

The Relational Wear and Tear of Everyday Racism Among African American Couples



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Abstract

The wear and tear of adapting to chronic stressors such as racism and discrimination can have detrimental effects on mental and physical health. Here, we investigated the wider implications of everyday racism for relationship quality in an adult sample of 98 heterosexual African American couples. Participants reported on their experiences of racial discrimination and positive and negative affect for 21 consecutive evenings. Using dyadic analyses, we found that independently of age, gender, marital status, income, racial-discrimination frequency, neuroticism, and mean levels of affect, participants' relationship quality was inversely associated with their partner's negative affective reactivity to racial discrimination. Associations did not vary by gender, suggesting that the effects of affective reactivity were similar for men and women. These findings highlight the importance of a dyadic approach and call for further research examining the role of everyday racism as a key source of stress in the lives of African American couples.

Keywords

African American, affective reactivity, discrimination, racism, relationship quality, open materials

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There is growing evidence that everyday experiences of discrimination in general, and racial discrimination in particular, are associated with negative relationships outcomes, including decreased relationship satisfaction (Bryant et al., 2010; Lincoln & Chae, 2010; Trail et al., 2012) and increased relationship instability and strain (Lavner et al., 2018; Murry et al., 2001; Priest et al., 2020). An important finding emerging from dyadic studies is that in addition to one's own experiences of discrimination (e.g., Doyle & Molix, 2014; Kerr et al., 2018), partner experiences of discrimination may also influence relationship well-being (e.g., Trail et al., 2012; Wofford et al., 2019). But despite the recognition that racial discrimination is a salient chronic stressor for racial- and ethnic-minority couples (Bryant et al., 2010; St Jean & Feagin, 1998), the day-to-day unfolding of discrimination within couples has rarely been studied, hindering our understanding of racism as a dynamic, interpersonal phenomenon (Harrell, 2000; Smith et al., 2020). Here, we examined whether individual differences in affective responses to racial discrimination in

daily life were associated with relationship functioning in African American couples.

Racial Discrimination as a Stressor for African American Couples

Relative to White Americans, African Americans consistently report more experiences of unfair treatment and discrimination at every level of age, gender, and socioeconomic status (Barnes et al., 2004; Forman et al., 1997; Kessler et al., 1999; Lewis et al., 2012). Moreover, studies have documented consistent associations between reports of discrimination and a variety of mental and physical health indicators among African Americans (Clark et al., 1999; Mays et al., 2007; Pieterse et al., 2012). These associations are evident in cross-sectional as well as longitudinal studies (Goosby et al., 2018;

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Lewis et al., 2015; Paradies et al., 2015; Williams et al., 2019). By contrast, research focusing on the effects of racial discrimination on African American interpersonal functioning has only recently begun to receive systematic attention (Clark et al., 2002; Lavner et al., 2018; Smith et al., 2020). Understanding these effects is important because of the interdependence of individuals in close relationships in general (Aron et al., 1991; Arriaga, 2013; Rusbult & Van Lange, 1996) and the shared experience of racial discrimination among African American couples in particular (Bryant et al., 2010; St Jean & Feagin, 1998).

Studies of stress and couple functioning suggest that stressful life events may influence one's own (e.g., Bolger et al., 1989) and one's partner's (e.g., Thompson & Bolger, 1999) relationship quality. Importantly, by differentiating between actor (or intrapersonal) effects and partner (or interpersonal) effects, dyadic studies of couples have elucidated how stressors can both spread across multiple spheres of life and reverberate beyond one partner to influence the health of the other (Bolger et al., 1990; Neff & Karney, 2007). To date, most research examining racial discrimination and health among African Americans has focused on actor effects (for a review, see Mays et al., 2007). Yet the study of stress transmission and proliferation requires attention to not only intrapersonal effects (e.g., Ong et al., 2009) but also interpersonal effects (e.g., Barton et al., 2018; Lavner et al., 2018) of racial discrimination.

Affective Reactivity to Daily Stressors

Increasingly, researchers have turned to daily-process designs to probe the dynamic processes that give rise to individual differences in affective reactivity to daily stressors (Charles et al., 2013). Operationally, these individual differences are represented by the within-person coupling of daily stress and affect (Bolger & Zuckerman, 1995). These intraindividual parameter estimates measure a continuum of affective reactivity such that stronger reactions to daily stressors (e.g., greater increases in negative affect) constitute greater vulnerability. Importantly, empirical work demonstrates that heightened affective reactivity is a unique vulnerability factor for subsequent affective disorders (Charles et al., 2013), chronic health conditions (Piazza et al., 2013), inflammation (Sin et al., 2015), allostatic load (Piazza et al., 2019), and mortality (Chiang et al., 2018).

Given the documented breadth of correlates of affective reactivity (see Ong & Leger, 2022), it is plausible that affective reactivity would be associated with relationships outcomes as well. Indeed, leading theoretical models of relationship quality posit that enduring personal vulnerabilities to stressful events (e.g., affective

Statement of Relevance

Psychological scientists have long studied the nature of racism and its consequences for individual cognition and health. In this research, we asked whether experiences of everyday racism impact the relational well-being of African American couples. This question is especially pressing, given that psychological science can inform research and practice and, ultimately, public discourse on how best to combat the realities of everyday racism. Using dyadic data, we found that individuals' perceptions of relationship quality are predicted by their partners' affective reactivity to day-to-day racial discrimination. These findings advance our understanding of the social effects of everyday racism and the various ways in which it can impinge on the interpersonal flourishing of African American couples.

For additional thoughts on some of the psychological issues of societal importance considered in this research, see the invited Further Reflections piece authored by Neblett (2022), available online at <https://doi.org/10.1177/09567976221105214> and on pages 1340–1342 of this issue.

reactivity) account for variations in relationship outcomes over time (Karney & Bradbury, 1995; Slatcher & Selcuk, 2017). In longitudinal analyses of married adults from the Midlife in the United States (MIDUS) study, Ong and colleagues (2020) found that greater negative affective reactivity to daily stressors predicted lower marital satisfaction and higher marital risk 10 years later.

Recent research has also provided initial evidence for the role of daily racial discrimination as a specific context for assessing naturalistic emotional processes. For example, building on prior work linking greater reactivity to generic daily stressors with subsequent depressive symptomatology (Charles et al., 2013), Ong and Burrow (2018) examined affective reactivity in the context of daily racial discrimination among African Americans. They found that heightened affective reactivity to daily racial discrimination forecasted elevated depressive symptoms 1 year later.

Although the above studies demonstrate the value of within-person, process-oriented methods, a number of central but yet unresolved issues remain. Foremost, although there is interest in the role of enduring vulnerabilities that individuals bring to close relationships

(Karney & Bradbury, 1995), it is unknown whether heightened affective responses to daily discrimination impinge on relationship quality in African American couples. Second, the extent to which affective reactivity operates uniquely within couples remains unclear. Theoretical models of racism-related stress posit that affective responses (e.g., anger, humiliation) to everyday discrimination are manifested through both direct and vicarious experiences (Harrell, 2000; Williams et al., 2003).

Third, research on affective reactivity to daily stressors has primarily focused on negative affective states. Maintenance of positive affect may be critical for stemming the damaging effects of daily stressor exposure. For instance, greater reductions in positive affect in response to daily stress have been linked with future depressive symptoms (O'Neill et al., 2004; Ong & Burrow, 2018), higher levels of inflammatory markers (Sin et al., 2015), lower sleep quality and efficiency (Ong et al., 2013), and even greater mortality risk (Chiang et al., 2018). Fourth, the extent of gender differences in affective reactivity to racial discrimination is important to assess, especially among African American couples in whom perceptions of discrimination and relationship instability are tied to gender discrepant experiences (Lavner et al., 2018; McNeil et al., 2014). For example, some evidence suggests that African American women may be disproportionately vulnerable to the effects of racial discrimination because of the overall burden of caregiving for other people in their social network (Kessler & McLeod, 1984; Merritt et al., 2011). However, a dyadic study of African American couples by McNeil and colleagues (2014) found no evidence of partner effects of discrimination, suggesting that discrimination experienced by African American men and women did not influence their partner's well-being.

Finally, in this present investigation, we considered the role of negative-emotionality traits as potential confounds (for a discussion, see Lilienfeld, 2017; Ong, 2021) in the association between affective reactivity to racial discrimination and relationship quality. Considerable evidence indicates that individual differences in neuroticism (a well-established marker of negative emotionality and stress reactivity) may account for differential exposure and reactivity to daily stressors (Bolger & Schilling, 1991; Bolger & Zuckerman, 1995). Thus, we controlled for neuroticism in analyses of the associations between affective reactivity and relationship quality.

The Current Study

In the current study, we addressed these issues by examining associations between daily affective

reactivity and relationship quality in an adult sample of African American couples. Using dyadic data analyses, we examined actor and partner effects of affective reactivity on relationship quality. We tested the primary hypotheses that greater negative affective reactivity to daily racial discrimination is associated with lower relationship quality. Because close relationships are inherently dyadic, we also predicted partner effects, specifically that greater negative affective reactivity in one partner would impair the relationship perceptions of the other partner. Finally, we explored whether the effects of affective reactivity on relationship quality varied by affective valence and participant gender.

Method

Participants

As part of a larger study investigating racial discrimination, relationship processes, and psychological well-being, 180 African American couples were recruited from the broader Chicago area using posters, community message boards, and advertisements on Chicago Transit Authority buses and trains. Couples were eligible if both partners were at least 18 years old, identified as African American, were married or living together, and had Internet access. Of the 180 couples who responded, five couples were excluded because at least one member of the dyad did not complete any daily diaries. Of the remaining 176 couples, 60 couples were excluded because one or both couple members reported experiencing discrimination either every day or none of the days (the computation of affective reactivity requires having both discrimination and nondiscrimination days). Of the remaining couples, data from 17 dyads were excluded from analysis because the partners could not be distinguished by gender and because a large sample of same-gender couples is required to account for dependency between partners when retaining both distinguishable and indistinguishable dyads (Olsen & Kenny, 2006). The final analytic sample ($N = 98$ couples) had a mean age of 35.9 years ($SD = 12.3$). On average, participants had been in their current relationships for 7.1 years ($SD = 8.1$), and 34.5% were married. The median individual income (\$25,000–\$50,000) was comparable with that reported in national surveys of African Americans (Chatters et al., 2008), and 98% completed at least a high school education.

Procedure

Couples attended an orientation session in which they completed a questionnaire assessing relationship quality along with other measures related to a larger study.

After the questionnaire assessment, couples received both verbal and written instructions about the diary procedure, which started on the upcoming Monday. Every evening for 21 consecutive days, participants received an email containing a link to an online survey about their daily experiences (e.g., discrimination, positive affect, and negative affect). Participants received an email message each day reminding them to access the diary measures. To minimize variation in reporting times, we allowed participants to log on to the website only between the hours of 8:00 p.m. and 4:00 a.m. The median number of days that a participant contributed data was 19 ($M = 17.0$ days, $SD = 5.5$). At the conclusion of the 21-day period, couples were compensated up to \$175 for their time: \$50 for the baseline questionnaire and up to \$125 for the daily diaries. In addition, for every day both members submitted a daily survey, couples were entered into a lottery for a chance to win a \$500 bonus at the end of the study. The study protocol was approved by the human subjects institutional review board at Loyola University Chicago.

Measures

Relationship quality. Relationship quality was assessed for each member of the dyad using the Perceived Relationship Quality Components Inventory (Fletcher et al., 2000). This 18-item scale assesses six components of romantic relationship quality: satisfaction (e.g., “How satisfied are you with your relationship?” “How content are you with your relationship?”), commitment (e.g., “How committed are you to your relationship?” “How dedicated are you to your relationship?”), intimacy (e.g., “How intimate is your relationship?” “How close is your relationship?”), trust (e.g., “How much do you trust your partner?” “How much can you count on your partner?”), passion (e.g., “How passionate is your relationship?” “How sexually intense is your relationship?”), and love (e.g., “How much do you love your partner?” “How much do you cherish your partner?”). Each component is assessed by three items. Fletcher et al. (2000) have confirmed that these components are correlated and tap a higher order relationship factor. Responses were made on a 9-point Likert-type scale (1, *not at all*, to, 9, *extremely*). Responses to all 18 items were averaged to form a global index of relationship quality; higher scores indicate greater perceived relationship quality ($\alpha = .93$).

Daily racial discrimination. Daily racial discrimination was assessed with a modified version of the Daily Life Experience subscale of the Racism and Life Experiences Scales (Harrell, 1997). This self-report measure assesses the frequency and impact of experiencing 20 different types of racial discrimination (for a review of

scale properties, see Utsey, 1998). A recent psychometric study of the Daily Life Experience subscale demonstrated evidence of reliability, convergent and criterion-related validity, and measurement invariance by gender for African American men and women (Lee et al., 2021). The instructions for the checklist were modified to refer to whether each of the 20 events had occurred that day (e.g., “Today, I was ignored, overlooked, or not given service”; “Today, I was mistaken for someone else of my same race”). A participant was given a score of 1 if they had experienced a racial-discrimination event on a particular day and a score of 0 if they had not. This approach to measuring daily racial discrimination is consistent with research that distinguishes daily events from ongoing activities by defining them as changes from day-to-day occurrences (for a discussion, see Eckenrode & Bolger, 1997).

Affective reactivity to racial discrimination. Daily positive affect and negative affect were measured using the Positive and Negative Affect Schedule (Watson et al., 1988). For negative affect, participants rated how “angry,” “ashamed,” “dejected,” “distressed,” “nervous,” and “sad” they felt. For positive affect, participants rated how “alert,” “cheerful,” “excited,” “happy,” “interested,” and “proud” they felt. Participants responded using a 9-point Likert-type scale, ranging from 1 (*not at all*) to 9 (*extremely*). Within-person estimates of reliability were computed using three-level models in which items were nested within days, which were nested within participants (Bryk & Raudenbush, 1992, pp. 191–196). Using this procedure, we found that the estimated day-level reliability was .82 for the positive-affect scale and .85 for the negative-affect scale, respectively.

Following procedures established in other daily-stress research (Charles et al., 2013; O’Neill et al., 2004; Piazza et al., 2013), we operationalized affective reactivity as the difference in affect levels between racial-discrimination days and nonracial-discrimination days. Multilevel modeling was used to estimate reactivity coefficients for each individual using the following equation:

$$\text{Level 1: } \text{affect}_{ij} = a_{0j} + a_{1j}(\text{discrimination})_{ij} + a_{2j}(\text{gender})_{ij} + a_{3j}(\text{male})_{ij} + a_{4j}(\text{female})_{ij} + r_{ij}$$

$$\text{Level 2: } a_{0j} = \beta_{00} + u_{0j} \\ a_{1j} = \beta_{10} + u_{1j}$$

At Level 1, the value a_{0j} is a regression intercept and reflects the mean level of daily affect on days in which the predictor, the dichotomous racial-discrimination variable, is zero; a_{1j} is a regression slope (reactivity

coefficient) representing the difference in affect between days when a racial-discrimination event was and was not endorsed. Gender was effects coded ($-1 = \text{male}$, $1 = \text{female}$). Dummy-coded male ($0 = \text{female}$, $1 = \text{male}$) and female ($0 = \text{male}$, $1 = \text{female}$) separated the random intercept into two components for each gender. In this model, the residual parameter (r_{ij}) indexes the day-to-day variability in affect for each individual. At Level 2, β_{00} and β_{10} represent the sample-average level of affect and reactivity effect, respectively. Additionally, u_{0j} and u_{1j} are variances reflecting individual differences or deviations from the sample-average level of affect and reactivity estimates, respectively. Each person therefore has unique regression parameters, representing their own relationship between racial discrimination and affect. For some people, reactivity coefficients will be larger, whereas for others, they will be smaller or even near zero. As an example, a person with a negative-affective-reactivity coefficient of 0.19 (the sample mean) had an increase of 0.19 (on a scale from 1 to 5) in negative affect on racial-discrimination days compared with nonracial-discrimination days. Models were estimated by means of restricted maximum likelihood. Under this estimation procedure, estimates for missing data at Level 1 are obtained via the expectation-maximization algorithm (Raudenbush & Bryk, 2002).

Covariates. Demographic data on age, gender, marital status, and relationship length were included as covariates. Following prior work (Ong & Burrow, 2018; Sin et al., 2015), we controlled for average or mean-level affect on nonracial-discrimination days to distinguish between the effects of affective reactivity to daily racial discrimination and typical experiences of affect. The number of days during which at least one racial-discrimination experience occurred was included in all analyses to adjust for individual differences in racial-discrimination frequency. Finally, because neuroticism has been shown to be an important correlate of reactivity to daily stressor exposure (Bolger & Zuckerman, 1995), we controlled for it using the neuroticism subscale of the International Personality Item Pool (Goldberg, 1992). Responses to the 10-item measure are based on a 7-point scale (1, *very inaccurate*, to 7, *very accurate*). Sample items include “Get stressed out easily” and “Am easily disturbed” ($\alpha = .85$).

Analytic approach

Primary analyses consisted of estimating a series of actor-partner interdependence models (APIMs) to evaluate whether affective reactivity to daily racial discrimination was associated with relationship quality. To

account for interdependence of individuals within the same dyad, we used dyadic data analysis (Kashy & Kenny, 2000). Using this method, we were able to estimate both *actor effects* (associations between an individual's affective reactivity to racial discrimination and his or her own relationship quality) and *partner effects* (associations between an individual's affective reactivity to racial discrimination and his or her partner's relationship quality). Both actor and partner effects of negative affective reactivity and positive affective reactivity were examined as predictors of relationship quality. Before analysis, data for negative affective reactivity were Winsorized at the 90th percentile to correct for skewness. Additionally, to aid in interpretability, we multiplied the slopes for positive affective reactivity by -1 to reflect lower levels of relationship quality as a function of racism-related decreases in positive affect.

All analyses were conducted using the *dyadr* package (Version 0.0.0.9000; Garcia & Kenny, 2020) in the R programming environment (Version 4.0.0; R Core Team, 2020). Unadjusted analyses for negative affective reactivity were examined in Model 1. Main effects of daily negative affect on nonracial-discrimination days and racial-discrimination frequency were added in Model 2. Demographic covariates (i.e., age, gender, income, marital status, relationship length) and neuroticism were added in Model 3. To probe for gender differences, we included two-way interactions of actor and partner negative affective reactivity with gender in Model 4. Parallel models were tested for positive affective reactivity (Models 5–8). Finally, to evaluate whether positive and negative affective reactivity were independently associated with relationship quality, we included both actor and partner effects of both negative and positive affective reactivity, along with their two-way interactions with gender, in Model 9.

Results

Descriptive statistics

Table 1 includes descriptive information and correlations for the study variables. Means, standard deviations, and zero-order correlations are presented for men and women separately. Scores for actor and partner negative and positive affective reactivity were correlated within couples; if one person experienced heightened reactivity, their partner was also likely to have experienced heightened reactivity. Relationship quality was negatively correlated with most actor and partner effects of negative and positive affective reactivity (r s ranged from $|0.20|$ to $|0.30|$), except for partner positive affective reactivity, which was not significantly correlated with relationship quality for women ($p = .27$).

Table 1. Descriptive Statistics and Correlations for Primary Study Variables

Variable	Women		Men		Correlations					
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Actor negative affect (slope)	0.42	1.02	0.46	0.88	—	.54**	.40**	.17	-.25*	.19
2. Partner negative affect (slope)	0.46	0.88	0.42	1.02	.54**	—	.23*	.32**	-.30**	.06
3. Actor positive affect (slope)	-0.001	1.84	-0.001	1.79	.32**	.17	—	.43**	-.31**	.36**
4. Partner positive affect (slope)	-0.001	1.79	-0.001	1.84	.23*	.40**	.43**	—	-.11	.04
5. Relationship quality	7.70	1.25	7.86	1.13	-.24*	-.20*	-.25*	-.30**	—	-.16*
6. Discrimination frequency	4.01	3.43	3.44	3.04	.14	-.01	.13	.08	.04	—

Note: Correlations for men are in the lower diagonal; correlations for women are in the upper diagonal.

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

Actor-partner negative affective reactivity and relationship quality

Results from APIM regression models are presented in Table 2. In unadjusted analyses, there was a significant main effect of actor negative affective reactivity in predicting relationship quality (Model 1; $b = -0.20$, $p = .025$, 95% confidence interval [CI] = [-0.38, -0.03]). However, this association became nonsignificant when models adjusted for mean daily affect, racial-discrimination frequency, demographic covariates, and neuroticism (Models 2–4; all $ps > .43$). Partner negative affective reactivity was a significant predictor of relationship quality in univariate analyses (Model 1; $b = -0.19$, $p = .028$, 95% CI = [-0.37, -0.02]) and remained significant in models controlling for mean daily affect and racial-discrimination frequency (Model 2; $b = -0.19$, $p = .034$, 95% CI = [-0.37, -0.02]) and demographic factors and neuroticism (Model 3; $b = -0.21$, $p = .032$, 95% CI = [-0.40, -0.09]). There was no evidence for any two-way interactions of actor and partner negative affective reactivity with gender (Model 4; all $ps > .542$).

Actor-partner positive affective reactivity and relationship quality

Parallel APIM analyses were conducted to explore whether actor and partner positive affective reactivity to racial discrimination predicted relationship quality. As shown in Table 2, actor positive affective reactivity was significantly associated with relationship quality in unadjusted analyses (Model 5; $b = -0.15$, $p = .001$, 95% CI = [-0.24, -0.06]) and in the model controlling for mean daily affect and racial-discrimination frequency

(Model 6; $b = -0.47$, $p = .029$, 95% CI = [-0.90, -0.05]). However, this association became nonsignificant in the model adjusting for demographic covariates and neuroticism (Model 7; $p = .067$). By contrast, partner positive affective reactivity was unrelated to relationship quality (Models 5–8; all $ps > .105$). Additionally, there was no evidence for any two-way interactions of actor and partner positive affective reactivity with gender (Model 8; all $ps > .105$).¹ Finally, when negative-affect and positive-affect actor-partner variables were included in the same model, the main effect of partner negative affective reactivity held (Model 9; $b = -0.21$, $p = .043$, 95% CI = [-0.41, -0.01]).

Supplemental analyses

In a series of supplementary analyses, we examined whether actor and partner effects of negative and positive affective reactivity were associated with specific dimensions of relationship quality. The results from these models can be found in Tables S1 to S6 in the Supplemental Material available online. In unadjusted models, actor negative affective reactivity to daily discrimination was associated with lower levels of relationship commitment (see Table S1, Model 1; $b = -0.30$, $p = .001$, 95% CI = [-0.47, -0.12]), love (see Table S3, Model 1; $b = -0.19$, $p = .036$, 95% CI = [-0.37, -0.01]), satisfaction (see Table S5, Model 1; $b = -0.28$, $p = .046$, 95% CI = [-0.55, -0.01]), and trust (see Table S6, Model 1; $b = -0.30$, $p = .032$, 95% CI = [-0.58, -0.03]). However, these associations became nonsignificant in fully adjusted models. Independently of actor effects, partner negative affective reactivity was associated with lower relationship commitment (see Table S1, Model 1; $b = -0.21$,

Table 2. Results From Models of Negative and Positive Affective Reactivity Predicting Relationship Quality

Variable	Negative affect			Positive affect			Negative affect and positive affect		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6		Model 7	Model 8
Actor negative affect (slope)	-0.201* (0.089)	-0.185 (0.233)	0.099 (0.317)	0.083 (0.322)					0.292 (0.338)
Partner negative affect (slope)	-0.195* (0.088)	-0.190* (0.089)	-0.209* (0.097)	-0.215* (0.098)					-0.212* (0.103)
Actor Negative Affect (Slope) × Gender				0.049 (0.115)					0.066 (0.112)
Partner Negative Affect (Slope) × Gender				-0.069 (0.114)					-0.160 (0.118)
Actor positive affect (slope)					-0.152** (0.044)	-0.475* (0.216)	-0.458 (0.067)	-0.420 (0.245)	-0.481 (0.268)
Partner positive affect (slope)					-0.073 (0.045)	-0.063 (0.045)	-0.055 (0.047)	-0.048 (0.047)	-0.023 (0.050)
Actor Positive Affect (Slope) × Gender								0.007 (0.055)	0.010 (0.056)
Partner Positive Affect (Slope) × Gender								0.088 (0.054)	0.100 (0.055)
Negative affect on nonracial-discrimination days		-0.024 (0.183)	-0.172 (0.245)	-0.166 (0.248)					-0.296 (0.256)
Racial-discrimination frequency		0.016 (0.026)	0.025 (0.027)	0.025 (0.027)		0.031 (0.025)	0.041 (0.026)	0.036 (0.027)	0.039 (0.028)
Positive affect on nonracial-discrimination days						-0.288 (0.197)	-0.311 (0.225)	-0.280 (0.222)	-0.333 (0.241)
Neuroticism			-0.091 (0.064)	-0.086 (0.064)			-0.065 (0.062)	-0.069 (0.062)	-0.055 (0.065)
Age		0.002 (0.009)	0.002 (0.009)	-0.000 (0.009)			0.003 (0.010)	0.004 (0.010)	-0.004 (0.010)
Gender (1 = female)			0.017 (0.082)	0.025 (0.092)			-0.075 (0.075)	-0.074 (0.073)	0.015 (0.091)
Income			-0.190 (0.100)	-0.198 (0.102)			-0.197 (0.103)	-0.194 (0.103)	-0.185 (0.103)
Marriage status (1 = married)			-0.023 (0.227)	-0.049 (0.233)			-0.023 (0.232)	0.003 (0.230)	-0.108 (0.233)
Relationship length			-0.009 (0.016)	-0.007 (0.016)			-0.011 (0.016)	-0.014 (0.016)	-0.007 (0.016)

Note: Values shown are unstandardized regression coefficients (standard errors are given in parentheses). * $p < .05$. ** $p < .01$.

$p = .02$, 95% CI = $[-0.39, -0.32]$), passion (see Table S4, Model 1; $b = -0.32$, $p = .04$, 95% CI = $[-0.62, -0.02]$), and satisfaction (see Table S5, Model 1; $b = -0.28$, $p = .05$, 95% CI = $[-0.55, -0.00]$) in unadjusted models. However, in fully adjusted models, only the association between partner negative affective reactivity and passion persisted (see Table S4, Model 4; $b = -0.53$, $p = .003$, 95% CI = $[-0.88, -0.18]$).

Actor and partner positive affective reactivity also emerged as unique predictors of specific relationship dimensions in unadjusted models, with main effects of actor positive affective reactivity on intimacy (see Table S2, Model 5; $b = -0.20$, $p = .001$, 95% CI = $[-0.31, -0.09]$), passion (see Table S4, Model 5; $b = -0.22$, $p = .004$, 95% CI = $[-0.37, -0.07]$), satisfaction (see Table S5, Model 5; $b = -0.24$, $p = .001$, 95% CI = $[-0.38, -0.11]$), and trust (see Table S6, Model 5; $b = -0.17$, $p = .013$, 95% CI = $[-0.31, -0.03]$) and partner positive affective reactivity on passion (see Table S4, Model 5; $b = -0.18$, $p = .02$, 95% CI = $[-0.33, -0.04]$), respectively. However, in fully adjusted models, only the association between partner positive affective reactivity and passion persisted (see Table S4, Model 7; $b = -0.18$, $p = .03$, 95% CI = $[-0.34, -0.02]$). Finally, when negative-affect and positive-affect actor-partner variables were included in the same model, only main effects for partner negative affective reactivity on passion held (see Table S4, Model 9; $b = -0.49$, $p = .01$, 95% CI = $[-0.86, -0.13]$).

Discussion

Racial discrimination is a salient source of chronic stress for African Americans (Clark et al., 1999) that has documented adverse effects on mental and physical health (Mays et al., 2007; Paradies et al., 2015). Few studies have addressed the associations between racial discrimination and relationship quality in African American couples (Lavner et al., 2018; Smith et al., 2020). Accordingly, scholars have highlighted the need for research examining how the experience of day-to-day racial discrimination can have negative effects on African American couples' relationship functioning (Bryant et al., 2010; Clark et al., 2002). Extending prior work on affective reactivity, which has focused primarily on intrapersonal effects of daily stress (e.g., Charles et al., 2013), this study is the first to examine links between affective reactivity to daily racial discrimination and relationship quality and the first to address these associations using dyadic data from African American couples. Results from APIM analyses add weight to the importance of considering couple processes as mechanisms linking daily-stress processes to individual health. Whereas significant associations between affective reactivity and mental health have been previously

documented among African American adults (e.g., Ong & Burrow, 2018), the present study further elucidates the interpersonal effects of racial discrimination among African American couples.

Findings indicated that participants' relationship quality was inversely associated with their partner's negative affective reactivity to daily racial discrimination. In supplemental analyses of specific relationship quality components, partner negative affective reactivity was associated with lower levels of relationship passion. This effect held in fully adjusted models that controlled for mean levels of positive affect and negative affect and neuroticism, suggesting that the association of partner negative affective reactivity and relationship passion may not simply be due to mean levels of affective well-being or negative-emotionality traits. Although the impact of stressor spillover on intimate relationships has been widely reported (Buck & Neff, 2012; Neff & Karney, 2007), to our knowledge, no empirical research has addressed parallel issues in the context of African American couples' reactivity to daily racial discrimination and examined how differences in reactivity are linked to specific components of relationship quality. The current data are among the first to report unique links between partner negative affective reactivity and passion, a facet of relationship quality that is strongly associated with sexual intimacy (Baumeister & Bratslavsky, 1999). These findings suggest that more attention should be paid to the effects of racism-related stress among African American couples (Lavner et al., 2018) and that couples' everyday stress reactivity may be a particularly relevant intervention target for maintaining passion and sexual desire in intimate relationships (Neff & Karney, 2017). Overall, the findings lend support to theoretical formulations of racial discrimination as a dyadic phenomenon (Bryant et al., 2010; Clark et al., 2002; Harrell, 2000) and suggest the need for more research that considers the negative spillover and crossover effects of daily stress on African American couple's relationship functioning (Barton et al., 2018; Neff & Karney, 2007).

Building on previous research (Ong & Burrow, 2018), we also considered the role of positive affective reactivity. Whereas there was evidence of an association between actor positive affective reactivity and relationship quality, suggesting heightened vulnerability, this association was not maintained in fully adjusted models. This is consistent with the findings of other studies suggesting that the links between relationship responsiveness and health are driven by negative rather than positive affective reactivity (Slatcher et al., 2015; Stanton et al., 2019). Given the relative dearth of daily-process studies with African American couples, research examining both actor and partner effects represents a key area for future investigation.

A key strength of the current study was the use of dyadic daily data from African American couples. At the same time, however, the study had several limitations. All measures were based on self-report data, raising concerns about common method and memory bias. Future investigations comparing results from daily-diary and momentary-sampling studies that incorporate physiological responses and behavior measures are thus needed. Conclusions regarding the causal direction cannot be determined given the cross-sectional analysis of relationship quality. Therefore, prospective, longitudinal studies with multiple-wave assessments of daily racial discrimination and affect and relationship quality are needed to understand the directionality and time course of these relations. Furthermore, assessing dynamic daily-stress processes (affective reactivity) as stable individual differences requires measures that are reliable and sensitive to within-person change (Ong & Leger, in press). A challenge in assessing the reliability of person-specific estimates (random slopes) reflecting daily affective reactivity is that it is unknown how many measurement occasions are needed for the individual slope estimates to be accurate and valid measures of interindividual differences. Further research, applying a dynamic structural-equation-modeling approach to larger longitudinal dyadic samples (Asparouhov et al., 2018; Olsen & Kenny, 2006), is warranted. Future research must also take into account the generalizability of these findings to other ethnic-racial populations and geographic areas in the United States. Finally, the current study focused only on affective reactivity. Whereas reactivity reflects the magnitude of responses to stress, recovery reflects the speed with which stress responses return to baseline (Epel et al., 2018). Further daily-process studies building on this work are necessary to confirm the extent to which individual differences in delayed affective recovery from daily discrimination uniquely influence interpersonal functioning, independently of exposure and affective reactivity to daily discrimination. Future researchers may also want to extend the findings here to explore the role of negative health behaviors (such as drinking) as a potential mechanism linking partner effects of discrimination to relationship quality (DeHart et al., 2014; Hamilton & DeHart, 2020).

These limitations notwithstanding, results from this study demonstrate the unique role that partners play in promoting relationship quality among African American couples. The findings suggest that negative affective reactivity to daily racial discrimination has not only intrapersonal (Ong & Burrow, 2018) but also interpersonal associations with health. Assessment of affective reactivity as a potential vulnerability characteristic is of practical significance in suggesting factors that are malleable and can be addressed clinically (e.g., through

interventions designed to teach couples how to regulate their daily negative affect in the face of daily stressors; Neff & Karney, 2017). For African Americans, heightened affective reactivity to daily encounters of racial discrimination may reflect an embedded history of stressor exposure. Further research that integrates personal histories of major and day-to-day experiences of discrimination is needed to better understand how racial discrimination impinges on relationship functioning. How African American couples respond to and are affected by each other's experiences of everyday racial discrimination thus remains a critical direction for future research.

Transparency

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Author Contributions

A. D. Ong and B. Urganici developed the study concept. T. DeHart and A. L. Burrow contributed to the study design and data collection. B. Urganici analyzed and interpreted the data under the supervision of A. D. Ong. A. D. Ong drafted the manuscript, and T. DeHart, A. L. Burrow, and B. Urganici provided critical revisions. All the authors approved the final manuscript for submission.

Declaration of Conflicting Interests

The author(s) declared that there were no conflicts of interest with respect to the authorship or the publication of this article.

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Open Practices

All modeling scripts and materials have been made publicly available via OSF and can be accessed at <https://osf.io/73gd2>. Data for this study have not been made publicly available. The design and analysis plans were not preregistered. This article has received the badge for Open Materials. More information about the Open Practices badges can be found at <http://www.psychologicalscience.org/publications/badges>.



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Supplemental Material

Additional supporting information can be found at <http://journals.sagepub.com/doi/suppl/10.1177/09567976221077041>

Note

1. Descriptive and exploratory analyses examining the role of marital status are reported in Tables S7 and S8 in the Supplemental Material available online. There was no evidence that the association between affectivity reactivity and relationship quality varied as a function of marital status.

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