JSPR

Article

Racial discrimination, racism-specific support, and self-reported health among African American couples

Journal of Social and Personal Relationships
1–21

DOI: 10.1177/0265407519878519
journals.sagepub.com/home/spr
SAGE

Shardé McNeil Smith[1], Lillie D. Williamson[1], Hafeezah Branch[1], and Frank D. Fincham[2]

Abstract

Racial discrimination is a part of the lived experience for African Americans, and it is widely found to have damaging consequences to their mental and physical health; yet, we know less about how romantic partners influence the degree to which racial discrimination can impinge on health outcomes. Using a dyadic approach with heterosexual African American couples ($N = 487$), the current study examined the compensatory and stress-buffering effects of racism-specific support (RSS) from the partner on the associations between racial discrimination and one's own and one's partner's self-reported mental, physical, and general health. We found that perceptions of RSS from the partner were associated with better mental and physical health for husbands and better physical and general health for wives, independent of the effects of their own and their partner's racial discrimination. However, wives showed compromised mental health when their husbands perceived high levels of RSS. Furthermore, among wives who reported low levels of RSS from their partner, wives' and husbands' experiences of racial discrimination were associated with wives' lowered mental health. These findings suggest that couple-level interventions for African Americans should pay specific attention to wives who may carry the burden of their own and their husbands' experiences of racial discrimination.

[1] University of Illinois at Urbana-Champaign, USA
[2] Florida State University, USA

Corresponding author:
Shardé McNeil Smith, Department of Human Development and Family Studies, University of Illinois at Urbana-Champaign, 904 West Nevada Street, Urbana, IL, 61801, USA.
Email: snsmith@illinois.edu

Keywords
African American, couples, health, racial discrimination, racism, social support

Racial discrimination is a pervasive and common stressor for African Americans (Ajrouch, Reisine, Lim, Sohn, & Ismail, 2010; Clark, Anderson, Clark, & Williams, 1999; Williams & Mohammed, 2009). Experiences of racial discrimination can occur in daily interactions within several social contexts (Chae, Lincoln, & Jackson, 2011; Williams & Williams-Morris, 2000) and can include behaviors that are overt, such as direct physical encounters, or covert such as being treated with less courtesy (Chae et al., 2014). Moreover, racial discrimination can manifest as African Americans engage in mundane tasks such as golfing, working out, barbecuing in their local park, setting up a lemonade stand outside of their home, and waiting on friends in a coffee shop (Harrison, 2001; Mezzofiore, 2018). Denigrating acts such as these have been consistently shown to have harmful effects on the mental and physical health of African Americans (Lavner, Barton, Bryant, & Beach, 2018; Mouzon, Taylor, Woodward, & Chatters, 2017; Williams & Williams-Morris, 2000). Specifically, African American adults who report experiencing racial discrimination have poor health outcomes as evidenced by elevated levels of psychological distress (Berger & Sarnyai, 2015), low self-esteem (Fischer & Shaw, 1999), elevated blood pressure (Brondolo, Rieppi, Kelly, & Gerin, 2003), and increased physiological arousal (Banks, Kohn-Wood, & Spencer, 2006).

Given the interdependence of individuals in close interpersonal relationships, it is reasonable to expect that the link between racial discrimination and health may operate uniquely for those in committed relationships. Indeed, racial discrimination can be a shared experience such that the experiences of one partner can influence the health of the other (Utsey, Ponterotto, Reynolds, & Cancelli, 2000), making own and partner experiences of racial discrimination a risk factor for poor health (i.e., partner or cross-over effects; McNeil, Fincham, & Beach, 2014). In addition to the potential for partner effects, partners in romantic relationships can also be an important source of support for helping individuals deal with the pernicious effects of racial discrimination (Clavél, Cutrona, & Russell, 2017; Donnelly, Robinson, & Umberson, 2019). Therefore, partners who perceive that their loved one would be supportive when discussing experiences of racial discrimination may have better health outcomes than those who feel they would not receive support.

Although there is substantial evidence that social relationships influence individual health (Umberson & Montez, 2010), research examining the effects of racial discrimination on health for those in a romantic relationship is scarce. Therefore, using a sample of African American couples in committed relationships (i.e., married or engaged to be married), we examined (a) whether romantic partners' experiences with discrimination are associated with their own and their partner's self-reported health (i.e., general health, mental health, and physical health), (b) whether perceived racism-specific support (RSS) from their partner has compensatory effects (i.e., positive effects on self-reported health outcomes regardless of the level of racial discrimination), and (c) whether perceived RSS

from their partner has stress-buffering effects (i.e., reduces the negative effects of high levels of racial discrimination on health outcomes).

Racial discrimination and health among African Americans

Racial discrimination experiences are dehumanizing and arise from a system of racism that unjustly disadvantages marginalized racial and ethnic groups while providing advantages to those in the majority (Banks et al., 2006; Jones, 2002). A significant proportion of African Americans report experiencing racial discrimination (Kessler, Mickelson, & Williams, 1999), which may produce higher stress levels by triggering psychological, behavioral, and physiological responses (Clark et al., 1999). Furthermore, repeated experiences of racial discrimination are shown to foster a constant state of emotional and physical stress for African Americans (Anderson, 2013), which can lead to weathering or early health deterioration through the cumulative wear and tear on one's mind and body (Geronimus, Hicken, Keen, & Bound, 2006). Racial discrimination is also linked to poor health outcomes through distrust in a variety of social institutions (e.g., healthcare system), reduced neighborhood social capital, an increase in risky behaviors (Chen & Yang, 2014), and institutionalized racism that generates residential segregation, food insecurity, and financial stress for this population (Williams & Mohammed, 2009). Given that African Americans are living in an environment consisting of "multiple forms of continuous, chronic, subtle and overt forms of oppressions that is both energy- and resource-consuming" (McNeil Smith & Landor, 2018, p. 435), they are vulnerable to experiencing such negative health consequences throughout their lifetime.

Considerable research has produced evidence of these aforementioned effects on African Americans' mental and physical health. Specifically, African Americans experiencing racial discrimination are at risk of lower positive mental health outcomes such as psychological well-being (Ajrouch et al., 2010) and life satisfaction (Driscoll, Reynolds, & Todman, 2015). Experiencing racial discrimination has also been linked to elevated negative mental health outcomes such as psychological distress (Chae et al., 2011), anxiety and depressive symptoms (Graham, Calloway, & Roemer, 2015; Hudson, Neighbors, Geronimus, & Jackson, 2016), and greater risk of suicidality (Paradies et al., 2015). Moreover, racial discrimination has deleterious effects on the physical health of African Americans. This is evidenced by the association of racial discrimination with hypertension (Williams & Neighbors, 2001) and cardiovascular disease (Mouzon et al., 2017), in addition to physical health risk factors such as being overweight or obese (Cozier, Wise, Palmer, & Rosenberg, 2009) and not obtaining preventative cancer screenings (Shariff-Marco, Klassen, & Bowie, 2009). Such findings have emerged using both cross-sectional and longitudinal data, as well as community and national samples (Paradies et al., 2015).

The effects of racial discrimination on health may differ based on the type of health outcome examined. In a meta-analysis of 293 published studies, Paradies et al. (2015) found that the effects of racism on mental health were two times larger than the effects of racism on physical health: The effects of racism on general health (unspecified mental or

physical health) were in between these two broad health outcomes. These findings indicate that racial discrimination may have unique effects on the mental, physical, and general health of African Americans; yet, we know less about whether these patterns are present among those in committed relationships. Previous studies have predominantly focused on one or two of these health outcomes without considering that there may be distinct effects across all three. Therefore, we examine associations between racial discrimination and the self-reported mental, physical, and general health of African American men and women in committed relationships.

Guiding theoretical frameworks

Interdependence theory. According to interdependence theory, partners' experiences and interactions influence each other's outcomes (Rusbult & Van Lange, 1996). That is, individuals in committed relationships have frequent interactions with each other and are influenced by the thoughts, feelings, and behaviors of their partner. Marital relationships, in particular, have significant impacts on individuals' health and well-being (Saxbe & Repetti, 2010; Umberson & Montez, 2010). One way interdependent relationships can influence health is through stress transmission. Stress transmission may occur through passive behaviors (e.g., withdrawal) or through active behaviors such as communicating with the partner about stressful events (Thompson & Bolger, 1999). Thus, in the context of interpersonal relationships, racial discrimination can become a shared experience that has damaging effects as one member's experiences are transformed into what St. Jean and Feagin (1998) refer to as collective grief. African American family members then become a "translator, negotiator, gatekeeper, stress absorber, and stress buffer" (Bagley, Angel, Dilworth-Anderson, Liu, & Schinke, 1995, p. 232), which can have negative consequences for their health.

Resiliency theory. Being in a supportive marital relationship can also be beneficial for health (Lewis et al., 2006). Compared to their single counterparts, married individuals engage in healthier behaviors, have better mental and physical health, and live longer (Kiecolt-Glaser & Wilson, 2017). These better health outcomes among married individuals can be attributed to the perceptions and availability of resources such as social support (Holt-Lunstad, Birmingham, & Jones, 2008; Kiecolt-Glaser & Wilson, 2017). Resiliency theory provides a conceptual framework for understanding how resources such as social support from one's partner may influence the effects of racial discrimination on health. Resiliency theory focuses on promotive factors (positive contextual, social, and individual assets and resources) that can be used to overcome the negative effects of risk exposure. As such, assets and resources can counteract negative effects of discrimination on psychological health.

Two models used to examine how promotive factors can have positive influences on health are the compensatory model and stress-buffering model. A compensatory model examines the degree by which promotive factors (e.g., social support) have direct effects on health outcomes, independent of the effects of risks (Zimmerman, 2013). In other words, promotive factors, such as social support from one's spouse, can be predictive of health outcomes no matter the level of risk (i.e., degree of racial discrimination). The

stress-buffering hypothesis, on the other hand, postulates that the negative effects of stressors (e.g., high levels of racial discrimination) will have a weaker impact on one's health at high levels of the promotive factor (e.g., social support; Cohen & McKay, 1985). This suggests that the link between racial discrimination and health can be attenuated at high levels of social support from one's partner.

Racial discrimination and social support in the couple context

Encountering racial discrimination can be stressful. One strategy that African Americans may use to deal with such stress is to discuss their experiences with their loved ones (Smyth & Yarandi, 1996). Romantic partners are in a position to provide support when their partners experience racial discrimination (Brondolo, Brady, Pencille, Beatty, & Contrada, 2009). This is consistent with the notion that the African American family context is a refuge for race-related distress. St. Jean and Feagin (1998) found that family members who were seeking relief from race-related stress used their family as a sounding board—"a safe and affectionate setting where encounters with racial discrimination are shared, reassessed, and validated" (p. 299). Being married is a unique interpersonal subsystem within families where there is an opportunity for spouses to vent to their partner, receive validation, and potentially mutual understanding of the pain from experiencing or witnessing racial discrimination (Donnelly et al., 2019). Hence, married African Americans may share their experiences with their spouses and find comfort in knowing they have someone they can talk to about their racial discrimination experiences.

There is evidence that African Americans in committed relationships actively work together to protect the family from the consequences of racial discrimination. One way couples describe doing this is by putting the needs of the collective before the individual and by "pulling together" to combat the social ills of the larger society (Cowdery et al., 2009). Yet, empirical evidence for the compensatory and stress-buffering effects of social support for the racial discrimination-health link is inconclusive (Brondolo et al., 2009). Some scholars find that social support is a significant stress-buffer for racial discrimination and health (e.g., Ajrouch et al., 2010; Donnelly et al., 2019; McNeil et al., 2014), whereas others do not (e.g., Prelow, Mosher, & Bowman, 2006). Furthermore, with the exception of a few empirical studies focused on African American women (e.g., Clark, 2006; Seawell, Cutrona, & Russell, 2014), there is little empirical understanding of how social support related specifically to racial discrimination influences health for married African American men and women. The available evidence demonstrates that receiving social support specifically for racial discrimination can reduce the impact of racial discrimination on mental health outcomes to a greater degree than general social support (Seawell et al., 2014). There is also some evidence that racism-specific social support is a buffer for physical health indicators, in that perceived racism was linked to vascular reactivity only for Black college women who failed to seek social support for racial discrimination (Clark, 2006).

It is worth noting that African American wives may have an undue burden in supporting their husbands when African American husbands experience racial discrimination. Cowdery and colleagues (2009), for example, found evidence that wives were

sensitive to the discrimination that their husbands faced. In particular, the authors stated that because husbands felt powerless in society, wives made "quiet efforts to protect their husbands from indignities experienced in the larger society by "letting" the men have more power at home . . . " (p. 35). As such, wives may carry an undue burden by relinquishing their power in efforts to "support" their husbands from the consequences of societal inequality. McNeil, Fincham, and Beach (2014) also found that the social support African American wives provided to their husbands protected husbands from the negative effects of racial discrimination on mental health; however, social support from husbands was not a protective factor for wives. Thus, men and women may differentially benefit from the social support received from their partner, with African American men benefiting more.

Current study

Empirical evidence demonstrates that racial discrimination is pervasive and has harmful effects on the mental, physical, and overall health of African Americans. However, how romantic partners influence the degree to which racial discrimination can impinge on health outcomes remains unclear. When individuals in committed romantic relationships experience racial discrimination, it not only has negative effects on their own health but potentially on the health of their partner. One mechanism for these effects is through individuals talking with their partner about their experiences. If individuals feel supported when talking with their partner about their racial discrimination experiences, it is possible that negative effects of racial discrimination on health are ameliorated.

Using a sample of African American couples in committed relationships (i.e., married or engaged to be married), we extend previous work focusing on the associations between racial discrimination, social support, and mental health in couples by examining the resilience-promoting capabilities of RSS for couples using three different types of health outcomes—mental, physical, and general health. Specifically, we hypothesize the following.

H1: Racial discrimination will be negatively associated with one's own and one's partner's self-reported health outcomes.

H2: Perceptions of RSS from one's partner would be significantly related to better health outcomes, independent of the level of racial discrimination each partner experienced.

We also examined whether RSS from one's partner exerts stress-buffering effects on individual and partner's health. It is unclear whether RSS will be a stress-buffer for husbands, wives, or both. Based on literature demonstrating that husbands differentially benefit from the social support perceived or received from their partner (e.g., McNeil et al., 2014), it could be expected that perceptions of RSS would be stress-buffering for husbands but not for wives. However, the available evidence examining *RSS* suggests that RSS has stress-buffering effects for women (Seawell et al., 2014). Therefore, we build on and extend past research by exploring the following research question.

RQ1: Does RSS from one's partner differentially protect men and women in committed relationships from the negative effects of racial discrimination on health?

Method

Sample and procedures

The current study used data from 487 African American heterosexual couples residing in rural and urban areas of the southeastern region of the U.S. Participants were recruited to participate in the Program for Strong African American Marriages (ProSAAM), a preventive intervention designed to enhance relationship quality among engaged or married African American couples. Couples were eligible to participate in ProSAAM if they were at least 21 years of age, were married or engaged to be married within 1 year of recruitment, and were willing to pray and have others pray for them as a couple. Participants ranged in age from 20 years to 77 years (women: $M_{age} = 38.22$, $SD = 9.18$ and men: $M_{age} = 39.87$, $SD = 9.71$). Approximately 37% of men and 33% of women completed some college or technical school, and an additional 25% of men and 29% of women had a college degree. On average, couples reported being together 10.75 years ($SD = 8.63$). Among those who were married, they had been married for an average of 9.81 years ($SD = 9.22$). Before participating in the ProSAAM intervention, romantic partners independently completed a battery of assessments. Data for the current study are from the pre-intervention assessments. Given that couples were either married or engaged to be married shortly after their responses, romantic partners will be referred to as husbands and wives for ease of interpretation for the remainder of the manuscript.

Measures

Racial discrimination. Spouses completed 13 items from the Experiences of Racism Scale (Murry, Brown, Brody, Cutrona, & Simons, 2001) assessing the frequency of racism or discrimination experiences. Questions were modified to reflect couple and family-level experiences (e.g., How often has someone said something derogatory or insulting to you or your partner just because you are African American or are a part of an African American family?) Responses were on a 4-point scale ranging from 0 (*never*) to 3 (*several times*). Scores were calculated for husbands and wives separately by creating summative scores across each of the 13 items. Higher scores represent greater frequencies of racial discrimination ($\alpha = .93$ and .91 for husbands and wives, respectively).

RSS. Social support can be perceived as both helpful and unhelpful for particular stressful circumstances (Cutrona, 1996). For the current study, we posit that an indicator of helpful support is feeling better when discussing racial discrimination experiences with one's partner. Therefore, we assessed RSS from partner using a single item asking husbands and wives "If you experienced an act of racism, how likely is it that talking to your mate would help you feel better?" Participants rated the item on a 5-point scale from 1 (*very unlikely*) to 5 (*very likely*). Higher values represent greater RSS.

Self-reported health outcomes. Three self-reported health outcomes were examined in the present study: general health, mental health, and physical health. General health was measured using 4 items from the Health and Daily Living form (Moos, Cronkite, Billings, & Finney, 1986). Items asked participants about general perceptions of their health (e.g., "I am as healthy as anybody I know"). Participants were asked to rate how true or false each item related to their general health was on a scale of 1 (*definitely true*) to 4 (*definitely false*). Positively worded items were reverse coded so that greater scores represented better general health. A composite variable was then created by averaging the items ($\alpha = .66$ and .72 for males and females, respectively). Both mental and physical health outcomes were assessed using a single-item measure. Using a 5-point response scale ranging from 1 (*poor*) to 5 (*excellent*), husbands and wives responded to the following questions: "How would you rate your overall mental health in the past 30 days" and "How would you rate your overall physical health in the past 30 days?" Higher scores represent better mental and physical health. These single-item self-rated health measures have been found to be strongly associated with longer, multi-item survey measures in the literature and have demonstrated good reliability and validity (Ahmad, Jhajj, Stewart, Burghardt, & Bierman, 2014; DeSalvo et al., 2006).

Control variable. Based on extensive prior research, socioeconomic status is associated with health outcomes (Adler et al., 1994; Williams, 2006). Education level, a socioeconomic status proxy, was therefore used as a control variable in all analyses. Education level was assessed on a 6-point scale ranging from 1 (*less than high school*) to 6 (*advanced degree/beyond a college degree*).

Analytic strategy

Descriptive and bivariate statistics were computed for each of the study variables. We used the actor–partner interdependence model (APIM; Cook & Kenny, 2005; Kashy & Kenny, 2000) to test our research questions. The APIM includes responses from both members of the dyad in a single analysis to assess actor and partner effects. Actor effects refer to whether an individual's predictor variable influences their own outcome, and partner effects refer to whether an individual's predictor variable influences another person's outcome (e.g., wives' racial discrimination influences her husband's mental health). Due to the interdependent nature of the data, the predictor variables were correlated as well as the error terms of the outcome variables.

First, we conducted an omnibus test of distinguishability to examine whether partners were empirically distinguishable. This omnibus test constrains parameters to be equal across husbands and wives (i.e., means, variances, intercepts, actor effects, and partner effects). If the resulting χ^2 test is significant, then there is evidence of distinguishability (i.e., differences between men and women). However, Ackerman, Donnellan, and Kashy (2011) suggest relaxing the constraints on the means. If freeing these parameters also produces a significant χ^2, we can conduct APIM with distinguishable dyads.

Second, we assessed the intrapersonal and interpersonal influence of racial discrimination on each of the three health outcomes for husbands and wives, controlling for education level. Third, we examined compensatory effects by including partners' RSS as

predictors in the model. Fourth, we conducted an APIM moderation model to assess the stress-buffering effects of RSS. The racial discrimination and RSS variables were centered to their respective means to avoid multicollinearity and to aid in interpretation (Aiken & West, 1991). Interactions were created for the actor moderators (e.g., Wives' Perceived Racial Discrimination × Wives' Perceived RSS From Partner) and the partner moderators (e.g., Wives' Perceived Racial Discrimination × Husbands' Perceived RSS From Partner). The interactions were entered as predictors of the six health outcomes. In other words, the two actor and two partner interactions were used to examine both actor and partner effects for the general health, mental health, and physical health outcomes for husbands and wives. Finally, we conducted a post hoc simple slope test at 1 *SD* above and below the mean. All models were analyzed using full information maximum likelihood in Mplus 8 (Muthén & Muthén, 1998–2017) to account for any missing data. All analyses used 1,000 bootstrap samples and 95% confidence intervals.

Results

Descriptive analyses

Means, standard deviations, and correlations for all study variables are shown in Table 1. A majority of both husbands (88%) and wives (86.2%) reported having experienced discrimination at least once in their lifetime. Husbands' and wives' experiences with racial discrimination were correlated with each other. For both husbands and wives, perceived racial discrimination was positively correlated with their own reports of perceived RSS. For wives, perceived racism specific support was positively related to their general and mental health. For husbands, perceived RSS was positively associated with their own physical and mental health.

Wald's χ^2 tests were used to determine whether husbands and wives differed on any of the study variables. Husbands reported higher levels of perceived racial discrimination, χ^2 (1) = 11.76, $p < .001$, and better mental health, χ^2 (1) = 18.72, $p < .00$, than wives. On the other hand, wives reported higher rates of perceived RSS, χ^2 (1) = 10.30, $p < .01$, than husbands.

Tests of distinguishability

Although husbands and wives are conceptually distinguishable, they may not be empirically distinguishable. Therefore, we conducted an omnibus test of distinguishability. The χ^2 of the model constraining means, intercepts, variances, and direct effects was significant, χ^2 (14) =54.66, $p > .001$, and remained significant after freeing the means, χ^2 (10) = 23.46, $p > .001$. This suggests that holding husbands and wives equal worsens the fit of the model. Therefore, APIM analyses were conducted for distinguishable dyads.

Stress model

We examined the actor and partner effects of racial discrimination on health outcomes, controlling for education level (Table 2). Actor effects were present only for wives.

Table 1. Means, standard deviations, and correlations of study variables ($n = 487$).

	Descriptives									
	Wives		Husbands			Bivariate correlations				
Variables	*M*	*SD*	*M*	*SD*	Wald	1	2	3	4	5
1. Perceived racial discrimination	8.64	8.43	10.23	8.43	11.76***	.11**	.11*	−.12**	−.08	−.05
2. Racism-specific support	4.28	1.12	4.04	1.25	10.30**	.14**	.04	.10*	.08	.14**
3. General health	3.27	0.58	3.33	0.53	3.14	−.05	.06	−.01	.63***	.43***
4. Physical health	3.40	1.01	3.53	1.03	3.65	−.04	.12**	.63***	−.02	.49***
5. Mental health	3.76	1.02	4.04	1.08	18.72***	−.06	.16***	.41***	.55***	.06

Note. Wives' correlations are above and husbands' correlations are under the diagonal. Correlations between husbands and wives lie on the diagonal.
*$p < .05$; **$p < .01$;***$p < .001$

Table 2. Parameter estimates of the stress model.

	General health				Physical health				Mental health			
	B	*SE*	*p*	95% CI	*B*	*SE*	*p*	95% CI	*B*	*SE*	*p*	95% CI
Actor effects												
W-PRD	−.14	.05	.01	[−.24, −.05]	−.10	.05	.04	[−.20, −.01]	−.07	.05	.17	[−.17, .02]
H-PRD	−.07	.05	.16	[−.16, .02]	−.05	.05	.28	[−.16, .04]	−.07	.04	.11	[−.16, .02]
Partner effects												
W-PRD	.03	.05	.54	[−.06, .12]	−.002	.05	.96	[−.09, .09]	−.02	.04	.70	[−.10, .08]
H-PRD	−.05	.05	.28	[−.14, .05]	.01	.05	.92	[−.08, .10]	−.04	.05	.38	[−.13, .05]

Note. W-PRD = wife perceived racial discrimination; H-PRD = husband perceived racial discrimination.

Table 3. Parameter estimates of the compensatory model.

	General health				Physical health				Mental health			
	B	*SE*	*p*	95% CI	*B*	*SE*	*p*	95% CI	*B*	*SE*	*p*	95% CI
Actor effects												
W-PRD	−.15	.05	.003	[−.25, −.06]	−.10	.05	.04	[−.20, −.01]	−.08	.05	.09	[−.18, .01]
H-PRD	−.06	.05	.18	[−.16, .03]	−.07	.05	.14	[−.17, .02]	−.09	.04	.03	[−.18, −.01]
W-RSS	.11	.04	.01	[.03, .19]	.10	.05	.08	[−.01, .17]	.14	.05	.003	[.05, .23]
H-RSS	.06	.05	.24	[−.03, .15]	.12	.05	.02	[.02, .22]	.16	.05	.003	[.05, .26]
Partner effects												
W-PRD	.02	.04	.61	[−.06, .11]	−.01	.05	.77	[−.10, .08]	−.04	.04	.40	[−.12, .05]
H-PRD	−.05	.05	.32	[−.14, .05]	.02	.05	.61	[−.07, .12]	−.02	.05	.60	[−.11, .06]
W-RSS	.02	.05	.74	[−.09, .11]	−.01	.05	.77	[−.10, .07]	.02	.05	.74	[−.08, .11]
H-RSS	−.003	.04	.94	[−.09, .09]	−.04	.05	.34	[−.14, .05]	−.10	.05	.02	[−.18, −.01]

Note. W-PRD = wife perceived racial discrimination; H-PRD = husband perceived racial discrimination; W-RSS = wife racism-specific support; H-RSS = husband racism-specific support.

Specifically, wives' perceived racial discrimination was negatively associated with her general and physical health. Contrary to our expectations, no actor effects were present for husbands and no partner effects were present for either romantic partner.

Compensatory model

We included RSS for husbands and wives in the model as predictors of each of the health outcomes (Table 3). When doing so, husbands' perceived racial discrimination was negatively associated with his mental health and wives' perceived racial discrimination remained negatively associated with her general and physical health.

Consistent with the compensatory hypothesis, we found evidence that RSS from partner was positively associated with health outcomes for both husbands and wives, controlling for the actor and partner effects of racial discrimination, partner's perceived RSS, and education level. Specifically, we found that husbands' perceived RSS from the wife was positively associated with his mental and physical health. We also found that wives' perceived RSS from the husband was positively associated with her general and mental health. Interestingly, we found a partner effect for husbands such that husbands' perceived RSS was negatively associated with wives' mental health. In other words, the more husbands perceived that wives would be supportive when he discusses racial discrimination with her, the lower mental health their wives reported.

Stress-buffering model

To assess the stress-buffering effects of RSS on the relationship between racial discrimination and health outcomes, interaction terms were included in the model (Table 4). We found actor and partner interaction effects for wives' mental health. In particular, the actor interaction effect revealed that the relationship between wives' perceived racial discrimination and her mental health is conditional on her perceived RSS from her

Table 4. Parameter estimates of the stress-buffering model.

	General health				Physical health				Mental health			
	B	SE	p	95% CI	B	SE	p	95% CI	B	SE	p	95% CI
Actor effects												
W-PRD	−.15	.05	.002	[−.25, −.06]	−.11	.05	.02	[−.20, −.02]	−.10	.05	.05	[−.19, −.004]
H-PRD	−.06	.05	.22	[−.16, .03]	−.07	.05	.15	[−.17, .02]	−.10	.05	.03	[−.19, −.01]
W-RSS	.12	.05	.01	[.03, .21]	.10	.05	.03	[.02, .20]	.18	.05	.00	[.10, .27]
H-RSS	.07	.06	.21	[−.04, .18]	.13	.05	.02	[.02, .23]	.18	.06	.002	[.06, .28]
W-PRD × W-RSS	.01	.05	.83	[−.08, .11]	.08	.05	.09	[−.01, .17]	.12	.05	.01	[.02, .21]
W-PRD × H-RSS	.08	.05	.13	[−.03, .17]	.08	.04	.07	[−.01, .16]	.05	.05	.31	[−.06, .15]
H-PRD × H-RSS	.05	.06	.44	[−.07, .16]	.03	.06	.58	[−.07, .14]	.10	.06	.12	[−.02, .22]
H-PRD × W-RSS	−.01	.05	.84	[−.10, .08]	−.03	.05	.61	[−.12, .06]	.01	.05	.88	[−.08, .11]
Partner effects												
W-PRD	.02	.05	.66	[−.08, .11]	−.01	.05	.78	[−.10, .08]	−.04	.05	.40	[−.13, .05]
H-PRD	−.05	.05	.35	[−.13, .06]	.03	.05	.59	[−.06, .12]	−.02	.05	.59	[−.11, .06]
W-RSS	.02	.05	.72	[−.09, .12]	−.02	.05	.75	[−.12, .07]	.03	.05	.56	[−.08, .13]
H-RSS	−.02	.05	.63	[−.11, .08]	−.05	.05	.31	[−.14, .05]	−.12	.05	.01	[−.21, −.02]
W-PRD × W-RSS	.04	.05	.41	[−.06, .12]	.01	.05	.91	[−.09, .11]	.07	.05	.22	[−.04, .17]
W-PRD × H-RSS	.04	.04	.42	[−.06, .12]	−.02	.05	.73	[−.12, .07]	−.06	.05	.22	[−.16, .03]
H-PRD × H-RSS	−.07	.05	.19	[−.17, .03]	.01	.04	.76	[−.07, .11]	−.02	.05	.70	[−.11, .08]
H-PRD × W-RSS	.10	.05	.05	[−.001, .18]	.09	.05	.06	[−.003, .18]	.12	.05	.02	[.02, .22]

Note. W-PRD = wife perceived racial discrimination; H-PRD = husband perceived racial discrimination; W-RSS = wife racism-specific support; H-RSS = husband racism-specific support

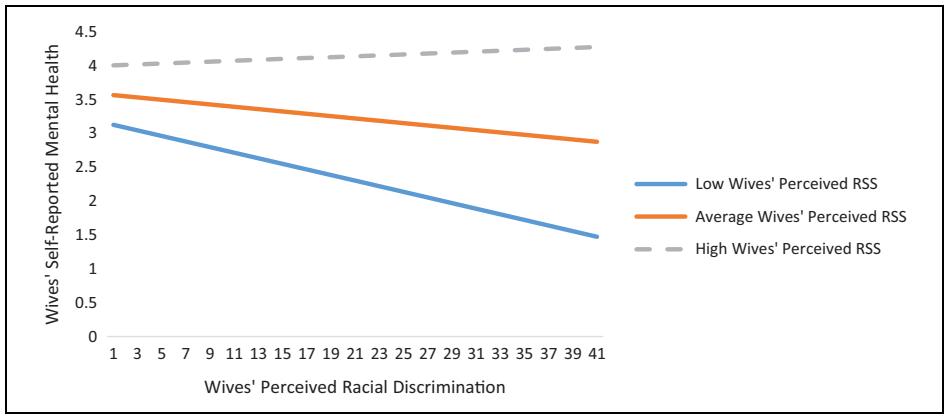

Figure 1. Actor effect of wives' perceived racial discrimination on wives' self-reported mental health moderated by wives' perceived RSS from husband. RSS = racism-specific support; low = 1 *SD* below the average; high = 1 *SD* above the average.

husband. Simple slope analyses revealed that there is an actor effect between wives' racial discrimination and her mental health among wives who have low levels of RSS from husbands, $b = -.41$, $p < .01$. However, for wives who perceive high levels of RSS from husbands, there is no relationship between her perceived racial discrimination and her mental health, $b = .07$, $p > .05$. Furthermore, the partner interaction effect revealed that the relationship between husbands' perceived racial discrimination and wives' mental health is conditional on wives' perceived RSS from husbands. Simple slope analyses showed a partner effect between husband's racial discrimination and wives' mental health among wives who have low levels of RSS from husbands, $b = -.26$, $p < .05$. Yet, for wives who perceive high levels of RSS from their partners, husband's racial discrimination does not influence her mental health. Graphical representations of these findings are in Figures 1 and 2.

Discussion

Despite a wealth of knowledge demonstrating that racial discrimination experiences can compromise African Americans' mental and physical health (Paradies et al., 2015), relatively few studies have examined whether being in a supportive romantic relationship is a protective resource that reduces this risk. Furthermore, there is a dearth of literature focused on the resilience-promoting aspects of racism-specific social support, even with evidence showing that social support tailored to the specific stressor may be more effective than general social support (Seawell et al., 2014). Thus, guided by interdependence and resiliency frameworks, we examined whether RSS serves as a compensatory and stress-buffering factor for the associations between racial discrimination and health outcomes among engaged and married African American couples.

There were three key findings from our investigation. Each underscores the importance of accounting for RSS when exploring the effects of racial discrimination on health

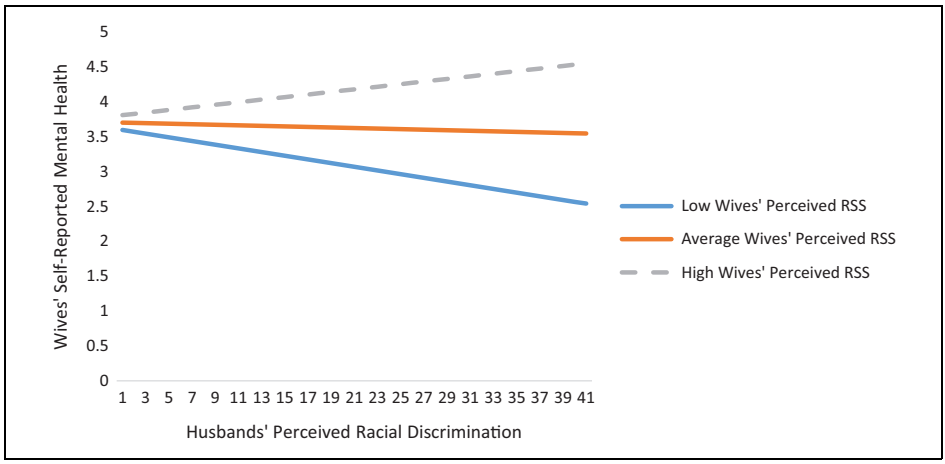

Figure 2. Partner effect of husbands' perceived racial discrimination on wives' self-reported mental health moderated by wives' perceived RSS from husband. RSS = racism-specific support; low = 1 *SD* below the average; high = 1 *SD* above the average.

outcomes. First, we found that for husbands and wives, receiving RSS from their partners is resilience-promoting for their mental, physical, and overall health, independent of their and their partner's racial discrimination experiences. These results are consistent with the extant literature revealing that supportive married partners are a salient, significant, and influential form of social support for individual health (Gardner & Cutrona, 2004; Umberson & Montez, 2010). Our results also align with recent findings indicating that there is an increase in social support among African American couples experiencing racial discrimination (Clavél et al., 2017). Clavél and associates (2017) note that the provision of social support increases because there is a likelihood for partners to lean on each other due to their shared experience with an external stressor that is too big to handle alone. Thus, our findings complement this research by highlighting the need to identify and leverage couple-level strengths that can be used to combat the negative effects of racial discrimination on health.

Second, we found evidence to suggest that when wives provide RSS to their husbands, it is resilience-promoting for husbands but has negative consequences for wives' mental health. Husbands in the present study experienced significantly more racial discrimination than their partners; therefore, wives may be tasked with the mental burden of helping them deal with the negative health effects. This possibility is supported by existing qualitative (Cowdery et al., 2009) and quantitative (McNeil et al., 2014) studies demonstrating that while husbands are protected and supported by their wives when they experience racial discrimination, there is an undue emotional burden on wives. It is also possible that wives are vicariously experiencing racial discrimination when discussing their husbands' racial discrimination experiences. Based on interdependence theory, partners are influenced by their own stressful experiences and those of their loved ones. As a result, African American wives could be indirectly affected by the discriminatory events or the consequences of those events. This possibility is supported by the robust

evidence showing that women are more susceptible to stress and trauma experienced by others in close relationships than are men (Baum, Rahav, & Sharon, 2014). Therefore, it is possible that African American wives are internalizing their husbands' racism-related stress when providing RSS. More research is needed to explore the possibility of gender differences in racism-related stress transmission within this specific dyadic context.

Third, our findings indicate that RSS from husbands is stress-buffering for wives when they and their partner experiences high levels of racial discrimination. These findings both confirm and extend prior work indicating that tailored social support for racial discrimination mitigates the negative impacts of racial discrimination on depressive symptoms for African American women (Seawell et al., 2014). Given that previous research found that general spousal social support was not a stress buffer for the effects of racial discrimination on mental health for wives (McNeil et al., 2014), there may be something unique or resilience-promoting about social support tailored to racial discrimination for African American women. Racial discrimination is a stressor that is unpredictable, debilitating, and pervasive, which may require culturally specific encouragement, responsiveness, or reassurance that wives are not receiving from general social support. We are unable to explore this possibility, thus future research should focus on uncovering the unique resilience-promoting capabilities of RSS for African American wives in committed relationships.

Although we found that RSS is a stress-buffer for wives, we also found that when wives perceive low-levels of RSS from their husbands, their mental health is compromised. The theory of resilience and relational load (TRRL) may put these findings into context. The TRRL posits that resilience within close relationships derives from prosocial daily, verbal and nonverbal, investments that each partner makes into the relationships (Afifi, Merrill, & Davis, 2016). As a result, when stressful situations arise, such as racial discrimination, couples can draw on the existing relational capital that they have built. However, if one is expending energy to protect one's self from stress, they can become emotionally unavailable to their partner. It is possible that a subset of husbands in this study was unable to provide RSS to their wives because they were taxed themselves due to their own racial discrimination experiences, leading to a depletion of emotional capital for wives to draw from. As such, when African American wives are dealing with their own and their partner's experiences of racial discrimination, they are unable to rely on their husbands for RSS. It is also possible that African American women are personifying a Superwoman role where in the face of societal and personal challenges, they take on their own and partners' stress at the expense of their own health (Donovan & West, 2015; Woods-Giscombe, 2010) and may not receive or seek social support because of the need to be self-reliant (Watson-Singleton, 2017). Although these explanations are all speculative, the present study highlights the need for further empirical exploration about how RSS can exert differential effects for African American wives' and husbands' health.

Limitations and future research

The findings of the current study need to be considered in the context of several limitations. First, the sample may not be generalizable to all African American couples.

Specifically, given the nature of the intervention for which they were recruited, the couples were from the southeastern part of the U.S. and were willing to pray or be prayed for by their partner. Furthermore, this study focused on the experiences of African American heterosexual couples and may not be reflective of African American same-sex and interracial couples who may also experience discrimination due to social disapproval of their relationship. Recent evidence suggests that individuals in same-sex marriages receive more spousal support to combat negative effects of racial discrimination on mental health than those in different-sex marriages (Donnelly et al., 2019). Therefore, future work should examine the effects of RSS on health for more diverse couples. Second, the measures used in the study were self-reports and therefore susceptible to recall or social desirability biases. In addition, the health outcomes did not measure specific health conditions so it is possible that these results will differ for particular mental and physical health outcomes (e.g., depression, anxiety, and cardiovascular health). Furthermore, RSS was measured with a single item and operationalized as the degree to which participants believed that talking with their partner about an experience of racism would help them feel better. Although existing scales have included similar language related to "feeling better" when measuring social support (e.g., Social Support Questionnaire; Sarason, Sarson, Sheerin, & Pierce, 1987), this single item may have produced biased results by conceptually overlapping with the health-related outcome measures. Thus, future research should design and utilize a validated racism-specific social support inventory to reduce the possibility of measurement bias. We were also unable to identify the specific processes that would make partners feel supported when discussing racial discrimination with their partner and whether they actually engaged in these practices. In particular, do perceptions of RSS from one's partner include having someone there as a soundboard when racist events occur, receiving validation for one's responses to racial discriminatory events, receiving tangible strategies to use to combat race-related stress, or something else? An increased understanding of the components of RSS will help inform interventionists and practitioners of the ways couple-level supportive interactions can be leveraged to mitigate the negative effects of racial discrimination on health. Given that there are various levels and types of racism (e.g., interpersonal, institutionalized, and internalized), it is also important for future research to examine the utility of RSS for specific forms of racism to better understand how these processes are integral for African American's health. Finally, this study was cross-sectional and did not include consistent time parameters across measures; therefore, causal inferences cannot be made. A longitudinal examination of the resilience-promoting effects of RSS on the link between racial discrimination and health outcomes over time is warranted.

Conclusion

The compensatory and protective capabilities of racism-specific stress vary across health domains for husbands and wives. RSS is a resilience-promoting factor for husbands and wives for mental, physical, and general health; however, wives' mental health can be negatively affected when wives are providing RSS to their husbands and when wives are not perceiving RSS from their husbands. Using the APIM, we were able to use the

experiences and perceptions of both members of the couple to examine the intrapersonal *and* interpersonal effects of racial discrimination on health outcomes. This more comprehensive examination of dyadic-level processes provided a greater understanding of how perceptions and behaviors of the couple can influence African American's health. Couple-level interventions that include African Americans should pay specific attention to African American women who may carry the burden of their own and their partner's experiences of racial discrimination. Finding effective ways for couples to support each other emotionally is crucial given the ubiquitous and unpredictable nature of racial discrimination in the day-to-day lives of African Americans.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Shardé McNeil Smith https://orcid.org/0000-0002-9310-2369

Open research statement

As part of IARR's encouragement of open research practices, the authors have provided the following information: This research was not pre-registered. The data used in the research are not available. The materials used in the research are not available.

References

Ackerman, R. A., Donnellan, M. B., & Kashy, D. A. (2011). Working with dyadic data in studies of emerging adulthood: Specific recommendations, general advice, and practical tips. In F. D. Fincham & M. Cui (Eds.), *Advances in personal relationships. Romantic relationships in emerging adulthood* (pp. 67–97). New York, NY: Cambridge University Press.

Adler, N. E., Boyce, T., Chesney, M. A., Cohen, S., Folkman, S., Kahn, R. L., & Syme, S. L. (1994). Socioeconomic status and health: The challenge of the gradient. *American Psychologist*, *49*, 15–24. doi:10.1037/0003-066X.49.1.15

Afifi, T. D., Merrill, A. F., & Davis, S. (2016). The theory of resilience and relational load. *Personal Relationships*, *23*, 663–683. doi:10.1111/pere.12159

Ahmad, F., Jhajj, A. K., Stewart, D. E., Burghardt, M., & Bierman, A. S. (2014). Single item measures of self-rated mental health: A scoping review. *BMC Health Services Research*, *14*, 398. doi:10.1186/1472-6963-14-398

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.

Ajrouch, K. J., Reisine, S., Lim, S., Sohn, W., & Ismail, A. (2010). Perceived everyday discrimination and psychological distress: Does social support matter? *Ethnicity & Health*, *15*, 417–434. doi:10.1080/13557858.2010.484050

Anderson, K. F. (2013). Diagnosing discrimination: Stress from perceived racism and the mental and physical health effects. *Sociological Inquiry*, *83*, 55–81.

Bagley, S. P., Angel, R., Dilworth-Anderson, P., Liu, W., & Schinke, S. (1995). Panel V: Adaptive health behaviors among ethnic minorities. *Health Psychology*, *14*, 632–640. doi:10.1037/0278-6133.14.7.632

Banks, K. H., Kohn-Wood, L. P., & Spencer, M. (2006). An examination of the African American experience of everyday discrimination and symptoms of psychological distress. *Community Mental Health Journal*, *42*, 555–570. doi:10.1007/s10597-006-9052-9

Baum, N., Rahav, G., & Sharon, M. (2014). Heightened susceptibility to secondary traumatization: A meta-analysis of gender differences. *American Journal of Orthopsychiatry*, *84*, 111–122. doi:10.1037/h0099383

Berger, M., & Sarnyai, Z. (2015). "More than skin deep": Stress neurobiology and mental health consequences of racial discrimination. *Stress*, *18*, 1–10. doi:10.3109/10253890.2014.989204

Brondolo, E., Brady, N., Pencille, M., Beatty, D., & Contrada, R. J. (2009). Coping with racism: A selective review of the literature and a theoretical and methodological critique. *Journal of Behavioral Medicine*, *32*, 64–88. doi:10.1007/s10865-008-9193-0

Brondolo, E., Rieppi, R., Kelly, K. P., & Gerin, W. (2003). Perceived racism and blood pressure: A review of the literature and conceptual and methodological critique. *Annals of Behavioral Medicine*, *25*, 55–65. doi:10.1207/S15324796ABM2501_08

Chae, D. H., Lincoln, K. D., & Jackson, J. S. (2011). Discrimination, attribution, and racial group identification: Implications for psychological distress among Black Americans in the national Survey of American life (2001-2003). *The American Journal of Orthopsychiatry*, *81*, 498–506. doi:10.1111/j.1939-0025.2011.01122.x

Chae, D. H., Nuru-Jeter, A. M., Adler, N. E., Brody, G. H., Lin, J., Blackburn, E. H., & Epel, E. S. (2014). Discrimination, racial bias, and telomere length in African-American men. *American Journal of Preventive Medicine*, *46*, 103–111. doi:10.1016/j.amepre.2013.10.020

Chen, D., & Yang, T. C. (2014). The pathways from perceived discrimination to self-rated health: An investigation of the roles of distrust, social capital, and health behaviors. *Social Science & Medicine*, *104*, 64–73. doi:10.1016/j.socscimed.2013.12.021

Clark, R. (2006). Perceived racism and vascular reactivity in black college women: Moderating effects of seeking social support. *Health Psychology*, *25*, 20. doi:10.1037/0278-6133.25.1.20

Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans: A biopsychosocial model. *American Psychologist*, *54*, 805–816. doi:10.1037/0003-066X.54.10.805

Clavél, F. D., Cutrona, C. E., & Russell, D. W. (2017). United and divided by stress: How stressors differentially influence social support in African American couples over time. *Personality and Social Psychology Bulletin*, *43*, 1050–1064. doi:10.1177/0146167217704195

Cohen, S., & McKay, G. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, *98*, 310–357. doi:10.1037/0033-2909.98.2.310

Cook, W. L., & Kenny, D. A. (2005). The actor–partner interdependence model: A model of bidirectional effects in development studies. *International Journal of Behavioral Development*, *29*, 101–109. doi:10.1080/01650250444000405

Cowdery, R. S., Scarborough, N., Knudson-Martin, C., Seshadri, G., Lewis, M. E., & Mahoney, A. R. (2009). Gendered power in cultural contexts: Part II. Middle class African American heterosexual couples with young children. *Family Process*, *48*, 25–39. doi:10.1111/j.1545-5300.2009.01265.x

Cozier, Y. C., Wise, L. A., Palmer, J. R., & Rosenberg, L. (2009). Perceived racism in relation to weight change in the Black Women's Health Study. *Annals of Epidemiology*, *19*, 379–387. doi:10.1016/j.annepidem.2009.01.008

Cutrona, C. E. (1996). *Social support in couples: Marriage as a resource in times of stress* (Vol. 13). Thousand Oaks, CA: Sage.

DeSalvo, K. B., Fisher, W. P., Tran, K., Bloser, N., Merrill, W., & Peabody, J. (2006). Assessing measurement properties of two single-item general health measures. *Quality of Life Research*, *15*, 191–201. doi:10.1007/s11136-005-0887-2

Donnelly, R., Robinson, B. A., & Umberson, D. (2019). Can spouses buffer the impact of discrimination on depressive symptoms? An examination of same-sex and different-sex marriages. *Society and Mental Health*, *9*, 192–210. doi:10.1177/2156869318800157

Donovan, R. A., & West, L. M. (2015). Stress and mental health: Moderating role of the strong black woman stereotype. *Journal of Black Psychology*, *41*, 384–396. doi:10.1177/0095798414543014

Driscoll, M. W., Reynolds, J. R., & Todman, L. C. (2015). Dimensions of race-related stress and African American life satisfaction: A test of the protective role of collective efficacy. *Journal of Black Psychology*, *41*, 462–486. doi:10.1177/0095798414543690

Fischer, A. R., & Shaw, C. M. (1999). African Americans' mental health and perceptions of racist discrimination: The moderating effects of racial socialization experiences and self-esteem. *Journal of Counseling Psychology*, *46*, 395–407. doi:10.1037/0022-0167.46.3.395

Gardner, K. A., & Cutrona, C. E. (2004). Social support communication in families. In A. L. Vangelisti (Ed.), *Handbook of family communication* (pp. 495–512). Mahwah, NJ: Lawrence Erlbaum Associates.

Geronimus, A. T., Hicken, M., Keene, D., & Bound, J. (2006). "Weathering" and age patterns of allostatic load scores among blacks and whites in the United States. *American Journal of Public Health*, *96*, 826–833.

Graham, J. R., Calloway, A., & Roemer, L. (2015). The buffering effects of emotion regulation in the relationship between experiences of racism and anxiety in a black American sample. *Cognitive Therapy and Research*, *39*, 553–563. doi:10.1007/s10608-015-9682-8

Harrison, L. (2001). Understanding the influence of stereotypes: Implications for the African American in sport and physical activity. *Quest*, *53*, 97–114. doi:10.1080/00336297.2001.10491732

Holt-Lunstad, J., Birmingham, W., & Jones, B. Q. (2008). Is there something unique about marriage? The relative impact of marital status, relationship quality, and network social support on ambulatory blood pressure and mental health. *Annals of Behavioral Medicine*, *35*, 239–244. doi:10.1007/s12160-008-9018-y

Hudson, D. L., Neighbors, H. W., Geronimus, A. T., & Jackson, J. S. (2016). Racial discrimination, John Henryism, and depression among African Americans. *Journal of Black Psychology*, *42*, 221–243. doi:10.1177/0095798414567757

Jones, C. P. (2002). Confronting institutionalized racism. *Phylon*, *50*, 7–22. doi:10.2307/4149999

Kashy, D. A., & Kenny, D. A. (2000). The analysis of data from dyads and groups. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social psychology* (pp. 451–477). New York, NY: Cambridge University Press.

Kessler, R. C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior*, *40*, 208–230.

Kiecolt-Glaser, J. K., & Wilson, S. J. (2017). Lovesick: How couples' relationships influence health. *Annual Review of Clinical Psychology*, *13*, 421–443. doi:10.1146/annurev-clinpsy-032816-045111

Lavner, J. A., Barton, A. W., Bryant, C. H., & Beach, S. R. H. (2018). Racial discrimination and relationship functioning among African American couples. *Journal of Family Psychology*, *32*, 686–691. doi:10.1037/fam0000415

Lewis, M. A., McBride, C. M., Pollak, K. I., Puleo, E., Butterfield, R. M., & Emmons, K. M. (2006). Understanding health behavior change among couples: An interdependence and communal coping approach. *Social Science & Medicine*, *62*, 1369–1380. doi:10.1016/j.socscimed.2005.08.006

McNeil, S., Fincham, F. D., & Beach, S. R. H. (2014). Does spousal support moderate the association between perceived racial discrimination and depressive symptoms among African American couples? *Family Process*, *53*, 109–119. doi:10.1111/famp.12054

McNeil Smith, S., & Landor, A. M. (2018). Toward a better understanding of African American families: Development of the sociocultural family stress model. *Journal of Family Theory & Review*, *10*, 434–450. doi:10.1111/jftr.12260

Mezzofiore, G. (2018, May 22). A white woman called police on black people barbecuing. This is how the community responded. *CNN*. Retrieved from https://www.cnn.com/2018/05/22/us/white-woman-black-people-oakland-bbq-trnd/index.html

Moos, R. H., Cronkite, R. C., Billings, A. G., & Finney, J. W. (1986). *Health and daily living form manual*. Palo Alto, CA: Veterans Administration and Stanford University Medical Center.

Mouzon, D. M., Taylor, R. J., Woodward, A. T., & Chatters, L. M. (2017). Everyday racial discrimination, everyday non-racial discrimination, and physical health among African American. *Journal of Ethnic & Cultural Diversity in Social Work*, *26*, 68–80. doi:10.1080/15313204.2016.1187103

Murry, V. M., Brown, P. A., Brody, G. H., Cutrona, C. E., & Simons, R. L. (2001). Racial discrimination as a moderator of the links among stress, maternal psychological functioning, and family relationships. *Journal of Marriage and Family*, *63*, 915–926. doi:10.1111/j.1741-3737.2001.00915.x

Muthén, L. K., & Muthén, B. O. (1998–2017). *Mplus User's guide* (8th ed.). Los Angeles, CA: Muthén & Muthén.

Paradies, Y., Ben, J., Denson, N., Elias, A., Priest, N., Pieterse, A., … Gee, G. (2015). Racism as a determinant of health: A systematic review and meta-analysis. *PLoS One*, *10*, 1–48. doi:10.1371/journal.pone.0138511

Prelow, H. M., Mosher, C. E., & Bowman, M. A. (2006). Perceived racial discrimination, social support, and psychological adjustment among African American college students. *Journal of Black Psychology*, *32*, 442–454. doi:10.1177/0095798406292677

Rusbult, C. E., & Van Lange, P. A. M. (1996). Interdependence processes. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 564–596). New York, NY: Guilford Press.

Sarason, I. G., Sarason, B. R., Sheerin, E. N., & Pierce, G. R. (1987). A brief measure of social support: Practical and theoretical implications. *Journal of Social and Personal Relationships*, *4*, 497–510.

Saxbe, D., & Repetti, R. L. (2010). For better or worse? Coregulation of couples' cortisol levels and mood states. *Journal of Personality and Social Psychology*, *98*, 92–103. doi:10.1037/a0016959

Seawell, A. H., Cutrona, C. E., & Russell, D. W. (2014). The effects of general social support and social support for racial discrimination on African American women's well-being. *Journal of Black Psychology*, *40*, 3–26. doi:10.1177/0095798412469227

Shariff-Marco, S., Klassen, A. C., & Bowie, J. V. (2009). Racial/ethnic differences in self-reported racism and its association with cancer-related health behaviors. *American Journal of Public Health*, *100*, 364–374. doi:10.2105/AJPH.2009.163899

Smyth, K., & Yarandi, H. N. (1996). Factor analysis of the ways of coping questionnaire for African American women. *Nursing research*, *45*, 25–29.

St. Jean, Y, & Feagin, J. R. (1998). The family costs of white racism: the case of African American families. *Journal of Comparative Family Studies*, *29*, 297–312.

Thompson, A., & Bolger, N. (1999). Emotional transmission in couples under stress. *Journal of Marriage and Family*, *61*, 38–48. doi:10.2307/353881

Umberson, D., & Montez, J. K. (2010). Social relationships and health: A flashpoint for health policy. *Journal of Health and Social Behavior*, *51*, S54–S66. doi:10.1177/0022146510383501

Utsey, S. O., Ponterotto, J. G., Reynolds, A. L., & Cancelli, A. A. (2000). Racial discrimination, coping, life satisfaction, and self-esteem among African Americans. *Journal of Counseling & Development*, *78*, 72–80. doi:10.1002/j.1556-6676.2000.tb02562.x

Watson-Singleton, N. N. (2017). Strong black woman schema and psychological distress: The mediating role of perceived emotional support. *Journal of Black Psychology*, *43*, 778–788. doi:10.1177/0095798417732414

Williams, D. R. (2006). Race, socioeconomic status, and health: The added effects of racism and discrimination. *Annals of the New York Academy of Sciences*, *896*, 173–188. doi:10.1111/j.1749-6632.1999.tb08114.x

Williams, D. R., & Mohammed, S. A. (2009). Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine*, *32*, 20–47. doi:10.1007/s10865-008-9185-0

Williams, D. R., & Neighbors, H. (2001). Racism, discrimination and hypertension: Evidence and needed research. *Ethnicity & Disease*, *11*, 800–816.

Williams, D. R., & Williams-Morris, R. (2000). Racism and mental health: The African American experience. *Ethnicity & Health*, *5*, 243–268. doi:10.1080/713667453

Woods-Giscombe, C. L. (2010). Superwoman schema: African American women's view on stress, strength, and health. *Qualitative Research*, *20*, 668–683. doi:10.1177/1049732310361892

Zimmerman, M. A. (2013). Resiliency theory: A strengths-based approach to research and practice for adolescent health. *Health Education & Behavior*, *40*, 381–383. doi:10.1177/1090198113493782