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The Impact of Racial Discrimination and Peritraumatic Dissociation on the Development of PTSD Symptoms

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THE IMPACT OF RACIAL DISCRIMINATION AND PERITRAUMATIC DISSOCIATION ON THE DEVELOPMENT OF PTSD SYMTPOMS

by

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ABSTRACT

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by

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Racial discrimination is a traumatic stressor that increases risk for posttraumatic stress disorder (PTSD), but mechanisms to explain this relationship remain unclear. Peritraumatic dissociation, the complex process of disorientation, depersonalization, and derealization during a traumatic event, has been found as a consistent predictor of PTSD. Experiences of racial discrimination may force many Black Americans to detach from their environment to mitigate stress and protect their well-being, which, in turn, increases risk for dissociation. However, this has not been specifically explored with peritraumatic dissociation. The current study explored the role of peritraumatic dissociation in the impact of racial discrimination on PTSD symptoms after a traumatic injury, and the intersectional role of gender. One hundred and thirteen Black/African American individuals were recruited from the Emergency Department at a Level One Trauma Center. Two weeks after the traumatic event, participants self-reported their experiences with racial discrimination and peritraumatic dissociation. At the six-month follow-up appointment, individuals underwent a clinical assessment of their PTSD symptoms. Results of longitudinal mediation analyses showed that peritraumatic dissociation significantly mediated the effect of racial discrimination on PTSD symptoms, after controlling for age and lifetime trauma exposure. A secondary analysis was conducted to examine the moderating role of gender in the mediation model. Gender was not a significant moderator in the model. A discussion will

follow explaining how the results of this current study can inform prevention and intervention efforts as well as directions for future research.

To my parents for moving across the world

and providing me opportunities I could have

only ever dreamed of for myself.

Thank you for supporting me, loving me, and

learning all the research language I teach you.

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Introduction

Trauma and PTSD

Experiences of trauma are pervasive and common. Globally, an estimated 70% of individuals experience a traumatic event in their lifetime, ranging from events related to war exposure, physical violence, sexual or intimate partner violence, natural disasters and accidents, unexpected deaths, or witnessing of a traumatic event (Benjet et. al., 2016; Kessler et al., 2017). Although traumatic events are exceedingly common, the development of posttraumatic stress disorder (PTSD) is not as widespread. Each year, the approximate prevalence of PTSD in the United States is 8% (Kilpatrick et al., 2013). Since only a subset of individuals who experience a traumatic event will go on to develop PTSD, it is important to understand what individual experiences, risk factors, or systemic structures contribute to, or increase the susceptibility of, developing PTSD.

Racial Discrimination and PTSD

In noting the general estimate of PTSD in the United States, it is important to consider differences in prevalence rates across groups. In fact, research has suggested that Black Americans exhibit greater rates of PTSD than White Americans (Carter, 2007; Roberts et al., 2011). Initially, this increased rate of PTSD could be assumed to reflect more frequent exposures to traumatic events, a greater risk of PTSD development once exposed to a traumatic event, or a combination of both. However, empirical work revealed that although Black individuals are more likely to develop PTSD after experiencing a traumatic event, White Americans experience a greater number of traumatic events (Roberts et al., 2011). In other words, higher rates of PTSD in Black Americans cannot simply be attributed to a greater frequency of trauma exposure. Thus,

it is imperative for research to continue examining what factors account for this discrepancy in PTSD rates.

Moreover, while previous work indicated that Black Americans have a greater conditional risk for PTSD despite experiencing fewer traumatic events (Roberts et al., 2021), it may be that previous research has underestimated the frequency of trauma for Black Americans. Specifically, the current diagnostic criteria do not capture the full range of traumatic experiences and omit experiences that affect Black but not White Americans (Abdullah et al., 2021; Holmes et al., 2016). Criterion A in the *Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5)* enumerates specific instances required to meet criteria for a PTSD diagnosis. As defined, these involve direct or indirect "exposure to actual or threatened death, serious injury, or sexual violence" (American Psychiatric Association, 2013 p. 271). However, these very specific criteria preclude the recognition of other chronic stressors or traumatic events that may also produce posttraumatic stress symptoms. A stressor that has been historically excluded as a potential source of trauma is racial discrimination, which may contribute to the increased risk of PTSD among Black Americans (Roberts et al., 2011; Sibrava et al., 2019). Racial discrimination has been defined as unequal treatment received by individuals on the basis of their race or ethnicity (Pager & Shepherd, 2008). Racial discrimination impacts marginalized communities of color in the United States in many settings and across interpersonal and structural levels (Hirsch & Cha, 2008). Indeed, 70% of Black Americans report experiencing racial discrimination (Lee, 2019).

These high rates of racial discrimination are extremely alarming, especially considering the impact of racial discrimination on the psychological well-being of Black Americans. Research has shown that chronic racism is a stressor with long-term impacts on psychological

functioning and physical health (Carter et al., 2017; Torres, Driscoll & Burrow, 2010). More specifically, Black Americans who report experiences of racial discrimination also report lower life satisfaction and greater psychological distress, including elevated rates of depression and anxiety (Broman et al., 2000; Carter et al., 2017; Pieterse et al., 2012). Moreover, research has shown that the impacts of racism lead to trauma-related symptomatology (Abdullah et al., 2021; Holmes et al., 2016; Pieterse et al., 2010). Black Americans that experience race-based stressful events display symptoms that overlap with PTSD, including re-experiencing, irritability, hypervigilance, and avoidance (Carter, 2007).

Ultimately, studies have revealed such a robust link between racial discrimination and posttraumatic outcomes that there has been a call to expand Criterion A in the *DSM-5* to include experiences of racial discrimination (Holmes et al., 2016). It is also important to consider that experiencing racial discrimination does not occur in isolation and may impact responses to other traumatic events. Research has established that increases in the number of traumatic events experienced (i.e., a greater "trauma load") corresponds to an increase in risk for PTSD (Breslau, 1991; Kessler et al., 1995). For example, racial discrimination was found to be a mechanism that explains increased PTSD symptoms in racially/ethnically minoritized veterans (Ruef et al., 2000). Similarly, experiences of racial discrimination also increase the likelihood of developing PTSD symptoms after a traumatic injury (Bird et al., 2021). Overall, research has not only provided evidence that racial discrimination is associated with posttraumatic symptoms, but also that experiencing racial discrimination increases the risk for PTSD following a separate trauma.

Peritraumatic Dissociation as a Mechanism

What is less understood, however, are the mechanisms linking experiences of discrimination to PTSD development. Peritraumatic dissociation has been established as a known

risk factor to the development of PTSD in victims of various forms of trauma, such as motor vehicle crashes, war exposure, and natural disasters (Koopman et al., 1994; Marmar et al., 1994; Marmar et al., 1996; Marmar et al., 1997; Nobakht et al., 2017; Ursano et al., 1999). Peritraumatic dissociation refers to complex responses occurring during, or immediately following, the traumatic event, including depersonalization, derealization, and emotional numbness (Lensvelt-Mulders et al., 2008; Thompson, Jun & Sloan, 2018). A dissociative response can be beneficial in the acute aftermath of the trauma because it allows victims to detach themselves from intense fear-related emotions, horror, and revulsion (Punamäki et al., 2005). However, a dissociative response to trauma has been found to alter one's somatic functioning, perception of time and space, and affective reactions; it has also been thought to disrupt normal information processing and inhibit natural recovery after the traumatic event, and therefore increase the likelihood of PTSD development (Mattos et al., 2016; Thompson et al., 2017). Although peritraumatic dissociation is not necessary for the development of PTSD, it dramatically increases its likelihood and has been found to be a consistent predictor of PTSD (Breh & Seidler, 2007; Otis et al., 2012; Ozer et al., 2003). A notable gap in the literature, and one this study had hoped to elucidate, is understanding what may increase vulnerability to peritraumatic dissociation and subsequent PTSD.

A factor this study explored in relation to increased likelihood of peritraumatic dissociation is racial discrimination because prior research relating racial discrimination and peritraumatic dissociation is very limited and mixed. While one study found that Hispanic police officers experience more racism than their non-Hispanic White counterparts, greater peritraumatic dissociation and more PTSD symptoms (Pole, 2005), other research found that Black veterans do not experience greater peritraumatic dissociation once the level of combat

exposure is adjusted for (Zatzick et al., 1994). Thus, the relationship between the variables is unclear.

Recently, separate research has found that experiencing racial discrimination produces symptoms of trauma-related dissociation that cannot be explained by exposure to other traumatic events (Carter et al., 2020; Polanco-Roman et al., 2016). Although this research does not examine peritraumatic dissociation specifically, it offers important insight into the positive relationship between racial discrimination and dissociation. Specifically, Polanco-Roman and colleagues (2016) propose that incidents of racial discrimination may elicit the use of strategies such as emotional numbing and avoidance that mitigate the distress caused by racial discrimination. However, these processes are also implicated as facets of dissociation, and thus may explain the positive association between racial discrimination and dissociation. While this research provides seminal evidence relating racial discrimination and dissociation, it does not specifically explore peritraumatic dissociation. Therefore, this proposed study addressed a research gap by exploring whether racial discrimination increases risk for dissociation during a separate, non-race-based traumatic event.

Gender Differences in Trauma, Dissociation, and PTSD

While discussing the limited literature relating peritraumatic dissociation and racial discrimination, it is important to note that, to the authors' knowledge, research has yet to explore this with an intersectional lens considering the underlying interactions between systems of oppression (e.g., racism and sexism). Consistently, research has found that women display greater rates of PTSD, and this trend upholds when specifically examining the Black community (Breslau et al., 1997; Breslau et al., 1998; Kessler et al., 1995; Punamäki et al., 2005; Stein et al., 2000; Tolin & Foa, 2006; Valentine et al., 2019). Research exploring the mechanisms behind this

discrepancy are ongoing. Previous studies have found that women experience greater peritraumatic dissociation, and that this propensity may be accounting for the gender differences in PTSD development (Demarble et al., 2020; Lilly & Valdez, 2012; Tolin & Foa, 2006). However, other research has not found gender differences in peritraumatic dissociation (Demarble et al., 2020; Punamäki et al., 2005). In addition to differences in rates of peritraumatic dissociation and PTSD, prior empirical work has also found gender differences in experiences of racism among Black men and women. While many experiences of racial discrimination may overlap, findings suggest that Black women are burdened by the unique intersection of racism and sexism, while the racialization of Black men may be central to their lived experiences (Silverstein et al., 2022).

As a result of the scarce and mixed literature, an intersectional understanding of the mechanistic role of peritraumatic dissociation in the impact of racial discrimination on PTSD is essential. Moreover, these experiences need to be explored in a sample that has experienced a separate traumatic event to better understand the pervasive effect of racial discrimination on an index trauma. Thus, the primary aim of this study explored the role of peritraumatic dissociation in mediating the impact of racial discrimination on the development of PTSD in a traumatically injured sample of Black Americans. It was hypothesized that greater experiences of racial discrimination prior to the traumatic injury would predict greater PTSD symptoms six months after the injury, and that peritraumatic dissociation would mediate this relationship. Since research has suggested that there are gender differences in relation to experiences of discrimination, peritraumatic dissociation, and PTSD symptoms, the moderating role of gender in the mediation model was also examined as a secondary aim. It was hypothesized that gender would moderate the indirect effect of racial discrimination on PTSD.

Method

Participants

This current study is derived from a larger project called Imaging Study on Trauma & Resilience (iSTAR). By collecting psychophysical, neurobiological, behavioral, and self-reported data, iSTAR aimed to examine outcomes of traumatic injury, trajectories of PTSD, and factors that influence mental health concerns more broadly. English-speaking participants between the ages of 18 and 60 years old were recruited from the Emergency Department (ED) at the Medical College of Wisconsin (MCW) in Milwaukee, Wisconsin. Participants were eligible if they met criterion A of the *DSM-5* and scored 3 or higher on the Predicting PTSD Questionnaire (Rothbaum et al., 2014). Participants were excluded from the study if they displayed current, or reported a history of, psychotic or manic symptoms, experienced a spinal cord or traumatic brain injury, or tested positive for alcohol, illegal drugs, or narcotics. Additional exclusion criteria included being in the ED due to a self-inflicted injury or sexual assault. Ultimately, a total of 215 participants provided written informed consent and were included in the iSTAR study. Participants were compensated at every visit.

The sample size of this current study was 113, which included only participants who identified as Black/African American, completed all required baseline measurements, and underwent the assessment at the follow-up time point six months after baseline. Only participants who identified as Black/African American were included in the study because their unique lived experiences and mental health warrant investigation without comparison to other groups.

The vast majority of participants (72.6%) were seen in the Emergency Department as a result of a motor vehicle crash. The remaining participants reported their mechanism of injury as assault or altercation (13.3%), domestic violence (5.3%), or other (8.8%). Of the 113

participants, 69 identified as female (61.1%). The majority of the sample (65.5%) reported a yearly income of $40,000 or lower. 32.7% of participants graduated high school or obtained GED/equivalent diploma, 30.1% had attended some college, 13.2% had an Associate's degree, and 12.4% had a bachelor's degree or higher. Regarding psychiatric history, 14.2% of the sample reported a past diagnosis of a psychiatric disorder and/or treatment.

Procedure

Longitudinal data were collected for the larger study (iSTAR) at 2 weeks, 3 months, 6 months, 12 months, 18 months, and 24 months post-trauma. For this current study, self-report data (racial discrimination and peritraumatic dissociation) collected at the 2-week post-trauma time point was utilized. PTSD symptom severity from the 6-month assessment point was used as the outcome variable in order to capture chronicity of posttraumatic symptoms several months after the traumatic injury.

Measures

Racial Discrimination

The Perceived Ethnic Discrimination Questionnaires (PEDQ; Brondolo et al., 2005) was used to collect the participants' experiences with racial discrimination. This validated 17-item measure contains 5 subscales of racial discrimination (Exclusion, Discrimination at Work, Stigmatization, Threat, Unfair Police) and a Total Score. Participants rated their responses on a 5-point Likert scale ranging from 1 (*Never*) to 5 (*Very often*). The PEDQ Total Score represents a mean value of responses on the subscale questions. A sample item of the PEDQ asks participants to rate how often "[they have] been treated unfairly by co-workers or classmates." PEDQ responses from the 2-week baseline visit were used for this study. This time point was

chosen in order to understand experiences of racial discrimination prior to the traumatic injury. The reliability of this measure was high (Cronbach's alpha = 0.91).

Peritraumatic Dissociation

The Peritraumatic Dissociative Experiences Questionnaire (PDEQ; Marmar et al., 1997) was utilized to collect self-reported recollection of peritraumatic dissociation during the index trauma that brought participants to the ED (e.g., motor vehicle crash). The PDEQ is a 10-item validated measure that asks respondents to rate on a 5-point Likert scale from 1 (*Not at all true*) to 5 (*Extremely true)* how much each statement related to their experience during the traumatic event. Scores represent a sum (range for this sample was 10-50). A sample item of the PDEQ states, "I had moments of losing track of what was going on. I 'blanked out' or 'spaced out' or in some way felt that I was not part of what was going on." The Cronbach's alpha for this sample was 0.85.

Posttraumatic Symptoms

PTSD symptom severity was measured using the Clinician-Administered PTSD Scale *DSM-5* (CAPS-5; Weathers et al., 2013) administered at the 6-month participant visit. The CAPS-5 is a semi-structured clinical interview containing 30 items designed to assess the frequency, intensity, and duration of current posttraumatic stress symptoms (Weathers et al., 2018). CAPS-5 aims to capture the severity of the four symptom clusters as defined in the DSM-5 (reexperiencing, avoidance, hyperarousal, and alterations in negative mood). CAPS-5 yielded a Cronbach's alpha of 0.91 with this current sample.

CAPS-5 was administered to the participants six months after the baseline appointment. All CAPS-5 interviews were administered by 14 interviewers who identified as White females.

Each interviewer completed training through an online training offered by the U.S. Department of Veteran Affairs. Additionally, each interviewer administered two mock CAPS-5 interviews that were reviewed by postdoctoral clinical psychologists to ensure fidelity of administration. Lastly, each interviewer also observed two live interviews conducted by experienced CAPS-5 interviewers. Research staff also reviewed 20% of the interviews, yielding high interrater reliability (0.96; 95% CI [0.93, 0.98]).

The interviewers scored both intensity and frequency of reexperiencing, avoidance, hyperarousal, and negative mood symptoms in the past month, as reported by the participants. For this study, intensity and frequency scored were merged to create a comprehensive PTSD symptom severity score.

Analytic Strategy

This study had one central aim: to examine if peritraumatic dissociation mediates the relationship between racial discrimination and PTSD. A secondary aim was to examine the role of gender in moderating this mediation model. To answer the proposed aims, the following analytic strategy was implemented.

Preliminary bivariate correlations were conducted in order to examine the associations between racial discrimination, peritraumatic dissociation, and PTSD symptoms. Preliminary *t*-tests were also conducted to examine gender differences in racial discrimination, peritraumatic dissociation, and PTSD. Then, longitudinal mediation analyses were conducted using PROCESS model 4 (Hayes, 2017). Participants' self-reported experiences of racial discrimination were utilized as the predictor variable, peritraumatic dissociation as the mediator, and total PTSD symptom severity at six months was analyzed as the outcome variable. To ensure that no specific type of racial discrimination was the main driving factor behind the mediation, supplemental

analyses examined the effect of individual subscale of the PEDQ (Exclusion, Discrimination at Work, Stigmatization, Threat, Unfair Police) on PTSD symptom severity. Finally, to answer the secondary aim of the study, gender was assessed as a moderator (PROCESS model 8; Hayes, 2017). Model 8 was chosen in order to explore the moderating role of gender on the direct *a* path between racial discrimination and peritraumatic dissociation, and the direct *c* path. The relationship between peritraumatic dissociation and PTSD is consistent, such that gender was not expected to moderate that path. Lifetime trauma exposure and age were used as covariates in the mediation models to isolate the effect of racial discrimination.

It was hypothesized that peritraumatic dissociation would mediate the effect of racial discrimination on PTSD. It was also hypothesized that gender would significantly moderate the mediational model.

Results

Correlations and *t*-tests

Preliminary bivariate correlations were conducted to examine the associations between racial discrimination, peritraumatic dissociation, and PTSD symptoms. Notably, total racial discrimination (RD) was significantly associated with peritraumatic dissociation (r= 0.289, p = 0.002). All subscales of the PEDQ racial discrimination measure were also significantly associated with peritraumatic dissociation, except the Discrimination at Work subscale. Moreover, peritraumatic dissociation was correlated with PTSD symptom severity (r = 0.445, p < 0.001). Lastly, total racial discrimination (0.263, p = 0.002) and the Exclusion/Rejection (r = 0.278, p = 0.003) and Threat/Aggression (r = 0.298, p < 0.001) subscales were significantly correlated with total PTSD symptoms. Correlations can be found in Table 1.

Table 1. *Bivariate Correlations of Racial Discrimination (RD), Peritraumatic Dissociation, and PTSD Symptom Severity*

	1	2	3	4	5	6	7	8
1.Total RD	—	0.903***	0.880***	0.821***	0.801***	0.660***	0.289**	0.263**
2.Exclusion/Rejection		—	0.777***	0.672***	0.616***	0.545***	0.265**	0.278**
3.Discrimination at Work			—	0.601***	0.601***	0.544***	0.160	0.172
4. Stigmatization				—	0.569***	0.571***	0.269**	0.176
5.Threat/Aggression					—	0.391***	0.270**	0.298**
6.Unfair Policing						—	0.274**	0.076
7.Peritraumatic Dissociation							—	0.445***
8.PTSD Symptom Severity								—

Note. *** $p < 0.001$, ** $p < 0.01$, *$p < 0.05$

Next, an independent samples *t*-test was conducted to understand gender differences related to racial discrimination, peritraumatic dissociation, and PTSD. There was no gender difference in relation to total racial discrimination, but the Stigmatization and Unfair Policing subscales showed gender differences. Men ($M = 1.81$; SD=1.00) reported higher scores than women ($M = 1.47$; SD=0.75) on the Stigmatization subscale ($t_{(111)} = 2.058$, $p = 0.042 < 0.05$). The Unfair Policing subscale yielded a significant gender difference ($t_{(111)} = 3.754$, $p < 0.001 < 0.05$), such that men reported higher scores ($M = 2.93$; SD=1.58) than women ($M = 1.93$; SD=1.25). There were no gender differences in peritraumatic dissociation. PTSD symptom severity was trending toward significance, ($t_{(111)} = -1.96$, $p = 0.053$), with women reporting greater symptom severity ($M = 14.38$; $SD = 9.36$) than men (M=10.05; $SD = 12.61$). *T*-test results can be found in Table 2.

Table 2. *Gender Differences of Racial Discrimination, Peritraumatic Dissociation, and PTSD Symptom Severity*

Gender	Men		Women		*t*(111)	*p*	Cohen's *d*
	M	*SD*	*M*	*SD*			
Total Racial Discrimination	2.11	0.91	1.86	.085	1.49	0.139	0.288
Exclusion/Rejection	2.34	1.09	2.23	1.14	0.504	0.616	0.097
Discrimination at work	2.27	1.06	2.10	1.08	0.842	0.402	0.162
Stigmatization	1.81	1.00	1.47	0.75	2.058	0.042*	0.397
Threat/Aggression	1.81	0.99	1.63	1.00	0.964	0.337	0.186
Unfair Policing	2.93	1.58	1.93	1.25	3.754	<0.001*	0.724
Peritraumatic Dissociation	27.27	9.91	27.12	9.03	0.087	0.931	0.017
PTSD Symptom Severity	10.05	9.36	14.38	12.61	-1.959	0.053	0.378

Note. *Significant at the 0.05 level

Mediation analyses

The primary purpose for this study was to examine the impact of racial discrimination on PTSD, as mediated by peritraumatic dissociation. The mediation analysis was conducted using PROCESS model 4 (Hayes et al., 2017). PROCESS is an SPSS macro, computational addition that analyzes direct, indirect, and conditional effects in moderation and mediation analyses (Hayes, 2017). PROCESS is an effective tool that uses bootstrapping to provide direct, indirect, and total effects of the mediation model.

All mediation models included age and lifetime trauma exposure as covariates. It was important to covary for age and lifetime trauma exposure in order to isolate the effect of racial discrimination on the PTSD symptomatology, rather than general stress and trauma. This also minimizes the possibility of attributing the indirect effect to variables other than the predictor in this model.

Primarily, the results show that peritraumatic dissociation was a significant mediator of the effect of total racial discrimination on total PTSD symptom severity (*B*= 1.372*,* CI [0.210, 2.722], *SE*= 0.647). Results can be found in Table 3.

In order to ensure that this mediation was not driven by a specific type of discrimination, supplemental mediation analyses were conducted examining the specific subscales of the racial discrimination measure. Peritraumatic dissociation significantly mediated the relationship between the Exclusion/Rejection and PTSD, (*B*= 0.951*,* CI [0.137, 2.058], *SE*= 0.493). Results can be found in Table 4. However, peritraumatic dissociation was not a significant mediator of the link between Discrimination at Work and PTSD symptom severity (*B*= 0.521*,* CI [-0.340, 1.574], *SE*= 0.487). Results can be found in Table 5. Peritraumatic dissociation was a significant mediator of the relationship between the Stigmatization subscale and PTSD symptom severity, though (*B*= 1.342*,* CI [0.093, 2.651], *SE*= 0.651). Results can be found in Table 6. Peritraumatic dissociation also significantly mediated the relationship between the Threat/Aggression subscale of the PEDQ and PTSD symptoms (*B*= 1.074*,* CI [0.132, 2.112], *SE*= 0.514). Results can be found in Table 6. Lastly, the link between the Unfair Policing discrimination and PTSD was significantly mediated by peritraumatic dissociation (*B*= 0.863*,* CI [0.180, 1.705], *SE*= 0.389). Results can be found in Table 8.

Thus, peritraumatic dissociation significantly mediated the link between total racial discrimination (and most subscales) and PTSD symptom severity. The only relationship not mediated by peritraumatic dissociation was the effect of Discrimination at Work on PTSD. In sum, these analyses show that the effect of racial discrimination on PTSD is mediated by peritraumatic dissociation, and this relationship is not uniquely driven by a specific type of discrimination.

Table 3. *Model Summary of the Indirect Effect of Total Racial Discrimination on PTSD symptom Severity*

	Outcome					
	M – Peritraumatic Dissociation			*Y – PTSD symptom severity*		
Predictor	*B*	*SE B*	*p*	*B*	*SE B*	*p*
Total Racial Discrimination	2.81	1.04	0.008**	1.39	1.23	0.258
Peritraumatic Dissociation	-	-	-	0.488	0.11	< 0.001***
Constant	20.51	3.43	< 0.001***	-8.39	4.52	0.066
	R^2 = 0.089 $F(3, 109) = 3.55$, $p = 0.017$*			R^2 = 0.24 $F(4, 109) = 8.40$, $p < .001$***		

			95% Confidence Interval	
Indirect effect	*B*	*SE*	Lower limit	Upper limit
Total indirect effect	1.37	0.65	0.21	2.72

Note. * $p < .05$, ** $p < .01$, ***$p < 0.001$

Table 4. *Model Summary of the Indirect Effect of Exclusion on PTSD symptom Severity*

	Outcome					
	M – Peritraumatic Dissociation			*Y – PTSD symptom severity*		
Predictor	*B*	*SE B*	*p*	*B*	*SE B*	*p*
Exclusion	1.97	0.81	0.017*	1.41	0.94	0.18
Peritraumatic Dissociation	-	-	-	0.48	0.11	< 0.001***
Constant	21.28	3.39	< 0.001***	-8.61	4.47	0.057
	R^2 = 0.078 $F(3, 109) = 3.05$, $p = 0.031$*			R^2 = 0.24 $F(4, 108) = 8.71$, $p < .001$***		

			95% Confidence Interval	
Indirect effect	*B*	*SE*	Lower limit	Upper limit
Total indirect effect	0.95	0.49	0.14	2.06

Note. * $p < .05$, ** $p < .01$, ***$p < 0.001$

Table 5. *Model Summary of the Indirect Effect of Discrimination at Work on PTSD symptom Severity*

	Outcome					
	M – Peritraumatic Dissociation			*Y – PTSD symptom severity*		
Predictor	*B*	*SE B*	*p*	*B*	*SE B*	*p*
Discrimination at Work	1.01	0.87	0.25	0.54	0.98	0.58
Peritraumatic Dissociation	-	-	-	0.51	0.11	< 0.001*
Constant	23.28	3.36	< 0.001*	-7.67	4.51	0.09
	R^2 = 0.040 $F(3, 109) = 1.51$, $p = 0.22$			R^2 = 0.23 $F(4, 108) = 8.08$, $p < .001$*		

			95% Confidence Interval	
Indirect effect	*B*	*SE*	Lower limit	Upper limit
Total indirect effect	0.52	0.49	-0.34	1.57

Note. * $p < 0.001$

Table 6. *Model Summary of the Indirect Effect of Stigmatization on PTSD symptom Severity*

	Outcome					
	M – Peritraumatic Dissociation			*Y – PTSD symptom severity*		
Predictor	*B*	*SE B*	*p*	*B*	*SE B*	*p*
Stigmatization	2.64	1.00	0.009**	0.51	1.18	0.66
Peritraumatic Dissociation	-	-	-	0.451	0.11	< 0.001***
Constant	20.98	3.38	< 0.001***	-7/54	4.50	0.097
	R^2 = 0.087 $F(3, 109) = 3.45$, $p = 0.019$*			R^2 = 0.23 $F(4, 108) = 8.94$, $p < .001$***		

			95% Confidence Interval	
Indirect effect	*B*	*SE*	Lower limit	Upper limit
Total indirect effect	1.34	0.65	0.09	2.65

Note. * $p < .05$, ** $p < .01$, ***$p < 0.001$

Table 7. *Model Summary of the Indirect Effect of Threat/Aggression on PTSD symptom Severity*

	Outcome					
	M – Peritraumatic Dissociation			*Y – PTSD symptom severity*		
Predictor	*B*	*SE B*	*p*	*B*	*SE B*	*p*
Threat/Aggression	2.28	0.89	0.01**	1.93	1.04	0.07
Peritraumatic Dissociation	-	-	-	0.47	0.11	< 0.001***
Constant	21.51	3.32	< 0.001***	-8.57	4.41	0.05*
	R^2 = 0.083 $F(3, 109) = 3.28$, $p = 0.024$*			R^2 = 0.25 $F(4, 108) = 9.11$, $p < .001$***		

			95% Confidence Interval	
Indirect effect	*B*	*SE*	Lower limit	Upper limit
Total indirect effect	1.07	0.51	0.13	2.11

Note. * $p < .05$, ** $p < .01$, ***$p < 0.001$

Table 8. *Model Summary of the Indirect Effect of Unfair Policing on PTSD symptom Severity*

	Outcome					
	M – Peritraumatic Dissociation			*Y – PTSD symptom severity*		
Predictor	*B*	*SE B*	*p*	*B*	*SE B*	*p*
Unfair Policing	1.58	0.60	0.01**	-0.69	0.71	0.33
Peritraumatic Dissociation	-	-	-	0.55	0.11	< 0.001***
Constant	21.57	3.30	< 0.001***	-6.44	4.44	0.15
	R^2 = 0.085 $F(3, 109) = 3.39$, $p = 0.02$*			R^2 = 0.23 $F(4, 108) = 8.29$, $p < .001$***		

			95% Confidence Interval	
Indirect effect	*B*	*SE*	Lower limit	Upper limit
Total indirect effect	0.86	0.39	0.18	1.71

Note. * $p < .05$, ** $p < .01$, ***$p < 0.001$

Moderated mediation

The secondary aim was to examine the moderating role of gender in the mediational model, after examining the mechanistic role of peritraumatic dissociation. Thus, separate moderated mediations (Hayes et al., 2017) were conducted to examine the moderating role of gender with each subscale of racial discrimination. Using PROCESS model 8, the role of gender in moderating the link between the direct *a* path and the direct *c* path was explored.

Gender did not significantly moderate the mediational relationship between total racial discrimination, peritraumatic dissociation, and PTSD symptom severity (*B*= -0.71*,* CI [-3.26, 1.12], *SE*= 1.11). Once again, to ensure that there were no specific differences with subscales, separate moderated mediation analyses were conducted. Gender was not a significant moderator for the mediational relationship of the Exclusion subscale, (*B*= 1.27*,* CI [-2.25, 0.97], *SE*= 1.27), the Discrimination at Work subscale (*B*= -0.88*,* CI [-2.80, 0.84], *SE*= 0.91), the Stigmatization subscale (*B*= -0.41*,* CI [-3.51, 1.60], *SE*= 1.29), the Threat/Aggression (*B*= -0.02*,* CI [-2.06, 1.68], *SE*= 0.94), or Unfair Policing, (*B*= -1.02*,* CI [-2.74, 0.40], *SE*= 0.79). In sum, gender was not a significant moderator of any of the mediational models. Results can be found in Tables 9a—9f.

Table 9a. ***Moderated-mediational*** *Analysis for Total Racial Discrimination, Peritraumatic Dissociation, and PTSD Symptom Severity*

	B	*SE B*	t
Mediator— Peritraumatic Dissociation			
Predictor: Total Discrimination	3.71	1.55	2.39*
Moderator: Gender	3.70	4.40	2.39
Interaction: Discrimination x Gender	-1.48	2.00	0.84
Outcome – PTSD Symptoms			
Predictor: Total Discrimination	1.02	1.77	0.58
Moderator: Gender	2.62	4.91	0.53
Mediator: Peritraumatic Dissociation	0.49	0.11	4.50**
Interaction: Discrimination x Gender	1.29	2.24	0.58
	Conditional ind. effect	Boot *SE*	95% CI
Moderator – Gender			
Males	1.78	0.93	0.30—3.97
Females	1.07	0.82	-0.63—2.59
	Boot Ind. Effect	Boot *SE*	95% CI
Index of Moderated Mediation	-0.71	1.11	-3.26–1.12

Note. * $p < .05$, ** $p < 0.001$

Table 9b. ***Moderated-mediational*** *Analysis for Exclusion, Peritraumatic Dissociation, and PTSD Symptom Severity*

	B	*SE B*	t
Mediator— Peritraumatic Dissociation			
Predictor: Exclusion	2.65	1.30	2.03*
Moderator: Gender	2.70	4.09	0.66
Interaction: Exclusion x Gender	-1.06	1.60	-0.66
Outcome – PTSD Symptoms			
Predictor: Exclusion	1.04	1.47	0.71
Moderator: Gender	3.50	4.52	0.78
Mediator: Peritraumatic Dissociation	0.48	0.11	4.54**
Interaction: Exclusion x Gender	0.62	1.77	0.35
	Conditional ind. effect	Boot *SE*	95% CI
Moderator – Gender			
Males	1.28	0.72	0.11—2.94
Females	0.76	0.57	-0.24—2.02
	Boot Ind. Effect	Boot *SE*	95% CI
Index of Moderated Mediation	-0.51	0.80	-2.25–0.97

Note. * $p < .05$, ** $p < 0.001$

Table 9c. ***Moderated-mediational*** *Analysis for Discrimination at Work, Peritraumatic Dissociation, and PTSD Symptom Severity*

	B	*SE B*	t
Mediator— Peritraumatic Dissociation			
Predictor: Discrimination at work	2.06	1.35	1.53
Moderator: Gender	4.10	4.15	0.99
Interaction: Discrimination x Gender	-1.72	1.69	-1.02
Outcome – PTSD Symptoms			
Predictor: Discrimination at work	0.38	1.49	0.26
Moderator: Gender	3.74	4.57	0.82
Mediator: Peritraumatic Dissociation	0.511	0.11	4.85*
Interaction: Discrimination x Gender	0.54	1.86	0.29
	Conditional ind. effect	Boot SE	95% CI
Moderator – Gender			
Males	1.05	0.72	-0.25—2.59
Females	0.17	0.63	-1.03—1.48
	Boot Ind. Effect	Boot SE	95% CI
Index of Moderated Mediation	-0.88	0.91	-2.80–0.83

Note. *$p < 0.001$

Table 9d. ***Moderated-mediational*** *Analysis for Stigmatization, Peritraumatic Dissociation, and PTSD Symptom Severity*

	B	*SE B*	t
Mediator— Peritraumatic Dissociation			
Predictor: Total Discrimination	3.14	1.40	4.56*
Moderator: Gender	2.42	3.78	0.64
Interaction: Discrimination x Gender	-0.84	2.04	-0.42
Outcome – PTSD Symptoms			
Predictor: Total Discrimination	0.59	1.60	0.37
Moderator: Gender	3.50	4.21	0.83
Mediator: Peritraumatic Dissociation	0.49	0.11	4.59**
Interaction: Discrimination x Gender	0.99	2.28	0.43
	Conditional ind. effect	Boot SE	95% CI
Moderator – Gender			
Males	1.55	0.88	0.09—3.51
Females	1.13	1.01	-1.30—2.67
	Boot Ind. Effect	Boot SE	95% CI
Index of Moderated Mediation	-0.42	1.28	-3.53–1.61

Note. *$p < .05$, **$p < 0.001$

Table 9e. ***Moderated-mediational*** *Analysis for Threat/Aggression, Peritraumatic Dissociation, and PTSD Symptom Severity*

	B	*SE B*	t
Mediator— Peritraumatic Dissociation			
Predictor: Total Discrimination	2.32	1.42	1.64
Moderator: Gender	0.56	3.60	0.16
Interaction: Discrimination x Gender	-0.048	1.79	-0.027
Outcome – PTSD Symptoms			
Predictor: Total Discrimination	1.78	1.57	1.13
Moderator: Gender	4.12	3.93	1.05
Mediator: Peritraumatic Dissociation	0.46	0.11	1.63*
Interaction: Discrimination x Gender	1.29	2.24	0.58
	Conditional ind. effect	Boot SE	95% CI
Moderator – Gender			
Males	1.08	0.79	-0.32—2.82
Females	1.06	0.62	-0.21—2.21
	Boot Ind. Effect	Boot SE	95% CI
Index of Moderated Mediation	-0.02	0.94	-2.08–1.72

Note. *$p < 0.0001$

Table 9f. ***Moderated-mediational*** *Analysis for Unfair Policing, Peritraumatic Dissociation, and PTSD Symptom Severity*

	B	*SE B*	t
Mediator— Peritraumatic Dissociation			
Predictor: Unfair Policing	2.71	0.88	3.08*
Moderator: Gender	6.38	3.52	1.81
Interaction: Unfair Policing x Gender	-1.87	1.24	-1.51
Outcome – PTSD Symptoms			
Predictor: Unfair Policing	1.02	1.77	0.58
Moderator: Gender	2.62	4.91	0.53
Mediator: Peritraumatic Dissociation	0.54	0.11	5.00*
Interaction: Unfair Policing x Gender	1.85	1.40	1.31
	Conditional ind. effect	Boot SE	95% CI
Moderator – Gender			
Males	1.47	0.58	0.47—2.71
Females	0.46	0.59	-0.69—1.67
	Boot Ind. Effect	Boot SE	95% CI
Index of Moderated Mediation	-1.02	0.79	**-2.70–0.40**

Note. *$p < 0.0001$

Discussion

The correlational findings of this current longitudinal study demonstrate that experiences of racial discrimination are significantly associated with PTSD symptoms, which corroborates the findings of previous research (Carter et al., 2017; Roberts et al., 2011; Sibrava et al., 2019). Importantly, this shows that experiences of racial discrimination are related to an increased risk of PTSD following a traumatic injury, which replicates the findings of other empirical work (Bird et al., 2021). Like previous research, the current findings also reiterate the significant association between peritraumatic dissociation and PTSD, suggesting that dissociation during a traumatic event continues to be a robust risk factor of PTSD (Marmar et al., 1997). The novel findings of this study include the significant relationship between racial discrimination and peritraumatic dissociation. Past research has yielded mixed results regarding racial

discrimination and dissociation (Pole et al., 2005; Polanco-Romano et al., 2016; Zatzick et al., 1994), and so this study contributes to the literature by demonstrating a positive relationship between the variables.

While previous research has found that racial discrimination predicts longitudinal PTSD symptoms (Bird et al., 2021), few studies have examined possible underlying mechanisms of this relationship. The novel findings of this study suggest that peritraumatic dissociation significantly mediates the relationship between racial discrimination and PTSD symptom severity, after controlling for age and lifetime trauma exposure (using the Life Events Checklist; LEC; Gray et al., 2004). These results suggest that experiences of discrimination increase risk for peritraumatic dissociation, which is a consistent predictor of PTSD symptomatology. Thus, racial discrimination places people at greater risk developing PTSD symptoms after a traumatic event, with peritraumatic dissociation as a mechanism to explain this relationship.

Racial Discrimination and Peritraumatic Dissociation

As it stands, these results demonstrate that Black Americans who experience racial discrimination are at increased risk for dissociating during a traumatic event, and consequently, developing PTSD symptoms. In the acute aftermath of a traumatic event, peritraumatic dissociation may be initially protective because it allows survivors to separate themselves from their painful, life-threatening, and fearful reality (Punamäki et al., 2005). However, since important neurobiological, somatic, and affective reactions are disrupted during peritraumatic dissociation, the long-term impact of dissociation increases risk of PTSD symptoms (Mattos et al., 2016; Thompson et al., 2017).

Similarly, experiences of racial discrimination create a reality for Black Americans that is painful, life-threatening, and fearful, and thus there has been a call to conceptualize racial

discrimination as a chronic traumatic stressor that results in posttraumatic symptoms as defined by *DSM-5* criteria (Abdullah et al., 2021; American Psychiatric Association; Carter, 2007). As a result of systemic and pervasive injustice, Black Americans are faced with frequent experiences of racial discrimination at many levels (e.g., personal and institutional; D. Williams et al., 1999). Thus, many Black Americans may be forced to detach from their environment and engage in avoidance and emotional numbing in order to cope with frequent race-based stress, as many individuals do in the face of other traumatic events (Polanco-Roman et al., 2016). Moreover, the use of such strategies may also be protecting Black Americans from harm that could be elicited from actively responding to certain types of discrimination (e.g., threat or unfair policing; Polanco-Roman et al., 2016). As a result of repeated racial discrimination, many Black Americans may be forced to frequently rely on such reactions that decrease one's ability to process stressful events effectively and actively. Thus, this may be further compounded when they experience other traumatic events.

In the current study, experiences of racial discrimination increased risk of peritraumatic dissociation during a separate traumatic event (e.g., a motor vehicle crash). Therefore, it seems that being forced to detach from one's reality often due to repeated traumatic stress (e.g., racial discrimination) leaves individuals more vulnerable to experience the similar, and complex, processes of peritraumatic dissociation (emotional numbing, depersonalization, derealization) in response to other traumas (Lensvelt-Mulders et al., 2008; Polanco-Roman et al., 2016; Thompson, Jun & Sloan, 2018). In sum, these results emphasize that racial discrimination is a traumatic stressor that increases risk of peritraumatic dissociation in the face of other traumatic events, and later, PTSD.

As the supplementary mediation analyses showed, the relationship between experiences of racial discrimination and PTSD is not uniquely driven by a specific type of racial discrimination. Rather, as previous research has shown, experiences of racial discrimination longitudinally predict an increased risk of PTSD (Bird et al., 2021; Sibrava et al., 2019). However, few studies have examined potential mechanisms that explain the link between racial discrimination and PTSD. Thus, the novel results of this current study find that experiences of racial discrimination place Black Americans at an increased risk of peritraumatic dissociation, and thus a greater risk for severe PTSD symptoms. These findings also contribute to an understanding of the elevated risk of PTSD for Black Americans and emphasize the traumatic nature of racial discrimination (Roberts et al., 2011).

The secondary aim of this current study was to examine the moderating role of gender in this mediational model. The data used in this current study allowed for the examination of gender differences relating to different types of racial discrimination, since previous research has found that Black men and women's lived experiences with discrimination differ (Silverstein et al., 2022; Jones, Cross & DeFour, 2007). Specifically, the *t*-tests found that Black men reported significantly more experiences of stigmatization and unfair policing. Moreover, there was marginal significance related to PTSD symptom severity, with women reporting greater PTSD symptom severity, as previous research has found (Valentine et al., 2019). There was no gender difference in experiences peritraumatic dissociation, which corroborates the findings of some previous empirical work (Punamäki et al., 2005; Demarble et al., 2020), although other studies have found a gender difference (Fullerton et al., 2001).

In order to examine this mediational model with an intersectional lens, a moderated mediation (PROCESS model 8; Hayes et al., 2017) was conducted as part of the secondary aim.

There has not been sufficient previous evidence to predict the directionality of the effect, so the aim of the study was to explore how gender would affect the mediation being proposed. However, the results did not demonstrate that gender significantly moderated the mediation, suggesting that the indirect effect upheld for both Black men and women in similar ways.

Overall, these results are significant because they provide an understanding of a mechanism explaining the relationship between racial discrimination and PTSD symptoms in the aftermath of a traumatic event. These findings have an important role in targeted prevention and intervention. Primarily, these findings can inform prevention efforts. Experiences of racial discrimination increase vulnerability to peritraumatic dissociation, a consistent predictor of PTSD. Thus, at a broad level, preventative measures include the need to continue dismantling systems of oppression that are forcing Black Americans to detach from their realities and leaving them at an increased risk of dissociation and PTSD. Additional preventative measures can create safe, supportive systems at a community level that provide Black Americans with resources to actively process experiences of discrimination with other community members. This may help reduce the reliance on avoidance strategies that increase risk for dissociation during race-based and non-race based traumatic events (Polanco-Roman et al., 2016). Through safe, supportive spaces, individuals can learn to effectively process stressful and traumatic events, and thus, decrease the dependence on strategies that increase risk for dissociation (Mekawi et al., 2021).

Moreover, these findings can also be generalized to interventions that can emphasize active coping strategies after a traumatic event in order to reduce the effect of dissociation. Importantly, interventions for PTSD should consider clients' lived experiences, as racial discrimination continues to impact the recovery of trauma (Bird et al., 2021; Ruef et al., 2000). Clinicians should be actively aware of the effect of racial discrimination—which in itself is a

chronic, traumatic stressor—on the healing of a separate, traumatic event. With this understanding, interventions can be tailored to support individuals in the aftermath of a traumatic event as it intersects with the pervasive effects of racial discrimination.

A few notable strengths of this study and its findings include its longitudinal design that allowed for an exploration of a mediation model. With this design, it was possible to examine how experiences of racial discrimination prior to the traumatic injury increased risk for peritraumatic dissociation during the injury, and the subsequent effect on PTSD symptoms several months later. Moreover, the results of the mediation model upheld even when covarying for lifetime trauma exposure. This isolates the effect of racial discrimination as a traumatic stressor and emphasizes its impact on PTSD symptomatology, via peritraumatic dissociation. Lastly, the examination of individual PEDQ subscales allowed for an understanding of the effect of racial discrimination generally, rather than emphasizing that specific types of discrimination drive the negative mental health outcomes.

While important, this study is not without its limitations. Primarily, the vast majority of the sample (72.6%) was recruited from the Emergency Department after a motor vehicle crash. As a result, these findings may not be generalizable to experiences related to recovery from other traumatic events. In fact, findings related to peritraumatic dissociation may be moderated by type of trauma, as past research has found (Hetzel-Riggin & Roby et al., 2013). Thus, future research should broaden the sample to include survivors of other forms of trauma and inform respective interventions.

In addition to the mechanism of injury, another limitation of this study is geographic location. All participants were recruited from a hospital in Milwaukee, a segregated, urban environment, which can impact experiences of racial discrimination. Moreover, the lived

experiences of Black Americans are not homogenous and may differ regionally. These experiences of racial discrimination may also not be applicable to other marginalized groups. Thus, the generalizability of these results may be limited by location, which calls for the need of replication in other geographical regions and with other minoritized groups.

Future studies should explore the neurobiological underpinnings of racial discrimination, peritraumatic dissociation and PTSD. Follow-up research can explore if the mechanistic role of peritraumatic dissociation is driven by its neurobiological relations with the effect of racial discrimination on the brain.

Research should also continue this line of work with other minoritized individuals to capture the widespread effect of racial discrimination on many aspects of healing for people from various cultural backgrounds. In doing so, it will be important to recognize the role of systemic injustice, and not resort to individual blame of the already burdened and marginalized communities. Moreover, studies should continue to implement an intersectional lens while exploring complex lived experiences and avoid diluting individuals to one, single, salient identity.

References

Abdullah, T., Graham-LoPresti, J. R., Tahirkheli, N. N., Hughley, S. M., & Watson, L. T. J. (2021). Microaggressions and posttraumatic stress disorder symptom scores among Black Americans: Exploring the link. *Traumatology*, *27*(3), 244–253. https://doi-org.ezproxy.lib.uwm.edu/10.1037/trm0000259

Alessi, E. J., Martin, J. I., Gyamerah, A., & Meyer, I. H. (2013). Prejudice events and traumatic stress among heterosexuals, lesbians, gay men, and bisexuals. *Journal of Aggression, Maltreatment & Trauma, 22*, 510– 526. http://dx.doi.org/10.1080/10926771.2013.785455

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed).* American Psychiatric Publishing.

Assari, S., Miller, R. J., Taylor, R. J., Mouzon, D., Keith, V., & Chatters, L. M. (2018). Discrimination Fully Mediates the Effects of Incarceration History on Depressive Symptoms and Psychological Distress Among African American Men. *Journal of Racial and Ethnic Health Disparities*, *5*(2), 243–252. https://doi.org/10.1007/s40615-017-0364-y

Assari, S., Moazen-Zadeh, E., Caldwell, C. H., & Zimmerman, M. A. (2017). Racial discrimination during adolescence predicts mental health deterioration in adulthood: Gender differences among Blacks. *Frontiers in Public Health*, *5*, 104. https://doi.org/10.3389/fpubh.2017.00104

Benjet, C., Bromet, E., Karam, E. G., Kessler, R. C., McLaughlin, K. A., Ruscio, A. M., Shahly, V., Stein, D. J., Petukhova, M., Hill, E., Alonso, J., Atwoli, L., Bunting, B., Bruffaerts, R., Caldas-de-Almeida, J. M., de Girolamo, G., Florescu, S., Gureje, O., Huang, Y., Lepine, J. P., … Koenen, K. C. (2016). The epidemiology of traumatic event exposure

worldwide: Results from the World Mental Health Survey Consortium. *Psychological medicine, 46(2),* 327–343. https://doi.org/10.1017/S0033291715001981

Bird, C. M., Webb, E. K., Schramm, A. T., Torres, L., Larson, C., & deRoon, C. T. A. (2021). Racial discrimination is associated with acute posttraumatic stress symptoms and predicts future posttraumatic stress disorder symptom severity in trauma-exposed black adults in the United States. *Journal of Traumatic Stress*. https://doi-org.ezproxy.lib.uwm.edu/10.1002/jts.22670

Breh, D. C., & Seidler, G. H. (2007). Is peritraumatic dissociation a risk factor for PTSD? *Journal of Trauma & Dissociation, 8*(1), 53–69. https://doi.org/10.1300/J229v08n01_04

Bremner J. D. (2006). Traumatic stress: effects on the brain. *Dialogues in Clinical Neuroscience, 8(4),* 445–461. https://doi.org/10.31887/DCNS.2006.8.4/jbremner

Breslau N., Davis G.C., Andreski, P., & Peterson E., (1991). Traumatic events and posttraumatic stress disorder in an urban population of young adults. *Archives of General Psychiatry 48*, 216–222.

Breslau, N., Davis, G. C., Andreski, P., Peterson, E. L., & Schultz, L. R. (1997). Sex differences in posttraumatic stress disorder. *Archives of General Psychiatry*, *54*(11), 1044–1048. https://doi.org/10.1001/archpsyc.1997.01830230082012

Breslau, N., Kessler, R. C., Chilcoat, H. D., Schultz, L. R., Davis, G. C., & Andreski, P. (1998). Trauma and posttraumatic stress disorder in the community: the 1996 Detroit Area survey of trauma. *Archives of General Psychiatry*, *55*(7), 626–632. https://doi.org/10.1001/archpsyc.55.7.626

Broman, C. L., Mavaddat, R., & Hsu, S. (2000). The experience and consequences of perceived racial discrimination: A study of African Americans. *Journal of Black Psychology*, 26(2), 165–180. https://doi-org.ezproxy.lib.uwm.edu/10.1177/0095798400026002003

Brondolo, E., Kelly, K. P., Coakley, V., Gordon, T., Thompson, S., Levy, E., Cassells, A., Tobin, J. N., Sweeney, M., & Contrada, R. J. (2005). The Perceived Ethnic Discrimination Questionnaire: Development and preliminary validation of a community version. *Journal of Applied Social Psychology*, *35*(2), 335–365. https://doi.org/10.1111/j.1559-1816.2005.tb02124.x

Carter, R. T. (2007). Racism and Psychological and Emotional Injury: Recognizing and assessing race-based traumatic stress. *The Counseling Psychologist*, *35*(1), 13–105. https://doi-org.ezproxy.lib.uwm.edu/10.1177/0011000006292033

Carter, R. T., Kirkinis, K., & Johnson, V. E. (2020). Relationships between trauma symptoms and race-based traumatic stress. *Traumatology*, *26*(1), 11– 18. https://doi.org/10.1037/trm0000217

Carter, R. T., Lau, M. Y., Johnson, V., & Kirkinis, K. (2017). Racial discrimination and health outcomes among racial/ethnic minorities: A meta-analytic review. *Journal of Multicultural Counseling and Development*, *45*(4), 232– 259. https://doi.org/10.1002/jmcd.12076

Choi, N. G., Hegel, M. T., Sirrianni, L., Marinucci, M. L., & Bruce, M. L. (2012). Passive coping response to depressive symptoms among low-income homebound older adults: does it affect depression severity and treatment outcome? *Behaviour research and therapy, 50(*11), 668–674. https://doi.org/10.1016/j.brat.2012.07.003

Collins, P. H. (1991). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment*. New York: Routledge.

Demarble, J. B., Fortin, C., D'Antono, B., & Guay, S. (2020). Gender differences in the prediction of acute stress disorder from peritraumatic dissociation and distress among victims of violent crimes. *Journal of Interpersonal Violence*, *35(5–6),* 1229–1250. https://doi-org.ezproxy.lib.uwm.edu/10.1177/0886260517693000

Essed, P. (1991). *Understanding everyday racism: An interdisciplinary theory*. Newbury Park, CA: Sage.

Fullerton, C. S., Ursano, R. J., Epstein, R. S., Crowley, B., Vance, K., Kao, T. C., Dougall, A., & Baum, A. (2001). Gender differences in posttraumatic stress disorder after motor vehicle accidents. *The American Journal of Psychiatry*, *158*(9), 1486–1491. https://doi.org/10.1176/appi.ajp.158.9.1486

Gray, M. J., Litz, B. T., Hsu, J. L., & Lombardo, T. W. (2004). Psychometric properties of the Life Events Checklist. Assessment, 11(4), 330–341. https://doi.org/10.1177/1073191104269954

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach.* Guilford Press.

Hayes, A. F., & Rockwood, N. J. (2017). Regression-based statistical mediation and moderation analysis in clinical research: Observations, recommendations, and implementation. *Behaviour Research and Therapy*, *98*, 39–57. https://doi.org/10.1016/j.brat.2016.11.001

Hirsch, C. E., & Cha, Y. (2008). Understanding employment discrimination: A multilevel approach. *Sociology Compass, 2*(6), 1989–2007. doi:10.1111/j.1751-9020.2008.00157.x

Holmes, S. C., Facemire, V. C., & DaFonseca, A. M. (2016). Expanding Criterion A for posttraumatic stress disorder: Considering the deleterious impact of oppression. *Traumatology*, *22*(4), 314–321. https://doi.org/10 .1037/trm0000104

Irish, L. A., Fischer, B., Fallon, W., Spoonster, E., Sledjeski, E. M., & Delahanty, D. L. (2011). Gender differences in PTSD symptoms: An exploration of peritraumatic mechanisms. *Journal of Anxiety Disorders, 25*(2), 209–216. https://doi-org.ezproxy.lib.uwm.edu/10.1016/j.janxdis.2010.09.004

Jones, H. L., Cross, W. E., Jr., & DeFour, D. C. (2007). Race-related stress, racial identity attitudes, and mental health among Black women. *Journal of Black Psychology, 33(2),* 208–231. https://doi-org.ezproxy.lib.uwm.edu/10.1177/0095798407299517

Hetzel-Riggin, M. D., & Roby, R. P. (2013). Trauma type and gender effects on PTSD, general distress, and peritraumatic dissociation. *Journal of Loss and Trauma*, *18(1*), 41–53. https://doi.org/10.1080/15325024.2012.679119

Kessler, R. C., Aguilar-Gaxiola, S., Alonso, J., Benjet, C., Bromet, E. J., Cardoso, G., Degenhardt, L., de Girolamo, G., Dinolova, R. V., Ferry, F., Florescu, S., Gureje, O., Haro, J. M., Huang, Y., Karam, E. G., Kawakami, N., Lee, S., Lepine, J. P., Levinson, D., Navarro-Mateu, F., … Koenen, K. C. (2017). Trauma and PTSD in the WHO World Mental Health Surveys. *European Journal of Psychotraumatology*, *8*(5), 1353383. https://doi.org/10.1080/20008198.2017.1353383

Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the National Comorbidity Survey. *Archives of General Psychiatry, 52*(12), 1048–1060. https://doi.org/10.1001/archpsyc.1995.03950240066012

Kilpatrick, D. G., Resnick, H. S., Milanak, M. E., Miller, M. W., Keyes, K. M., & Friedman, M. J. (2013). National estimates of exposure to traumatic events and PTSD prevalence using *DSM-IV* and *DSM-5* criteria. *Journal of Traumatic Stress*, *26*(5), 537–547. https://doi.org/10.1002/jts.21848

Koopman, C., Classen, C., & Spiegel, D. A. (1994). Predictors of posttraumatic stress symptoms among survivors of the Oakland/Berkeley, Calif., firestorm. *The American Journal of Psychiatry, 151*(6), 888–894. https://doi.org/10.1176/ajp.151.6.888

Lee, R. T., Perez, A. D., Boykin, C. M., & Mendoza-Denton, R. (2019). On the prevalence of racial discrimination in the United States. *PloS one*, *14*(1), e0210698. https://doi.org/10.1371/journal.pone.0210698

Lensvelt-Mulders, G., van der Hart, O., van Ochten, J. M., van Son, M. J. M., Steele, K., & Breeman, L. (2008). Relations among peritraumatic dissociation and posttraumatic stress: A meta-analysis. *Clinical Psychology Review, 28*, 1138–1151. doi:10.1016/j.cpr.2008.03.006

Lilly, M. M., Valdez, C. E. (2012). Interpersonal trauma and PTSD: The roles of gender and a lifespan perspective in predicting risk. *Psychological Trauma-Theory Research Practice and Policy, 4,* 140-144.

Marmar, C. R., Weiss, D. S., Schlenger, W. E., Fairbank, J. A., Jordan, B. K., Kulka, R. A., & Hough, R. L. (1994). Peritraumatic dissociation and posttraumatic stress in male Vietnam theater veterans. *The American Journal of Psychiatry, 151*(6), 902–907. https://doi.org/10.1176/ajp.151.6.902

Marmar, C. R., Weiss, D. S., Metzler, T. J., & Delucchi, K. (1996). Characteristics of emergency services personnel related to peritraumatic dissociation during critical incident exposure. *The American Journal of Psychiatry, 153*(Suppl), 94–102.

Marmar, C. R., Weiss, D. S., & Metzler, T. J. (1997). The Peritraumatic Dissociative Experiences Questionnaire. In J. P. Wilson & T. M. Keane (Eds.), *Assessing psychological trauma and PTSD* (pp. 412–428). The Guilford Press.

Mattos, P. F., Pedrini, J. A., Fiks, J. P., & de Mello, M. F. (2016). The concept of peritraumatic dissociation: A qualitative approach. *Qualitative Health Research, 26*(7), 1005–1014. https://doi.org/10.1177/1049732315610521

Mekawi, Y., Carter, S., Packard, G., Wallace, S., Michopoulos, V., & Powers, A. (2021). When (passive) acceptance hurts: Race-based coping moderates the association between racial discrimination and mental health outcomes among Black Americans. Psychological Trauma: Theory, Research, Practice, and Policy. https://doi.org/10.1037/tra0001077

Nobakht, H. N., Ojagh, F. S., & Dale, K. Y. (2019). Risk factors of post-traumatic stress among survivors of the 2017 Iran earthquake: The importance of peritraumatic dissociation. *Psychiatry Research, 271,* 702–707. https://doi org.ezproxy.lib.uwm.edu/10.1016/j.psychres.2018.12.057

Otis, C., Marchand, A., & Courtois, F. (2012). Peritraumatic dissociation as a mediator of peritraumatic distress and PTSD: A retrospective, cross-sectional study. *Journal of Trauma & Dissociation, 13*(4), 469–477. https://doi-org.ezproxy.lib.uwm.edu/10.1080/15299732.2012.670870

Ozer, E. J., Best, S. R., Lipsey, T. L., & Weiss, D. S. (2003). Predictors of posttraumatic stress disorder and symptoms in adults: a meta-analysis. *Psychological bulletin*, *129*(1), 52–73. https://doi.org/10.1037/0033-2909.129.1.52

Pager, D., & Shepherd, H. (2008). The Sociology of discrimination: Racial discrimination in employment, housing, credit, and consumer markets. *Annual Review of Sociology*, *34*, 181–209. https://doi.org/10.1146/annurev.soc.33.040406.131740

Pieterse, A. L., Carter, R. T., Evans, S. A., & Walter, R. A. (2010). An exploratory examination of the associations among racial and ethnic discrimination, racial climate, and trauma-related symptoms in a college student population. *Journal of Counseling Psychology*, *57*(3), 255–263. https://doi-org.ezproxy.lib.uwm.edu/10.1037/a0020040

Pieterse, A. L., Todd, N. R., Neville, H. A., & Carter, R. T. (2012). Perceived racism and mental health among Black American adults: A meta-analytic review. *Journal of Counseling Psychology, 59*(1), 1–9. https://doi.org/10.1037/a0026208

Polanco-Roman, L., Danies, A., & Anglin, D. M. (2016). Racial discrimination as race-based trauma, coping strategies, and dissociative symptoms among emerging adults. *Psychological Trauma: Theory, Research, Practice, and Policy, 8*(5), 609–617. https://doi.org/10.1037/tra0000125

Pole, N., Best, S. R., Metzler, T., & Marmar, C. R. (2005). Why are Hispanics at greater risk for PTSD? *Cultural Diversity and Ethnic Minority Psychology, 11*(2), 144–161. https://doi-org.ezproxy.lib.uwm.edu/10.1037/1099-9809.11.2.144

Punamäki, R.-L., Komproe, I. H., Qouta, S., Elmasri, M., & de Jong, J. V. M. (2005). The role of peritraumatic dissociation and gender in the association between trauma and mental

health in a Palestinian community sample. *The American Journal of Psychiatry*, *162(3),* 545–551. https://doi-org.ezproxy.lib.uwm.edu/10.1176/appi.ajp.162.3.545

Roberts, A. L., Gilman, S. E., Breslau, J., Breslau, N., & Koenen, K. C. (2011). Race/ethnic differences in exposure to traumatic events, development of post-traumatic stress disorder, and treatment-seeking for post-traumatic stress disorder in the United States. *Psychological Medicine, 41*(1), 71–83. https://doi.org/10.1017/S0033291710000401

Rothbaum, B. O., Kearns, M. C., Price, M., Malcoun, E., Davis, M., Ressler, K. J., Lang, D., & Houry, D. (2012). Early intervention may prevent the development of PTSD: A randomized pilot civilian study with modified prolonged exposure. *Biological Psychiatry*, *72*(11), 957–963. https://doi.org/10.1016/ j.biopsych.2012.06.002

Ruef, A. M., Litz, B. T., & Schlenger, W. E. (2000). Hispanic ethnicity and risk for combat-related posttraumatic stress disorder. *Cultural Diversity and Ethnic Minority Psychology, 6,* 235–251.

Sibrava, N. J., Bjornsson, A. S., Pérez Benítez, A. C. I., Moitra, E., Weisberg, R. B., & Keller, M. B. (2019). Posttraumatic stress disorder in African American and Latinx adults: Clinical course and the role of racial and ethnic discrimination. *American Psychologist, 74,* 101–116. http://dx.doi.org/10.1037/amp0000339

Silverstein, M. W., Mekawi, Y., Watson-Singleton, N. N., Shebuski, K., McCullough, M., Powers, A., & Michopoulos, V. (2022). Psychometric properties of the Connor-Davidson Resilience Scale 10 in a community sample of African American adults: Exploring the role of gender. *Traumatology, 28*(2), 211–222. https://doi-org.ezproxy.lib.uwm.edu/10.1037/trm0000316.supp (Supplemental)

Stein, M. B., Walker, J. R., & Forde, D. R. (2000). Gender differences in susceptibility to posttraumatic stress disorder. *Behaviour Research and Therapy*, *38*(6), 619–628. https://doi.org/10.1016/s0005-7967(99)00098-4

Thompson, H. J., Jun, J. J., & Sloan, D. M. (2017). The association between peritraumatic dissociation and PTSD symptoms: The mediating role of negative beliefs about the self. *Journal of Traumatic Stress, 30*(2), 190–194. https://doi-org.ezproxy.lib.uwm.edu/10.1002/jts.22179

Tolin, D. F., & Foa, E. B. (2006). Sex differences in trauma and posttraumatic stress disorder: A quantitative review of 25 years of research. *Psychological Bulletin, 132*(6), 959–992. https://doi.org/10.1037/0033-2909.132.6.959

Torres, L., Driscoll, M. W., & Burrow, A. L. (2010). Racial microaggressions and psychological functioning among highly achieving African Americans: A mixed-methods approach. *Journal of Social and Clinical Psychology*, *29*(10), 1074–1099. https://doi.org/10.1521/jscp.2010.29.10.1074

Ursano, R. J., Fullerton, C. S., Epstein, R. S., Crowley, B., Kao, T. C., Vance, K., Craig, K. J., Dougall, A. L., & Baum, A. (1999). Acute and chronic posttraumatic stress disorder in motor vehicle accident victims. *The American Journal of Psychiatry, 156*(4), 589–595. https://doi.org/10.1176/ajp.156.4.589

Valentine, S. E., Marques, L., Wang, Y., Ahles, E. M., Dixon De Silva, L., & Alegría, M. (2019). Gender differences in exposure to potentially traumatic events and diagnosis of posttraumatic stress disorder (PTSD) by racial and ethnic group. *General Hospital Psychiatry*, *61*, 60–68. https://doi.org/10.1016/j.genhosppsych.2019.10.008

Weathers, F. W., Blake, D. D., Schnurr, P. P., Kaloupek, D. G., Marx, B. P., & Keane, T. M. (2013). *The Clinician-Administered PTSD Scale for DSM-5 (CAPS-5)* [Assessment]. https://www.ptsd.va.gov/professional/assessment/ adult-int/caps.asp

Weathers, F. W., Bovin, M. J., Lee, D. J., Sloan, D. M., Schnurr, P. P., Kaloupek, D. G., Keane, T. M., & Marx, B. P. (2018). The Clinician-Administered PTSD Scale for DSM-5 (CAPS-5): Development and initial psychometric evaluation in military veterans. *Psychological assessment*, *30*(3), 383–395. https://doi.org/10.1037/pas0000486

Zatzick, D. F., Marmar, C. R., Weiss, D. S., & Metzler, T. (1994). Does trauma-linked dissociation vary across ethnic groups? *The Journal of Nervous and Mental Disease*, *182*(10), 576–582. https://doi.org/10.1097/00005053-199410000-00008