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How Does Stigma "Get Under the Skin"?:

The Mediating Role of Emotion Regulation

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Abstract

Stigma is a risk factor for mental health problems, but few studies have considered how stigma leads to psychological distress. The present research examined whether specific emotionregulation strategies account for the stigma-distress association. In an experience-sampling study, rumination and suppression occurred more on days when stigma-related stressors were reported than on days when these stressors were not reported, and rumination mediated the relationship between stigma-related stress and psychological distress. The effect of social support on distress was moderated by the concealability of the stigma: Lesbian, gay, and bisexual (LGB) respondents reported more isolation and less social support than African American respondents subsequent to experiencing stigma-related stressors, whereas African Americans reported greater social support than LGB participants. Social isolation mediated the stigma-distress association among LGB respondents. In a second experimental study, participants who ruminated following the recall of an autobiographical discrimination event exhibited prolonged distress on both implicit and explicit measures relative to participants who distracted themselves; this finding provides support for a causal role of rumination in the stigma-distress relationship.

> Stimulated by the seminal work of Goffman (1963), social psychological research has documented a range of adverse outcomes, including problems with academic performance and self-esteem (Crocker, Major, & Steele, 1998; Major & O'Brien, 2005), that are associated with experiencing stigma. More recently, the fields of clinical psychology and public health have begun to link stigma-related stressors to adverse mental and behavioral health outcomes across several stigmatized groups, including African Americans (Williams, Neighbors, & Jackson, 2003), the overweight and obese (Brownell, Puhl, Schwartz, & Rudd, 2005), and the lesbian, gay, and bisexual (LGB) population (Meyer, 2003). Nonetheless, there is still a paucity of research addressing the mechanisms by which stigma influences the development of psychopathology. Integrating social psychological research on stigma with process models from clinical science, the present research was aimed at elucidating potential mediating pathways from stigma to adverse mental health outcomes.

> One mechanism underlying the relationship between stigma and psychopathology may be emotion regulation, which refers to the "conscious and nonconscious strategies [people] use to increase, maintain, or decrease one or more components of an emotional response" (Gross, 2001, p. 215). Because stigma conveys a devalued social identity within a particular context (Crocker et al., 1998), it creates unique stressors and psychological distress (Major & O'Brien, 2005). Stigmatized individuals then use strategies in an attempt to manage these emotional responses.

Current research on coping with stigma has examined emotion regulation strategies, such as *cognitive reappraisal* (Major & Schmader, 1998), as moderators of the stigma-health association (see Miller & Kaiser, 2001). In the research reported here, we investigated another possibility—that the stress of having a devalued identity can activate emotion regulation processes, which then mediate the impact of stigma on psychological distress.

Emotion regulation involves a number of distinct processes (Gross, 2001), some of which may be relevant for members of stigmatized groups (Miller & Kaiser, 2001). One strategy is *rumination*, defined as the tendency to passively and repetitively focus on one's symptoms of distress and the circumstances surrounding these symptoms (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008). Stigma-related stress may be particularly likely to contribute to rumination because it engenders hyper-vigilance (Major & O'Brien, 2005; Mays, Cochran, & Barnes, 2007), an element of ruminative self-focus (Lyubomirsky, Tucker, Caldwell, & Berg, 1999). Consistent with this hypothesis, two studies have found that rumination is elevated in socially disempowered groups, including heterosexual women (Nolen-Hoeksema, Larson, & Grayson, 1999) and individuals with a minority sexual orientation (Hatzenbuehler, McLaughlin, & Nolen-Hoeksema, 2008). In turn, rumination prolongs and exacerbates psychological distress (Nolen-Hoeksema et al., 2008).

Two other salient emotion-regulation strategies that may be frequently utilized by members of stigmatized groups include *suppression* (Spencer, 2003) and *social support* (Branscombe & Ellemers, 1998). Suppression involves inhibiting emotionally expressive behaviors. It has numerous negative consequences, including memory impairment, and is associated with prolonged emotional distress, relative to cognitive reappraisal (Gross, 2001). There are several likely motivations for suppressing emotion following stigma-related events, including fear of backlash or a desire to avoid "false alarms" when it is ambiguous whether or not events are inspired by prejudice (Contrada et al., 2000). African Americans report using suppression more than European Americans (Gross & John, 2003). In addition, for individuals with concealable stigmas who do not wish to disclose their stigmatized status, suppressing emotion-expressive behaviors may be one of the few options available for responding to stigma-related events. However, research has not examined suppression of emotions within the specific day-to-day context of stigma-relevant events.

In contrast to rumination and suppression, which have potentially harmful effects, seeking social support can be a positive response to stigma-related experiences. Individuals may seek out such social support after experiencing stigma-related stressors, in an attempt to modulate their emotions. The benefits of social support for mental health are well documented; however, these positive effects are not uniform across sociodemographic groups (Kawachi & Berkman, 2001), which suggests that the availability of social support may also vary across different types of stigmas. For example, Frable, Platt, and Hoey (1998), in an experience-sampling study, found that individuals with concealable stigmas benefited more from the presence of others who shared their stigma than did those with visible stigmas, but they were less likely to have opportunities for social support.

In the research reported here, we evaluated the putative role of rumination, suppression, and social support in the relationship between stigma-related stress and psychological distress. In order to examine the generalizability of the results, we used two groups exposed to chronic stigma-related stressors: LGB individuals (Meyer, 2003) and African Americans (Williams et al., 2003). Despite certain commonalities (e.g., both groups deal with stereotypes, discrimination, and the expectation of rejection), these groups differ in the extent to which the stigma is concealable, which may have important implications for the kinds of emotion-regulation strategies that are utilized, as well as for the effectiveness of such strategies in buffering against the negative mental health sequelae of stigma. For example, because the

concealability of stigma increases uncertainty and hypervigilance (Pachankis, 2008), which are associated with rumination (Lyubomirsky et al., 1999), individuals with concealed identities (e.g., LGB individuals) may be more likely than those with conspicuous identities (e.g., African Americans) to engage in rumination following acts of discrimination.

STUDY 1

The first study investigated whether LGB individuals and African Americans rely on different emotion-regulation strategies following exposure to discrimination and whether these strategies predict subsequent psychological distress. In this study, LGB and African American participants completed daily diaries for 10 days, reporting events of discrimination, responses to these events, and psychological distress. We had four primary hypotheses: (a) that stigma-related stress would predict psychological distress; (b) that rumination, suppression, and social isolation would occur more frequently on days when stigma-related stressors occurred relative to days on which participants did not report experiencing these stressors; (c) that greater rumination, suppression, and social isolation would be associated with more psychological distress; and (d) that these emotion-regulation strategies would mediate the relation between stigma-related stress and psychological distress. We also explored potential group differences in the extent to which LGB and African American participants engaged in these emotion-regulation strategies following stigma-related stressors.

Method

Participants—Fifty students and community members participated for pay. The mean age was 21.14 years (SD = 3.10). There were 19 African American participants (5 male, 14 female) and 31 LGB participants (16 male, 15 female; 15 gay, 10 lesbian, 6 bisexual).

Procedure—Participants completed 10 days of experience-sampling surveys. If participants reported experiencing a stigma-related stressor, they were asked to report their response to the stressor and their psychological distress. When stigma-related events were not reported, participants completed emotion-regulation items and psychological-distress items in response to non-stigma-related events that had occurred that day. This afforded us the opportunity to compare levels of emotion regulation and psychological distress on days when stigma-related stressors were experienced with levels on days when these stressors were not experienced.

Data from 2 participants who withdrew from the study were excluded. Of the remaining respondents, 94.2% completed the full set of 10 diary days, for a total of 471 diary days. Respondents accessed the secure on-line survey each evening any time after 9:00 p.m.

Measures of Stigma-Related Stress—Participants were asked eight questions to assess daily experiences with stigma-related stressors. Four of these items were taken from the widely used Everyday Discrimination Scale (EDS; Williams, Yu, Jackson, & Anderson, 1997); these items included being treated with less courtesy and respect than other people, being called names or insulted, being threatened or harassed, and being avoided. The remaining items assessed aspects of stigma not assessed in the EDS; these items included "felt stigma" (Herek & Garnets, 2007, p. 361) and sensitivity to status-based rejection (Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002). Responses were recorded on a 5-point scale and were summed to create a total stress score ($\alpha = .82$).

Rumination—Five items were used to assess rumination in response to stigma-related stress. These items (e.g., "What am I doing to deserve this?") were taken from the Brooding

subscale of the original Response Styles Questionnaire (Treynor, Gonzalez, & Nolen-Hoeksema, 2003), and responses were summed to create a total rumination score ($\alpha = .84$).

Suppression—Two items ("I kept my emotions to myself" and "I controlled my emotions by not expressing them") from the Emotion Regulation Questionnaire (Gross & John, 2003) were used to assess suppression subsequent to experiencing stigma-related stressors. Responses to these items were summed to create a total suppression score ($\alpha = .88$).

Social Support and Isolation—A single item asked respondents to rate the quality of the social support they received that day; ratings were made on a scale from *not satisfied* (0) to *very satisfied* (3). Respondents also rated two questions regarding the extent to which they had sought out support from others or isolated themselves (e.g., "I went to my room alone to think about how I felt"); responses to these two behavior items were summed to form an isolation score ($\alpha = .83$).

Psychological Distress—Five items were chosen from the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988): *distressed, upset, shame, nervous*, and *afraid*. Respondents rated each item on a scale from *very slightly/not at all* (0) to *extremely* (4). These responses were summed to create a total psychological-distress score ($\alpha = .85$).

Analyses—The full mediation model (see Baron & Kenny, 1986) was examined using the product-of-coefficients method (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). Sobel's standard error approximation was used to test the significance of the intervening-variable effect (Sobel, 1982).

Given the nested structure of the data, Hierarchical Linear Modeling (HLM) Version 6 (Raudenbush, Bryk, Cheong, Congdon, & du Toit, 2004) was used to test the mediation models. The predictor and mediator variables were modeled with coefficients that were randomly varying at the person level, to allow the relationships among stigma-related stress, emotion regulation, and psychological distress to vary between individuals. A linear variable for time, representing the day that the participant completed the experience-sampling survey (1–10), was included as a covariate.

Results and Discussion

Table 1 summarizes the descriptive statistics for the variables. Preliminary analyses revealed no group differences in the experience of stigma-related stress over the 10 days, β = .196, SE = .163, p = .235, p_{rep} = .695. Moreover, there were no group differences in the extent to which African American and LGB respondents engaged in rumination (β = .026, SE = .47, p = .584, p_{rep} = .44) or suppression (β = .006, SE = .042, p = .896, p_{rep} = .187) following stigma-related stressors. However, African Americans reported greater social support than LGB respondents subsequent to these stressors, β = .070, SE = .018, p = .001, p_{rep} = .986. Thus, we present the mediation results for social support separately by group.

Rumination and Suppression—Our first hypothesis was supported: Stigma-related stress significantly predicted psychological distress for both groups over the course of the 10 days, $\beta = .252$, SE = .054, p < .001, $p_{rep} = .996$.

¹In order to examine direct relationships between stigma and subsequent emotion regulation and psychological distress, we coded the emotion-regulation and psychological-distress variables as missing on days when stigma-related stressors did not occur. However, when the original values for these variables were reentered, the pattern of results was unchanged.

Results were also consistent with our second hypothesis: Both rumination (β = .153, SE = .032, p < .001, p_{rep} = .996) and suppression (β = .068, SE = .023, p < .01, p_{rep} = .98) occurred more on days when participants reported stigma-related stressors than on days when no stressors were reported.

Higher levels of both rumination and suppression predicted more psychological distress over the 10-day period (our third hypothesis)—rumination: β = .863, SE = .087, p < .001, p_{rep} = . 996; suppression: β = .308, SE = .131, p = .02, p_{rep} = .93.

In the final mediation model, there was a significant indirect effect of stigma-related stress on psychological distress through rumination, Sobel's z = 4.18, p < .001, $p_{rep} = .999$, but not through suppression, Sobel's z = 1.39, p = .17, $p_{rep} = .83$.

Social Support—Among LGB respondents, days in which stigma-related stressors occurred were associated with a greater decrement in quality of social support compared to days when no stressors were reported, $\beta = -.051$, SE = .014, p = .001, $p_{\text{rep}} = .99$. Lower perceived quality of social support predicted increased psychological distress, $\beta = -.88$, SE = .40, p = .036, $p_{\text{rep}} = .90$. Mediation analyses demonstrated a significant indirect effect of stigma-related stress on psychological distress through social support, Sobel's z = -1.88, p = .06, $p_{\text{rep}} = .86$. The lower levels of social support reported on days when stigma-related stress was experienced may be due, at least in part, to LGB respondents' greater tendency to isolate themselves on days when stigma-related stressors occurred, $\beta = .049$, SE = .025, p = .05, $p_{\text{rep}} = .88$; isolation, in turn, accounted for the relationship between stigma-related stress and psychological distress, Sobel's z = 2.87, p < .01, $p_{\text{rep}} = .97$.

In contrast, African Americans reported greater quality of social support on the days when they experienced stressors related to stigma compared to days without these stressors, $\beta = .043$, SE = .018, p = .026, $p_{rep} = .92$. This greater social support following stigma-related stress is likely related to the fact that African Americans were no more likely to isolate themselves on days when they experienced stigma-related stressors than on days when they did not report these stressors, $\beta = .005$, SE = .038, p = .89, $p_{rep} = .19$. However, quality of social support did not mediate the association between stigma-related stress and psychological distress among African Americans.

STUDY 2

Of the three emotion-regulation variables examined in the experience-sampling study, only rumination was found to mediate the association between stigma-related stress and psychological distress among both LGB and African American participants. However, given the correlational nature of the data, alternative explanations are plausible. Indeed, follow-up analyses revealed that distress also mediated the association between stigma-related stress and rumination. Experimental data were therefore needed to clarify the role of rumination as a causal emotion-regulation mechanism linking stigma-related stressors to distress.

Consequently, in Study 2, we experimentally induced participants to ruminate or to distract themselves following the recall of an idiographic discrimination event. Given the divergent histories and types of discrimination events that African American and LGB groups confront, we chose an idiographic discrimination event both to standardize the impact of feeling stigmatized across these two groups and to capture the centrality of the stigma experience in as naturalistic a manner as possible. On the basis of prior experimental work (Nolen-Hoeksema & Morrow, 1993; Rusting & Nolen-Hoeksema, 1998), we hypothesized that participants induced to ruminate would exhibit greater psychological distress on both

explicit and implicit measures compared with participants who were instructed to distract themselves.

Method

Participants—Fifty-three undergraduates and community members participated for pay. The mean age was 23.34 years (SD = 5.69). There were 29 African American participants (11 male, 18 female) and 24 LGB participants (14 male, 10 female; 11 gay, 3 lesbian, 10 bisexual).

Procedure—After completing a baseline packet of questionnaires that contained explicit mood scales and filler items, participants were introduced to the idiographic induction procedure. To prevent participants from guessing the true purpose of the experiment, we told them that we were interested in their "ability to remember and imagine past experiences" (following procedures developed by Nolen-Hoeksema & Morrow, 1993). Participants were instructed to reach into an envelope and "randomly" choose a slip of paper, which asked them to remember and imagine a past memory. Unbeknownst to the participants, all of the slips had the same topic written on them: "Think of a time in your life when you were discriminated against because of your race/ethnicity" (or "your sexual orientation," for LGB participants). After reading the topic, participants were told to re-experience the memory as vividly as they could, picturing the event as if it were happening to them all over again (see Rusting & Nolen-Hoeksema, 1998; Wright & Mischel, 1982). Participants were then given a blank sheet of paper and instructed to write about their memory for 5 min.

Following the mood induction, participants were immediately asked to complete the second packet of explicit mood measures and filler items. After completing these measures, participants were randomly assigned to the rumination or distraction condition. These conditions were designed to manipulate the focus of participants' thoughts by having them direct their attention to and "think about" a series of 45 items (adapted from Nolen-Hoeksema & Morrow, 1993). The rumination condition required participants to focus their attention on themselves, although participants were not told specifically to think about negative emotions or negative personal attributes (e.g., "Think about the kind of person you are" and "why you react the way you do"). In contrast, in the distraction condition, participants focused their attention on thoughts that were directed externally and not related to the self (e.g., "Think about a boat slowly crossing the Atlantic"). The items in the rumination and distraction conditions were rated as equally neutral by nondysphoric judges. Participants in each of these conditions spent 8 min focusing their attention on these items.

After completing this task, participants completed the third packet of explicit mood questions and filler tasks. Finally, participants completed implicit mood measures.

Explicit Mood Measure—Participants completed three packets of explicit mood questionnaires over the course of the experiment. Each packet included a questionnaire that asked participants to rate their present state on several 9-point scales ranging from *not at all* (1) to *extremely* (9). The scales included the items *sad, depressed*, and *anxious*, and responses were summed to obtain a single measure of psychological distress at each occasion ($\alpha = .83$; see Rusting & Nolen-Hoeksema, 1998). The mood items were interspersed randomly among a number of filler scales measuring other states (e.g., *curious, creative, reckless*) to help disguise the experiment's focus on mood. To further obscure the intent of the experiment, we included in each packet several filler tasks about imagining colors and recalling dreams.

Implicit Mood Measure—Wenzlaff, Rude, Taylor, Stultz, and Sweatt's (2001) embedded-word task was used as our measure of implicit mood. This task involves letter grids with hidden words, in a layout similar to that of a crossword puzzle. Each grid contains a unique set of 10 positive (e.g., "happy"), 10 negative (e.g., "gloom"), and 10 neutral (e.g., "track") stimulus words, which range from three to seven letters long. Participants were told to find as many words as they could in each "crossword puzzle." They were given 4 min to complete two randomly generated letter grids that were counterbalanced within participants. For each grid, we counted how many of the positive, negative, and neutral words listed by Wenzlaff et al. each participant found.

Results and Discussion

All analyses were initially conducted with gender and group (African American and LGB) as between-subjects factors. No significant main effects or interactions involving gender or group were obtained. Consequently, we collapsed across gender and group in the remainder of the analyses.

Explicit Mood—A 2 (condition: rumination vs. distraction) \times 3 (time: pre-mood induction, post-mood induction, post-condition manipulation) analysis of variance (ANOVA), with repeated measures on the second independent variable, was performed on the explicit mood measure. The analysis revealed a main effect for time, F(2, 52) = 5.37, F(2, 52) = 5.37

Of most relevance to the hypotheses, the predicted Condition \times Time interaction was significant, F(2, 52) = 4.07, p = .02, $p_{\rm rep} = .93$, $\eta_{\rm p}^2 = .07$. As illustrated in Figure 1, there were no significant differences between participants in the rumination and distraction conditions before the mood induction, p = .43, or immediately after the mood induction, p = .89. However, after the condition manipulation, participants in the distraction condition showed less distress than those in the rumination condition, M = 10.07 (SD = 4.10) versus M = 13.24 (SD = 6.14), t(51) = 2.23, p = .03, $p_{\rm rep} = .91$. Moreover, participants in the distraction condition displayed a significant reduction in distress after the manipulation, compared with immediately before the manipulation, M = 13.39 (SD = 5.67) versus M = 10.07 (SD = 4.10), t(26) = 3.96, p < .001, $p_{\rm rep} = .99$. In contrast, in the rumination condition, there was no reduction in distress, M = 13.20 (SD = 4.60) versus M = 13.24 (SD = 6.14), p = .97, $p_{\rm rep} = .09$.

Implicit Mood—To examine whether the condition manipulation influenced implicit mood, we performed a 2 (condition: rumination vs. distraction) × 3 (word category: identification of positive vs. negative vs. neutral words) × 2 (word search: first vs. second trials) ANOVA, with repeated measures on the last two independent variables. This analysis revealed the expected Condition × Word Category interaction, R(2, 102) = 3.93, p < .021, $p_{\text{rep}} = .93$, across the two word-search trials; the three-way interaction did not approach significance (p < .57). For positive words, there was no significant difference between the rumination and distraction conditions, $M_{\text{s}} = 2.90$ (SD = 1.10) for the rumination group and 3.89 (SD = 4.81) for the distraction group, p = .32. Similarly, for neutral words, there was no significant difference between the rumination and distraction conditions, $M_{\text{s}} = 2.10$ (SD = 1.10) for the rumination group and 1.88 (SD = 1.19) for the distraction group, p = .48. In contrast, for negative words, there was a significant difference, t(51) = 2.12, p = .039, p_{rep}

= .89, d = 0.59: Participants in the rumination condition found more negative words than did those in the distraction condition, $M_{\rm S}$ = 3.06 (SD = 1.24) for the rumination group and 2.38 (SD = 1.12) for the distraction group. Supplemental analyses of covariance showed that, even after controlling for the number of neutral words identified, participants in the rumination condition found more negative words than did those in the distraction condition (predicted $M_{\rm S}$ = 3.01 vs. 2.43), F(1, 50) = 3.94, p< .053), whereas the effect for positive words remained nonsignificant (predicted $M_{\rm S}$ = 2.80 vs. 3.96, p = .23).

GENERAL DISCUSSION

Despite advances in understanding of the deleterious effects of stigma-related stressors on psychopathology (Brownell et al., 2005; Meyer, 2003; Williams et al., 2003), few studies have addressed the psychological mechanisms linking stigma to mental health problems. In two studies, utilizing different methodologies, we have provided initial evidence that emotion regulation may be one important mechanism. In particular, we have shown that more rumination following the experience of discrimination, both when discrimination is reported in vivo (Study 1) and when it is experimentally manipulated (Study 2), predicts greater psychological distress among both LGB and African American participants.

In Study 1, suppression was another emotion-regulation strategy that LGB and African American participants employed in response to stigma-related events, and more suppression predicted greater distress in response to stigma stressors over the 10-day study period. Unlike rumination, however, suppression did not mediate the stigma-distress association. Although suppression may serve a self-protective function in that it prevents retaliation from perpetrators, the present study suggests that it has negative consequences for the mental health of the stigmatized. Moreover, suppression may perpetuate the cycle of stigma, because it does not communicate to other people that events rooted in prejudice have occurred, and thereby increases the likelihood that perpetrators will not change their actions in the future (Gross, 1998).

Not all attempts to regulate emotions lead to harmful consequences. Indeed, procuring positive social support may serve to buffer against the deleterious effects of stigma (Branscombe & Ellemers, 1998). However, the protective effect of social support may not be uniform across stigmatized groups. Individuals with concealed stigmas (e.g., LGB populations) have fewer opportunities than individuals with conspicuous stigmas (e.g., African Americans) to seek out support from similar others, which may contribute to more reports of psychological distress among this group (Frable et al., 1998). In the current study, LGB respondents perceived less social support on days when stigma-related stressors occurred than on days with no such stressors, in contrast to African Americans, who perceived greater support from their social networks on days when stigma-related stressors were reported. This pattern was partially explained by isolative behaviors; LGB respondents reported isolating themselves more on days when stressors occurred. Prior research has suggested that stigma-related stress diminishes social support because it may lead stigmatized individuals to isolate themselves from others in order to avoid future rejection (Link, Struening, Rahav, Phelan, & Nuttbrock, 1997). Future studies are needed to better understand the mechanisms leading to social isolation following stigma, as well as the conditions under which social support can serve to protect LGB individuals from the negative mental health sequelae of stigma.

In summary, these studies help explain how stigma-related stressors can relate to psychological distress. This approach, which attempts to integrate the literatures on the social psychology of stigma and on models of emotion regulation in clinical psychology (Gross & Muñoz, 1995), can have valuable implications for practice and theory. Practically,

a better understanding of the mechanisms underlying the effects of stigma on psychological distress can facilitate the development of theory-based interventions for members of socially disadvantaged groups, a central priority of *Healthy People 2010* (U.S. Department of Health and Human Services, 2000). Theoretically, although members of different stigmatized groups, perhaps because of the nature of different stigmas (e.g., differences in terms of concealability), may characteristically engage in various emotion-regulation strategies to different degrees (Study 1), these approaches—when engaged—may have comparable effects across groups (Study 2). Thus, a fuller conceptual understanding of the experience of stigma requires an appreciation of the factors that distinguish different stigmas and the basic psychological processes that operate in common across stigmatized groups.

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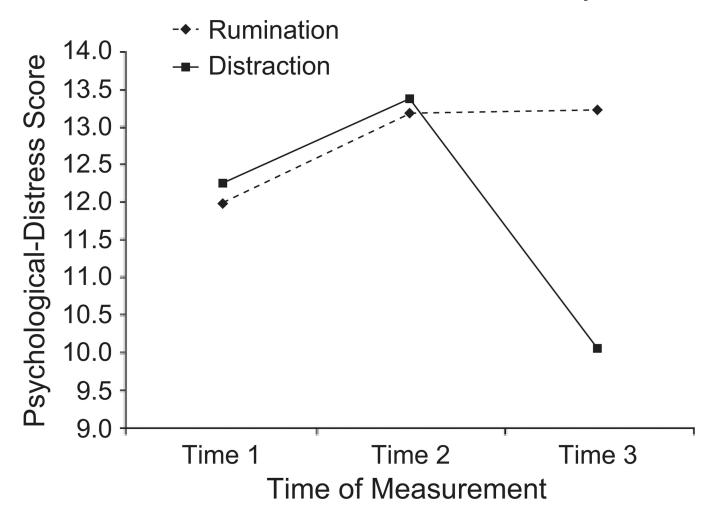


Fig. 1. Results from Study 2: reported psychological distress as a function of time of measurement and condition.

TABLE 1

Descriptive Statistics for the Study 1 Variables

	Group	
Measure	Lesbian, gay, and bisexual	African American
Stigma-related stressors		
Percentage of days on which at least one stigma-related stressor was reported	72.9	73.2
Percentage of participants reporting at least one stigma-related stressor	73.0	73.2
Total number reported (0–21)	4.07 (4.89)	4.89 (4.83)
Emotion regulation		
Rumination (0–15)	2.55 (2.94)	2.82 (2.90)
Suppression (0–6)	2.13 (1.71)	2.42 (2.05)
Social support (0–3)	1.75 (0.94)	1.79 (1.01)
Isolation (0–6)	1.12 (1.37)	1.01 (1.47)
Psychological distress (0–20)	4.51 (4.52)	4.71 (3.96)