

Race, social pain minimization, and mental health

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Abstract

People often believe Black individuals experience less social pain and require less social support to cope with distress than White individuals (e.g., Deska, Kunstman, Lloyd, et al., 2020). However, researchers have not tested whether biases in third-person pain judgments translate to first-person experiences with social pain minimization. For example, do Black individuals feel their social pain is underrecognized to a greater extent than White individuals? The current work tested whether Black individuals felt their social pain was minimized more than White individuals and if the experience of social pain minimization was related to worse mental health and greater life stress. Data from two cross-sectional, correlational studies provide initial support for these predictions ($N_{\text{total}} = 1,501$). Black participants felt their social pain was minimized more than White participants and this race difference in social pain minimization was associated with worse mental health and greater life stress. These results suggest that Black individuals feel their pain is underrecognized and this experience of social pain minimization is related to worse mental health outcomes.

Keywords

mental health, microaggressions, race, social pain, stress

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Research across the social and health sciences indicates that chronic negative social experiences, including exclusion, unfairness, and disrespect can severely damage mental health and well-being (e.g., Cacioppo & Cacioppo, 2014; Jackson et al., 2006; Jaremka et al., 2014). In the current work, we refer to the distress and negative emotions caused by these aversive social situations as social pain (MacDonald & Leary, 2005). The negative consequences of social pain are striking considering that (a) these experiences occur more frequently to members of culturally

stigmatized groups like Black Americans than to members of culturally dominant groups like White Americans and (b) these frequent

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experiences with unfairness and mistreatment contribute to racial disparities in health and well-being (Guyll et al., 2001; Jackson et al., 2006; Krieger & Sidney, 1996; Major et al., 2013; Smith et al., 2011; Williams & Mohammed, 2009). Despite consistent evidence that social pain harms Black Americans more than White Americans (e.g., Guyll et al., 2001; Krieger & Sidney, 1996), emerging evidence suggests that evaluators paradoxically believe Black individuals experience less social pain and require less social support than White individuals (Deska, Kunstman, Lloyd, et al., 2020). Yet, it remains unclear whether these third-party biases translate to the lived experiences of Black individuals. Do Black individuals feel their social pain is minimized more than White individuals? Moreover, what are the mental health consequences associated with first-person experiences with social pain minimization? The current work addressed these research questions with two large survey studies of Black and White Americans. Based on evidence that White and Black evaluators minimize Black people's social pain, we anticipated that Black participants would feel their social pain was minimized more than White participants. Moreover, we expected that, as a specific deficit in social support, experiencing social pain minimization would be associated with greater stress and worse mental health.

Race and Social Pain Minimization

The current work defined social pain as the psychological distress and negative affect generated by social mistreatment (i.e., exclusion, disrespect, unfairness). We focus on these forms of social mistreatment because of their established negative effects on mental and physical health (e.g., Cacioppo & Patrick, 2008; Guyll et al., 2001; Jackson et al., 2006; Jaremka et al., 2014). When people are excluded, demeaned, and treated unjustly, the mind and body suffer. Thus, our definition of social pain—and resultant minimization—featured these forms of social

harm to connect with well-known threats to health and well-being.

We operationalized social pain minimization as the perception that listeners devalue, dismiss, and downplay speakers' experiences with social pain. People experience social pain minimization when they believe others are inattentive or apathetic to their negative affect following aversive social experiences (e.g., exclusion, unfairness, disrespect). For example, an individual experiences social pain minimization when she feels listeners invalidate her sadness after being excluded from a friend's birthday party; or when an individual feels listeners trivialize his distress after describing disrespectful coworkers. Social pain minimization occurs when people disclose negative social experiences and feel listeners devalue their hurt.

Moreover, social pain minimization is adjacent but distinct from phenomena like racial microinvalidations as commonly conceptualized¹ (e.g., Nadal, 2011; Sue, Nadal, et al., 2008; Torres-Harding et al., 2012). Specifically, whereas racial microinvalidations focus on race-based attributions for direct, primary negative events with White people, social pain minimization focuses on emotional experiences to secondary events recounted to others, regardless of listener race. For example, a racial microinvalidation might involve a White colleague telling a Black individual that racial discrimination is a thing of the past (Nadal, 2011). By contrast, continuing with this example, social pain minimization would entail the neglect experienced by the Black individual when she shares her encounter with others and feels others—regardless of their race—are apathetic to her hurt. Thus, social pain minimization focuses on the perception that negative emotions have been neglected after sharing hurtful social experiences with others.

Several converging lines of research support the hypothesis that Black individuals will feel their social pain is minimized more than White individuals. First, research on dehumanization finds that cultural and historical representation of Black people leads others to devalue the emotional experiences and capacities of Black

individuals and, in some cases, perceive Black individuals as being less capable of experiencing complex emotions (e.g., Albarello & Rubini, 2012; Cuddy et al., 2007; Goff et al., 2008; Leyens et al., 2000). For example, Black survivors of Hurricane Katrina had their emotional capacities for empathy, anguish, and mourning minimized by White participants, and these dehumanizing judgments undermined intentions to help survivors (Cuddy et al., 2007). Based on this evidence, we theorized that cultural stereotypes that dehumanize the emotional capacity of Black people might lead others to be insensitive to Black individuals' emotions, ultimately creating a sense of social pain minimization.

Second, research on microinvalidations suggests that the racial reality of Black individuals is devalued and disregarded by White individuals (Nadal, 2011; Pierce, 1970; Sue, Capodilupo, et al., 2008; Torres-Harding et al., 2012), which may contribute to a broad sense of pain minimization. When Black individuals call attention to race-based mistreatment, White individuals frequently dismiss and invalidate the role of race in the lived experience of Black individuals. Over time, these microinvalidations can lead Black individuals to question their emotions, create negative affect, and increase depressive and somatic symptoms (Huynh, 2012; Nadal et al., 2014; Sue, 2010). Although, as noted before, microinvalidations differ from social pain minimization in terms of conceptual focus, event type, and perpetrator characteristics, this literature highlights how the race-based experiences of Black individuals are discounted. We theorized that if this invalidation extends to secondary experiences of sharing social hurts with others, it might contribute to racial differences in social pain minimization.

Third, our minimization prediction is supported by research that finds evaluators frequently minimize the physical and social pain of Black people relative to White people (e.g., Deska, Kunstman, Lloyd, et al., 2020; Mende-Siedlecki et al., 2019; Trawalter et al., 2012). For example, when asked to imagine how much pain Black and White individuals experience after breaking bones

or being excluded by friends, people routinely believe Black individuals experience less pain than White individuals. Research further suggests these racial biases in pain judgments are partially related to race-based beliefs about adversity and toughness, which subsequently undermine social support judgments for Black individuals (Deska, Kunstman, Bernstein, et al., 2020; Deska, Kunstman, Lloyd, et al., 2020; Hoffman & Trawalter, 2016). Stereotypic beliefs that adversity has toughened Black people relative to White people lead to false perceptions that Black people feel less pain and consequently need less social support than White people. It is important to note that Black participants also show these biased pain judgments, suggesting these biased judgments extend to racial ingroup members (Deska, Kunstman, Lloyd, et al., 2020; Deska, Kunstman, Bernstein, et al., 2020; Trawalter et al., 2012). The generalization of this bias to ingroup members is noteworthy because it raises the theoretical possibility that Black individuals' personal experiences with social pain minimization may extend to ingroup interactions. To the extent that Black and White individuals hold lay beliefs that Black people are tougher and less sensitive to social pain than White people, we theorized that Black individuals might have their social pain minimized by both outgroup and ingroup members. As a consequence of having their pain and need for support frequently underestimated, Black people may feel their social pain is minimized more than White people may.

The existing research provides convergent evidence for predicting that Black individuals will feel greater social pain minimization than White individuals. Black people are regularly dehumanized and denied complex emotional states (e.g., Cuddy et al., 2007), their race-based experiences are invalidated to the detriment of their mental health (e.g., Huynh, 2012), and their social pain and support needs are consistently underestimated relative to those of White individuals (e.g., Deska, Kunstman, Lloyd, et al., 2020). Together, these lines of research suggest Black people may feel their social pain is minimized more than White people may do.

Social Pain Minimization and Health

Central to the current work is the prediction that social pain minimization will be associated with poor mental health and stress. Research linking social support and health affirms this prediction. From this perspective, social pain minimization can be considered a specific deficit in emotional support (i.e., feeling others are apathetic and disinterested in one's distress). When their pain is minimized, people fundamentally feel a lack of social support, which has negative implications for coping (Coyne & Downey, 1991), resilience (Thoits, 1984), and several outcomes related to health and well-being (e.g., Belgrave & Lewis, 1994; Cohen, 1988). In keeping with this reasoning, the experience of social pain minimization represents a distinct absence of an important buffer to protect the mind and body from the effects of stress (Cohen & Wills, 1985). Absent this buffer, social pain minimization is likely to be associated with heightened stress and risk for several health problems. For instance, low levels of social support are associated with higher resting blood pressure, greater stress reactivity, hypertension risk, and elevated levels of depression and anxiety (e.g., Hefner & Eisenberg, 2009; Kamarck et al., 1990; O'Donovan & Hughes, 2007; Taylor & Stanton, 2007; Uchino et al., 1996; Wirtz et al., 2006; Xia & Li, 2018). Collectively, this work illustrates that social support is an important protective factor for maintaining mental health and well-being. When people feel their social support is insufficient, they are likely to experience stress and negative mental health outcomes.

In keeping with this reasoning, research in clinical and developmental psychology have closely linked experiences with emotional invalidation to mental health problems (e.g., Hong & Lishner, 2016; Krause et al., 2003; Linehan, 1993; Shenk & Fruzzetti, 2011; Yap et al., 2008; You & Leung, 2012; Zielinski & Veilleux, 2018). When people feel their emotions are dismissed and invalidated, they are deprived of critical social support to manage distress. Absent this support,

individuals may fail to develop important coping and emotion regulation skills, all to the detriment of their global mental health (e.g., Gottman et al., 1996; Krause et al., 2003; Yap et al., 2008). Collectively, this research suggests that emotion invalidation and minimization are closely associated with negative mental health outcomes.

In addition to clinical and developmental research, further evidence for predicting social pain minimization will be associated with worse mental health and well-being comes from research on rejection and perceived responsiveness from social networks. When people feel that sharing their emotions will lead to rejection and discomfort from close others, relationships and personal well-being suffer (Feeney & Collins, 2015). Likewise, when facing adversity, perceived weak support from partners can increase negative affect such as fear, sadness, rejection, and helplessness (Feeney & Collins, 2015). Moreover, the negative mental and physical health consequences of major life stressors are compounded when people feel their ability to express their emotions is constrained by those in their social network (Lepore et al., 1996). For instance, people may inhibit and conceal emotional experiences to avoid expected invalidating responses from others. In keeping with our overarching theorizing, constrained contexts are associated with increased depressive symptoms, heightened stress, worse global health, and nonadherence to health regimens (Lepore, 2001). In short, mental health is adversely affected when people restrict their emotional expression to avoid expected emotion invalidation (e.g., Lepore & Helgeson, 1998).

The Current Work

The current work integrates social cognitive research on race-based biases in social pain judgments with health perspectives on perceived social support to test the hypothesis that Black individuals will feel their social pain is minimized more than White individuals. Guided by theorizing on the important role of social support for mental health and stress management (e.g.,

Feeney & Collins, 2015; Lepore, 2001), we further hypothesized that greater feelings of social pain minimization would be associated with worse mental health and greater life stress. Two studies tested these primary hypotheses. Using cross-sectional survey methods, we predicted that Black Americans would feel greater social pain minimization than White Americans and greater minimization would be associated with worse mental health and greater stress.²

Study 1

As a first test of the work's primary hypothesis, we surveyed Black and White Americans about their experiences with social pain minimization. Specifically, participants completed a face-valid, five-item measure that assessed personal experiences with social pain minimization (e.g., "When sharing negative social experiences with others [e.g., being disrespected, derogated, treated unfairly], people minimize my pain and negative emotions"). It is worth noting that we assessed personal rather than relative experiences with social pain minimization (i.e., participants reported personal feelings of pain minimization rather than how much they think their pain was devalued relative to the pain of racial outgroup members). We believe an advantage of this approach is that it provides independent assessments of participants' experiences with social pain minimization without activating social comparison processes and racial stereotypes associated with social pain and toughness. We expected that Black participants would feel their social pain was minimized more than White participants.

In addition to social pain, we also measured life stress (Cohen et al., 1983) and mental health, specifically, brief assessments of anxiety and depression (Kroenke et al., 2009). In light of conflicting results related to the direct effect of race on life stress and mental health (e.g., Williams & Mohammed, 2009), we were agnostic about whether Black and White participants would differ on reported life stress and mental health. However, we did hypothesize that social pain

minimization would be associated with more stress and worse mental health. Hence, although participant race may not directly affect health, we predicted race would have an indirect effect on stress and mental health through heightened social pain minimization. We expected Black participants to experience greater social pain minimization than White participants, and greater minimization to be associated with worse health outcomes.

Finally, as a test of a core assumption of this work, namely that Black Americans have more experiences with social pain than White Americans (thus setting the stage for greater potential social pain minimization), the current work also assessed the frequency with which individuals encountered socially painful events (Williams et al., 1997). Specifically, using items that did not directly implicate race, we assessed daily experiences with unfairness, disrespect, and social mistreatment. In keeping with past work (e.g., Guyll et al., 2001; Kessler et al., 1999; Krieger & Sydney, 1996; West, 2019), we anticipated that Black participants would more frequently experience social mistreatment (i.e., more socially painful experiences) than White participants.

Methods

Participants. We were uncertain of the effect size for racial differences in social pain minimization. An a priori power analysis (G*Power Version 3.1; Faul et al., 2007) suggested a sample size of 352 would provide 80% power to detect a small to medium effect ($d = 0.30$) at $\alpha = .05$. In anticipation of some data loss due to incomplete responses and repeat IP addresses (suggesting repeat participation), we collected data from a sample of 743 online participants. Of the total sample, 13 responses came from duplicate IP addresses and were excluded from analyses. The inclusion of responses from repeat IP addresses does not change the nature or significance of the reported results. We conducted targeted recruitment of Black participants through Qualtrics

Participant Panel Services, resulting in 275 Black respondents. White participants were recruited through open sampling on MTurk, which ultimately yielded 256 White participants and an additional 156 Black participants. In total, analyses were conducted on 687 participant responses (431 Black/African American, 256 White American; 52.1% female; $M_{\text{age}} = 40.43$, $SD = 14.27$). A sensitivity analysis indicates that this sample provides sufficient power to detect effects as small as $d = 0.21$.

Materials

Social pain minimization. We measured participants' feelings of social pain minimization with a five-item measure (e.g., "When sharing negative social experiences with others [e.g., being disrespected, derogated, treated unfairly], people minimize my pain and negative emotions," "Others don't fully appreciate how much disrespect and mistreatment hurt my feelings," "When I tell others about times I've been treated unfairly, I feel people underestimate my hurt"; $\alpha = .93$). Participants expressed (dis)agreement on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*).

Mental health. Mental well-being was measured with the four-item Patient Health Questionnaire for Depression and Anxiety (PHQ-4; Kroenke et al., 2009), a well-validated and commonly used assessment of depression and anxiety (e.g., Löwe et al., 2010; Schiffman et al., 2014). Participants indicated the frequency of negative mental states over the past 2 weeks (e.g., "Feeling down, depressed, or hopeless," "Not being able to stop or control worrying"; $\alpha = .88$) on a 4-point scale (0 = *not at all*, 1 = *several days*, 2 = *more days than not*, 3 = *nearly every day*). Mental health was scored such that greater values reflect worse mental health.

Stress. Stress judgments were measured with the Perceived Stress Scale (PSS-4; e.g., Cohen et al., 1983), a well-established short measure of life stress (e.g., Ingram et al., 2014; Warttig et al., 2013). Participants responded to four items that measure the frequency of life stress (e.g., "In the

last month, how often have you felt that you were unable to control the important things in your life?" "How often have you felt difficulties were piling up so high that you could not overcome them?"; $\alpha = .74$). Stress was scored such that greater values indicate more life stress.

Frequency of social pain experiences. Social pain experiences were measured with nine items modeled on Williams et al.'s (1997) Everyday Discrimination Scale (see also Pérez et al., 2008). Participants indicated how frequently they encountered socially painful events in their daily lives (e.g., "You are treated with less respect than other people," "You receive poorer service than others in restaurants and stores," "You are called names or insulted"; $\alpha = .89$) on a 4-point scale (1 = *never*, 2 = *rarely*, 3 = *sometimes*, 4 = *often*). It is worth noting that, like Williams et al.'s (1997) measure, these nine items were race-neutral and did not label daily experiences with unfairness with terms like racism, prejudice, and discrimination. Hence, we measured daily experiences with social pain without directly implicating race or race-based situations.

Procedure. In random order, participants completed the aforementioned social pain minimization, frequency of experiencing socially painful events, mental health, and stress measures. Participants then provided demographic information, were thanked, debriefed, and compensated for their time. The research reported herein was completed in accordance with the Institutional Review Boards of Miami University. Materials, data, and syntax for the current work can be accessed at the Open Science Framework (https://osf.io/8jkhg/?view_only=4c159c7ecbb24e79bafa0c3aa0c9003f). Data for Studies 1 and 2 were collected in the summer of 2019.

Results

Bivariate relationships. Table 1 features a summary of the correlations between all variables in the current study. For clarity, mental health and stress were scored such that larger values indicated

Table 1. Alphas, descriptive statistics, and correlations between social pain minimization, the frequency of social pain experiences, worse mental health, and stress: Study 1.

Measure	α	M	SD	1.	2.	3.	4.
1. Social pain minimization	.93	4.32	1.40	-	.42***	.39***	.33***
2. Frequency of social pain	.89	2.10	0.67		-	.52***	.39***
3. Mental health	.88	2.02	0.86			-	.65***
4. Stress	.74	2.60	0.87				-

Note. * $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

more negative outcomes (i.e., worse mental health and greater life stress). Most relevant to the current work's central theorizing, correlational analyses revealed that social pain minimization was significantly related to more frequent social pain experiences, worse mental health, and greater life stress. More frequent social pain experiences were also related to worse mental health and greater levels of stress. Worse mental health was also associated with greater life stress.

Preliminary analyses revealed the Qualtrics and MTurk samples differed slightly on age, $t(682.11) = 4.16, p < .001$, such that Qualtrics participants ($M = 42.83, SD = 15.80$) were slightly older than MTurk participants ($M = 38.38, SD = 12.22$). This variable was included as a covariate in all subsequent analyses to account for age's possible effects.

Multiple regression analyses next tested whether the relationships between perceived social pain minimization and health markers remained significant after accounting for the frequency with which people encountered socially painful events. Even after covarying the frequency of experiencing socially painful events, $bs \geq 0.33, ps < .001$, and age, $bs \geq -0.10, ps < .001$, perceived social pain minimization remained a significant predictor of worse mental health, $b = 0.13, p < .001, 95\% CI [0.09, 0.17], r_{\text{partial}} = .24$, and greater life stress, $b = 0.12, p < .001, 95\% CI [0.07, 0.16], r_{\text{partial}} = .20$.

Role of participant race. To assess racial differences across the study's dependent measures, we used participant race (Black = 1, White = 0) as the grouping variable in a series of multiple regression

analysis measures of social pain minimization, mental health, stress, and frequency of social pain experiences. Age was included as a covariate. In keeping with the work's main hypothesis, Black participants reported greater social pain minimization than White participants, $b = 0.29, p = .009, 95\% CI [0.07, 0.51], r_{\text{partial}} = .10$. Age did not predict minimization, $b < -0.01, p = .09$. Subsequent analyses also revealed that Black participants reported significantly worse mental health than White participants did, $b = 0.19, p = .004, 95\% CI [0.06, 0.31], r_{\text{partial}} = .11$. Participant race did not significantly relate to stress, $b = 0.10, p = .10, 95\% CI [-0.02, 0.23], r_{\text{partial}} = .06$. In these analyses, age was inversely related to mental health and stress, $bs \geq -0.01, ps < .001$. In keeping with past work on racial differences in socially painful experiences (e.g., Guyll et al., 2001; Kessler et al., 1999), Black participants also reported more frequent experiences with social pain than White participants, $b = 0.23, p < .001, 95\% CI [0.13, 0.22], r_{\text{partial}} = .17$. Age was inversely related to social pain frequency, $b < -0.01, p < .001$. For ease of interpretation, estimated means from parallel analyses of covariance (ANCOVAs) are presented in Table 2. Full regression output for Studies 1 and 2 is presented in Table 4.

Race, minimization, and health markers. We next used PROCESS Model 4 to conduct two distinct mediational analyses to test whether racial differences in social pain minimization are related to greater stress and worse mental health (Hayes, 2017). Age was included as a covariate. Using 10,000 bootstrapped samples, these analyses indicated that participant race had an indirect effect

Table 2. Estimated means and standard deviations of social pain minimization and health markers after controlling for age (Study 1) and age and participant gender (Study 2).

Study 1	Black participants ($N = 430$)	White participants ($N = 256$)
Social pain minimization**	4.43 (1.32)	4.14 (1.52)
Frequency of social pain***	2.19 (0.67)	1.96 (0.65)
Mental health**	2.08 (0.86)	1.90 (0.83)
Stress	2.69 (0.82)	2.59 (0.82)
Study 2	Black participants ($N = 443$)	White participants ($N = 278$)
Social pain minimization***	4.24 (1.49)	3.87 (1.47)
Mental health***	2.07 (0.89)	1.81 (0.83)
Stress**	2.66 (0.87)	2.47 (0.86)

Note. * $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$ denotes significance level.

through social pain minimization on stress, $b = 0.05$, $SE = 0.02$, 95% CI [0.01, 0.10], and worse mental health, $b = 0.06$, $SE = 0.03$, 95% CI [0.02, 0.12] (see Figures 1 and 2). That is, Black participants experienced greater social pain minimization than White participants, which led to greater life stress and worse mental health.

Discussion

The current results provide initial evidence for the negative relationships between social pain minimization, mental health, and stress. Preliminary analyses revealed that perceived social pain minimization was associated with worse mental health and greater life stress. Moreover, perceived social pain minimization remained a significant predictor of these health markers even after accounting for individual differences in daily social pain experiences. These results suggest that over and above the frequency of socially painful events, personal experiences with social pain minimization are related to worse mental health and greater stress.

These data also provide support for a core assumption of the current work. Specifically, Black Americans experienced more socially painful events than White Americans (e.g., Kessler et al., 1999). We anticipated these negative experiences would translate into Black individuals experiencing greater social pain minimization than White

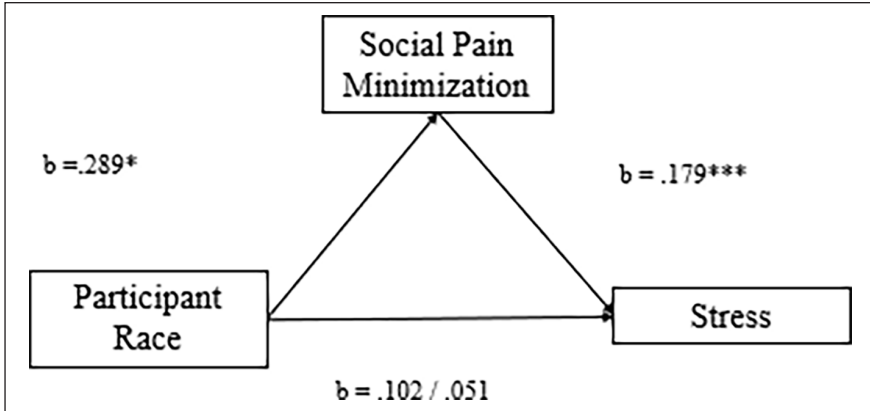
individuals. The current data support this underlying assumption.

These results also provide support for the central hypothesis regarding racial differences in social pain minimization. Specifically, Black participants felt their social pain was minimized more than White participants. Black participants also reported worse mental health than White participants. Participant race and stress were not directly related (see also Williams et al., 1997).

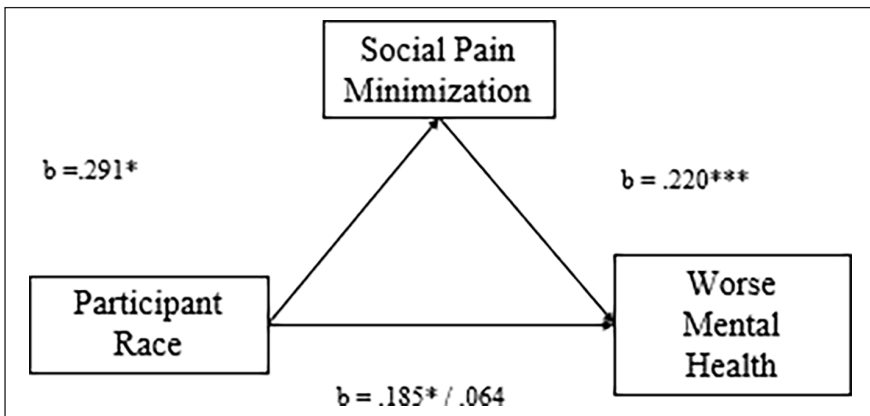
Also, as hypothesized, social pain minimization mediated race's relationships with mental health and stress, respectively. Although race's direct effect on stress was not significant, it operated through social pain minimization to adversely impact life stress. Here it is worth noting that these results come from cross-sectional data that cannot provide strong evidence for causality and should be interpreted carefully. Granting these limitations, these results provide initial evidence consistent with the work's central predictions that Black individuals have more experiences with social pain minimization than White individuals, and these experiences with minimization negatively affect stress and mental health.

Study 2

As a replication of Study 1, we again tested the hypothesized relationships between race, social pain minimization, and mental health. We repeated Study 1's method and surveyed a new

Figure 1. Social pain minimization mediates the effect of participant race on stress: Study 1.

Note. $*p \leq .05$. $**p \leq .01$. $***p \leq .001$.

Figure 2. Social pain minimization mediates the effect of participant race on mental health: Study 1.

Note. $*p \leq .05$. $**p \leq .01$. $***p \leq .001$.

sample of Black and White Americans. We again hypothesized that Black participants would feel greater social pain minimization than White participants and minimization would be associated with poorer mental health and greater stress. In keeping with Study 1's results, we expected Black participants might evince worse mental health than White participants, but it was unclear whether participant race would directly impact stress. Although participant race may not directly impact health markers, we again hypothesized an indirect effect through social pain minimization

(i.e., Black participants would report greater social pain minimization than White participants and minimization would be associated with greater stress and worse mental health). Unlike Study 1, the current study did not measure daily experiences with social pain.

Method

Participants. The current study employed a similar sampling strategy as Study 1. To achieve a minimal sample of 352 (80% power, $\alpha = .05$, $d = 0.30$), we

Table 3. Alphas, descriptive statistics, and correlations between social pain minimization, mental health, and stress: Study 2.

Measure	α	M	SD	1.	2.	3.
1. Social pain minimization	.93	4.11	1.49	-	.49**	.43**
2. Mental health	.89	1.99	0.88		-	.68**
3. Stress	.88	2.60	0.87			-

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

again collected data online through MTurk and Qualtrics platforms. Of the initial sample, 16 responses had repeat IP addresses and were excluded from analyses. The inclusion of these participants does not alter the direction or significance of the reported results. Of the remaining sample of 726 participants, 445 identified as Black/African American and 281 identified as White (53% male; $M_{\text{age}} = 39.15$, $SD = 13.39$). A sensitivity analysis indicated that this sample provides sufficient power to detect effects as small as $d = 0.21$.

Materials

Social pain minimization. To improve on Study 1's minimization measure, we added three additional items ("Others minimize my pain when I tell them about negative social experiences I've had," "People don't validate my emotions when I tell them about times I've experienced disrespect and unfairness," "When I tell them, people don't realize how much being excluded and mistreated hurts my feelings"; $\alpha = .93$). Participants responded to these eight items on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*).

Mental well-being and stress. We measured health markers with the PHQ-4 ($\alpha = .89$) and PSS ($\alpha = .88$). Greater values indicated worse mental health and greater life stress.

Results

Bivariate relationships. Table 3 summarizes bivariate correlations between all variables in the current study. In keeping with the work's central theorizing, social pain minimization was again

significantly related to worse mental well-being and greater stress. Worse mental health was associated with greater stress.

Role of participant race. To test for racial differences in the study's dependent measures, we conducted a series of multiple regression analyses with participant race (Black = 1, White = 0) as the group variable. Participant age and gender were included as covariates because preliminary analyses indicated slight differences between Qualtrics and MTurk participants, such that the Qualtrics sample was older and had more men than the MTurk sample. In keeping with the work's primary hypothesis, Black participants again experienced significantly greater social pain minimization than White participants, $b = 0.36$, $p = .001$, 95% CI [0.14, 0.56], $r_{\text{partial}} = .12$. As in Study 1, Black participants reported worse mental health than White participants, $b = 0.27$, $p < .001$, 95% CI [0.15, 0.39], $r_{\text{partial}} = .16$. Unlike Study 1, the direct effect of participant race on stress was significant, $b = 0.19$, $p = .003$, 95% CI [0.07, 0.32], $r_{\text{partial}} = .11$. Estimated means from parallel ANCOVA analyses for Study 2 are presented in Table 2.

Race, minimization, and health markers. As in Study 1, PROCESS Model 4 was used to test whether racial differences in social pain minimization related to greater stress and worse mental health (Hayes, 2017). Age and gender were included as covariates. Using 10,000 bootstrapped samples, these analyses indicated that participant race had an indirect effect through social pain minimization on stress, $b = 0.08$, $SE = 0.08$, 95% CI [0.03, 0.14], and worse mental health,

Table 4. Regression output for models testing the effect of participant race on outcome variables, covarying significant participant demographics: Studies 1 and 2.

	Minimization			Mental health			Stress			Social pain frequency						
	<i>b</i>	<i>SE</i>	95% CI	<i>p</i>	<i>b</i>	<i>SE</i>	95% CI	<i>p</i>	<i>b</i>	<i>SE</i>	95% CI	<i>p</i>				
Study 1																
Race	0.29	0.11	[0.07, 0.51]	.009	0.19	0.06	[0.06, 0.31]	.004	0.10	0.06	[-0.02, 0.23]	.102	0.23	0.05	[0.07, 0.51]	.009
Age	-0.01	0.01	[-0.01, 0.01]	.092	-0.02	0.01	[-0.02, -0.02]	< .001	-0.01	0.01	[-0.02, -0.01]	< .001	-0.01	0.01	[-0.013, 0.001]	.092
Study 2																
Race	0.36	0.11	[0.14, 0.59]	.001	0.27	0.06	[0.15, 0.39]	< .001	0.19	0.06	[0.07, 0.32]	.003	-	-	-	-
Age	-0.02	0.01	[-0.03, -0.01]	< .001	-0.02	0.01	[-0.03, -0.02]	< .001	-0.02	0.01	[-0.02, -0.01]	< .001	-	-	-	-
Gender	-0.32	0.12	[-0.531, -0.102]	.004	-0.092	0.061	[-0.21, 0.03]	.13	0.041	0.06	[-0.08, 0.16]	.065	-	-	-	-

N = 62. Race coded: Black participants = 1, White participants = 0; women = 1, men = 0.

b = 0.09, *SE* = 0.03, 95% CI [0.03, 0.15] (see Figures 3 and 4).

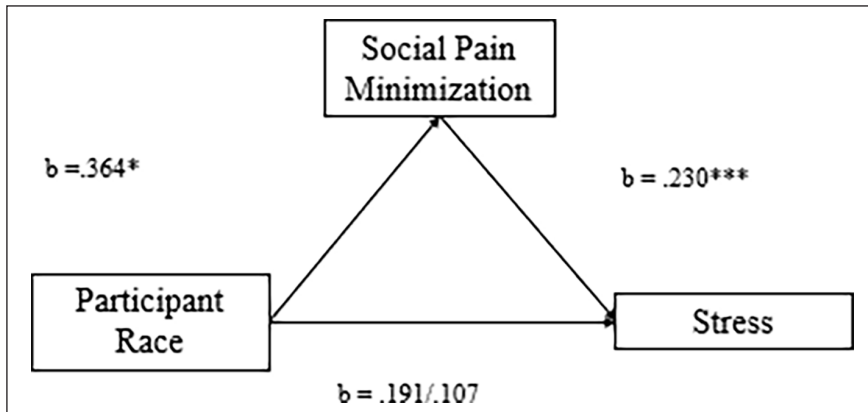
Discussion

The current results provide additional evidence for race-based differences in social pain experiences and for the relationship between social pain minimization and worse mental health. Replicating the results of Study 1, Black participants again felt their social pain was minimized more than White participants and social pain minimization mediated the relationship between race and mental health. Again, cross-sectional mediation should be interpreted with caution. However, the current data are consistent with the hypothesis that Black individuals experience greater social pain minimization than White individuals, and this experience of minimization is associated with greater stress and worse mental health.

General Discussion

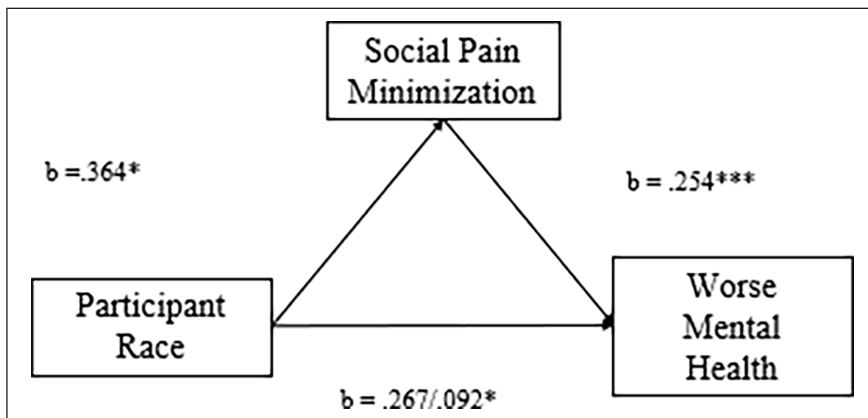
Despite evidence that Black individuals more frequently experience social pain than White individuals (e.g., Kessler et al., 1999; West, 2019), recent research suggests people paradoxically believe Black individuals feel less social pain and require fewer coping resources than White individuals (Deska, Kunstman, Lloyd, et al., 2020). The current work theorized that these racial biases in third-person social pain judgments might lead to racial differences in first-person experiences with social pain minimization. Consequently, we hypothesized that after sharing negative social events with others, Black participants might feel their social pain was minimized more than White participants. We further predicted that social pain minimization would adversely relate to stress and mental health. Two studies provide consistent support for these predictions. In line with the work's primary hypotheses, both studies found that Black participants felt greater social pain minimization than White participants. Moreover, social pain minimization mediated race's effect on stress and mental health. These results provide

Figure 3. Social pain minimization mediates the effect of participant race on stress: Study 2.



Note. $*p \leq .05$. $**p \leq .01$. $***p \leq .001$.

Figure 4. Social pain minimization mediates the effect of participant race on mental health: Study 2.



Note. $*p \leq .05$. $**p \leq .01$. $***p \leq .001$.

initial support for the prediction that Black people's pain is minimized more than White people's pain and that experiencing social pain minimization is associated with poorer mental health and greater life stress.

Secondary analyses in Study 1 found that even after accounting for the frequency of socially painful events, minimization remained a significant predictor of poor mental health and heightened stress. Over and above the chronicity of encountering socially painful events, social pain minimization is adversely associated with health and well-being.

Finally, in keeping with past work on race, discrimination, and experienced unfairness (e.g., Guyll et al., 2001; Kessler et al., 1999; Krieger & Sidney, 1996; West, 2019), Study 1 also found that Black participants had more frequent experiences with social pain than White participants. In this sample, Black individuals encountered more socially painful events than White individuals.

Implications

The current work makes several contributions to research on race, social pain, and health. First,

these studies provide direct evidence for a race difference in personal experiences with social pain minimization. Black participants' social pain was minimized more than the pain of White participants. Whereas past research on social pain has focused on third-person judgments of others' pain (e.g., Deska, Kunstman, Bernstein, et al., 2020; Deska, Kunstman, Lloyd, et al., 2020; Riva & Andrighetto, 2012), the present research provides initial evidence for racial differences in personal experiences with social pain minimization. Not only do others minimize the social pain of Black people relative to White people, but Black individuals feel their social pain is minimized more than that of White individuals. These results extend research on racial biases in social pain from judgments of others' distress to personal, lived experiences.

Second, the effect of race on social pain minimization also contributes to research on racial microaggressions and invalidations (Nadal, 2011; Sue et al., 2007; West, 2019). Whereas past work illustrates that Black individuals regularly have race-based experiences discounted by White individuals (e.g., Sue, Capodilupo, et al., 2008; Sue et al., 2007), the current findings suggest that Black individuals also experience another distinct form of invalidation when recounting negative experiences with others. By focusing on emotion and secondary experiences, these results complement and extend research on race-based invalidation. Beyond the direct denial of their racial reality, Black individuals also experience heightened social pain minimization after sharing negative experiences with others.

Third, the current findings connect racial differences in social pain minimization with measures of mental health and stress. Black participants felt greater social pain minimization than White participants and these experiences were associated with worse mental health and greater life stress. These results complement research highlighting the importance of social support for health and well-being (e.g., Coyne & Downey, 1991; Feeney & Collins, 2015), and provide preliminary evidence linking race-based differences in emotional support and mental health outcomes.

Fourth, these findings have implications for the study of social support, stress, and the social pain experienced by Black individuals. Although the link between social support and stress has been studied in depth (e.g., Cohen & Wills, 1985; Coyne & Downey, 1991), limited studies are investigating the relationships between stress, social support, and mental health among Black individuals and those studies that have been conducted yield a complex pattern of results. For example, Brown et al. (1992) found that close family ties did not buffer against the influence of economic stress on depressive symptoms among Black participants. Conversely, Dressler (1985) found that perceived social support did protect Black individuals' mental health from the effect of economic stress. Further complicating the picture, Lincoln et al. (2005) found that social support decreased Black participants' level of depressive symptoms, but did not mitigate the effect of stress. The current work contributes to this area of study by providing evidence that social pain minimization is associated with worse mental health and greater life stress among Black participants.

Finally, these results highlight the role of psychological experiences in understanding relationships between race, adversity, and health. Although research frequently connects discrimination and social mistreatment to negative health outcomes (e.g., Major et al., 2013; Williams & Mohammed, 2009), this work usually focuses on the frequency of discrimination and social mistreatment and rarely examines how individuals differ in their psychological experiences of these events and how these distinct experiences relate to health (cf. Townsend et al., 2010). The current results affirm the role of these distinct psychological experiences in predicting health outcomes. Not only did individuals differ on their experiences with social pain minimization (Studies 1 and 2), but these experiences with minimization remained significant predictors of mental health and stress even after accounting for differences in the frequency with which individuals encountered socially painful events (Study 1). In other words, over and above the chronicity of people's

experienced mistreatment, those who felt their pain was minimized reported greater life stress and worse mental health than those who did not. When people felt their social pain was invalidated, these negative experiences seemed to compound the detrimental consequences of social mistreatment. Like other forms of secondary harm (e.g., secondary victimization), social pain minimization represents another layer of hurt added to the already painful effects of negative social experiences. These results affirm the role of psychological experiences in shaping the relationships between social mistreatment, health, and well-being.

Future Direction and Limitations

Limitations of the current work offer opportunities for future research. We found that Black individuals reported greater social pain minimization than White individuals, and minimization was associated with worse mental health and greater life stress. However, one limitation of these mediational findings is their cross-sectional nature, which cannot provide strong causal evidence. Although inconsistent with established clinical and developmental literature that finds emotional invalidation predicts negative mental health outcomes (e.g., Hong & Lishner, 2016; Krause et al., 2003; Linehan, 1993; Shenk & Fruzzetti, 2011; Yap et al., 2008; You & Leung, 2012; Zielinski & Veilleux, 2018), it may be that negative mental health contributes to feelings of social pain minimization. Future research should test these relationships longitudinally to track changes in the proposed minimization mediator and account for baseline differences in mental health symptoms. Longitudinal designs could then provide strong evidence for process and allow for tests of “reverse” and reciprocal relationships between minimization and mental health.

The current work is also limited by focusing on purely intergroup differences between Black and White individuals and by not exploring within-category factors that shape Black Americans’ experiences. The perspectives of

Black individuals are not monolithic. Factors like racial phenotypicity (Maddox, 2004; Monk, 2015) and socioeconomic status (SES) may further influence experiences with social pain and resultant minimization. For instance, considerable research finds that Black individuals with more racially phenotypic features (e.g., darker skin tone, fuller lips) and those from lower socioeconomic backgrounds experience greater levels of discrimination than Black individuals with less phenotypic features and those from more affluent backgrounds (Landrine & Klonoff, 2000; Monk, 2015; Turner & Avison, 2003). Because they likely have more frequent social pain experiences, it may be that phenotypic and low-SES Black individuals are at the greatest risk for having their pain minimized. Future studies should explore individual difference moderators in personal experiences with social pain minimization.

Future research should also explore external and internal protective factors to reduce feelings of social pain minimization and its negative associations with mental health. External protective factors might include relationship maintenance strategies and social network characteristics, and internal protective factors may involve individual differences in attachment style and receptivity to social support (e.g., social support strategies, social network size, and density; Collins & Feeney, 2004; Feeney & Collins, 2015; Wester et al., 2015). Whether embedded externally in social relationships or internally within individuals, psychological factors that fortify social support may buffer against the experience of social pain minimization.

The current work also documented inconsistent direct relationships between participant race and life stress. Black participants reported significantly greater life stress than White participants in Study 2 but not in Study 1. Future research might further explore how life events influence stress for Black and White individuals.

Researchers might also explore how interracial dynamics contribute to experiences of social pain minimization. For instance, partner authenticity is critical to feeling emotionally validated (e.g., Rempel et al., 1985); however,

White people's concerns about racism may lead them to act in ways that are suspect and signal inauthenticity to Black interaction partners (e.g., effusiveness, exaggerated positivity; Kunstman & Fitzpatrick, 2018). Based on findings that people of color experience threat when positivity from White people is linked to race and concerns about racism (e.g., Crocker et al., 1991; Major et al., 2013), it may be that social support that is similarly linked to Whites' concerns (rather than Black people's emotional well-being) is similarly hurtful, ultimately fostering feelings of social pain minimization. Future research should explore how interracial dynamics shape when social pain is recognized versus minimized, to the detriment of mental health.


Concluding Remarks

The current studies provide consistent evidence that Black individuals personally experience more social pain minimization than White individuals. Moreover, greater feelings of social pain minimization were associated with worse mental health and greater life stress. These results provide direct evidence for race-based differences in first-person experiences with social pain minimization and link these experiences to negative mental and physical health outcomes.

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Notes

1. Here we draw upon microinvalidations as conceptualized by Sue, Nadal, et al. (2008), who operationalized invalidations as a denial of the "racial reality of Black Americans." This conceptualization of microinvalidations includes four main

types of experience: being an alien in one's own land, color blindness, denial of personal racism, and the myth of meritocracy.

2. The data presented in the current work come from larger research efforts directed at understanding health disparities between Black and White Americans and metaperceptions about social pain. The current work contains all measures of mental health and well-being. The corresponding author can be contacted for additional information about these research efforts.

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