

“Is Racial Discrimination a Risk Factor for 9-11 Related Psychological Trauma?”

Nathan E. Fosse
Ethan A. Fosse
Harvard University

Abstract

Using cumulative risk theory as framework, this study provides the first evidence linking perceived racial discrimination to fear of terrorism in a nationally-representative sample of African-Americans interviewed up to two years after the terrorist attacks of September 11, 2001. Based on data from the National Survey of American Life (NSAL), findings reveal that African-Americans who had experienced racial discrimination in the past were 63.3% more likely to report that the 9/11 terrorist attacks had shaken their sense of safety “a great deal,” compared to those who had never experienced discrimination. Moreover, this association is only slightly attenuated and remains statistically significant after controlling for a number of hypothesized confounders. These results suggest that racism poses a significant risk factor for psychological vulnerability to acute stressors, even if such stressors are unrelated to the experiences of racial discrimination.

INTRODUCTION

This study provides the first evidence linking perceived racial discrimination and fear of terrorism in a nationally-representative sample of African-Americans interviewed up to two years after the terrorist attacks of September 11, 2001. Little research has examined

how long-term exposure to discrimination may sensitize some minority populations to the psychological consequences of terrorism.

Prior research has demonstrated adverse mental health consequences of discrimination among African-Americans as well as persistent, long-term mental health effects of the September 11, 2001 terrorist attacks in New York City. However, no studies have examined whether black Americans who experience racial discrimination are also more likely to experience terrorism-related psychological trauma after 9-11, or whether this association remains after controlling for basic demographics, socioeconomic status, social stressors and support, and other physical and mental health conditions.

LITERATURE REVIEW

Racism and Mental Health

(Bhopal, 2004) provides a useful conceptualization of racism, and defines it as, “a belief that some races are superior to others, used to devise and justify individual and collective actions that create and sustain inequality among racial and ethnic group (2004: 444).” Racial discrimination is rooted in racism, and it reflects the kinds of experiences by minority groups in a racist society. (Paradies, 2006) further delimits the conceptualization between subjective racism “as a direct perception or experience” and objective racism “by indirect inference(either experimentally or observationally” (Paradies, 2006). However, not all correlational studies have found an association between perceived discrimination and positive physical health.

One major concern when examining how discriminated black Americans respond to a macrostressor such as the 9-11 attacks is whether or not they are affected differently because of the presence of comorbid physical and mental health conditions. Accordingly, it might be that discrimination leads to diminished sense of safety due to pre-existing or co-determined health conditions.

(Williams, 2003) suggest that controlling for confounding factors is a plausible means of examining these associations, though they admit that “a clear consensus has yet to emerge regarding the potential confounding variables that should be included in such studies” (Williams, 2003). Nevertheless, (Williams, 2003) say “the rigorous scientific research that would allow us to evaluate causal direction in the discrimination-health association is still in the future” (205). However, in one longitudinal study (Brown, 2000)find that “poor mental health did not predict subjective reports (perceptions) of discrimination” (117).

Likewise, it is possible that a diminished sense of safety is due to other forms of physical and mental health. (Harrell, 2003) suggests that in self-report correlational

studies, as well as laboratory experiments and studies of psychophysiological responses, racism elevates blood pressure and affects brain structure. However, not all of the self-reported correlational studies are consistent, and in some cases inverse associations between discrimination and health have been reported .

Evidence also suggests that perceived discrimination is linked to both physical health as well as mental health. However, the effect of racism on mental health is likely to be at least somewhat mediated by socioeconomic indicators. For example, even at comparable measures of socioeconomic status black Americans live in more segregated communities and in communities characterized by higher crime rates ; (Williams, 1995; Wilson, 1987, 1996). Thus, while socioeconomic status (SES) accounts for the large proportion in racial disparities in health, racial differences remain.

It is possible that perceived discrimination reflects lowered mobility chances of black Americans. Other researchers point to the importance of socioeconomic status as a predictor of diminished safety. Indeed, experiences of racism may be mediated by social exclusion from dominant institutions. According to this theory, discrimination operates through exclusion from access to resources in mainstream society. This study examines how and whether other factors mediate the association between racism and 9-11 related psychological trauma.

9-11, Stress, and Cumulative Risk Theory

Evidence suggests that the stress induced from the 9-11 attacks were persistent, and were not limited to individuals directly exposed to the attacks. In particular (Holman, 2008) found that acute stress responses recorded 9 to 14 days after the attacks were linked with a 53% increased incidence of cardiovascular problems after three years, even after controlling for baseline health conditions measured before the attacks. These persistent health conditions remain years after exposure (Prevention, 2002; Schuster, 2001).

Cumulative risk theory posits that prior stressors sensitize individuals to current stressful events. Typically, this theory has been applied to the study of adolescents over the lifecourse, demonstrating how health and academic trajectories are compounded by multiple risk factors (Appleyard, 2005; Holman, 2008; Sameroff, 1993).

However, most prior research has focused on the long-term mental health consequences of prior trauma experience as a risk factor (Brewin, 2000; Heim, 2000). With regard to the 9-11 attacks, research has demonstrated potential risk factors involve prior stressful experiences unrelated to the attacks (Galea, 2002). Thus, there is some evidence that prior histories of trauma may sensitize individuals to terrorist attacks. For

example, in a study of pregnant women (Lewis, 2008) find some support that women with a history of interpersonal violence experienced more subjective reactions to the September 11 attacks. However, no research has examined discrimination (racial and otherwise) as a risk factor.

HYPOTHESES

Since the evidence suggests that racism is a risk factor influencing mental health, and since studies have shown that the 9-11 terrorist attacks affected levels of stress, it is hypothesized that black Americans who have experienced discrimination are more likely to experienced terrorism-related psychological trauma. In addition, cumulative risk theory hypothesizes that discrimination as a health stressor is likely to negatively impact respondents' feelings and affect after a traumatic event. Since the effect of racism on health consists of both direct and indirect mechanisms, it is further hypothesized that perceived discrimination is associated with diminished sense of safety as a result of the terrorist attacks, net of the following controls: basic demographics, family background and socioeconomic status, physical and mental health conditions, other social stressors and social support, political attitudes and beliefs, and interview context.

METHODS AND FINDINGS

Data on all variables are derived from the National Survey of American Life, a nationally-representative cross-section of black Americans interviewed from 2001-2003. Preliminary analyses suggest found that, in a large nationally-representative sample of black Americans interviewed from 2001-2003, perceived racial discrimination was associated with a 49% increase in the likelihood that the September 11 terrorist attacks had shaken their sense of safety “a great deal.”

The inclusion of a large number of control and moderating variables attenuated the relationship moderately, but the point estimates remain the same. In other words, a wide variety of possible mediating and moderating variables, including measures of prior psychological status, other stressors and social support, did not attenuate the association between discrimination and diminished sense of safety. An additional preliminary analysis did not find any interaction effects with the control variables, except with foreign-born status. Black Americans born outside the United States and who reported unfair treatment due to discrimination were more likely to have a diminished sense of safety than black Americans born in the United States. Prior research suggests that being foreign born has increased the psychological stress of 9-11, and this finding suggests that it can interact importantly with experiences of unfair treatment.

CONCLUSION

These findings suggest that racial discrimination poses a direct risk factor sensitizing some minorities to greater stress from collective trauma, consistent with cumulative risk theory and with the literature on racial disparities in health. Future studies must examine the ways in which structural inequalities predispose individuals to greater psychological risk in response to national and collective disasters. This study suggests that perceived discrimination has psychological effects that go beyond and independent of long-term health conditions, and which extend to how individuals are able to cope with disaster.

The former analysis reveals several strengths. First, this study includes a large set of control variables, and moderators between perceived discrimination, and self-reported health, allowing more careful estimation of the association. Second, this study consists of a nationally-representative sample of black Americans, allowing for generalizability of these findings across black Americans in the United States.

Nevertheless, the results of this study should be interpreted with some caution. First, like the majority of studies on perceived discrimination, reverse causation is possible between discrimination and the health outcome studied here. However, prior research has suggested that mental health conditions do not affect recall of unfair treatment, including discrimination (Brown, 2000). Nevertheless, it is unclear whether reverse causation would be more likely when the health outcome is the extent to which the attacks affected respondents' sense of safety. Second, this study consists of only one measure of 9-11 related stress over a two-year time span. Thus, it is unclear how the duration of time after the attack might affect the influence of discrimination on sense of safety. Third, this study does not examine the totality of mechanisms linking discrimination and trauma-related fear. It was hypothesized that this link can occur both indirectly through socioeconomic status and other measures of social exclusion, and directly, primarily through the ways in which discrimination, as a source of trauma, sensitizes respondents. Nevertheless, the 9-11 attacks carry significant and ambiguous meaning, and it is unclear exactly how discrimination linked to reactivity to the 9-11 attacks.

Future research should examine more carefully the mechanisms by which racism sensitizes minorities to traumatic events, and the ways in which pre-existing chronic conditions interact with acute traumatic events to elicit more severe responses in vulnerable populations. This study is important because nearly all research focusing on racism and mental health have exclusively focused on general health conditions, and have

not examined how individuals respond to collective trauma. In other words, this study suggests a need to broaden the conceptualization of health outcomes, particularly when future research examines population health in the context of disasters and trauma. Minorities affected by racial discrimination appear to be differentially vulnerable to the effects of collective trauma.

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