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# Assessing Racial Trauma With the Trauma Symptoms of Discrimination Scale

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***Objective:*** Racial discrimination can cause symptoms of trauma, yet few tools for measurement exist. African Americans have higher rates of posttraumatic stress disorder and experience more racial discrimination than other groups. This study is a preliminary assessment of the psychometric properties of the Trauma Symptoms of Discrimination Scale (TSDS), a new measure of discriminatory distress measuring anxiety-related trauma symptoms. ***Method:*** African American monoracial and biracial undergraduate students ($n = 123$) completed questionnaires, including the TSDS, the Multigroup Ethnic Identity Measure, assessments of racial discrimination, and a range of psychopathology measures. The TSDS factor structure was determined with a principal components analysis and internal consistency was assessed. Pearson's correlations were conducted between the TSDS and measures of discrimination and psychopathology. Linear regression was used to predict the TSDS from frequency of discrimination. ***Results:*** Item loadings suggested 4 components: (a) uncontrollable hyperarousal, (b) feelings of alienation, (c) worries about future negative events, and (d) perceiving others as dangerous. All measures of discrimination significantly predicted symptoms of trauma, even when accounting for prior traumatic experiences. ***Conclusions:*** Preliminary evidence supports the validity of the TSDS for the measurement of anxiety-related trauma symptoms due to racial discrimination. All forms of discrimination may contribute to traumatization in African Americans.

*Keywords:* trauma, discrimination, assessment, microaggressions, racism



Discrimination can be defined as unjust, prejudicial treatment on the basis of stigmatized status and may occur as the result of an ascribed identity (race/ethnicity, sex, or age) or achieved identity (social class or education). Research to date indicates that the experience of discrimination can contribute to a sense of traumatization and even posttraumatic stress disorder (PTSD; Chou, Asnaani, & Hofmann, 2012; Flores, Tschann, Dimas, Pasch, & de Groat, 2010). Racial discrimination has been linked to traumatic symptoms such as anxiety, negative affect, and avoidance, yet few tools for measurement exist. As African Americans have a higher prevalence rate of PTSD and report higher frequencies of racial discrimination than other ethnic groups, these problems may be related (Chae, Lincoln, & Jackson, 2011; Chou et al., 2012; Himle, Baser, Taylor, Campbell, & Jackson, 2009). The current study aims to establish the psychometric properties of a new measure for quantifying anxiety-related trauma symptoms due to discrimination in African Americans and those who identify as biracial African American.

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## Trauma and Discrimination

Individual trauma occurs when an event, series of events, or circumstances are experienced by an individual as physically or emotionally harmful or threatening and have lasting adverse effects on the person's functioning and physical, social, emotional, or spiritual well-being. Federal Bureau of Investigation (2015) statistics indicate that offenses of race-related hate crimes increased in 2015, leaving 4,216 reported victims in the United States, more than half of whom were African American. However, discrimination can cause or worsen the impact of violence in less direct ways as well. For example, race-related violence and profiling against ethnic minorities may be perpetuated by police officers with biases (Carroll & Gonzalez, 2014), and publicized cases of police violence may also lead to decreased emergency calls from ethnic minorities, leaving victims of color more vulnerable during and after violent and nonviolent crimes (Desmond, Papachristos, & Kirk, 2016).

A racially motivated act of violence in which a person is assaulted or threatened can clearly be a cause of PTSD, but changes in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (*DSM–5*) acknowledge that reoccurring exposure to mildly traumatic incidents with enough frequency can contribute to PTSD as well (American Psychiatric Association, 2013). Consistent with *DSM–5* changes, research findings seem to

indicate that covert discrimination may be equally or more distressing as overt discrimination (Franklin, 1999; O'Keefe, Wingate, Cole, Hollingsworth, & Tucker, 2015; Sue et al., 2007). Covert discrimination can leave people of color questioning whether an unpleasant interpersonal experience was based on race at all. Much like sexual harassment (Larsen & Fitzgerald, 2011; Palmieri & Fitzgerald, 2005), ongoing racially discriminatory events can have a cumulative effect that may increase hypervigilance and avoidance and contribute to PTSD symptoms or the development of a PTSD diagnosis (Bryant-Davis & Ocampo, 2006; Butts, 2002; Williams et al., 2014). Trauma-related symptoms such as anxiety, depression, and negative future outlook may be linked to perceived covert discrimination, and as an individual's experience of subtle mistreatment in the form of microaggressions increases so does the predictive relationship with trauma symptoms (Nadal, Griffin, Wong, Hamit, & Rasmus, 2014; Williams, Kanter, & Ching, 2017).

Pieterse, Carter, Evans, and Walter (2010) examined the association among racial and/or ethnic discrimination, racial climate, and trauma-related symptoms among racially diverse college undergraduates. Asian and Black students reported more frequent experiences of discrimination than did White students, and the Black students perceived the campus racial climate as being more negative than did White and Asian students. A hierarchical regression analysis showed that when controlling for generic life stress, perceptions of discrimination significantly explained variability in trauma-related symptoms for Black students. Further, in a study in the United Kingdom, De Maynard (2010) found that Blacks who experienced derogatory race-related comments and low self-esteem had scored significantly higher on a measure of dissociative experiences, a common symptom of traumatization.

Another addition to the *DSM–5*, the inclusion of vicarious trauma into PTSD criteria, may be appropriate for ethnic minorities who have experienced, witnessed, or been told of generational and communal discrimination (Helms, Nicolas, & Green, 2012). Even if an individual has not experienced a personal trauma, it is believed that a continual fear of race-related stressors and increased paranoia or vigilance may cause traumatization over time or lead to PTSD when accompanied with a more traumatic event (Carter, 2007). Further, traumatization may be passed down through social and epigenetic mechanisms (Bierer et al., 2014), and just learning about the experiences of others may also contribute through vicarious traumatization (Harrell, 2000). This means that individuals may not need to experience the discrimination at all for it to have an effect.

## Assessment of Racial Trauma

Despite the potential benefits of clinical intervention, racism-related trauma has received inadequate treatment and recognition in the clinical literature (Carter, 2007; Helms et al., 2012). Racial trauma, or race-based trauma, can be defined as a traumatic response to an accumulation of negative race-related experiences (Bryant-Davis & Ocampo, 2006; Comas-Díaz, 2016). As race is a social construct, these experiences are always linked to racism (as opposed to a natural disaster or random violence), where racism can be defined as prejudice, discrimination, and violence against a subordinate racial group based on attitudes of superiority by the dominant group. Racial trauma transcends individual experience, as it includes cultural trauma, which in turn potentiates individual experiences of racial discrimination. The phenomenology of racial trauma may differ from PTSD in the *DSM–5*, as it may encompass a wider range of symptoms, such as paranoia, avoidance of dominant group members, somatic complaints, and excessive worries about loved ones (Whaley, 1997; Williams, Peña, & Mier-Chairez, 2017).

Mental health service providers may be unaware of the impact of discrimination or incorrectly associate traumatization with other causes (Carter, 2007; Parham, 2002). Assessing discriminatory distress in ethnic minority patients may be uncomfortable for some therapists, particularly European American mental health providers who may feel anxious initiating the topic of racism, despite findings that these conversations can have positive results for clients (Knox, Burkard, Johnson, Suzuki, & Ponterotto, 2003; Sue & Sue, 2008; Utsey, Hammar, & Gernat, 2005).

This uneasiness with the topic of discrimination could be remedied by assessing distress with a brief, easily administered self-report measure, creating space for therapists to inquire about discriminatory experiences in relation to elevated scores. Importantly, a measure provided to clients, which assesses psychological distress related to discrimination, may improve the overall cultural sensitivity of the therapeutic settings by validating such experiences in affected individuals. Furthermore, such an instrument has the potential to streamline measurement of discriminatory trauma in research settings by assessing the most common symptom areas (i.e., anxiety, emotional distress, and avoidance) found in response to discrimination.

Despite the benefits that may come with using an assessment measuring trauma symptoms resulting from discrimination, few efficient tools exist (Helms et al., 2012; Parham, 2002; Williams et al., 2017). Quantitative measures used to assess PTSD may not be appropriate to measure racial trauma, as their emphasis on high internal consistency may exclude a range of discriminatory experiences (Helms et al., 2012), and available PTSD checklists may not list important sources of racial traumatization, such as harassment by law enforcement or incarceration (Malcoun, Williams, & Bahojb-Nouri, 2015). Current measures of racism-related stress, such as the Race-Based Traumatic Stress Symptom Scale (RBTSSS; Carter et al., 2013), General Ethnic Discrimination Scale (GEDS; Landrine, Klonoff, Corral, Fernandez, & Roesch, 2006), and Racial Microaggressions Scale (RMAS; Torres-Harding, Andrade, & Romero Diaz, 2012), provide invaluable information in relation to frequency and associated distress related to discrimination but may not reflect conventional trauma-related symptom clusters. The GEDS assesses the frequency, context, and accompanied distress related to discrimination but asks questions such as, "How stressful was this for you?" rather than capturing specific trauma symptoms (i.e., social anxiety, avoidance, and worry). The RMAS assesses the frequency in occurrence of subtle forms of discrimination but does not capture any symptoms in relation to discriminatory experiences. The RBTSSS is much more comprehensive but also much longer, requires a complicated scoring process, and is focused on sequelae resulting from a single incident. Thus, there remains a need for a short but effective screener for discrimination-related trauma symptoms that includes symptoms that may be the result of cumulative insults.

## African Americans and Racial Trauma

Many groups are victims of discrimination. As previously noted, among the major ethnic and racial groups in the United States, African Americans report the highest frequency of racial maltreatment, which includes overt discrimination (Chou et al., 2012; Cokley, Hall-Clark, & Hicks, 2011) and microaggressions (Landrine et al., 2006). African Americans may also be more likely to experience microaggressions centered around stereotypes of criminality or inferiority (Nadal et al., 2014), and those experiencing racial discrimination are more likely to report negative affect and PTSD symptoms than Asian or Latino/a Americans (Chou et al., 2012; Zoellner, Feeny, Fitzgibbons, & Foa, 1999). African Americans diagnosed with PTSD may also have greater symptom severity and more impediments in daily functioning than European Americans, with a higher risk of developing the disorder across the life span (Himle et al., 2009).

Ethnic identity in racial minorities is thought to buffer some of the deleterious effects of discrimination such as anxiety and depression; however, the same is not true for European Americans (Jackson, Yoo, Guevarra, & Harrington, 2012; Williams, Chapman, Wong, & Turkheimer, 2012). African Americans make up 13% of the U.S. population, including 1% who identify as biracial (African American and some other race, typically White; U.S. Census Bureau, 2012, 2016). The percentage of Americans reporting two or more races continues to rise, but little research has examined the effects of racial discrimination on biracial Americans. Emerging work seems to indicate that biracial Americans may have distinct difficulties, due in part to challenges in the development of a clear ethnic identity (Gaither, Remedios, Schultz, & Sommers, 2015; Howell, Gaither, & Ratliff, 2015). Racial socialization is thought to be critical to the development of a strong ethnic identity, but research is mixed regarding the degree and composition of racial socialization biracial Americans receive from their parents; some research shows no difference in the amount of socialization provided by White mothers, but other research finds differences based on the parents' heritage and appearance of the biracial individual (Snyder, 2012). It may be assumed that biracial African Americans experience less discrimination than monoracial African Americans because many appear White to others (Pew Research Center, 2015). However, biracial Americans may experience racial discrimination from additional sources, including microggressive statements from their own family members and/or friends who question their allegiance to one group or the other (Herman, 2004; Nadal, Sriken, Davidoff, Wong, & McLean, 2013).

## The Trauma Symptoms of Discrimination Scale

PTSD symptoms are varied and broad, but one of the principal driving forces behind symptoms is the presence of anxiety. Anxiety is defined as feelings of worry, nervousness, or discomfort due to an imminent event with an uncertain and potentially negative outcome. Traumatized individuals may experience anxiety over where harm might come from ("Is that White person a racist?"), the meaning of physical symptoms ("Why is my heart pounding?"), loss of control ("What if I start screaming and can't stop?"), the nature of their character ("Am I just a weak person?"), and other trauma-related cognitions ("Something bad might happen at any moment"). In an effort to prevent or ward off the distressing thoughts and feelings, avoidance is a primary coping strategy for anxiety among those with PTSD, which may lead to a range of problems such as social isolation, dissociation, overcontrol, and/or substance abuse. This study provides a preliminary assessment of the psychometric properties of the Trauma Symptoms of Discrimination Scale (TSDS), a new measure of discriminatory distress, with a focus on anxiety-related trauma symptoms in monoracial and biracial African Americans. In the interest of creating a short measure, rather than attempting to capture every symptom of trauma, the TSDS is focused on dysfunctional anxiety and resulting avoidance due to fears of discrimination.

In addition to reporting the psychometric properties of the TSDS (factor structure, validity, and reliability), we hypothesize that all forms of discrimination (i.e., everyday racism, major discrimination, general ethnic discrimination, and microaggressions) will significantly predict TSDS scores in participants, after controlling for gender and ethnic identity. We also hypothesize that biracial individuals will have a lower ethnic identity, but fewer symptoms due to possibly less major discrimination, although due to the limited literature on biracial Americans, these hypotheses should be considered exploratory.

# Method

## Participants and Procedures

Participants were 123 monoracial and biracial African American undergraduate students from large public universities in the Southern/Midwest and New England who completed measures online for course credit. Both of the universities were predominately White institutions, with large and moderately diverse student bodies. The Southern/Midwestern university experienced a recent spate of negative racial incidents that impacted the morale of many people of color at that institution (Williams & Kanter, in press). At the New England university, there were no highly publicized racial incidents on campus at that time, but the most recent presidential election was contentious and left many students of color worried about the future of race relations in general (Carolan, Terzi, DeAngelis, & Schoenfeld, 2016).

Individuals were classified as African American based on self-report via a multiple-choice item about race, as well as questions about how they identify ethnically and how long they have lived in the United States. For the question about race, respondents also had the option to choose "Other" and write in more details. Those who indicated that they were Black/African American and some other race/ethnicity were classified as "biracial." In terms of the difference between race and ethnicity, the racial identifier "Black" includes people from Africa and those with ancestors from Africa. Black people in the United States comprise numerous ethnic and cultural groups (e.g., African American, Caribbean American, and Nigerian American), each with differing experiences, perceptions, and definitions of discrimination. The ethnic identifier "African American" is intended to include only those people of African heritage who were socialized into American culture. To capture the experiences of African Americans, we only included Black individuals in the sample who had been living in the United States since childhood.

An online sign-up page for the study provided prospective participants a brief description of the study, followed by a pream-

ble consent page. After consent was obtained, participants were provided a Web link to an online questionnaire containing the measures of interest. Data were collected at three different time points, divided into groups as shown in Table 1, as part of a larger battery of measures. The study was approved by each university's institutional review board.

## Measures

The measures administered to each group are shown in Table 1. All three groups received the novel TSDS, with questions based on anxiety-related symptoms observed clinically in clients with PTSD as a result of discriminatory experiences (Carter & Forsyth, 2009; Williams et al., 2014). All groups also received a measure of ethnic identity. Group 1 received a broad range of psychopathology measures to examine the relationship of PTSD, depression, social fears, anxiety, worry, and obsessionality (all common symptoms of traumatization) to the construct of discriminatory trauma. In addition, there were four measures of discrimination included to explore the relationship between frequency and type of discriminatory events and the TSDS. The discrimination measures administered to Group 1 addressed discrimination more broadly, whereas measures administered to Groups 2 and 3 were specific to ethnic/racial discrimination.

**Trauma Symptoms of Discrimination Scale.** The TSDS is a 21-item self-report measure that focuses on anxiety-related trauma symptoms surrounding the experience of discrimination, including avoidance, negative cognitions, social fears, and worries about the future. Items were chosen for the scale based on common PTSD symptoms observed in these four categories, with an emphasis on how they might appear based on the discrimination literature. As a relatively new measure, its psychometric properties are only beginning to be explored, but it has shown good reliability and convergent validity in preliminary studies with African American and European American students (Williams, Kanter, & Ching, 2017; Williams, Kanter, & Debreaux, 2017). Items are rated from 1 (*never*) to 4 (*often*), where ratings are based on the amount of distress caused specifically by discriminatory acts. The measure is scored by summing all items. Participants were also asked to select what form of discrimination they experienced, including racial/ethnic, gender, sexual orientation, religion, age, and/or other (write in), and were able to check multiple causes. All participants completed the TSDS, and for Group 3, it was administered twice on the same day approximately 6 hr apart, and again 2–3 weeks later.

**Multigroup Ethnic Identity Measure.** The Multigroup Ethnic Identity Measure (MEIM-12; Roberts et al., 1999) has been validated in adolescents of various ethnic and racial groups, as well as a nationally representative sample of African American and European American adults, ages 18–35, with excellent reliability (Williams, Duque, Wetterneck, Chapman, & DeLapp, 2018). Being considered Black racially (currently defined by the U.S. Census as part or whole African ancestry) is a requirement for membership in the African American ethnic group. For African Americans (Black people socialized into U.S. culture), we would expect ethnic and racial identity to be similar (Williams, Gooden, & Davis, 2012). However, people vary in how much they identify with their group, which is why degree of ethnic identity was measured for this study. Items were scored from 1 to 4, with higher numbers corresponding to greater agreement of items. All participants completed the MEIM-12, which exhibited very good reliability in the current sample ($\alpha = .89$).

Table 1
*Demographics*

| Descriptive | Data collection time points | | | Totals |
|---|---|---|---|---|
| | Group 1 | Group 2 | Group 3 | |
| Location | South/Midwest | South/Midwest | New England | |
| Collection period | Fall 2014 | Fall 2015 | Spring 2017 | |
| Ethnoracial identity | | | | |
| Monoracial African American | 50 | 32 | 20 | 102 |
| Biracial African American | 11 | 10 | 0 | 21 |
| Gender | | | | |
| Female | 52 | 35 | 11 | 98 |
| Male | 9 | 7 | 9 | 25 |
| Sexual identity | | | | |
| Heterosexual | 49 | 13 | 4 | 66 |
| Lesbian/gay/bisexual | 5 | 5 | 5 | 7 |
| Undisclosed | 7 | 24 | 11 | 50 |
| Age | 20.15 (2.93) | 22.98 (6.74) | 19.95 (4.62) | 21.07 (4.95) |
| Measures | | | | |
| Primary outcome | TSDS | TSDS | TSDS (administered three times) | |
| Psychopathology and distress | PDS, BDI-II, PSWQ-A, SIAS, OBQ-44 | GEDS Stress | GEDS Stress | |
| Frequency of discrimination | EDS, MEDS | RMAS, GEDS Past Year and Lifetime | RMAS, GEDS Past Year and Lifetime | |
| Ethnic identity and attitudes | MEIM-12 | MEIM-12 | MEIM-12 | |

*Note*. TSDS = Trauma Symptoms of Discrimination Scale; PDS = Posttraumatic Diagnostic Scale; BDI-II = Beck Depression Inventory-II; PSWQ-A = Penn State Worry Questionnaire, Abbreviated; SIAS = Social Interaction Anxiety Scale; OBQ-44 = Obsessive Belief Questionnaire—brief version; GEDS = General Ethnic Discrimination Scale; EDS = Everyday Discrimination Scale; MEDS = Major Experiences of Discrimination Scale; RMAS = Racial Microaggressions Scale; MEIM-12 = Robert's 12-item Multigroup Ethnic Identity Measure.

**General Ethnic Discrimination Scale.** The GEDS (Landrine et al., 2006) was used to measure the frequency of ethnic discrimination over one's lifetime and resulting stress in all participants. Respondents are asked how often they have been treated unfairly in various situations due to racism over the past year (GEDS Past Year) and in the course of their lifetime (GEDS Lifetime). They are also asked how much stress resulted from each experience (GEDS Stress). The measure contains 18 items, three parts each, rated on a Likert-type scale from 1 to 6, with higher numbers indicating more experiences of discrimination or greater stress. All GEDS subscales exhibited excellent reliability in the current sample ($\alpha_{year} = 0.92$, $\alpha_{lifetime} = 0.94$, and $\alpha_{stress} = 0.93$).

**Racial Microaggressions Scale.** The RMAS (Torres-Harding et al., 2012) was used to measure the frequency of ongoing racial microaggressions. It contains 32 items, rated from 0 (*never*) to 3 (*often/frequently*), with higher numbers indicating more frequent experiences of microaggressions. There are six categories of microaggressions included in the total scale, which largely map onto Sue et al.'s (2007)x taxonomy and include items about feelings of invisibility due to race, assumptions of criminality by others, eroticization, being low-achieving or part of an undesirable culture, being a foreigner or not belonging, and environmental omissions. For example, "Other people hold sexual stereotypes about me because of my racial background." The RMAS exhibited excellent reliability in the current sample ($\alpha = .95$).

**Everyday Discrimination Scale.** The Everyday Discrimination Scale (EDS; Williams, Yu, Jackson, & Anderson, 1997) is a 9-item measure that includes items about experiences of poor treatment from others, starting with the question, "In your day-to-day life, how often do any of the following things happen to you?" (Williams, Yu, Jackson, & Anderson, 1997). The first seven items refer to more subtle forms of discrimination (e.g., "People act as if they are better than you"), whereas the last two items include more serious events, that is being "called names or insulted" and being "threatened or harassed." The scale anchors are 1 (*never*) and 6 (*almost every day*), and items are summed for a total score. The EDS exhibited excellent reliability in the current sample ($\alpha = .92$).

**Major Experiences of Discrimination Scale.** This six-item version of the Major Experiences of Discrimination Scale (MEDS) was developed for the 1995 Detroit Area Study (Forman, Williams, & Jackson, 1997; Williams et al., 1997). Items include items such as being fired from a job, harassed by police, or being denied housing. Items were scored as 0 = "never," 1 = "at least once in the last 12 months," and 2 = "at least once in my lifetime." For this study, items with a value of 1 or 2 were recoded as 1 and summed for a total score of lifetime major discriminatory events. The MEDS exhibited acceptable reliability in the current sample ($\alpha = .72$).

**Posttraumatic Diagnostic Scale.** Participants in Group 1 were asked if they had ever experienced a traumatic or life-threatening event such as assault, rape, witnessing someone being killed, combat, accidents, or major disasters (Foa, Cashman, Jaycox, & Perry, 1997). Participants were also prompted to consider similar traumatic or life-threatening events that occurred during their childhood. Those who endorsed experiencing such an event either recently or during childhood were provided the Posttraumatic Diagnostic Scale (PDS) to complete. Using a 4-point scale (0–3), respondents rated 17 items representing the cardinal symptoms of PTSD experienced in the past week. The symptom severity score, ranging from 0 to 51, was obtained by summing the individual's responses to items. The PDS exhibited excellent reliability in the current sample ($\alpha = .93$).

**Beck Depression Inventory-II.** The Beck Depression Inventory-II (BDI-II; Beck et al., 1996) is a popular 21-item self-report measure of depressive symptoms occurring over the past 2 weeks. Items are rated from 0 to 4, with higher numbers indicating greater symptom severity. It has been shown to have good psychometric properties in African Americans (Dutton et al., 2004). The BDI-II exhibited strong reliability in the current sample ($\alpha = .90$).

**Penn State Worry Questionnaire, Abbreviated.** The Penn State Worry Questionnaire, Abbreviated (PSWQ-A; Crittendon & Hopko, 2006) is an eight-item self-report measure of chronic worry with good psychometric properties, and it has been shown to be useful for identifying clinical levels of anxiety, although it has less than favorable discriminant validity with measures of depression. In scoring the PSWQ-A, a value of 0–4 was assigned to each response based on "how typical each statement is of you in general," and summed for a total score, with higher scores indicating greater amounts of worry. The PSWQ-A has been validated in African Americans, where it was shown to have similar psychometric properties as compared with European American samples (DeLapp, Chapman, & Williams, 2016). The PSWQ-A exhibited excellent reliability in the current sample ($\alpha = .95$).

**Obsessive Belief Questionnaire—brief version.** The Obsessive Belief Questionnaire—brief version (OBQ-44; Obsessive Compulsive Cognitions Working Group, 2005) is a 44-item self-report measure that assesses obsessive cognitive beliefs in the areas of responsibility and threat estimation, perfectionism and intolerance for uncertainty, and the importance and control of thoughts. Respondents are asked how much they agree or disagree with each item, based on "what you are like *most of the time*." Items were scored from 1 to 7 and summed for a total score, with higher numbers indicating more obsessional beliefs. The OBQ-44 has not been validated in African Americans but has shown excellent reliability in African American student and clinical samples (Wheaton, Berman, Fabricant, & Abramowitz, 2013; Williams, Wetterneck, Thibodeau, & Duque, 2013). The OBQ-44 exhibited excellent reliability in the current sample ($\alpha = .97$).

**Social Interaction Anxiety Scale.** The Social Interaction Anxiety Scale (SIAS) is a self-report scale that measures distress when meeting and talking with others (Mattick & Clarke, 1998). The measure contains 20 items, rated on a scale from 0 (*not at all characteristic or true of me*) to 4 (*extremely characteristic or true of me*), with higher scores indicative of greater social anxiety, except for three items that are reverse-scored. The measure has been validated in both Black and White samples with good reliability, the caveat being that social anxiety due to experiences of racism may not be completely captured by typical measures of social anxiety such as the SIAS (Carter, Sbrocco, Tang, Rekrut, & Condit, 2014). The SIAS exhibited excellent reliability in the current sample ($\alpha = .94$).

## Analysis Plan

The analysis plan included an examination of the psychometric properties of the TSDS in the whole sample (combining Groups 1, 2, and 3). An analysis of variance or *t* test was used to determine if there were any significant differences between groups on key variables. To ascertain the factor structure of the TSDS, we used

the principal components analysis method with varimax rotation, determining the number of factors to extract based on eigenvalues and a visual inspection of the scree plot. Items were included on individual components if their loadings were over .50 (Costello & Osborne, 2005). We determined reliability of the overall scale in terms of internal consistency (Cronbach's α) and used Pearson's correlations to determine test–retest reliability for same-day administration and 2–3 weeks later.

The types of discrimination reported by participants were tallied based on monoracial or biracial identity to determine the major cause(s) of symptoms reported on the TSDS. *T* tests were used to compare measure means by group to determine if there were group differences in ethnic identity, frequency of discrimination, and stress due to discrimination.

Pearson's correlations were conducted between the TSDS and measures of discrimination and psychopathology to establish concurrent validity for the TSDS. As we conceptualize discrimination as traumatic and trauma is cumulative, we expected the TSDS to be positively correlated with measures of discrimination frequency (RMAS, GEDS Past Year, GEDS Lifetime, EDS, and MEDS). Because we also believe discrimination is psychopathogenic, we expected the TSDS to be positively correlated to measures related to clinical syndromes, including PTSD (PDS), depression (BDI-II), worry (PSWQ-A), social anxiety (SIAS), and obsessional thinking (OBQ-44).

Linear regression was used to predict the TSDS from measures of frequency of different types of discrimination (MEDS and EDS, RMAS and GEDS Lifetime, respectively), with the MEIM-12, gender, and mono/biracial as covariates, where indicated. Male was coded as 1 and female as 0; monoracial was coded as 0 and biracial was coded as 1. Primary regressions were conducted in three stages, initially with the MEIM-12 and relevant demographics; measures of lifetime discrimination frequency and everyday or subtle discrimination were added in the second and third steps, respectively. This was done to isolate the contribution of demographic factors and then to ascertain the incremental contribution of regular subtle forms of discrimination beyond the impact of larger forms of discrimination over a lifetime (Lilienfeld, 2017). Missing data were addressed using list-wise deletion.

## Results

### Group Analyses

Because the data were collected at three different time points at two different locations, we first conducted an analysis of variance to test for mean differences between the three groups on the TSDS and the MEIM-12, the only measures collected for all groups. There were no significant differences. We then conducted *t* tests for mean differences for the three GEDS subscales and the RMAS, which were collected only for Groups 2 and 3. There were significant mean differences for the RMAS, with Group 2 reporting more microaggressions than Group 3 ($t = 4.27$, $p > .001$), but there were no differences on the GEDS subscales.

### Factor Structure

The Kaiser–Meyer–Olkin (KMO) Test for sampling accuracy was .92 (a good rating) and Bartlett's test of sphericity was highly significant ($p < .001$); thus, the principal components analysis was deemed acceptable. Examination of eigenvalues over 1 and visual inspection of the scree plot suggested a four-component solution, which explained 68.3% of variance. Inspection of item loadings suggested that the four components represented (a) uncontrollable distress and hyperarousal (eight items), (b) alienation from others (six items), (c) worry about safety and the future (five items), and being (d) keyed up and on guard (two items), as shown in Table 2. The components were all correlated with each other, with *r*s between 0.43 and 0.53, indicating that they are capturing separate but related constructs.

All items loaded above a cutoff of .50 on their respective components, but some items exhibited cross-loading (Items 2, 6, 9, 13, and 18). Of these five items, only one item loaded above .50 on more than one component (Item 6). One potential solution was to eliminate the cross-loading items to produce cleaner subscales. However, reliability did not improve, and in some cases decreased, by removing any of the cross-loading items. With those five items removed, the particular trauma symptoms represented by those items were no longer captured, potentially weakening the overall scale, so all items were retained for final scoring. However, because of the less-than-ideal factor structure, we did not conduct further statistical analyses using the subscales.

### Reliability

The TSDS showed excellent reliability ($\alpha = .94$). As noted, removing any one item did not improve reliability, indicating that all items contributed to internal consistency. Items were correlated with the total score, with *r*s from .52 to .78. Mean scores for items ranged from 1.44 to 2.45. Test–retest reliability for Group 3 was .91 ($p < .001$) for same-day administration and .78 ($p < .001$) for 2–3 weeks later (from the second to third administration).

### Correlational Analyses

Tables 3 and 4 compare monoracial and biracial African Americans on the TSDS and other measures of race and discrimination. (We did not include the GEDS due to the relatively low number of biracial individuals who completed this measure.) Both groups reported experiencing racial/ethnic discrimination as the primary form of discrimination encountered (Table 3). Only the MEIM-12 and MEDS Lifetime scales significantly differed between groups, with biracial African Americans having a significantly weaker ethnic identity and also experiencing less lifetime major discrimination (Table 4). However, lack of significant findings on other measures could be due to the small sample size of biracial individuals.

Pearson correlations between the TSDS and other measures are presented in Tables 5 and 6. The TSDS was positively correlated to various measures of discrimination ($p < .001$) as shown in Table 5, with correlation coefficients ranging from .48 to .71. All measures of psychopathology were also significantly correlated to the TSDS, including the PDS, $r = .49$, $p < .05$, as shown in Table 6. The TSDS was not correlated to gender, age, dichotomized sexual identity, or the MEIM-12.

Table 2
*Principal Components Analysis of Trauma Symptoms of Discrimination Scale*

| Item | Component 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| 21. Due to past experiences of discrimination, fear of social situations causes me a lot of problems in my daily functioning. | **.854** | .231 | .232 | .036 |
| 16. Due to past experiences of discrimination, in social situations I feel a rush of intense discomfort, and may feel my heart pounding, muscles tense up, or sweat. | **.770** | .256 | .162 | .118 |
| 20. Due to past experiences of discrimination, I am nervous in social situations, and am afraid people will notice that I am sweating, blushing, or trembling. | **.768** | .341 | .025 | −.055 |
| 7. Due to past experiences of discrimination, I often have trouble relaxing. | **.749** | .215 | .288 | .298 |
| 14. Due to past experiences of discrimination, I often feel so restless that it is hard to sit still. | **.693** | −.052 | .356 | .306 |
| 10. Due to past experiences of discrimination, I often cannot stop or control my worrying. | **.619** | .353 | .263 | .372 |
| 8. Due to past experiences of discrimination, I often feel numb or detached from others, activities, or my surroundings. | **.613** | .480 | .137 | .230 |
| 19. If I think about past experiences of discrimination, I cannot control my emotions. | **.588** | .105 | .307 | .175 |
| 3. Due to past experiences of discrimination, I often fear embarrassment. | .202 | **.836** | .229 | −.015 |
| 11. Due to past experiences of discrimination, I often find that being embarrassed or looking stupid are one of my worst fears. | .347 | **.716** | .014 | .260 |
| 17. Due to past experiences of discrimination, I feel isolated and set apart from others. | .208 | **.702** | .284 | .267 |
| 4. Due to past experiences of discrimination, I often feel nervous, anxious, or on edge, especially around certain people. | .154 | **.651** | .315 | .280 |
| 9. Due to past experiences of discrimination, I often avoid certain activities in which I am the center of attention. | .498 | **.589** | .087 | .308 |
| 18. Due to past experiences of discrimination, I avoid certain situations or speaking to certain people. | .124 | **.523** | .438 | .401 |
| 15. Due to past experiences of discrimination, I feel the world is an unsafe place. | .220 | .108 | **.724** | .218 |
| 1. Due to past experiences of discrimination, I often worry too much about different things. | .201 | .398 | **.637** | .174 |
| 6. Due to past experiences of discrimination, I often have nightmares about the past experience or think about it when I do not want to. | .535 | .134 | **.600** | −.092 |
| 5. Due to past experiences of discrimination, I often feel afraid as if something awful might happen. | .298 | .202 | **.572** | .390 |
| 2. Due to past experiences of discrimination, I often try hard not to think about it or go out of my way to avoid. | .207 | .476 | **.551** | −.244 |
| 12. Due to past experiences of discrimination, I often become easily annoyed or irritable. | .218 | .292 | .096 | **.762** |
| 13. Due to past experiences of discrimination, I often feel constantly on guard, watchful, or easily startled, especially around certain people or places. | .200 | .293 | .499 | **.560** |

*Note*. (1) Uncontrollable distress and hyperarousal, (2) Alienation from others, (3) Worry about safety and the future, and being (4) Keyed up and on guard. Highest loading item is in boldface. $N = 120$.

## Regressions

Two sets of linear regressions were conducted to determine the significance of different types of discrimination on the TSDS, as shown in Table 7. Because there were no significant differences between the African American and biracial samples, other than MEIM-12 and the MEDS, we included both groups together for the regressions. Although the TSDS was not correlated to gender, we opted to control for this variable due to the gender imbalance in the sample. We conducted these regressions in three blocks, with the first block including relevant demographics and the MEIM-12, so that the second and third blocks could isolate the effects of the discrimination measures specifically. We found that all forms of discrimination each significantly predicted anxiety-related trauma symptoms in two separate subsamples of our data set.

In the first analysis (Group 1), we found that both the EDS and the MEDS Lifetime were highly significant when including gender, biracial status, and the MEIM-12. This means that everyday discrimination significantly contributes to trauma symptoms, even when controlling for experiences of major discrimination over one's entire life. Likewise, major discrimination over one's life-

Table 3
*Frequency of Discrimination for Monoracial and Biracial African Americans, Trauma Symptoms of Discrimination Scale*

| Form of discrimination | Monoracial No | Monoracial Yes | Biracial No | Biracial Yes | Total Yes | Percent Yes |
|---|---|---|---|---|---|---|
| Racial/Ethnic | 0 | 50 | 1 | 10 | 60 | 98.4 |
| Gender | 24 | 26 | 7 | 4 | 30 | 49.2 |
| Age | 29 | 21 | 4 | 7 | 28 | 45.9 |
| Religion | 46 | 4 | 10 | 1 | 5 | 8.2 |
| Other | 48 | 2 | 11 | 0 | 2 | 3.3 |
| Sexual orientation | 49 | 1 | 11 | 0 | 1 | 1.6 |

*Note*. $N = 61$ (50 monoracial and 11 biracial).

Table 4
*Comparisons Between Monoracial and Biracial African Americans on Measures of Race and Discrimination*

| Measure | Monoracial *M* (*SD*) | Monoracial *N* | Biracial *M* (*SD*) | Biracial *N* | *t* | *p* |
|---|---|---|---|---|---|---|
| TSDS | 40.11 (13.40) | 100 | 37.95 (11.86) | 20 | .67 | .504 |
| MEIM-12 | 38.81 (5.79) | 102 | 33.38 (6.79) | 21 | 3.42 | .000 |
| EDS | 25.12 (9.35) | 50 | 22.09 (7.71) | 11 | 1.00 | .321 |
| MEDS Lifetime | 1.60 (1.74) | 50 | 0.82 (0.75) | 11 | 2.34 | .025 |
| RMAS | 79.47 (15.36) | 32 | 73.20 (17.89) | 10 | 1.08 | .285 |

*Note*. TSDS = Trauma Symptoms of Discrimination Scale; MEIM-12 = Robert's 12-item Multigroup Ethnic Identity Measure; EDS = Everyday Discrimination Scale; MEDS = Major Experiences of Discrimination Scale; RMAS = Racial Microaggressions Scale.

Table 5
*Correlations Between the TSDS and Racial/ Discrimination Measures*

| Measure/N | TSDS | MEIM-12 | EDS | RMAS | GEDS Past Year | GEDS Lifetime |
|---|---|---|---|---|---|---|
| MEIM-12 | .060 | | | | | |
| | 120 | | | | | |
| EDS | .482*** | .097 | | | | |
| | 61 | 61 | | | | |
| MEDS Lifetime | .493*** | .088 | .519** | | | |
| | 61 | 61 | 61 | | | |
| RMAS | .549*** | .372** | — | | | |
| | 59 | 62 | | | | |
| GEDS Past Year | .713*** | .156 | — | .470** | | |
| | 49 | 51 | | 51 | | |
| GEDS Lifetime | .610*** | .111 | — | .469** | .821** | |
| | 49 | 51 | | 51 | 51 | |
| GEDS Stress | .570*** | .049 | — | .353* | .609** | .781** |
| | 49 | 51 | | 51 | 51 | 51 |

*Note*. TSDS = Trauma Symptoms of Discrimination Scale; MEIM-12 = Robert's 12-item Multigroup Ethnic Identity Measure; EDS = Everyday Discrimination Scale; RMAS = Racial Microaggressions Scale; GEDS = General Ethnic Discrimination Scale; MEDS = Major Experiences of Discrimination Scale.
* $p < .05$. ** $p < .01$. *** $p < .001$ (two-tailed).

time predicts trauma symptoms, above and beyond experiences of everyday discrimination. This is particularly compelling when we consider the overlap ($r = .519$) between these two variables.

In the second analysis (Groups 2 and 3), we see the same thing, as both the GEDS Lifetime and the RMAS were significant predictors after including gender and the MEIM-12. We also controlled for group (i.e., participant location), as we had found this was significantly correlated to the RMAS. The regression shows that the regular experience of racial microaggressions significantly contributes to trauma symptoms, even when controlling for general ethnic discrimination over one's entire life. Likewise, general ethnic discrimination over one's lifetime predicts trauma symptoms, above and beyond experiences of regular microaggressions. This is particularly compelling when we consider the overlap ($r = .469$) between these two variables.

We also conducted the Group 1 analysis again, predicting the TSDS from the EDS and MEDS, where we removed Item 9 from the EDS, as it could be argued that being "threatened or harassed" may not be a typical form of everyday discrimination. The results did not change much, $F(5, 55) = 7.07$, $p < .001$, $R^2 = .392$; EDS: ß = .37, $t = 2.91$, $p = .005$, probably because being threatened or harassed is a relatively low-frequency event. Thus, we retained the original model.

The participants in Group 1 had also been screened for history of past traumatic or life-threatening experience. Of these, 22 endorsed "yes" (coded 1), 36 endorsed "no" (coded 0), and three preferred not to answer (excluded). The TSDS was higher in those with a trauma history than those without, $M = 41.51$, $SD = 14.04$ and $M = 36.07$, $SD = 12.75$, respectively, $t(262) = 3.21$, $p = .001$. To address the possibility that racial trauma symptoms were confounded by prior traumatic experiences, we added this into the regression as a binary variable, but it was not significant and the overall model did not change much, $F(6, 51) = 6.19$, $p < .001$, $R^2 = .421$; trauma history: ß = −.134, $t = -1.07$, $p = .288$. In the subset of individuals ($n = 22$) who had endorsed ever having experienced a traumatic event (all female), when controlling for the PDS, the TSDS remained strongly correlated to the MEDS Lifetime, $r = .494$, $p = .023$, but not the EDS.

## Discussion

### Factor Structure of the TSDS

The TSDS was developed to improve our ability to assess for trauma symptoms due to discrimination. The current study addresses this by providing evidence of the psychometric properties and validity of the TSDS in an African American sample. With regard to the factor structure, the current study indicated a four-component solution for the measure that was consistent with trauma symptoms. These components were characterized as uncontrollable distress and hyperarousal, feelings of alienation from others, worries about bad things happening in the future, and perceptions that others are dangerous. Although all items loaded strongly on their respective components, there were some cross-loading items. This cross-loading may be due, in part, to the increased complexity of the wording of those items. Although we could eliminate the cross-loading items to produce cleaner subscales, given the other positive psychometric properties of the TSDS, it may be premature to introduce a revised scale. The TSDS has yet to be validated in most other groups, and the factor structure may turn out to be better (or worse) when used with different ethnic or racial groups, different LGBTQ (lesbian, gay, bisexual, transgender, queer and questioning) groups, women, or disabled persons. Indeed, it may not be possible to devise a scale with a perfect factor structure for every group.

As mentioned previously, there is currently only one validated measure that is specifically focused on racial trauma, Carter et al.'s (2013) 52-item RBTSSS. Factor analysis of 330 adults determined that the scale comprised seven correlated constructs, characterized as Depression, Anger, Physical Reactions (somatic anxiety), Avoidance (denial of painful events),

Table 6
*Correlations Between the TSDS and Measures of Psychopathology*

| Measure/N | TSDS | PDS | BDI-II | PSWQ-A | SIAS |
|---|---|---|---|---|---|
| PDS | .488* | | | | |
| | 22 | | | | |
| BDI-II | .410** | .275 | | | |
| | 54 | 21 | | | |
| PSWQ-A | .521** | .499** | .631** | | |
| | 61 | 22 | 54 | | |
| SIAS | .524*** | .768*** | .394** | .471** | |
| | 61 | 22 | 54 | 61 | |
| OBQ-44 | .498*** | .615** | .347* | .448** | .628*** |
| | 58 | 22 | 52 | 58 | 58 |

*Note*. TSDS = Trauma Symptoms of Discrimination Scale; PDS = Posttraumatic Diagnostic Scale; BDI-II = Beck Depression Inventory, second edition; PSWQ-A = Penn State Worry Questionnaire, Abbreviated; SIAS = Social Interaction Anxiety Scale; OBQ-44 = Obsessive Beliefs Questionnaire—brief version.
* $p < .05$. ** $p < .01$. *** $p < .001$ (two-tailed).

Table 7
*Regressions Predicting TSDS From Overt and Covert Discrimination*

| Model | $R^2$ | $F$ | $MS_{residual}$ | $p$ | Independent variables | β | $t$ | $p$ |
|---|---|---|---|---|---|---|---|---|
| 1 | .055 | 1.10 | 159.94 | .355 | Gender | −.18 | −1.28 | .205 |
| | | | | | Biracial | −.06 | −0.38 | .704 |
| | | | | | MEIM-12 | −.20 | −1.40 | .166 |
| 2 | .297 | 5.93 | 121.03 | .000 | Gender | −.18 | −1.43 | .158 |
| | | | | | Biracial | .03 | 0.24 | .808 |
| | | | | | MEIM-12 | −.21 | −1.74 | .088 |
| | | | | | MEDS Lifetime | .50 | 4.40 | .000 |
| 3 | .391 | 7.07 | 106.74 | .000 | Gender | −.24 | −2.01 | .050 |
| | | | | | Biracial | .06 | 0.49 | .625 |
| | | | | | MEIM-12 | −.24 | −2.09 | .041 |
| | | | | | MEDS Lifetime | .31 | 2.52 | .015 |
| | | | | | EDS | .37 | 2.91 | .005 |
| 1 | .056 | .89 | 201.21 | .451 | Gender | −.19 | −1.25 | .217 |
| | | | | | Group (location) | .02 | 0.11 | .913 |
| | | | | | MEIM-12 | .14 | 0.94 | .354 |
| 2 | .416 | 7.82 | 127.44 | .000 | Gender | −.10 | −0.82 | .419 |
| | | | | | Group (location) | .15 | 1.20 | .238 |
| | | | | | MEIM-12 | .04 | 0.37 | .712 |
| | | | | | GEDS Lifetime | .62 | 5.20 | .000 |
| 3 | .511 | 8.99 | 109.07 | .000 | Gender | −.14 | −1.26 | .216 |
| | | | | | Group (location) | −.21 | −1.26 | .216 |
| | | | | | MEIM-12 | −.08 | −0.70 | .490 |
| | | | | | GEDS Lifetime | .31 | 2.03 | .049 |
| | | | | | RMAS | .56 | 2.90 | .006 |

Note. TSDS = Trauma Symptoms of Discrimination Scale; MEIM-12 = Robert's 12-item Multigroup Ethnic Identity Measure; MEDS Lifetime = Major Experiences of Discrimination Scale; EDS = Everyday Discrimination Scale; RMAS = Racial Microaggressions Scale; GEDS = General Ethnic Discrimination Scale. Group (location) coded as 0 for Group 3 (New England) and 1 for Group 2 (South/Midwest). First set of regressions, $N = 49$; second set of regressions, $N = 61$.

Intrusion (unwanted thoughts), Hypervigilance/Arousal (fearfulness), and Low Self-Esteem (self-blame). The TSDS is designed to assess anxiety-related trauma symptoms, in particular, and thus contains fewer components than the RBTSSS, though both assessments have component overlap. Due to the TSDS's anxiety and trauma focus, uncontrollable distress and hyperarousal questions about physical stress responses have some overlap with the RBTSSS's Physical Reactions, and all four of the TSDS components contain anxiety questions that are related to the RBTSSS's Hypervigiliance/Arousal component. There is also overlap with the RBTSSS's Avoidance component and TSDS components characterized by feelings of alienation from others and worries about bad things happening in the future. Intrusion in the RBTSSS may be similar to the TSDS's components for uncontrollable distress and hyperarousal, as well as worries about bad things happening in the future, in which some questions are focused on intrusive thoughts and emotions. The TSDS's feelings of alienation from others asks questions about fear of social embarrassment and is similar to the RBTSSS's Low Self-Esteem component, which includes items about one's perception of self and external judgment, albeit to a lesser degree. Questions directly related to depression are not present in the TSDS, and only one item assesses anger; however, the TSDS includes an item not seen in the RBTSSS addressing depersonalization/derealization. Overall, the RBTSSS and TSDS have notable overlap, but both assessments have unique utility when accounting for their differences, mainly in that the TSDS focuses on anxiety-related trauma symptoms and avoidance, whereas the RBTSSS is more comprehensive.

## Validity and Reliability

The TSDS showed excellent internal consistency and test–retest reliability. The measure also showed good concurrent validity, as it was significantly positively correlated with distress from general ethnic discrimination in the expected direction. The moderate correlations among the four components represented good discriminant validity, or in other words, the components each are measuring different but related constructs. The TSDS also evidenced good convergent validity in terms of significant correlations with related measures of psychopathology. There were high correlations with a validated trauma measure as well as other psychopathology measures that also tend to be correlated to PTSD.

## Comparisons With Biracial African Americans

In our analysis of biracial African Americans, although scores were slightly lower, the TSDS did not significantly differ between groups, indicating that biracial African Americans may experience as much or almost as much traumatization from racism as monoracial African Americans. Although biracial individuals experienced significantly fewer instances of major discrimination, they reported similar levels of other types of racial maltreatment and no less traumatization. However, results should be interpreted with caution due to the small sample size.

As noted previously, ethnic identity appears to protect monoracial as well as biracial African Americans against the stresses of racism (Jackson et al., 2012). Biracial individuals reported significantly lower levels of ethnic identity, which may be due in part to less racial socialization as a result of having a non-African Amer-

ican parent. The extent to which biracial children receive racial socialization may widely vary and can range from direct messages about racial inequality to color-blind attitudes, and biracial youth may decrease their reporting of discriminatory events to their caregiver when caregivers espouse this latter approach (Snyder, 2012); this can become problematic, as some non-African American parents rely on their child's self-report of racial incidents to prompt discussions of racial identity and provide support (Stone & Dolbin-MacNab, 2017). In addition, the fact that biracial individuals may experience microaggressions from family members or witness discrimination perpetrated by family may make it difficult to seek social support from caregivers and familial networks, particularly for more subtle forms of discrimination, such as microaggressions. With the increased risk of conflicted racial identity (Herman, 2004; Jackson et al., 2012) and potentially more indirect, color-blind, or reactive racial socialization, biracial individuals may be less protected against discrimination, even with lower incidents of major discrimination, and may equally benefit from therapeutic support as monoracial African Americans.

## Predictors of Racial Trauma Symptoms

Although the TSDS is designed to capture trauma reactions to any type of discrimination, it appears that the TSDS may be particularly sensitive to capturing racial trauma in African Americans. Nearly all respondents endorsed experiencing racial discrimination, although about half also listed gender and age as sources of discrimination.

Examining the two main regressions conducted, we see that all forms of discrimination contribute to traumatization. Both regularly occurring everyday discrimination and major discrimination over one's lifetime were significant predictors of trauma symptoms, as seen in the first set of regressions, despite sizable significant correlations between those two variables. Further, both general ethnic discrimination over one's lifetime and regular experiences of racial microaggressions were also significant predictors of trauma symptoms of discrimination, as seen in the second set of regressions, despite also being significantly correlated. This lends evidence to the hypothesis that all forms of discrimination are highly detrimental to targets, even types of discrimination that some might be tempted to minimize or dismiss as "inadvertent racial slights," such as microaggressions (Lilienfeld, 2017). In fact, some scholars have argued that covert and subtle forms of racism, like microaggressions, may actually be more psychologically damaging than overt experiences (Jones, Peddie, Gilrane, King, & Gray, 2016). The analyses conducted in this study suggest that each of these types of discrimination result in perhaps comparable harm, but we cannot make exact comparisons, given the different descriptions provided with each measure in regard to the time frames over which the various types of discrimination were experienced (e.g., "in your day-to-day life" vs. collective lifetime experiences).

## Limitations and Future Directions

Only African American undergraduates were examined, and so, this study should be replicated with a community and clinical sample to establish generalizability of findings. Further, we had a very small group of biracial African Americans, thus conclusions about that group are highly limited and should be considered preliminary. Future research should determine how well the TSDS captures symptoms in other ethnic/racial minorities and LGBTQ individuals and examine the factor structure of the measure in these groups. Although there were some LGBTQ individuals in the sample, there were not enough for a separate analysis. Research shows that all forms of discrimination are correlated with negative mental health outcomes in all groups (Cokley et al., 2011). Thus, future work should also examine how well the TSDS captures trauma symptoms in European Americans and those exposed to other forms of discrimination.

Because PTSD is maintained by anxiety-driven avoidance, the TSDS is focused on these symptoms, but future measures of discrimination-related distress might sample a wider range of symptoms to determine the best and most efficient means of capturing racial trauma symptoms. Subsequent versions of the TSDS might also explore simplified wording of some of the items.

## Research Implications

It could be speculated that traumatization due to discrimination may represent some preexisting psychopathology on the part of the victim. This notion is not completely unfounded, given that research indicates that trauma is cumulative, and that prior traumatization sensitizes one to subsequent traumatization (Breslau, Chilcoat, Kessler, & Davis, 1999; Scott & Stradling, 1994). This may explain why we found that people with a traditional trauma history had a significantly higher score on the TSDS. That being said, when we controlled for history of major trauma and degree of PTSD symptoms from other sources, we continued to find a significant correlation between traumatization and discriminatory experiences. Likewise, it has been speculated that negative affectivity could be a cause for the correlation between reports of discriminatory experiences and psychopathology (Lilienfeld, 2017), which we did not account for in the current study. However, other related research has examined this using the TSDS with a similar sample and found that negative affectivity did not explain the relationship between psychopathology and racial microaggressions (Williams, Kanter, & Ching, 2017) or general ethnic discrimination (Williams et al., 2017). Future work should attempt to determine how the different forms of discrimination differentially contribute to traumatization.

## Clinical and Policy Implications

The symptoms described in the TSDS measure are found in the *DSM–5* description of PTSD, although not grouped in exactly the same way. For example, Component 1 (uncontrollable distress and hyperarousal) maps onto Criterion D (negative alterations in cognitions and mood) and Criterion E (alterations in arousal and reactivity). Component 3 (worry about safety and the future) maps onto some items in Criterion D (negative alterations in cognitions and mood). Component 2 (alienation from others) includes an item from Criterion D (feeling cut off from people) as well as other social fears. Component 4 (keyed up and on guard) maps onto parts of Criterion E (alterations in arousal and reactivity). It could be that the structure of racial trauma differs from the way PTSD is organized in the *DSM–5* (Carter, 2007), or it could be that the *DSM–5* will undergo further refinement that will ultimately bring

it closer to our emerging understanding of racial trauma. However, these findings need to be replicated before making any definitive conclusions.

Currently, there are no empirically supported treatments to address racial trauma in people of color (Comas-Díaz, 2016; Williams, Peña, & Mier-Chairez, 2017); however, utilization of assessments like the TSDS can assist clinicians in identifying and monitoring changes in traumatization symptoms. Future studies could use the TSDS in a clinical sample to observe if empirically validated treatments for PTSD and other psychopathologies can reduce TSDS scores in people of color over the course of treatment.

## Conclusions

Discrimination can be traumatizing for people of color and is positively correlated with distress and psychopathology. Findings indicate that all forms of racism are harmful for monoracial and possibly biracial African Americans as well, yet there are very few measures to quantitatively capture symptoms related to racial traumatization. This study provides preliminary evidence that a brief psychometrically valid instrument can be used to measure trauma symptoms due to racial discrimination in African Americans. Additional research and validation with a larger, more diverse sample is needed to better understand racial trauma symptomology and the utility of the TSDS as an assessment of racial traumatization.

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