "internalized domination perpetuates oppression of

others and alienation from oneself by either denying or degrading all but a narrow range of human possibilities… [and] is the mechanism within an oppressive system for perpetuating domination" (p. 35). Similarly, others have situated internalized dominance as both the expression of "entitlement and privilege" [45] and as a belief system resulting from "an advantaged relationship to privilege, power, and cultural affirmation" ([51], p. 143). Consequently, members of dominant racial/ethnic groups who internalize attitudes, beliefs, or ideologies that perpetuate anti-racial/ethnic minority hierarchies internalize racism broadly, while internalizing their racial dominance specifically. On the other hand, Berman and Paradies [5] uses the label "internalized racial oppression" to refer to IR among racial/ethnic minorities: the internalization, among members of a minority, non-privileged, or non-powerful racial/ethnic groups, of attitudes, beliefs, or ideologies about the superiority of other racial/ethnic groups and/or the inferiority of one's own racial/ethnic group.

Together, the above suggests that members of dominant and minority racial/ethnic groups internalize racism, albeit for different reasons. Specifically, they suggest that members of dominant racial/ethnic groups internalize beliefs about the superiority of their racial/ethnic group and/or the inferiority of other racial/ethnic groups, while members of minority racial/ethnic groups internalize beliefs about the inferiority of their racial/ethnic group and/or the superiority of dominant racial/ethnic groups. Internalization of attitudes, beliefs, or ideologies from either racial/ethnic majority or minority members perpetuate and maintain anti-racial/ethnic minority social hierarchies, and as such, represent unique forms of IR [5, 115]).

How Is Racism Internalized?

In some definitions of IR, "internalized" and "acceptance (of)" are synonymized, even though the latter refers to an intentional and conscious process [72]. Using the label "acceptance" suggests—albeit indirectly and perhaps unintentionally—that the internalization of racism is *intentional* and *conscious* process. This analogue is debatable given that the internalization process is generally thought of as both a conscious and unconscious process through which external aspects of culture—such as values, beliefs, and ways of understanding— become part of an individual's internal capacity to define their beliefs, identity, and social relations [95, 126].

For example, Schafer [95] describes internalization as the processes by which "the subject transforms real or imagined regulatory interactions with his environment, and real or imagined characteristics of his environment into inner regulations and characteristics" (p. 9). In addition, Schafer [95] notes that although individuals have an active role in the process; they also unconsciously "take on" these values, beliefs, and ways of understanding in response to significant external pressures (e.g., culture, social context). Here, Schafer [95] suggests that the internalization process is both *unintentional* and *unconscious* and *intentional* and *conscious*. In the same way, Ryan and Connell [92] described internalization as the "taking in," consciously and/or unconsciously, of external social values that then shapes identity. This view of internalization as a conscious and/or unconscious process is reflected in select definitions of IR (see also [53]).

For example, Hipolito-Delgado [50] conceptualizes the internalization of racism as both a conscious and unconscious process. In particular, according to Hipolito-Delgado [50], prolonged and continued exposure to racism (e.g., through media, racist experiences) and cultural pressures present during socialization processes lead racial/ethnic minorities to internalize racism both consciously and unconsciously. Supporting this claim, previous work shows a positive correlation between racial socialization and IR among Black/African Americans [118]. In addition, other work shows that among Asian American adults and Black/African American adults and college students, internalizing beliefs about their cultural and racial group's inferiority is positively related to experiences with racism and discrimination [41].

Echoing this position, more recent scholarship recommends adopting new ways of thinking about the internalization process. For example, Banks and Stephens [4] argue for the use of the label "appropriated racial oppression" instead of "internalized racial oppression" when discussing IR among racial/ethnic minorities as the former label makes it clear that "people in oppressed groups learn to use and master the tools of their oppressors" (p. 95) and that these oppressive attitudes are taken from the larger system. Pointedly, Banks and Stephens [4] argue that the "appropriated racial oppression" label highlights "the fact that negative messages are modeled by the dominant culture and are taken up, or appropriated, by the oppressed group" (p. 96). Using similar arguments for using "appropriated racial oppression", Versey et al. [125] define internalized racial oppression as "any instinctive or deliberate reaction in response to normative Whiteness ideals embedded in society" (p. 5). Notwithstanding label preferences, these scholars present the internalization of racism (or appropriated racial oppression) as both a conscious and unconscious process.

Internalized Racism and Racial/Ethnic Minority Health

Models of racism (e.g., biopsychosocial model of racism; Clark et al. [19]; multidimensional conceptualization of racism-related stress; [46]) present racism as a stressor that contributes to ill health among racial/ethnic minorities (also see [128]). As one form of racism, IR contributes to ill health among racial/ethnic minority populations [59]. For example,

previous work shows positive associations between IR and both negative physical (e.g., systolic blood pressure; [47]) and mental (e.g., depression; [27]) health outcomes among racial/ethnic minority samples.

On the one hand, previous work suggests that IR's relationship with ill health is driven by its negative effects on one's core self-evaluation (CSE). CSE is an evaluation "of one's worthiness, effectiveness, and capability as a person" ([62], p 304). Core self-evaluation is considered to be central for self-regulation and motivation, which comprises aspects of self-esteem and self-efficacy [48, 63]. In a meta-analytic review, Kammeyer-Mueller et al. [63] found that more positive or high core CSEs were associated with fewer perceived stressors, lower strain, less avoidance coping, and more problem-solving coping. As such, IR can lead to negative health outcomes via decrements in one's positive CSE, which can lead to increased perceived stressors, greater strain, more avoidance coping, and less problem-solving coping [40].

For example, Szymanski and Obiri [113] found that among Black/African American adults, negative religious coping mediated the relationship between IR and psychological distress, such that IR was positively related to negative religious coping, which in turn was positively associated with psychological distress. In another study, Kim and Lee [66] found that, among an Asian American sample, emotional self-control mediated the relationship between IR and help-seeking, such that IR was positively associated with emotional self-control, which in turn was negatively associated with help-seeking. Last, Rivera and Paredez [91] found that self-esteem mediated the relationship between IR and body mass index among Hispanic Americans, such that greater IR was associated with decreased self-esteem, which was then associated with greater odds of being overweight or obese.

In another example, using a nationally representative sample of African Americans, James [58] found that self-esteem moderated the relationship between IR and past-year MDD. In particular, James [58] found that at high, but not low, levels of self-esteem, increasing levels of IR predicted increased risks to past-year MDD. James [58] proposes that among people with high self-esteem, IR represents an ego-threat that disrupts self-regulation, which might limit their ability to employ the active coping strategies needed to mitigate the negative effects of IR (see [63]).

Last, IR is also thought to result from experiences with racism and discrimination [115]. In this view, IR discussed as a "mediated process", that is, it results from continued exposure to stresses of racism and discrimination [4]. For example, Graham et al. [41] found, among a sample of African American adults, that self-reported past-year everyday experiences of racism was positively associated with IR, which in turn was positively associated with stress symptoms and anxious arousal. Graham et al. [41] reason that frequent experiences with anti-Blackness can normalize stigma that can lead to IR to a greater extent, which can ultimately lead to negative health outcomes.

Collectively, however, not much is known about the specific mechanisms through which IR contributes to health among racial/ethnic minorities. Nevertheless, the previous research suggests that (1) IR is negatively associated with health via decrements in positive CSE (e.g., [91]), (2) IR exacerbate negative health relationships (e.g., [58]), and (3) IR mediates the relationship between discrimination and health. Still, no research has reviewed research on the relationship between IR and health, outlined general mechanistic pathways, or presented the conditions under which IR leads to ill health among racial/ethnic minorities. This current research beings to address some of these blind spots.

Overview of Current Review

This review offers analytic criticism by qualitatively and quantitatively synthesizing research and offering scholarly critique of theory on internalized racism [83]. Due to the limited understanding of the range health and health-related correlates of IR, along with broad variability of how IR is measured (see [129]), meta-analytic procedures are not utilized. Instead, this review uses accumulated descriptive evidence to summarize the health and health-related correlates of IR among racial/ethnic minorities and introduce ways to rethink the IR-health relationship. To the author's knowledge, no studies have yet to investigate the relationship between internalized racism and health among racial/ethnic majority samples. As such, this paper does not focus on IR and health among racial/ethnic majority populations.

Method

Study Search, Retrieval, and Selection

Search, retrieval, and inclusion methods followed previous reviews [71, 85]. More specifically, studies were systematically identified through searches in the EBESCOhost, Google Scholar, PsycArticles, PsycINFO, PubMed, and Web of Science electronic databases using commonly used labels relating to IR: *internalized racism*, *internalized racial oppression*, *internalized racial stereotypes*, *stereotype internalization*, *internalized racialism*, *model minority myth*, *nigrescence*. All database searches were limited to research published between January 1990 and December 2018. Studies were included (or excluded) in this review based on the following eligibility criteria:

Eligibility Criteria

Studies were included if they met the following criteria:

1. Published in English
2. Published in peer-reviewed journals
3. Quantitatively assessed the relationship between *internalized racism*, *internalized racial oppression*, *internalized racial stereotypes*, *internalized racialism*, *stereotype internalization*, *internalized racialism*, *model minority myth*, *and/or nigrescence* and at least one other variable
4. Included racial/ethnic minority participants
5. Could be retrieved by contacting the author or through university library services

Studies were excluded if they met the following criteria:

1. Qualitative—no reported quantitative relationship between IR and some other variable
2. Thesis, dissertation, conference paper, and all non-peer-reviewed papers

Relevant articles referenced in the text studies identified through the database searchers, which also met the inclusion criteria, were included in the review.

Study Coding and Analytic Strategy

Informed by the literature review, studies meeting inclusion criteria were categorized based on their conceptualization (via measurement) of IR:

1. Conscious or unconscious IR: Explicit measures capture overt expression of attitudes as they involve conscious evaluation of stimuli, whereas implicit measures allow for the indirect assessment of attitudes outside conscious awareness [80]. As such, studies measuring IR implicitly and those measuring IR explicitly were categorized *unconscious IR* and *conscious IR*, respectively.
2. Group-focused or self-focused IR: Studies using measures that capture respondents' feelings, opinions, attitudes, views of themselves because of their racial/ethnic group membership (e.g., "I go through periods when I am down on myself for being Black") were categorized as *self-focused IR*. On the other hand, studies using measures that capture respondents' feelings, opinions, attitudes, and views of their racial/ethnic group (e.g., "Whites are superior to African Americans.") were categorized as *group-focused IR*.
3. "Positive" or "negative" IR: Studies conceptualizing IR as the internalization of negative beliefs, views, and stereotypes, which can include—but not limited to—the attribution of superiority to the dominant group, attraction to, and repulsion to dominant group, feelings of inferiority (self and group), internalization of negative group identities or similar negative manifestations were categorized as *negative IR*. On the other hand, studies conceptualizing IR as the internalization of positive beliefs, views, and stereotypes, which can include—but not limited to—the attribution of superiority to one's racial/ethnic group, attraction to one's racial/ethnic group, feelings of superiority (self and group) and success, internalization of positive group identities, or similar positive manifestations were categorized as *positive IR*.

Studies were categorized under multiple categories (e.g., conscious, group-focused, and positive). Studies not meeting any of the aforementioned categories were labeled as "other." In addition, following Paradies [85], health and health-related outcomes were categorized as either:

1. *Negative mental health correlates of IR*: factors associated with negative mental health outcomes (e.g., stress)
2. *Positive mental health correlates of IR*: factors associated with positive mental health outcomes (e.g., self-esteem)
3. *Negative physical health correlates of IR*: factors associated with negative physical health outcomes (e.g., systolic blood pressure)
4. *Positive physical health correlates IR*: factors associated with positive physical health outcomes (e.g., self-rated overall physical health)
5. *Positive health-related behavioral correlates of IR*: behaviors associated with positive health outcomes (e.g., help-seeking)
6. *Negative health-related behavioral correlates of IR*: behaviors associated with negative health outcomes (e.g., alcohol abuse)
7. *Other health/health-related correlates of IR*: factors associated with a broad range of positive and negative health outcomes (e.g., rejection sensitivity).

Next, the statistical relationship between each health/health-related outcome and IR—correlations (where the independent and dependent variable are not specified) and predictive estimates (as in the case of regression analysis, where there is a specified independent and dependent variables)—were coded as *statistically significant* ($p < .05$) or *non-statistically significant* ($p > .05$; no relationship). In the case of correlations: if statistically significant, relationships were coded as either *positive* or *negative*. In the case of predictive estimates: (1) if statistically significant and IR is the independent variable, relationships were coded as either *positive* (i.e., IR is associated with increased health/health-related outcome) or *negative* (i.e., IR is associated with decreased health/health-related outcome); (2) if statistically significant and IR is the dependent variable, relationships were coded as either *positive*

(i.e., health/health-related outcome predicts increased IR) or *negative* (i.e., health/health-related outcome predicts decreased IR).

Last, the proportion of studies reporting statistically significant or non-statistically significant relationships between IR and health-related variables were calculated. These percentages were used to represent the "accumulated descriptive evidence" showing statistical relationships between IR and health-related outcomes from the total number of studies included in the review.

Results

A total of 112 studies met the inclusion criteria for this review, which were represented by 111 peer-reviewed articles—one peer-reviewed article included two studies. Seventy-two (64.29%) of the studies were retrieved from database searches with the remaining 40 (35.71%) gathered from reference searches. Table 1 shows the research and sample characteristics of all studies. Table 2 shows the operationalization and measurement of IR, in addition to the validity of each IR measure. Last, Table 3 shows the health and health-related correlates of IR (see Supplement for the research and sample characteristics, measurement of IR, and main findings of each study).

Research Characteristics

Published studies on IR has increased every 5 years since 1990, with the 2015–2018 period (2015+) having the greatest number of published studies ($n = 32$; 28.83%). Across all studies, two (1.79%) studies utilize an experimental design, two (1.79%) utilize a longitudinal design, while all others utilize a cross-sectional research design ($n = 108$; 96.43%). Last, ten (8.93%) use representative/probability sampling procedures, and all others ($n = 102$; 91.07%) use convenience sampling procedures.

Sample Characteristics

All studies were conducted in three major geographic regions: North America ($n = 102$; 91.07%), the Caribbean ($n = 5$; 4.46%), and Africa ($n = 5$; 4.46%). In particular, all studies conducted in North America draw from US samples ($n = 102$; 91.07%); those conducted in the Caribbean ($n = 5$; 4.46%) draw samples from Barbados, Dominica, or the US Virgin Islands; and those conducted in Africa ($n = 5$; 4.46%) draw samples from Ghana, South Africa, Swaziland, or Zimbabwe.

Racially/ethnically, a large number of studies use Black/African American participants ($n = 78$; 69.64%), followed by Asian American samples ($n = 23$; 20.54%), while relatively fewer studies use Afro-Caribbean ($n = 10$; 8.93%), Black African ($n = 6$; 5.36%), Latino/a American ($n = 5$; 4.46%), Native American/Pacific Islander ($n = 2$; 1.79%), and/or "Other" racial/ethnic minority ($n = 2$; 1.79%) samples. A relatively equal number of studies use adult ($n = 52$; 46.43%) or college student ($n = 47$; 41.96%) samples, compared to fewer ones using adolescent samples ($n = 17$; 15.18%). Almost

Table 1 Research and sample characteristics of empirical quantitative studies ($N = 112$) included in review from peer-reviewed journal articles ($N = 111$)

Research and sample characteristic	No. of studies (% of total studies)
Publication year	
1990–1994	8 (7.21)
1995–1999	11 (9.91)
2000–2004	14 (12.61)
2005–2009	20 (18.02)
2010–2014	26 (23.42)
2015+	32 (28.83)
Study design	
Cross-sectional	108 (96.43)
Experimental	2 (1.79)
Longitudinal	2 (1.79)
Sampling procedure	
Convenience	102 (91.07)
Representative/probability	10 (8.93)
Sample size	
$n < 100$	20 (17.86)
$100 \leq n < 200$	42 (37.50)
$200 \leq n < 1000$	43 (38.39)
$n \geq 1000$	7 (6.25)
Region of study	
Africa	5 (4.46)
Ghana	1 (0.89)
South Africa	1 (0.89)
Swaziland	1 (0.89)
Zimbabwe	2 (1.79)
Caribbean	5 (4.46)
Barbados	2 (1.79)
Dominica	2 (1.79)
USA Virgin Islands	1 (0.89)
North America: USA	102 (91.07)
Study population[a]	
Ethnic/racial group	
Afro-Caribbean	10 (8.93)
Asian American	23 (20.54)
Black African	6 (5.36)
Black/African American	78 (69.64)
Latino/a American	5 (4.46)
Native American/Pacific Islander	2 (1.79)
Other racial/ethnic minorities	2 (1.79)
Age	
Adolescents	17 (15.18)
Adults	52 (46.43)
College students	47 (41.96)
Gender/sex	
Females only	22 (19.64)
Males only	7 (6.25)
Males and females	83 (74.11)

Percentages may not add to 100% due to rounding. $N = 112$ for year of publication, all else $N = 113$

[a] Categories are not mutually exclusive, as such percentages may exceed 100%

three-quarters of studies use combined male and female samples ($n = 83$; 74.11%) compared to one quarter using single-sex samples ($n = 29$; 25.89%); although, more studies use female-only ($n = 22$; 19.64) relative to male-only ($n = 7$; 6.25) samples. Last, per criteria proposed by Kelley and Maxwell [65], 20 (17.86%) studies use an "adequate" sample size ($n < 100$), 42 (37.50%) use a "good" sample size ($100 \leq n < 200$), and almost half ($n = 50$; 45.14%) use a "good-to-great" sample size ($n \geq 200$).

Operationalization and Measurement

Fifty-seven measures/instruments (including subscales) were used to capture IR. Of these measures, 48 (84.21%) are validated—used in 93 (83.04%) studies; 55 (96.49%) are explicit—used in 109 (97.32%) studies; and two (3.51%) are implicit—used in three (2.68%) studies. In addition, 31 (54.39%) of these measures operationalize IR as "negative: own-group"—represented by 76 (67.84%) studies; nine (15.79%) as "negative: self"—represented by 28 (25.00%) studies; four (7.02%) as "positive: own-group"—represented by 9 (8.04%) studies; one (1.75%) as "positive: self"—represented by two (1.79%) studies;, and 12 (21.01%) fitting "other" operationalizations—represented by 14 (12.50%) studies.

Health and Health-Related Correlates of IR

Altogether, the studies reported 378 relationships between IR and health and health-related outcomes.

Mental Health Correlates of IR Negative mental health correlates (e.g., anxiety) account for 33.07% ($n = 125$) of all relationships: 52.80% ($n = 66$) are positively associated, 4.80% ($n = 6$) are negatively associated, and 42.40% ($n = 53$) are not associated with IR. Positive mental health correlates (e.g., self-esteem) account for 36.77% ($n = 139$) of all relationships: 5.78% ($n = 8$) are positively associated, 59.71% ($n = 83$) are negatively associated, and 34.53% ($n = 48$) are not associated with IR.

Physical Health Correlates of IR Negative physical health correlates (e.g., hypertension) account for 10.05% ($n = 38$) of all relationships: 39.47% ($n = 15$) are positively associated, none are negatively associated, and 60.53% ($n = 23$) are not associated with IR. Only one positive physical health correlate was investigated (i.e., overall physical health), which accounts for 1.32% ($n = 5$) of all relationships: Of these, none were positively associated, 60.00% ($n = 3$) was negatively associated, and 40.00% ($n = 2$) was not associated with IR.

Health-Related Behavioral Correlates of IR Positive health-related behavioral correlates (e.g., help-seeking) account for 5.29% ($n = 20$) of all relationships: 15.00% ($n = 3$) are positively associated, 15.00% ($n = 3$) are negatively associated, and 70.00% ($n = 14$) are not associated with IR. Negative health-related behavioral correlates (e.g., drug and alcohol use) account for 13.31% ($n = 37$) of all relationships: 56.76% ($n = 21$) are positively associated, 10.81% ($n = 4$) are negatively associated, and 32.43% ($n = 12$) are not associated with IR.

Other Health/Health-Related Correlates of IR Other health/health-related correlates (e.g., mastery) account for 3.70% ($n = 14$) of all relationships: 21.43% ($n = 3$) are positively associated, 58.57% ($n = 4$) are negatively associated, and 50.00% ($n = 7$) are not associated with IR.

Table 3 also presents the health and health-related correlates of IR as a function of how IR was operationalized in each study. Of note, 58.47% ($n = 221$) of the relationships were investigated among studies operationalizing IR as "negative: own-group," 20.90% ($n = 79$) of the relationships were investigated among studies operationalizing IR as "negative: self," 7.14% ($n = 27$) of the relationships were investigated among studies operationalizing IR as "positive: own-group," 0.79% ($n = 3$) of the relationships were investigated among studies operationalizing IR as "positive: self," and 12.70% ($n = 48$) of relationships were investigated among studies using other conceptualizations of IR.

Last (not shown in Table 3), studies using implicit measures of IR account for 1.32% ($n = 5$) of all relationships. Of the total number of relationships, two (0.53%) were negative mental health correlates of IR (i.e., depression [positive association], stress [no association]), two (0.53%) were positive mental health correlates of IR (i.e., self-esteem [negative association], life/(inter-) personal/work satisfaction/quality [negative association]), and one (0.26%) was negative physical health correlated with IR (i.e., hypertension [no association]). Studies using explicit measures of IR account for all other relationships (98.68%; $n = 373$).

Key Findings, Insights, and Discussion

Research Characteristics

First, a vast majority of studies included in this review used cross-sectional designs. Only one study, (i.e., [76]) used longitudinal design methods to investigate the relationship between IR and a health-related outcome (i.e., school grade point average (GPA); previous studies have suggested that overall health is associated with GPA; [30]). To address this limitation, future work should longitudinally investigate the relationship between IR and health outcomes. In doing so, research can examine IR effects on health across time, which can address questions of between- and within-person variance and matters of causality [127].

Table 2 Operationalization and measurement of IR

Measure	Operationalization					Measurement			Frequency of use (% of total studies)
	Negative		Positive		Other	Type		Validated	
	Own-group	Self	Own-group	Self		Implicit	Explicit	Yes	
Appropriated Racial Oppression Scale [15]: Full		X					X	X	1 (.89)
Attitude Toward Asian Scale: Own-group [52]			X				X	X	1 (.89)
Attitude Toward Asian Scale: Self [44]				X			X		2 (1.79)
Black-White Implicit association test [82]	X					X		X	2 (1.79)
Collective Self-esteem Scale (Modified; [73])	X						X		1 (.89)
Colonial Mentality Implicit Association Test [26]	X					X		X	1 (.89)
Colonial Mentality Scale [28]									
Full scale					X		X	X	4 (3.57)
Colonial debt *subscale*	X						X	X	3 (2.68)
Cultural shame *subscale*		X					X	X	3 (2.68)
Internalized cultural and ethnic inferiority *subscale*		X					X	X	3 (2.68)
Physical characteristics *subscale*	X						X	X	3 (2.68)
Within group discrimination *subscale*	X						X	X	3 (2.68)
Colonial Mentality Scale-Ghana [123]									
Colonial debt *subscale*	X						X	X	1 (.89)
Internalized cultural and ethnic inferiority *subscale*		X					X	X	1 (.89)
Physical characteristics *subscale*		X					X	X	1 (.89)
Within group discrimination *subscale*	X						X	X	1 (.89)
Cross Racial Identity Scale [124]									
Self-hatred		X					X	X	18 (16.07)
Miseducation	X						X	X	13 (11.61)
Cross Ethnic-Racial Identity Scale-Adult: Pre-encounter: Self-hatred *subscale* [130]		X					X	X	1 (.89)
Gendered Racial/Ethnic Socialization Scale for Black Women: Internalized Gendered Racial Oppression *subscale* [12]	X						X	X	1 (.89)
Internalization of Asian American Stereotypes Scale [100]									
Full scale					X		X	X	4 (3.57)
Difficulties with English language communication					X		X	X	2 (1.79)
Emotional Reservation					X		X	X	2 (1.79)
Expected academic success					X		X	X	2 (1.79)
Pursuit of prestigious careers					X		X	X	2 (1.79)

Table 2 (continued)

Measure	Operationalization					Measurement			Frequency of use (% of total studies)
	Negative		Positive		Other	Type		Validated	
	Own-group	Self	Own-group	Self		Implicit	Explicit	Yes	
Internalization of the Model Minority Myth Measure [131]									
M-Achievement *subscale*			X				X	X	7 (6.25)
M-Mobility *subscale*			X				X	X	5 (4.46)
Internalization of Racist Academic Stereotypes [34]	X						X		1 (.89)
Internalized Racism in Asian Americans Scale [17]									
Full scale					X		X	X	1 (.89)
Appearance bias *subscale*	X						X	X	1 (.89)
Self-negativity *subscale*		X					X	X	1 (.89)
Weakness stereotypes *subscale*	X						X	X	1 (.89)
Internalized Racial Oppression Scale [3]									
Full scale					X		X	X	3 (2.68)
Alteration of physical appearance *subscale*	X						X	X	2 (1.79)
Biased representation of history *subscale*					X		X	X	2 (1.79)
Devaluation of an African worldview *subscale*							X	X	1 (.89)
Hair change		X					X	X	2 (1.79)
Internalization of negative stereotypes *subscale*	X						X	X	2 (1.79)
Internalized Racism Scale [32]	X						X	X	1 (.89)
Mochihua Tepehuani Scale [50]	X						X		1 (.89)
Modern Jezebel Scale [119]	X						X	X	2 (1.79)
Nadanolitization Scale [116]									
Racist *subscale*: full	X						X	X	15 (13.39)
Mental/genetic deficiencies *subscale*	X						X	X	3 (2.68)
Natural ability of Blacks *subscale*	X						X	X	2 (1.79)
Sexual prowess *subscale*	X						X	X	2 (1.79)
Negative stereotype endorsement: Own-group	X						X		7 (6.25)
Negative stereotype endorsement & Positive stereotype rejection									
Own-group	X						X		4 (3.57)
Self		X					X		1 (.89)
Positive stereotype rejection: Own-group	X						X		1 (.89)
Racial and Stereotyping Scale [16]	X						X		1 (.89)

Table 2 (continued)

Measure	Operationalization					Measurement			Frequency of use (% of total studies)
	Negative		Positive		Other	Type		Validated	
	Own-group	Self	Own-group	Self		Implicit	Explicit	Yes	
Racial Identity attitude scale: Pre-Encounter *subscale* [87]									
Short form	X						X	X	10 (8.93)
Long form	X						X	X	16 (14.29)
Stereotypic Roles for Black Women Scale [117]									
Mammy					X		X	X	1 (.89)
Jezebel	X						X	X	1 (.89)
Sapphire	X						X	X	1 (.89)
Superwoman					X		X	X	1 (.89)
Subjective Stigmatization Scale [10]			X				X	X	1 (.89)
Racelessness Scale: Stereotypical Beliefs *subscale* (Modified; [2])					X		X	X	1 (.89)
Total: Number of measures, $N = 57$ (% measures)	Negative = 40 (70.18)		Positive = 5 (8.77)		Other = 12 (21.01)	Type		Validated	
	Own-group = 31 (54.39)	Self = 9 (15.79)	Own-group = 4 (7.02)	Self = 1 (1.75)		Implicit = 2 (3.51)	Explicit = 55 (96.49)	Yes = 48 (84.21)	
Number of studies using operationalization/measurement (% of total studies)	Negative = 104 (92.86)		Positive = 11 (9.82)		Other = 14 (12.50)	Type		Validated	
	Own-group = 76 (67.84)	Self = 28 (25.00)	Own-group = 9 (8.04)	Self = 2 (1.79)		Implicit = 3 (2.68)	Explicit = 109 (97.32)	Yes = 93 (83.04)	

X yes/fits category

Table 3 Relationships between IR and health outcomes as a function of conceptualization

	All studies			Negative: own-group			Negative: self			Positive: own-group
	Positive	Negative	No	Positive	Negative	No	Positive	Negative	No	Positive
Negative mental health correlates (N = 125; 33.07%)	66 (52.80)	6 (4.80)	53 (42.40)	29 (43.94)	3 (50.00)	33 (62.26)	27 (40.91)	2 (33.33)	7 (13.21)	4 (6.06)
Anxiety symptoms (*n* = 17)	10	1	6	4	1	2	5		1	1
Depression symptoms (*n* = 41)	27	1	13	12	1	9	9		1	1
Negative affect (*n* = 2)	1		1							1
Phobia/phobic anxiety symptoms (*n* = 5)	3		2	1		2	2			
Obsessive compulsive disorder symptoms (*n* = 5)	3		2	1		2	2			
Psychological/emotional distress (*n* = 16)	6	1	9	2		4	3		3	1
Psychoticism (*n* = 8)	6		2	2		2	4			
Stress (symptoms, perceived, physiological correlates; *n* = 22)	4	3	15	3	1	9		2	2	
Other (*n* = 9)	6		3	4		3	2			
Positive mental health correlates (N = 139; 36.77%)	8 (5.76)	83 (59.71)	48 (34.53)	5 (62.50)	37 (44.58)	31 (64.58)		24 (28.92)	5 (10.42)	1 (12.50)
Life/(inter-) personal/work satisfaction/quality (*n* = 23)	3	6	14	3	2	9			1	
Positive affect (*n* = 2)			2							
Psychological health/well-being (*n* = 11)	1	7	3		3	1		1		1
Self-concept (*n* = 5)		1	4		1	4				
Self-efficacy (*n* = 5)	2	1	2							
Self-esteem (*n* = 88)	2	66	20	2	30	15		23	3	
Other (*n* = 5)		2	3		1	2			1	
Negative physical health correlates (N = 38; 10.05%)	15 (39.47)		23 (60.53)	11 (73.33)		22 (95.65)	3 (20.00)			1 (6.67)
Body Mass Index (*n* = 6)	3		3	2		3	1			
Cardiovascular disease (*n* = 1)	1			1						
Diastolic blood pressure (*n* = 3)	1		2	1		2				
Glucose level (*n* = 5)	2		3	2		3				
Hypertension (*n* = 2)			2			2				
Insulin level (*n* = 1)			1			1				
Somatic symptoms (*n* = 8)	4		4	1		3	2			1
Systolic blood pressure (*n* = 3)	1		2	1		2				
Waist circumference (*n* = 4)	1		3	1		3				
(Over-)weight (*n* = 5)	2		3	2		3				
Positive physical health correlates (N = 5; 1.32%)		3 (60.00)	2 (40.00)							
Overall physical health (*n* = 5)		3	2							
Positive health-related behavioral correlates (N = 20; 5.29%)	3 (15.00)	3 (15.00)	14 (70.00)	2 (66.67)	1 (33.33)	10 (71.43)			3 (21.43)	1 (33.33)
Emotion-focused coping (*n* = 6)	2		4	1		4				1
Help-seeking (*n* = 7)		2	5			2			2	
Positive coping (*n* = 1)			1			1				
Problem-focused coping (*n* = 5)	1		4	1		3			1	
Pro-social behavior (*n* = 1)		1			1					
Negative health-related behavioral correlates (N = 37; 13.31%)	21 (56.76)	4 (10.81)	12 (32.43)	17 (80.95)	4 (100.00)	11 (91.67)	4 (19.05)		1 (8.33)	
Alcohol concerns/use (*n* = 2)	2			2						
Drug concerns/use (*n* = 10)	7		3	7		3				
Negative coping (*n* = 5)	1		4			4	1			
Psychological defense (*n* = 8)	4	3	1	4	3	1				

Table 3 (continued)

Self-handicapping ($n = 1$)	1			1						
Sexually risky behavior and attitudes ($n = 3$)			3			3				
Violent behavior/aggression ($n = 8$)	6	1	1	3	1		3		1	
Other health/health-related correlates (N = 14; 3.70%)	3 (21.43)	4 (28.57)	7 (50.00)	1 (33.33)	1 (25.00)	3 (42.86)	1 (33.33)		2 (28.57)	
Health of environment ($n = 5$)		3	2							
Impression management ($n = 1$)	1									
Mastery ($n = 1$)		1			1					
Preference for own-race counselor ($n = 4$)			4			2			2	
Rejection sensitivity ($n = 3$)	2		1	1		1	1			
All correlates: N = 378	116 (30.69)	103 (27.25)	159 (42.01)	65 (56.03)	46 (44.66)	110 (69.18)	35 (30.17)	26 (25.24)	18 (11.32)	7 (6.03)

	Positive: own-group		Positive: self			Other		
	Negative	No	Positive	Negative	No	Positive	Negative	No
Negative mental health correlates (N = 125; 33.07%)		13 (24.53)		1 (16.67)		6 (9.09)		
Anxiety symptoms ($n = 17$)		3						
Depression symptoms ($n = 41$)		3				5		
Negative affect ($n = 2$)		1						
Phobia/phobic anxiety symptoms ($n = 5$)								
Obsessive compulsive disorder symptoms ($n = 5$)								
Psychological/emotional distress ($n = 16$)		2		1				
Psychoticism ($n = 8$)								
Stress (symptoms, perceived, physiological correlates; $n = 22$)		4				1		
Other ($n = 9$)								
Positive mental health correlates (N = 139; 36.77%)	1 (1.20)	4 (8.33)				2 (25.00)	21 (25.30)	8 (16.67)
Life/(inter-) personal/work satisfaction/quality ($n = 23$)		2					4	2
Positive affect ($n = 2$)		2						
Psychological health/well-being ($n = 11$)							3	2
Self-concept ($n = 5$)								
Self-efficacy ($n = 5$)						2	1	2
Self-esteem ($n = 88$)							13	2
Other ($n = 5$)	1							
Negative physical health correlates (N = 38; 10.05%)					1 (4.35)			
Body Mass Index ($n = 6$)								
Cardiovascular disease ($n = 1$)								
Diastolic blood pressure ($n = 3$)								
Glucose level ($n = 5$)								
Hypertension ($n = 2$)								

Table 3 (continued)

Insulin level ($n = 1$)							
Somatic symptoms ($n = 8$)				1			
Systolic blood pressure ($n = 3$)							
Waist circumference ($n = 4$)							
(Over-)weight ($n = 5$)							
Positive physical health correlates (N = 5; 1.32%)						3 (100.00)	2 (100.00)
Overall physical health ($n = 5$)						3	2
Positive health-related behavioral correlates (N = 20; 5.29%)	2 (66.67)			1 (7.14)			
Emotion-focused coping ($n = 6$)							
Help-seeking ($n = 7$)	2			1			
Positive coping ($n = 1$)							
Problem-focused coping ($n = 5$)							
Pro-social behavior ($n = 1$)							
Negative health-related behavioral correlates (N = 37; 13.31%)							
Alcohol concerns/use ($n = 2$)							
Drug concerns/use ($n = 10$)							
Negative coping ($n = 5$)							
Psychological defense ($n = 8$)							
Self-handicapping ($n = 1$)							
Sexually risky behavior and attitudes ($n = 3$)							
Violent behavior/aggression ($n = 8$)							
Other health/health-related correlates (N = 14; 3.70%)					1 (33.33)	3 (75.00)	2 (28.57)
Health of environment ($n = 5$)						3	2
Impression management ($n = 1$)					1		
Mastery ($n = 1$)							
Preference for own-race counselor ($n = 4$)							
Rejection sensitivity ($n = 3$)							
All correlates: N = 378	3 (2.91)	17 (10.69)	1 (.97)	2 (1.26)	9 (7.76)	27 (26.21)	12 (7.55)

Many articles examined multiple correlates as such the number of health and health-related correlates ($N = 346$) exceed the number of studies ($N = 112$). Percentages may not add to 100% because of rounding. Positive: Increased IR is associated with higher levels of outcome at $p < .05$. Negative: Increased IR is associated with lower levels of outcome at $p < .05$. *No*—No relationship between IR and outcome at $p < .05$. Empty spaces reflect 0 (0.00%)

Second, ten (8.93%) studies use representative/probability sampling procedures. As such, we cannot reliably, and with confidence, generalize a large majority of the evidence gathered in this review [9]. Moreover, all the studies using representative/probability sampling procedures used data from either the National Survey of Black Americans [55] or the National Survey of American Life [57]. Accordingly, future work should use other representative/probability datasets or produce new scholarship using representative/probability sampling procedures to examine the health correlates of IR.

Third, almost three quarters (69.64%) of the studies used Black/African American samples, with the other quarter represented by Asian American, Afro-Caribbean, Black African, and Latino/a American samples. This over-representation of Black/African American samples and US racial/ethnic minorities exist perhaps because 91.07% of the studies were conducted within the USA. Critically, this suggests that our current understanding of the IR-health relationship is driven by how IR functions within the US context, broadly, and among African Americans specifically. However, findings indicate that outside the US context (e.g., Barbados), IR is also associated with negative health among racial/ethnic minorities ([120]), thus providing some evidence against a US sampling bias. Nevertheless, in the context of health research, country-level ecological analyses, which include socio-cultural and political environments (e.g., racial dynamics) and structural factors (e.g., poverty and education levels), are needed to understand key determinants of health [75]. So, to address this research shortcoming, future work should expand the study of IR beyond the American context and include other racial/ethnic minority groups (e.g., Middle Easterners).

Fourth, 19.64% and 6.25% of studies used female-only and male-only samples, respectively. This suggests that we currently have little insight into how IR uniquely associated with health outcomes among female and male populations. Addressing the issue is important given the gendered nature of racism [103] and because men and women respond to experiences of racism differently [111], which leads to gendered health outcomes [93]. For example, Chambers et al. [16] found positive relationships between IR and waist circumference among women, but not men. However, Jackson and Neville [56] found no relationship between IR and feelings of hope among both men and women. These examples highlight, consistent with work showing the gendered relationships between racism and health, that the health correlates of IR are also gendered. Given this evidence, more work is needed to fully understand the antecedents, mechanisms, and moderators of the gendered effects of IR.

Last, no studies in this review used child samples. Accordingly, we have no insight into internalized racism-health relationship among children. On the one hand, it is possible that IR might present itself differently among child samples because of their difficulty in identifying instances of racism [112]. On the other hand, we might expect IR to present similarly among child and adult samples given other well-documented racism-health relationships among children (for review see [89]). In light of this, future research should examine internalized racism-health relationships among children—especially given the scant research on racism and health among child samples [84].

Measurement, Conceptualization, and Health Correlates of IR

Of 57 measures/instruments used, 48 (84.21%) are validated. To date, the psychometrics of only a few of these measures/instruments have been investigated and reported (e.g., The Internalization of Asian American Stereotypes scale: [100]). However, some of these measures have mixed psychometric properties. For example, the pre-encounter subscale of the Racial Identity Attitudes Scale (RIAS; [87]) was used in 26 studies (23.21%). Broadly, the RIAS is a self-report measure of the four stages of Black racial identity development described in Cross' [22] model of psychological Nigrescence: pre-encounter, encounter, immersion, internalization. There are three forms of the RIAS. The first, RIAS-A, contains 30 items based on the Q-sort items. A subsequent 30-item RIAS-B was developed using factor analysis (RIAS-B; short form), and a 50-item Long form (RIAS-B; long form) was developed to increase the internal consistency estimates of the RIAS [31]. Of the studies using the RIAS, all used the RIAS-B: 16 (61.54%) used the long form and 10 (38.46%) used the short form. However, according to Fischer and Moradi [36], the RIAS forms are not equivalent in that depending on the form, items belong to multiple or different subscales and overall evidence for the validity of the RIAS-B is mixed [31, 37].

In other instances, measures validated with one racial/ethnic group (e.g., African Americans: Nadanolitization Scale: [116]) were translated and/or presented to other groups (e.g., Latino/as: [50]). This is problematic because although racial/ethnic minority groups experience racism, the content and associated correlates of these experiences can vary once internalized [38]. Future research should construct and validate race/ethnic-specific measures of IR (e.g., The Colonial Mentality Scale for Filipino Americans: [28]). In the same way, research should also examine the intersectional nature of IR within racial/ethnic groups. For example, Thomas et al. [117] developed a measure of IR that captures the unique experiences of Black women. Thomas et al. [117] found that both generalized IR (i.e., beliefs about being Black) and gendered IR (i.e., beliefs about being a *Black female*) were uniquely and independently negatively associated with self-esteem. More research is needed to investigate "intersectional IR" and its relationship with health.

Positive and Negative IR Of the studies included in this review, 92.86% (n = 104) conceptualize IR as "internalized negative attitudes/feelings of inferiority" compared to roughly 9.82% (n = 11) conceptualizing it as "internalized positive attitudes/feelings of superiority." This skewed conceptualization among studies could reflect "mainstream" definitions of IR as almost exclusively "internalized self-hatred" (see [20]). In the same way, it is possible that the scant proportion of studies using "positive IR" conceptualizations mirrors influential theoretical frameworks defining racism as negative prejudices, bigotry, stereotypes, and flawed generalizations toward/about racial minorities [94] or the lack of acknowledgment that positive racial/ethnic stereotypes are a form of racial prejudice and component of racism that support, maintain, and legitimize anti-minority racial/ethnic hierarchies [24, 66, 105]. Critically, this suggests a need for research to investigate the correlates of IR when conceptualized as "positive IR."

In addition, no studies examined how "positive IR" is uniquely associated with health outcomes, and when, if, and how it is differently (or similarly) associated with health outcomes compared to "negative IR". It is possible that internalized positive views are associated with negative health (e.g., anxiousness: [106]) because people feel more constrained by these views [66, 99, 110]. Or perhaps endorsing positive views are associated with positive health outcomes because of the resulting boosts in self-concept people experience as a result [6, 132]. Deliberate focus on investigating "positive IR"—especially among non-Asian American samples given that only studies with Asian Americans samples used this conceptualization of IR—can challenge these assumptions.

Conscious and Unconscious IR Almost all studies conceptualize IR as the conscious, relative to unconscious—evidenced by the overwhelming number of studies using explicit (n = 109; 97.32%) compared to implicit (n = 3; 2.68%) measures/instruments to capture IR. It is conceivable that this conceptual disparity reflects "mainstream" conceptualizations of IR as a conscious process (see [68]). It is also possible that conceptualizations of IR as unconscious are less represented because of the complex nature of implicit measures and their still-disputed theoretical assumptions (see [29]). The small proportion of studies using implicit measures/instruments points to an urgent need to investigate unconscious IR.

To my knowledge—and evidence from this review—only David [26] has investigated the relationship between the conscious and unconscious forms of IR and health. David [26] found a modest (r = .43) correlation between the two forms and that both types of IR were positively, and uniquely, associated with depression (generalized, anhedonic) and depressive symptoms among Filipino Americans. However, how and why these relationships exist has not yet been developed fully. As a result, more work is needed, particularly with studies using both implicit and explicit measures/instruments of IR, to fully explore how, when, and the extent to which implicit and explicit IR converge (or diverge) when predicting health. In addition, future work should focus on understanding the unique relationships of unconscious IR and health especially given that previous work suggests that implicit attitudes are more stable overtime relative to explicit attitudes and that implicit attitudes can more accurately predict bias, can uniquely predict several specific biased social behaviors, and in some cases contradict explicit bias [39, 77, 81].

Last, it is my recommendation that studies investigating unconscious IR take caution when using the Implicit Association Test (IAT; [42]). All three (2.68%) studies measuring IR implicitly used the IAT. In particular, two of the three studies used a Black-White Implicit association test [82] with the third study using the Colonial Mentality Implicit Association Test (CMIAT; [26]). However, despite the validity and reliability of IATs (for review see [82]), some have suggested that IATs capture environmental associations and not unconscious attitudes (for more on this discussion see [43]). However, David and Okazaki [28] suggest that the Colonial Mentality IAT captures unconscious IR among Filipino Americans as it shows evidence of convergent, discriminant, and incremental validity. Notwithstanding potential issues with the IAT, more studies should investigate unconscious IR using other implicit measures (e.g., a modified word fragment completion task; [49]) that that do not only capture environmental associations in addition to using the IAT.

Self-Focused and Group-Focused IR A total of 75.88% (n = 85) and 26.79% (n = 30) of studies conceptualized IR as group-focused and self-focused, respectively. Importantly, only a few studies investigated how these two forms of IR are uniquely and independently associated with health. For example, Gupta et al. [44] found that positive self-focused IR was negatively associated with psychological distress, but not associated with help-seeking or somatic symptoms among Asian American adults. However, with the same sample, they found that positive group-focused IR was negatively associated with help-seeking and positively associated with somatic symptoms and psychological distress. Interestingly, they also found that positive self-focused and group-focused IR were moderately correlated (r = .53), but did not interact to influence any of the aforementioned health outcomes.

Gupta et al. [44] did not fully explain the theoretical reasons for these differences, but instead suggest that "The model minority myth [IR] extends beyond the group level, to the individual, and is based upon individual efforts, relevance, and mobility within the broader context of social, racial, and historical facts" (p.112). This implies that individual differences in racial/ethnic identity might influence the extent to which IR is associated with health outcomes. Perhaps, self-focused IR is more likely to predict health among individuals high in racial/ethnic centrality—i.e., the extent to which racial/ethnic group membership is emphasized in one's overall self-concept [96].

Or perhaps group-focused IR is more likely to predict health among those high in racial/ethnic private regard—positive or negative feelings toward one's racial/ethnic group [98]. Future work should examine these relationships.

In another study, Utsey et al. [123] investigated the association between IR and anxiety and depression symptoms among Ghanaian adults using the Colonial Mentality Scale-Ghana (CMS-G; [123]). The CMS-G has two negative self-focused and two negative group-focused measures of IR. Utsey et al. [123] found a positive association between negative group-focused IR and anxiety symptoms, but only found a positive association between negative group-focused IR and depression symptoms on only one of the two measures. Further, they found a positive association between negative self-focused IR and depression symptoms, but only found a positive association between negative self-focused IR and anxiety symptoms on only one of the two measures.

This example suggests that the extent to which self- and group-focused IRs are associated with health outcomes might be dependent on other key factors such as the specific health outcome, the population of study, and the content/valence of the internalized beliefs. As a consequence, future studies should investigate why and how self- and group-focused IRs converge (or diverge) when predicting health outcomes. For example, it is conceivable that group-focused IR is more strongly associated with health outcomes among allocentric individuals (i.e., individuals with a collectivist cultural orientation) as their construction of the self is largely influenced by their group membership [74]. On the other hand, it is also likely that self-focused IR is more strongly associated with health outcomes among idiocentric individuals (i.e., individuals with an individualist cultural orientation) given the schema of the self is largely independent of others [74]. More research is needed to examine the conditions and mechanisms through which self- and group-focused IR affect health.

Health Correlates of IR

Overall, negative health correlates of IR account for 52.91% ($n = 200$) of all health-associated relationships, while positive health correlates of IR account for 43.39% ($n = 164$) of all health-associated relationships. Of the negative health correlates 51.00% ($n = 102$) were positively associated with IR, while 54.27% ($n = 89$) of the positive health correlates were negatively associated with IR. Although IR is positively associated with negative health and negatively associated with positive health around 50% of the time, this pattern supports previous research suggesting that IR can lead to negative (less positive) health because of internalized feelings of inferiority [59, 60, 67], as well as negative feelings such as depersonalization [104] and anxiousness [106] that might result from the internalization of positive group stereotypes.

Interestingly, results also show that IR was negatively associated with negative health (5.00% [$n = 10$]) and positively associated with positive health (6.71% [$n = 11$]). Although these relationships are relatively low in number, they support previous empirical and theoretical work showing that internalized stigma broadly, and IR specifically can protect against negative/ill health. For example, Molina and James [78] found, in a nationally representative sample of Afro-Caribbeans in the USA, in which increased IR was associated with lower odds of major depressive disorder. Molina and James [78] suggest this pattern is likely because for Afro-Caribbean internalization of group stereotypes served as a self-protective strategy that guarded against negative/ill health. The self-protective nature of internalized stereotypes has been well-documented in other domains.

For example, Burkley and Blanton [13] found that women who failed a math test but were reminded of negative stereotypes about women and math performance rated their self-esteem higher than those who were not reminded of the negative stereotypes. They also found that women with higher levels of self-esteem were more likely to endorse these negative stereotypes compared to those with lower self-esteem. Burkley and Blanton [13] suggested that this *functional internalization* (i.e., a contextualized, adaptive, short-term strategic response to threat in which stereotypes are internalized to fulfill a particular motive; see also [14]) protected against negative psychological/emotional consequences of potentially confirming gender stereotypes. Thus, in the same way, it is possible that racial/ethnic minorities also internalize racism as a way to protect their self-concept against repeated exposure to racism and discrimination [125]. Conversely, in some instances, the internalization of stereotypes is not functional and carries over an extended period. This *chronic internalization* of stereotypes can contribute to negative health as long-term internalization might exhaust emotional and psychological resources [14]. Nevertheless, the extent to which chronic and functional IR influence racial/ethnic minority is unclear given the limited research that longitudinally investigate IR. Research is needed to more fully understand the relationship between chronic and functional IR and health.

In addition to examining chronic and functional IR, it is also likely that the relationship between IR and positive health outcomes is moderated by the valence of the internalized stereotypes and the position of one's racial/ethnic group in the racial hierarchy. For example, it is likely that positive IR is associated with better health because of boosts in self-concept [6] and increased feelings of competence [101]. This relationship is also complicated by research suggesting that "positive IR" might lead to different outcomes based on one's racial/ethnic group's status. For example, "positive IR" among Blacks and Latinos may contribute to maintaining/enhancing group hierarchies of which they are at/near the bottom, but the same internalization among high-status groups (i.e., Asians) and the corresponding hierarchy maintenance (i.e., at or near the top) takes on a

different meaning [109]. As such, more research investigating "positive IR"—especially among non-Asian American—is needed to understand how stereotype valence and group position in the racial hierarchy might explain IR-health relationship.

Last, evidence that identifies mechanisms and processes involved, or the conditions under which IR is associated with health among racial/ethnic minorities are limited. For example, although some research shows moderators such as sociodemographic characteristics (e.g., gender; [21]), experiences with discrimination [114], self-esteem and racial/ethnic identity [58], closeness to one's racial/ethnic group [54] and racial/ethnic group membership [79] and mediators such as self-esteem [91] and coping [66, 114], more research is needed given the complex nature of IR. In the same way, future research should diversify the health outcomes investigated. For example, of the health outcomes in this review, only about 10% were physical health outcomes, whereas around 70% were mental health outcomes. Critically, more research is needed to understand how IR influences physical health outcomes among racial/ethnic minorities [108].

Rethinking IR among Racial/Ethnic Minorities

Evidence from this review suggests that IR is almost exclusively conceptualized as the internalization of negative stereotypes, views, ideologies, or beliefs. However, a growing area of scholarship argues that the internalization of positive views about one's racial/ethnic group also constitutes a form of IR [66]. Nevertheless, definitions of IR that include the internalization of both negative and positive views, ideologies, worldviews, and stereotypes are lacking and/or are not integrated within "mainstream" conceptualizations of IR.

In addition, scant research differentiates between self- and group-focused IR. Critically, a largely majority of peer-reviewed quantitative research (from this review) conceptualize IR as group-focused relative to self-focused. This is problematic given that both self- and group-focused IRs are associated with negative health among racial/ethnic minorities. Further, although the internalization process is thought to be both conscious and unconscious (see [50]), almost all studies in this review conceptualized IR as a conscious process—a pattern that might reflect the complex nature of implicit measures [29].

To my knowledge, no definitions present IR as both a conscious and unconscious process that can be group- or self-focused, which also includes the internalization of both positive and negative views, beliefs, and stereotypes. To address this gap in the literature, using evidence from this review, I define IR, in its simplest form, as: A form of racism that lead people to internalize (consciously, unconsciously) beliefs, values, and stereotypes (negative, positive) about their racial/ethnic group or about themselves because of their racial/ethnic group membership.

Moreover, much research has focused on the relationship between IR and negative health. Yet, evidence extracted from this review suggests that in some instances, IR might function as a self-protective strategy. Still, little is known about the mechanisms and conditions under which IR is self-protective. Informed by research in other domains [13, 14], future research should investigate (potential) chronic and functional forms of IR. Such investigation can elucidate the ambiguous relationship between IR and positive and negative health outcomes. Nevertheless, research suggests that (1) IR is negatively associated with health via decrements in positive CSE, (2) IR exacerbates the relationship between other stressors and ill health, (3) IR mediates the relationship between discrimination and health, and (4) IR is a self-protective strategy that protects against ill health.

Collectively, this review suggests a complicated relationship between IR and health. As such, future research should pay particular attention to how IR is conceptualized (and measured) when examining IR-health relationships. Critically, in addition to conceptualizing IR as conscious or unconscious, group-focused or self-focused, the internalization of positive or negative views, beliefs, and stereotypes, research should also examine chronic and functional forms of IR. Overall, more research is examining the relationship between IR and health among racial/ethnic minorities is needed, especially among non-African-American populations. It is also critical to acknowledge that results from this review are driven largely by understandings of how internalized racism manifests among African American populations.

Conclusion

Although robust, the methods employed in this review are not without limitations. Livingston and Boyd [71] and Paradies et al. [86] have already highlighted some of these limitations. For example, first, only articles published in English were included in this review. This limits the cross-cultural generalizability of these findings and might account for the over-representation of American, Caribbean, and African samples in this review. However, understanding the nature of IR in single (or multiple) cultural contexts still contributes to our overall understanding of IR. Second, qualitative studies were excluded from this review, which limits the extent to which we can understand the phenomenology of IR. Nevertheless, understanding the quantitative associations of IR also provide further insight into the nature of IR. Third, only peer-reviewed studies were included in this review, which increases the chances that null or negative findings might be under-represented in this review and also limits the general accuracy of this synthesis. However, the insights garnered from peer-reviewed papers still contribute to our understanding of IR

despite these publication biases in reported results. A unique limitation of this review is the lack of focus on mechanisms and moderators of IR and health. The diverse number of measures/instruments of IR, coupled with different conceptualizations and health, made it increasingly difficult to fully dissect the nuisances of relationships between IR and health. Indeed, meta-analyses and/or reviews focusing on specific mechanism should be conducted in the near future.

Notwithstanding these limitations, this is the first review on IR and health to date. In particular, this paper summarizes and evaluates almost three decades of quantitative empirical research on IR, its associated health and health-related outcomes, and its measurement and conceptualization. Importantly, this paper expands the conceptual boundaries of IR to include the *conscious* and *unconscious* internalization of *negative* and *positive* own racial/ethnic group "views, beliefs, and stereotypes" about *one's racial/ethnic group* and about *one's self as a member of a racial/ethnic group*, which can be *chronic* and *functional*.

The strongest, and most consistent, findings gathered from this review show that IR is positively associated with negative physical and mental health, and negatively associated with positive mental health among racial/ethnic minorities. Interesting, this review also suggests that in some instances, IR might protect against negative health. However, the review also shows that the conceptualization of IR, and as a result how it is measured, can influence the nature of these relationships. In addition, the review shows that research interest in IR is growing and has been limited by a dearth of longitudinal studies, poor conceptualizations, measurement, and definition of IR and little focus on mediators and moderators of health associations. As the interest in IR is steadily increasing, it is hoped that this systemic review will provide new insights for research in understanding, as well as addressing, IR as a determinant of health among racial/ethnic minorities.

Compliance with Ethical Standards

Conflicts of Interest The author declares that there are no conflicts of interest.

Ethical Approval This article does not contain any studies with human participants or animals performed by any of the authors.

References

*See supplement for studies included in the review.

1. Alegria M, Woo M, Takeuchi D, Jackson J. Ethnic and racial group-specific consid- erations. In: Ruiz P, Primm A, editors. Disparities in psychiatric care: clinical and cross-cultural perspectives. Bethesda: Lippincott Williams and Wilkins; 2009. p. 306–18.
2. Arroyo CG, Zigler E. Racial identity, academic achievement, and the psychological well-being of economically disadvantaged adolescents. J Pers Soc Psychol. 1995;69(5):903–14.
3. Bailey TKM, Chung YB, Williams WS, Singh AA, Terrell HK. Development and validation of the internalized racial oppression scale for black individuals. J Couns Psychol. 2011;58(4):481–93.
4. Banks KH, Stephens J. Reframing internalized racial oppression and charting a way forward. Soc Issues Policy Rev. 2018;12(1): 91–111.
5. Berman G, Paradies Y. Racism, disadvantage and multiculturalism: towards effective anti-racist praxis. Ethnic Racial Stud. 2010;33(2):214–32.
6. Biernat M, Vescio TK, Green ML. Selective self- stereotyping. J Pers Soc Psychol. 1996;71(6):1194–209.
7. Bivens D. Internalized racism: a definition. Boston: The Women's Theological Center; 1995.
8. Bonilla-Silva E. Rethinking racism: toward a structural interpretation. Am Sociol Rev. 1997;62(3):465–80.
9. Bornstein MH, Jager J, Putnick DL. Sampling in developmental science: situations, shortcomings, solutions, and standards. Dev Rev. 2013;33(4):357–70.
10. Brega AG, Coleman LM. Effects of religiosity and racial socialization on subjective stigmatization in African-American adolescents. J Adolesc. 1999;22(2):223–42.
11. Brondolo E, Libretti M, Rivera L, Walsemann KM. Racism and social capital: the implications for social and physical well-being. J Soc Issues. 2012;68(2):358–84.
12. Brown D, Blackmon SK, Rosnick C, Griffin-Fennell F, White-Johnson R. Initial development of a gendered-racial socialization scale for African American college women. Sex Roles. 2017;77(3–4):178–93.
13. Burkley M, Blanton H. Endorsing a negative in-group stereotype as a self-protective strategy: sacrificing the group to save the self. J Exp Soc Psychol. 2008;44(1):37–49.
14. Burkley M, Blanton H. The positive (and negative) consequences of endorsing negative self-stereotypes. Self Identity. 2009;8(2–3): 286–99.
15. Campón RR, Carter RT. The appropriated racial oppression scale: development and preliminary validation. Cult Divers Ethn Minor Psychol. 2015;21(4):497–506.
16. Chambers EC, Tull ES, Fraser HS, Mutunhu NR, Sobers N, Niles E. The relationship of internalized racism to body fat distribution and insulin resistance among African adolescent youth. J Natl Med Assoc. 2004;96(12):1594–8.
17. Choi AY, Israel T, Maeda H. Development and evaluation of the internalized racism in Asian Americans scale (IRAAS). J Couns Psychol. 2017;64(1):52–64.
18. Clark KB, Clark MK. The development of consciousness of self and the emergence of racial identification in negro preschool children. J Soc Psychol. 1939;10(4):591–9.
19. Clark R, Anderson NB, Clark VR, Williams DR. Racism as a stressor for African Americans: a biopsychosocial model. Am Psychol. 1999;54(10):805–16.
20. Cokley KO. Testing Cross's revised racial identity model: an examination of the relationship between racial identity and internalized racialism. J Couns Psychol. 2002;49(4):476–83.
21. Cort MA, Gwebu ET, Tull ES, Cox NA, Modise T. The differential gender effect of internalized racism on abdominal obesity in KwaZulu-Natal, South Africa. Soc Sci J. 2013;50(4):557–64.
22. Cross WE Jr. The negro-to-black conversion experience. Black World. 1971;20(9):13–27.
23. Czopp, A. M. (2008). *School isn't cool, but I am: Implicit positive self-stereotyping & Blacks' education goals*. Poster presented at the annual meeting of the Society for Personality and Social Psychology, Albuquerque, NM.

24. Czopp AM, Kay AC, Cheryan S. Positive stereotypes are pervasive and powerful. Perspect Psychol Sci. 2015;10(4):451–63.
25. Darling-Hammond L. Race, inequality and educational accountability: the irony of 'no child left behind'. Race Ethn Educ. 2007;10(3):245–60.
26. David EJR. Testing the validity of the colonial mentality implicit association test and the interactive effects of covert and overt colonial mentality on Filipino American mental health. Asian Am J Psychol. 2010;1(1):31–45.
27. David EJR, Nadal KL. The colonial context of Filipino American immigrants' psychological experiences. Cult Divers Ethn Minor Psychol. 2013;19(3):298–309.
28. David EJR, Okazaki S. The colonial mentality scale (CMS) for Filipino Americans: scale construction and psychological implications. J Couns Psychol. 2006;53(2):241–52.
29. De Houwer J, Teige-Mocigemba S, Spruyt A, Moors A. Implicit measures: a normative analysis and review. Psychol Bull. 2009;135(3):347–68.
30. DeBerard MS, Spielmans GI, Julka DL. Predictors of academic achievement and retention among college freshmen: a longitudinal study. Coll Stud J. 2004;38(1):66–81.
31. DeCuir-Gunby JT. A review of the racial identity development of African American adolescents: the role of education. Rev Educ Res. 2009;79(1):103–24.
32. Drazdowski TK, Perrin PB, Trujillo M, Sutter M, Benotsch EG, Snipes DJ. Structural equation modeling of the effects of racism, LGBTQ discrimination, and internalized oppression on illicit drug use in LGBTQ people of color. Drug Alcohol Depend. 2016;159:255–62.
33. DuBois WEB. The souls of black folk. New York: Penguin; 2008. (Original work published 1903)
34. Ellis JM, Rowley LL, Nellum CJ, Smith CD. From alienation to efficacy an examination of racial identity and racial academic stereotypes among black male adolescents. Urban Educ. 2015;53(7):899–928.
35. Fanon, F. (1963). *The Wretched of the Earth*. Translated by Farrington, C. New York: Grove Press. (originally published in 1961).
36. Fischer AR, Moradi B. Racial and ethnic identity: recent developments and needed directions. In: Ponterotto JG, Casas JM, Suzuki LA, Alexander CM, editors. Handbook of multicultural counseling. 2nd ed. Thousand Oaks, CA: Sage; 2001. p. 341–70.
37. Fischer AR, Tokar DM, Serna GS. Validity and construct contamination of the racial identity attitude scale—long form. J Couns Psychol. 1998;45(2):212–24.
38. Fiske ST, Cuddy AJ, Glick P, Xu J. A model of (often mixed) stereotype content: competence and warmth respectively follow from perceived status and competition. J Pers Soc Psychol. 2002;82(6):878–902.
39. Gawronski B, LeBel EP, Peters KR. What do implicit measures tell us?: scrutinizing the validity of three common assumptions. Perspect Psychol Sci. 2007;2(2):181–93.
40. Glanz K, Schwartz MD. Stress, coping, and health behavior. Health Behav Health Educ: Theory Res Pract. 2008;4:211–36.
41. *Graham, J. R., West, L. M., Martinez, J., & Roemer, L. (2016). The mediating role of internalized racism in the relationship between racist experiences and anxiety symptoms in a black American sample. Cultural Diversity & Ethnic Minority Psychology, 22(3), 369–76.
42. Greenwald AG, McGhee DE, Schwartz JL. Measuring individual differences in implicit cognition: the implicit association test. J Pers Soc Psychol. 1998;74(6):1464–80.
43. Greenwald AG, Banaji MR, Nosek BA. Statistically small effects of the implicit association test can have societally large effects. J Pers Soc Psychol. 2015;108(4):553–61.
44. Gupta A, Szymanski DM, Leong FT. The "model minority myth": internalized racialism of positive stereotypes as correlates of psychological distress, and attitudes toward help-seeking. Asian Am J Psychol. 2011;2(2):101–14.
45. Hardiman R, Jackson B, Griffin P. Conceptual foundations for social justice courses. In: Adams M, Bell LA, Griffin P, editors. Teaching for diversity and social justice. 2nd ed. New York, NY: Routledge; 2007. p. 35–66.
46. Harrell SP. A multidimensional conceptualization of racism-related stress: implications for the well-being of people of color. Am J Orthop. 2000;70(1):42–57.
47. Hatter-Fisher D, Harper W. The relevance of depression, alexithymia, and internalized racism to blood pressure in African Americans. Int J Health Wellness Soc. 2017;7(1):49–60.
48. Hilbert A, Braehler E, Haeuser W, Zenger M. Weight bias internalization, core self-evaluation, and health in overweight and obese persons. Obesity. 2014;22(1):79–85.
49. Hing LSS, Li W, Zanna MP. Inducing hypocrisy to reduce prejudicial responses among aversive racists. J Exp Soc Psychol. 2002;38(1):71–8.
50. Hipolito-Delgado CP. Exploring the etiology of ethnic self-hatred: internalized racism in Chicana/o and Latina/o college students. J Coll Stud Dev. 2010;51(3):319–31.
51. Hitchcock J. Lifting the white veil: an exploration of White American culture in a multicultural context. Roselle, NJ: Crandall, Dostie, and Douglass; 2002.
52. Ho C, Jackson JW. Attitudes toward Asian Americans: theory and measurement. J Appl Soc Psychol. 2001;31(8):1553–81.
53. Huber LP, Johnson RN, Kohli R. Naming racism: a conceptual look at internalized racism in US schools. Chicano-Latino Law Rev. 2006;26:183–206.
54. Hughes M, Kiecolt KJ, Keith VM, Demo DH. Racial identity and well-being among African Americans. Soc Psychol Q. 2015;78(1):25–48.
55. Jackson JS. Life in black America. Newbury Park, CA: Sage Publications; 1991.
56. Jackson CC, Neville HA. Influence of racial identity attitudes on African American college students' vocational identity and hope. J Vocat Behav. 1998;53(1):97–113.
57. Jackson JS, Torres M, Caldwell CH, Neighbors HW, Nesse RM, Taylor RJ, et al. The National Survey of American life: a study of racial, ethnic and cultural influences on mental disorders and mental health. Int J Methods Psychiatr Res. 2004;13(4):196–207.
58. James D. Internalized racism and past-year major depressive disorder among African Americans: the role of ethnic identity and self-esteem. J Racial Ethn Health Disparities. 2017;4(4):659–70.
59. Jones CP. Levels of racism: a theoretic framework and a gardener's tale. Am J Public Health. 2000;90(8):1212–5.
60. Jones CP. Invited commentary:"race," racism, and the practice of epidemiology. Am J Epidemiol. 2001;154(4):299–304.
61. Jost JT, Kivetz Y, Rubini M, Guermandi G, Mosso C. System-justifying functions of complementary regional and ethnic stereotypes: cross-national evidence. Soc Justice Res. 2005;18(3):305–33.
62. Judge TA, Erez A, Bono JE, Thoresen CJ. The core self-evaluations scale: development of a measure. Pers Psychol. 2003;56(2):303–31.
63. Kammeyer-Mueller JD, Judge TA, Scott BA. The role of core self-evaluations in the coping process. J Appl Psychol. 2009;94(1):177–95.
64. Kay AC, Jost JT, Young S. Victim derogation and victim enhancement as alternate routes to system justification. Psychol Sci. 2005;16(3):240–6.
65. Kelley K, Maxwell SE. Sample size for multiple regression: obtaining regression coefficients that are accurate, not simply significant. Psychol Methods. 2003;8(3):305–21.

66. Kim PY, Lee D. Internalized model minority myth, Asian values, and help-seeking attitudes among Asian American students. Cult Divers Ethn Minor Psychol. 2014;20(1):98–106.
67. Kohli R. Unpacking internalized racism: teachers of color striving for racially just classrooms. Race Ethn Educ. 2014;17(3):367–87.
68. Kohli R, Johnson RN, Perez LH. Naming racism: a conceptual look at internalized racism in US schools. Chicano/Latino Law Rev. 2006;26:183–206.
69. Krieger N. Embodying inequality: a review of concepts, measures, and methods for studying health consequences of discrimination. Int J Health Serv. 1999;29(2):295–352.
70. Lee SJ, Wong N, Alvarez AN. The model minority and the perpetual foreigner: stereotypes of Asian Americans. In: Asian American psychology: current perspectives. New York: Routledge/Taylor & Francis; 2009. p. 69–84.
71. Livingston JD, Boyd JE. Correlates and consequences of internalized stigma for people living with mental illness: a systematic review and meta-analysis. Soc Sci Med. 2010;71(12):2150–61.
72. Lorini E, Longin D, Gaudou B, Herzig A. The logic of acceptance: grounding institutions on agents' attitudes. J Log Comput. 2009;19(6):901–40.
73. Luhtanen R, Crocker J. A collective self-esteem scale: self-evaluation of one's social identity. Personal Soc Psychol Bull. 1992;18(3):302–18.
74. Markus HR, Kitayama S. Cultures and selves: a cycle of mutual constitution. Perspect Psychol Sci. 2010;5(4):420–30.
75. Marmot M. Social determinants of health inequalities. Lancet. 2005;365(9464):1099–104.
76. Massey DS, Owens J. Mediators of stereotype threat among black college students. Ethn Racial Stud. 2014;37(3):557–75.
77. McConnell AR, Leibold JM. Relations among the implicit association test, discriminatory behavior, and explicit measures of racial attitudes. J Exp Soc Psychol. 2001;37(5):435–42.
78. Molina KM, James D. Discrimination, internalized racism, and depression: a comparative study of African American and Afro-Caribbean adults in the US. Group Process Intergroup Relat. 2016;19(4):439–61.
79. Mouzon DM, McLean JS. Internalized racism and mental health among African-Americans, US-born Caribbean blacks, and foreign-born Caribbean blacks. Ethn Health. 2016;22(1):36–48.
80. Nosek BA. Implicit–explicit relations. Curr Dir Psychol Sci. 2007;16(2):65–9.
81. Nosek BA, Banaji M, Greenwald AG. Harvesting implicit group attitudes and beliefs from a demonstration web site. Group Dyn Theory Res Pract. 2002;6(1):101–15.
82. Nosek BA, Greenwald AG, Banaji MR. The implicit association test at age 7: a methodological and conceptual review. In: Bargh CJA, editor. *Automatic processes in social thinking and behavior*. New York: Psychology Press; 2007. p. 265–92.
83. Okoli C, Schabram K. A guide to conducting a systematic literature review of information systems research. Sprouts Working Papers on Information Systems. 2010;10(26):1–50.
84. Pachter LM, Coll CG. Racism and child health: a review of the literature and future directions. J Dev Behav Pediatr. 2009;30(3):255–63.
85. Paradies Y. A systematic review of empirical research on self-reported racism and health. Int J Epidemiol. 2006;35(4):888–901.
86. Paradies Y, Ben J, Denson N, Elias A, Priest N, Pieterse A, et al. Racism as a determinant of health: a systematic review and meta-analysis. PLoS One. 2015;10:e0138511. https://doi.org/10.1371/journal.pone.0138511.
87. Parham TA, Helms JE. The racial identity attitudes scale. Handbook of Tests and Measurements for Black Populations. 1996;167–74.
88. Pheterson G. Alliances between women: overcoming internalized oppression and internalized domination. In: Albrecht L, Brewer R, editors. Bridges of power: women's multicultural alliances. Philadelphia: New Society Publishers; 1990. p. 34–48.
89. Priest N, Paradies Y, Trenerry B, Truong M, Karlsen S, Kelly Y. A systematic review of studies examining the relationship between reported racism and health and wellbeing for children and young people. Soc Sci Med. 2013;95(C):115–27.
90. Pyke KD. What is internalized racial oppression and why don't we study it? Acknowledging racism's hidden injuries. Sociol Perspect. 2010;53(4):551–72.
91. Rivera LM, Paredez SM. Stereotypes can "get under the skin": testing a self-stereotyping and psychological resource model of overweight and obesity. J Soc Issues. 2014;70(2):226–40.
92. Ryan RM, Connell JP. Perceived locus of causality and internalization: examining reasons for acting in two domains. J Pers Soc Psychol. 1989;57(5):749–61.
93. Ryff CD, Keyes CL, Hughes DL. Status inequalities, perceived discrimination, and eudaimonic well-being: do the challenges of minority life hone purpose and growth? J Health Soc Behav. 2003;44(3):275–91.
94. Salter P, Adams G. Toward a critical race psychology. Soc Personal Psychol Compass. 2013;7(11):781–93.
95. Schafer R. Aspects of internalization. New York: International Universities Press; 1968.
96. Scottham KM, Sellers RM, Nguyên HX. A measure of racial identity in African American adolescents: the development of the multidimensional inventory of black identity–teen. Cult Divers Ethn Minor Psychol. 2008;14(4):297–306.
97. Seet AZ (2019) Serving the White nation: bringing internalised racism within a sociological understanding J Sociol1440783319882087.
98. Sellers RM, Rowley SA, Chavous TM, Shelton JN, Smith MA. Multidimensional inventory of black identity: a preliminary investigation of reliability and construct validity. J Pers Soc Psychol. 1997;73(4):805–15.
99. Shen FC. The role of internalized stereotyping, parental pressure, and parental support on Asian Americans' choice of college major. J Multicult Couns Dev. 2015;43(1):58–73.
100. Shen FC, Wang YW, Swanson JL. Development and initial validation of the internalization of Asian American stereotypes scale. Cult Divers Ethn Minor Psychol. 2011;17(3):283–94.
101. Shih M, Ambady N, Richeson JA, Fujita K, Gray HM. Stereotype performance boosts: the impact of self- relevance and the manner of stereotype activation. J Pers Soc Psychol. 2002;83(3):638–47.
102. Sidanius J, Pratto F. Social dominance: an intergroup theory of social hierarchy and oppression. Cambridge: Cambridge University Press; 1999.
103. Sidanius J., Veniegas R. C. (2000). "Gender and race discrimination: the interactive nature of disadvantage." In *Reducing Prejudice and Discrimination*, ed. Oskamp S., editor. (Mahwah, NJ: Erlbaum), 47–69.
104. Siy JO, Cheryan S. When compliments fail to flatter: American individualism and responses to positive stereotypes. J Pers Soc Psychol. 2013;104:87–102.
105. Siy JO, Cheryan S. Prejudice masquerading as praise: the negative echo of positive stereotypes. Personal Soc Psychol Bull. 2016;42(7):941–54.
106. Son D, Shelton JN. Stigma consciousness among Asian Americans: impact of positive stereotypes in inter- racial roommate relationships. Asian Am J Psychol. 2011;2(1):51–60.
107. Speight SL. Internalized racism: one more piece of the puzzle. Couns Psychol. 2007;35(1):126–34.
108. Substance Abuse and Mental Health Services Administration (2015) Racial/ethnic differences in mental health service use among adults HHS Publication No. SMA-15-4906.. Rockville, MD: Substance Abuse and Mental Health Services

Administration. Retrieved from: http://www.integration.samhsa.gov/MHServicesUseAmongAdults.pdf
109. Sundstrom RR, Kim DH. Xenophobia and racism. Critical Philos Race. 2014;2(1):20–45.
110. Suzuki BH. Revisiting the model minority stereotype: implications for student affairs practice and higher education. New Dir Stud Serv. 2002;2002(97):21–32.
111. Swim JK, Hyers LL, Cohen LL, Fitzgerald DC, Bylsma WH. African American college students' experiences with everyday racism: characteristics of and responses to these incidents. J Black Psychol. 2003;29(1):38–67.
112. Szalacha LA, Erkut S, Coll CG, Alarcón O, Fields JP, Ceder I. Discrimination and Puerto Rican children's and adolescents' mental health. Cult Divers Ethn Minor Psychol. 2003;9(2):141–55.
113. Szymanski DM, Obiri O. Do religious coping styles moderate or mediate the external and internalized racism-distress links? Couns Psychol. 2010;39(3):438–62.
114. Szymanski, D. M., & Stewart, D. N. (2010). Racism and sexism as correlates of African American women's psychological distress. Sex Roles, 63(3-4), 226-238.
115. Tappan MB. Reframing internalized oppression and internalized domination: from the psychological to the sociocultural. Teach Coll Rec. 2006;108(10):2115–44.
116. Taylor J, Grundy G. Measuring black internalization of White stereotypes about blacks: the Nadanolitization scale. In: Jones RL, editor. Tests and measurements for black populations. Berkeley: Cobb & Henry; 1996. p. 217–26.
117. Thomas AJ, Witherspoon KM, Speight SL. Toward the development of the stereotypic roles for black women scale. J Black Psychol. 2004;30(3):426–42.
118. Thompson CP, Anderson LP, Bakeman RA. Effects of racial socialization and racial identity on acculturative stress in African American college students. Cult Divers Ethn Minor Psychol. 2000;6(2):196–210.
119. Townsend TG, Thomas AJ, Neilands TB, Jackson TR. I'm no Jezebel; I am young, gifted, and black: identity, sexuality, and black girls. Psychol Women Q. 2010;34(3):273–85.
120. Tull SE, Wickramasuriya T, Taylor J, Smith-Burns V, Brown M, Champagnie G, et al. Relationship of internalized racism to abdominal obesity and blood pressure in afro-Caribbean women. J Natl Med Assoc. 1999;91(8):447–52.
121. 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. Retrieved from: https://www.ncbi.nlm.nih.gov/books/NBK44243/pdf/Bookshelf_NBK44243.pdf
122. Utsey SO, Lanier Y, Williams O III, Bolden M, Lee A. Moderator effects of cognitive ability and social support on the relation between race-related stress and quality of life in a community sample of black Americans. Cult Divers Ethn Minor Psychol. 2006;12(2):334–46.
123. Utsey SO, Abrams JA, Opare-Henaku A, Bolden MA, Williams O III. Assessing the psychological consequences of internalized colonialism on the psychological well-being of young adults in Ghana. J Black Psychol. 2015;41(3):195–220.
124. Vandiver BJ, Cross WE Jr, Worrell FC, Fhagen-Smith PE. Validating the cross racial identity scale. J Couns Psychol. 2002;49(1):71–85.
125. Versey HS, Cogburn CC, Wilkins CL, Joseph N. Appropriated racial oppression and its role for health in whites and blacks. Soc Sci Med. 2019;230:295–302.
126. Wallis KC, Poulton JL. Internalization: the origins and construction of internal reality. Buckingham: Open University Press; 2001.
127. White RT, Arzi HJ. Longitudinal studies: designs, validity, practicality, and value. Res Sci Educ. 2005;35(1):137–49.
128. Williams DR, Mohammed SA. Racism and health I: pathways and scientific evidence. Am Behav Sci. 2013;57(8):1152–73.
129. Williams DR, Lawrence JA, Davis BA. Racism and health: evidence and needed research. Annu Rev Public Health. 2019;40:105–25.
130. Worrell FC, Mendoza-Denton R, Wang A. Introducing a new assessment tool for measuring ethnic-racial identity: the cross ethnic-racial identity scale–adult (CERIS-A). Assessment. 2017;26(3):404–18.
131. Yoo HC, Burrola KS, Steger MF. A preliminary report on a new measure: internalization of the model minority myth measure (IM-4) and its psychological correlates among Asian American college students. J Couns Psychol. 2010;57(1):114–27.
132. Yoo HC, Miller MJ, Yip P. Validation of the internalization of the model minority myth measure (IM-4) and its link to academic performance and psychological adjustment among Asian American adolescents. Cult Divers Ethn Minor Psychol. 2015;21(2):237–46.