Differential Item Functioning on the Schedule of Racist Events: Exploring a Modified Scale for Samples with Black and White Participants

Objective: Although both Black and White individuals report racial discrimination, self-report measures of exposure to racial discrimination that can be used across races/ethnicities are rare. The primary aim of our study was to determine if the Schedule of Racist Events (SRE), which was designed for use in Black samples, should also be used in White samples, and if so, what modifications to the scale are necessary.

Methods: In a sample of 302 adults, approximately equally divided by race, we investigated whether item endorsement differed between Black and White respondents.

Results: Results of confirmatory factor analysis and differential item functioning (DIF) analysis suggest that changing the item stem (from ‘because you are Black’ to ‘because of your race/ethnicity’) and removing four items that show differential item functioning and/or do not load on the first factor, results in a psychometrically sound scale with no evidence of measurement bias.

Conclusion: Researchers interested in measuring racial discrimination in samples that include both Black and White respondents may consider using this version of the SRE. Future studies should investigate other forms of validity in Black and White samples. (Ethn Dis. 2014;24(4):406–412)

Key Words: DIF, SRE, Perceived Racism

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INTRODUCTION

Growing evidence points to a deleterious relationship between self-reported racial discrimination and greater psychological symptoms, poorer physical health and increased mortality risk. Although most research has focused on the effects of self-reported racial discrimination in Blacks, there is evidence that these relations exist in other racial/ethnic groups, including Whites. Most studies that include Whites show that they, too, report racial discrimination, albeit at much lower rates than Blacks. There is also evidence that, for some outcomes, the relationship between discrimination and outcomes may vary by race, and not always in expected directions. For example, Barnes and colleagues reported that self-reported racial discrimination was related to increased risk of mortality, and further reported that this relation was, contrary to their expectations, stronger in Whites than Blacks. Thus, self-reported racial discrimination is a novel risk factor for health and mental health outcomes that is open to investigation in both Blacks and Whites.

A variety of scales have been designed to measure exposure to racial discrimination (see Williams & Mohammed for a comprehensive review). To our knowledge, only one scale has been designed to measure racial discrimination across race/ethnicity – the Experiences of Discrimination scale (EOD). Ideally, when measuring any construct, investigators should use a multi-method approach. When only one scale is available, any idiosyncrasies of the scale may be ascribed to the construct, leading to potentially erroneous conclusions about the construct. Thus, it is important that additional measures of racial discrimination be validated for use across race/ethnicity.

The Schedule of Racist Events (SRE), which was designed for use in Black samples, assesses the respondent’s exposure to and appraisal of instances of racial discrimination in a variety of domains in which the respondent is the direct and individual target. The SRE has led to important insights regarding the nature and effects of racial discrimination. For example, investigators using the SRE have found that self-reported racial discrimination was positively associated with health risk behaviors and poorer self-rated health. Further, Klonoff and Landrine demonstrated, using the SRE, that light-skinned Blacks report less exposure to racial discrimination than dark-skinned Blacks.

Whereas the SRE was designed for, and has proven useful in, Black samples, its use beyond Blacks has not been investigated. We were interested in examining whether it should be used with Whites. Because much of the research on the effects of racist events pertains to health outcomes, we examined this question in a clinical sample of individuals with diabetes – a disease determined, in part, by psychosocial influences and with well-established racial and ethnic health disparities. The primary aim of our study was to establish if the SRE demonstrates measurement bias in item endorsement contributing to differences between Blacks’ and Whites’ responses beyond racial discrimination per se. To examine this question, we conducted differential item functioning (DIF) analysis. Ideally, responses to items within an instrument should only be influenced by the construct the instrument is designed to measure, so that any difference in item