# UC Santa Barbara

Volume 4 (2023)

### Title

Racial Differences in Non Pathological Dissociation

## Permalink

https://escholarship.org/uc/item/2rg3862x

#### **Author** Kushnir, Christina N.

# Publication Date 2023-10-01

# Racial Differences in Non Pathological Dissociation

# An Investigation of Exposure to Race-Related Prejudice and Discrimination

Christina N. Kushnir Department of Psychological and Brain Sciences, University of California, Santa Barbara

# Abstract

Past literature examining dissociation beyond white populations is sparse. The few studies that have diversified their sampling report higher rates of dissociative symptomatology amongst black participants as compared to other racial groups. However, much of this research has failed to extend their findings beyond the general conclusion of an observable racial discrepancy in experienced dissociation. The present study incorporates theoretical models of racial traumatic stress and maladaptive dissociative coping in its investigation of perceived exposure to racial abuse as a potential factor for racial differences in dissociation—specifically of the nonpathological variety. Findings reveal a significantly higher rate of nonpathological dissociation amongst black individuals as compared to white individuals. Less statistically conclusive results were obtained regarding the degree of exposure to racial abuse and related dissociative tendencies. Yet, intrinsic limitations within the study were largely due to the difficulty in quantifying the vast complexities of experienced racism, suggesting the tentative importance of the findings. Discussions on racial trauma, dissociative phenomena, and hierarchical networks—as well as suggested directions for future research—are included.

# Introduction

In recent decades, there has been a proliferation of research surrounding the nature of dissociative experiences, with particular concern towards recognizing dissociation as existing on a continuum, as well as with understanding its various etiologies. While the link between dissociation and trauma, especially childhood sexual and physical abuse, has been well-established (Vonderlin et al., 2018), very little literature has examined the relationship between dissociation and racial trauma, specifically. Such limited efforts have occurred despite 1) the growing body of research illuminating the detrimental effects of race-related prejudice on an individual's psychological well-being (Carter, 2007; Jernigan & Daniel, 2011), and 2) an accumulation of studies demonstrating racial discrepancies in experienced dissociation, with African Americans exhibiting higher rates as compared to other racial groups (Douglas, 2009; Dunn et al., 1994). To address this inadequacy in contemporary research, the present study seeks to directly investigate the role of race-related stress and trauma in dissociative tendencies in African American individuals.

### Dissociation

Cardeña and Carlson (2011) provide a strong definition for the general understanding of dissociation: "An experienced loss of information or control over mental processes that, under normal circumstances, are available to conscious awareness, self-attribution, or control, in relation to the individual's age and cognitive development" (p. 251). This understanding can be prescribed to both normative and maladaptive dissociative functioning. On occasion, all individuals experience some form of dissociation in their lives, with the most recognized manifestations including daydreaming, imaginative thinking/fantasy proneness, and absorption (Butler, 2006). In such instances of normative or nonpathological dissociation, the structural integration of mental thoughts, processes, and awareness become dissociated from one another-with subsequent effects on cognitive functioning ranging across a spectrum (Irwin, 1999). However, if a person undergoes severe or repetitive traumatic experiences, dissociation can instead be employed as a mechanism of self-protection, such that the person is able to "detach from the overwhelming fear, pain, and helplessness engendered by the trauma" (Classen et al., 1993, p. 181; Irwin, 1999). Whereas dissociation may be, at first, intended to compartmentalize upsetting sensory information at the moment of experienced trauma, subsequent dissociative experiences as a habitual coping mechanism may lead to the development of dissociative pathology (Irwin, 1999; Levin & Spei, 2004). In its most extreme form, pathological dissociation may be experienced through frequent derealization, dissociative amnesia and fugue state, as well as with the presence of distinct, altered identities (Cardeña, 2008). Additionally, Waller, Carlson, and Putnam (1996) conceptualized pathological dissociation as a typological construct—in short, that individuals with dissociative tendencies can be classified as either pathological or nonpathological through Bayesian membership probability analysis. Utilizing this approach, a handful of studies have demonstrated an estimate 3.4% of the nonclinical general population belonging to the pathological taxon (Dorahy et al., 2003; Maaranen et al., 2005; Waller and Ross, 1997).

### Race-based Traumatic Stress

In examining the potential etiological role of race-related stress in dissociative symptomatology of African Americans, it is imperative to accurately consider their lived experiences within the United States. Despite the influence of progressivism on socio-political reform, black individuals continue to encounter severe adversity and threats to their well-being as a consequence of their blackness—including greater frequency of fatal injuries by police brutality (Cooper, 2015); the black maternal mortality rate being more than two-fold higher the rate for white mothers (Hoyert, 2023); persistent housing discrimination policies (Steil et al., 2018); the exoticization of black bodies in cultural media (Seck, 2013); disproportionate incarceration rates (Mauer & King, 2007); and higher poverty levels and exposure to gun violence (Gradín, 2011; Parham-Payne, 2014), among innumerable other examples. Besides institutional discrimination, day-to-day interpersonal interactions, such as stereotyping, aggression from others, and racial humiliation or shaming have been researched to have measurable psychological effects on individuals (Carter et al., 2013; De Maynard, 2009). Racial trauma, or race-based traumatic stress, manifests as the mental and physical distress resulting from continued exposure to such forms of racial discrimination and systematic violence (Comas-Díaz et al., 2019). Recent literature has found that racial trauma carries similar psychological and physiological effects as that of post-traumatic stress disorder, namely hypervigilance to perceived threats, flashbacks, anger and guilt, and irregular heart palpitations (Carter et al., 2013; Comas-Díaz et al., 2019); these similarities have been recognized and subsequently conceptualized by Carter (2007) as race-based traumatic stress theory. It can be therefore argued that anti-black racism and racial trauma are not merely abstract concepts, but rather, tangible and highly impactful phenomena that are "experienced through the lived bod[ies]" of African Americans—with measurable psychological and physical consequences (De Maynard, 2009, p. 40).

## Dissociative Experiences and Racial Trauma

Given the visceral and subjective nature of perceiving and experiencing racism, a myriad of varying individual responses may be observed within a population—with an unfortunate lack of knowledge in the field regarding how exactly these responses materialize and their efficacy in mitigating race-related stress (Polanco-Roman et al., 2016). More recently, however, scholars have theorized on dissociation as a subconscious coping strategy, elicited by the traumatic stress experienced in racial encounters during waking consciousness (De Maynard, 2009). In the way that individuals may dissociate in the aftermath of known correlates (i.e., childhood abuse) in an attempt to numb the emotional distress they bear, some African Americans may dissociate as a means of detaching from their everyday experiencing of racial prejudice and violence. Supporting literature has found cognitive avoidance to be a common coping mechanism by black individuals in response to race-related stress (Pieterse et al., 2010), with additional research highlighting its correlation to emotional numbing and behavioral inhibition (Polanco-Romano et al., 2016; Thompson, 2006). With limited positive coping strategies available, avoidance and compartmentalization may be invoked as a habitual response form to

persistent and extreme race-related stress—and, consequently, lead to a severe manifestation of dissociation.

## Hierarchical Identity Framework

Although not a primary goal of the current study, one compelling avenue of related research lies in the exploration of dissociative phenomena with regards to identity salience and self-concept—in this case, racial identity. De Maynard (2009), in his work, argued that black individuals maintain self-schemata as structured by their racialized positioning in relation to others and that, to protect the ego in the face of race-related abuse, some may dissociate themselves from their racial self-concept in order to temporarily assume a more socially agreeable identity. Despite there being little experimental research that expands on these arguments, other studies have echoed the broader conceptual models that situate individuals' identities within a hierarchically organized framework, wherein the current most salient identity fluctuates according to situational relevance (Hogg et al., 1995; Kira et al., 2017). It seems plausible, then, that in instances where one's racial identity is threatened in some manner, an individual may subconsciously activate a more neutral identity that excludes their racialized mental self-representations in order to maintain adequate mental and emotional functioning. As continued in his writing, De Maynard (2009) theorized that those individuals who employ continued or habitual "fragmentation of the self-concept" in order to evade negative evaluations of the racialized self-and existential threats to the ego-would be more prone to dissociative experiences and related psychopathology than individuals who have developed positive racial identities (p. 43).

## The Present Study

It is the primary goal of the current study to explore the racialized components of dissociative phenomena in a nonclinical population, with the specific hopes of illuminating the complex psychological effects that experienced and perceived racism have on an individual. Following the conceptualization of dissociation as a continuum up until pathological manifestation—which some literature has considered to be a discrete classification in itself—the present study specifically evaluates nonpathological dissociation rates in black and white participants. By partialling out pathological dissociators through categorical membership analysis, the study strives to capture the range of dissociative symptoms prior to pathology and examine where black dissociative tendencies reside on average. Following the literature, the current study theorizes that race-related stress and experiences with racial abuse may be one factor in the observed greater dissociation rates amongst black individuals. While such experiences may certainly be traumatic enough to lead to pathological development of a dissociative disorder, it may also be the case that everyday racial encounters elicit above-average rates of nonpathological dissociation—such that a greater degree of dissociation is expressed by the individual as a response to continued and normalized race-related distress, however, it is not debilitating enough to be clinically diagnosed. Despite racism being an exceptionally complex and multilayered subject—and therefore incredibly

challenging to reduce to limited measures—the study operationalizes experienced trauma by the degree of exposure: no or indirect exposure, and direct exposure.

Two hypotheses are put forth. First, it is hypothesized that black individuals will experience a greater degree of nonpathological dissociation as compared to white individuals, on average (Hypothesis 1). Second, it is hypothesized that black individuals with perceived direct exposure to racial prejudice and discrimination will experience a greater degree of nonpathological dissociation in comparison to black individuals with perceived *no/indirect* exposure, with white individuals experiencing the lowest degree of nonpathological dissociation out of the three groups, on average (Hypothesis 2).

# Method

## Participants

In accordance with grant allowance and appropriate participant compensation, a set point of 100 individuals took part in the study via CloudResearch Connect (Litman et al., 2017). The program's demographic tools were utilized such that CloudResearch profile users identifying as black or white were specifically targeted to see the study in their dashboard feed. In the demographics portion, eight participants selected a race other than what their profile identified them as. Nine additional participants failed to correctly complete the measure on dissociative experiences. This resulted in a final analysis of 41 black individuals and 42 white individuals (N = 83). There were 49 males and 34 females, and the sample had a mean age of 34.65 years (SD = 8.62). Participants were compensated \$5.00 for their time.

## Materials

#### General Health Questionnaire-12

The General Health Questionnaire-12 (GHQ-12) is a 12-item scale commonly used to screen for symptoms of general psychological distress (Goldberg & Williams, 1988). The measure consists of six regularly-scored questions (E.g., "*Over the past several weeks, have you felt you are playing a useful part in things?*") and six reverse-scored questions (E.g., "*Over the past several weeks, have you been losing confidence in yourself?*"). The answers are formatted on a 4-point Likert scale from 0 (always) to 3 (never). Total scores range from 0-36, with higher scores indicating worse mental health. The GHQ-12 demonstrates both high internal consistency and external validity (del Pilar Sánchez-López & Dresch, 2008; Schrnitz et al., 1999).

#### Dissociative Experiences Checklist-11

The Dissociative Experiences Checklist-II (DES-II) is a 28-item measure that assesses participants' various experiences of dissociation (Carlson & Putnam, 1993). For each statement, participants are instructed to select a percentage from 0-100% that indicates the frequency in which they experience the described occurrence. An example of one statement is: *"Some*"

people have the experience of feeling that other people, objects, and the world around them are not real." Final scores are calculated by converting each percentage response into a number from 0-10, multiplying the summed total by 10, and taking the average. Individuals who score above 30 are deemed fit for clinical interview. The DES-II Taxon is an additional 8-item subset from the original 28 items of the DES-II and is used to measure pathological dissociation (Waller et al., 1996). The DES-II has strong psychometric properties (Carlson & Putnam, 1993; Ross et al., 2002).

#### Traumatic Experiences Checklist

The Traumatic Experiences Checklist (TEC) is a 25-item measure to record potential traumatic experiences that have occurred across the lifetime (Nijenhuis et al., 2002). Age at which each traumatic experience occurred and perceived impact are additionally recorded. The TEC consists of 6 developmental-level subscales: emotional neglect, emotional abuse, physical abuse, threat to life and/or bizarre punishment, sexual harassment, and sexual abuse. Total trauma composite scores are found by individually calculating each subscale to achieve a developmental-level trauma composite score, to then sum to a total of 0-69. Higher scores reflect greater degrees of traumatization. Examples of listed traumatic experiences include serious bodily injury, loss of a family member, and unwanted sexual acts. The instrument has high internal consistency and reliability (Nijenhuis et al., 2002).

#### Adapted Multidimensional Inventory of Black Identity

The Multidimensional Inventory of Black Identity (MIBI) is a 51-item scale that assesses different aspects of the racial identity of black individuals (Sellers et al., 1997). It is a more stable adaptation of the Multidimensional Model of Racial Identity (MMRI) (Sellers et al., in press) and includes three dimensions—identity centrality, ideology, and regard. Following Sellers et al. (1997), the Centrality scale and Private Regard subscale were used to adequately measure identity, resulting in a revised, 15-item questionnaire. Statements from both scales include *"In general, being Black is an important part of my self-image."* and *"I am happy that I am Black."*, respectively. Answers are situated on a 7-point Likert scale from 0 *(Strongly Disagree)* to 7 *(Strongly Agree)*, and negative statements (E.g., *"I often regret that I am Black."*) are reverse-coded, accordingly. The MIBI has good psychometric properties (Sellers et al., 1997). The measure was only administered to black participants in the current study.

#### Open-ended Question

An open-ended question was provided for black participants at the end of the survey to freely expand on experienced racial prejudice and discrimination. The question was as follows: *"Please briefly describe your experiences with racism, if any, and include/estimate the year the event[s] occurred. It is also an option to answer 'none'."* The structure of the question was adapted from Dorahy et al. (2003), who investigated the effects of direct and indirect exposure to political violence on population levels of nonpathological dissociation. The goal of this measure was to collect individuals' experiences with and exposure to race-related trauma and aggression. Responses were independently coded as no/indirect or direct exposure.

# Procedure

Two questionnaires consisting of a consent form, a demographics section (including age, race, and gender), the GHQ-12, the DES-II, and the TEC were created using Qualtrics services. The questionnaire for black participants additionally contained the MIBI and open-ended question. The surveys were distributed on CloudResearch Connect where participants volunteered to take part in the study. A content warning was listed for the survey on CloudResearch to inform participants about the potentially upsetting nature of some of the questions they would be asked. Those who agreed to the details in the consent form and provided informed consent were instructed to complete the survey to the best of their ability. Upon completion of the questionnaire in Qualtrics, participants were thanked for their time and redirected to CloudResearch for compensation.

# Results

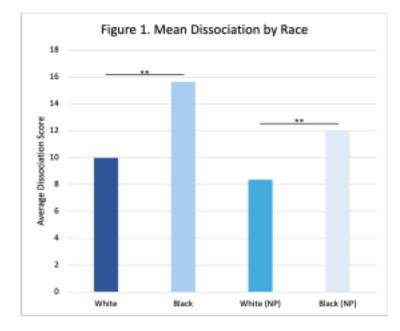
#### Differences of Means in Dissociation

In the interest of reproducing findings from previous literature regarding observed racial differences in reported dissociative symptoms, mean DES scores between black and white participants, including pathological dissociators, were compared. Due to the skewed nature of the data, a log transformation was performed to meet the test assumption of normality in distribution (West, 2022). Welch's independent t-test (two-tailed,  $\alpha = .05$ ) was subsequently conducted. It was found that black participants had significantly higher DES scores on average than white participants, t(71.89) = 3.1, p < 0.01; d = 0.47. Means and standard deviations for all scales are displayed in Table 1.

Table 1. Means and Standard Deviations of Psychological Measures in Black and White Participants				
Scale	MBlack	SDBlack	Mwhite	SDwhite
Dissociative Experiences Scale*	15.63	13.52	9.98	10.54
Dissociative Experiences Scale	11.98	8.07	8.35	7.51
Traumatic Experiences Checklist	4.67	3.50	3.79	3.72
General Health Questionnaire	14.47	7.68	15.02	8.42
Centrality Subscale	4.73	1.69	/	/
Regard Subscale	5.88	0.97	/	/

To test the first hypothesis, a similar procedure was followed. In order to partial out pathological dissociators, the DES-Taxon by Waller and Ross (1997) was utilized. Following their parameters, in addition to suggested analysis by Dorahy and colleagues (2003), a Bayesian 0.90 probability cut off was employed. Two white participants and five black participants were found to be pathological dissociators and were removed for the remainder of the analyses (N = 76). Log transformation of the data was performed, followed by Welch's independent t-test

(two-tailed,  $\alpha$  = .05). With pathological dissociators excluded, black participants remained having significantly higher DES scores on average than white participants, t(65.42) = 2.9, p < 0.01; d = 0.47. Figure 1 illustrates the findings from both analyses.



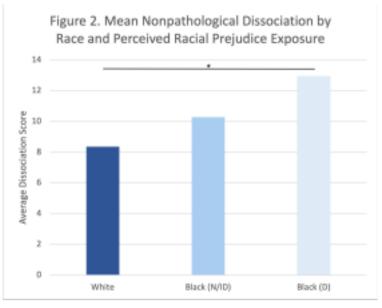
Average DES scores between white and black participants with and without the partialling out of pathological dissociators—NP to represent the white and black sample subsets of nonpathological scorers only. Differences were statistically significant in both the comparisons of total DES score means (p = 0.002), as well as of nonpathological DES score means (p = 0.004).

#### Differences of Means in Dissociation and Perceived Experienced Racism

To test the second hypothesis, Welch's one-way ANOVA was conducted on nonpathological DES scores amongst white participants, black participants with perceived no or indirect exposure to racial aggression and prejudice, and black participants with perceived direct exposure to racial aggression and prejudice. Examples of no or indirect—and direct—exposure statements recorded in survey collection are displayed in Table 2. Analysis revealed a significant difference in dissociation scores between at least two of the groups, F(2, 36.70) = 4.6, p < 0.05. Through post-hoc pairwise t-tests with Bonferroni correction, a significant difference in dissociation scores was found between white participants (M = 8.35) and black participants with perceived direct exposure (M = 12.94). There were no statistically significant differences in DES scores between black participants with perceived no/indirect exposure (M = 10.27) and either white participants or black participants with perceived direct exposure. Figure 2 highlights the trend in the data amongst all three groups. Given the promising nature of the findings, further analysis was performed on black participants' nonpathological dissociation scores and their degree of exposure to racial prejudice. It was predicted that there may be a positive association between severity of exposure to racial abuse and experienced dissociation.

A biserial correlation was conducted—differing from a point-biserial correlation in the sense that degrees of exposure were artificially dichotomized—however, no statistically significant results were obtained.

Table 2. Responses f	from Black Participants to the Open-Ended Question on Experienced
Racism	
	"I grew up and still live in a very diverse county so I have never had
No or indirect	racist experience[s] that I know of."
exposure	"None, I live in an exclusively black neighborhood, and don't get out
	much"
	"I have had racial slurs yelled at me on the street, and have been
Direct exposure	threatened by people "
	"I was harassed by a policeman 9 years ago, the experience was very
	awful that I don't like remembering it "



Average nonpathological DES scores between white participants, black participants with perceived no/indirect exposure (N/ID), and black participants with perceived direct exposure (D) to racial prejudice and discrimination. Differences in score averages were statistically significant only between white participants and black participants with perceived direct exposure (p = 0.018).

#### Exploratory Analyses

Beyond the study's main focuses, additional measures were included for general data collection due to the relative exploratory nature of investigating mental health phenomena in a non-white population—given a historical imbalance in representation and concern. Both the General Health Questionnaire and the Traumatic Experiences Checklist were provided to black and white samples; however, neither measure revealed significant differences in scores between participants on the basis of race. Additionally, following the work of De Maynard (2009) as discussed in the introductory section, the Centrality and Regard subscales of the

Multidimensional Inventory of Black Identity were employed to see if there was any observable relation between dissociation in black participants and strength of racial identity salience. No prediction of directionality was made, rather, the inclusion of the measures were simply to explore the recent theories as suggested in the cited literature. Pearson's product-moment correlations were run for both scales against black participants' nonpathological dissociation scores, however, no significant results were found.

#### Discussion

Increased demand for greater theoretical advancement and diversification in empirical research has provided the impetus to better understand the lived experiences of minority communities. Certain literature has expanded on the potential impacts of racism on mental and physical health—yet there is little conclusive investigation into this matter. To offer an intersectional exploration into the observed racial discrepancies in experienced dissociation rates, an online questionnaire comprising the Dissociative Experiences Scale as well as several exploratory measures was distributed to a nonclinical sample of white and black individuals, with an additional free-response section allowing black participants to disclose their possible encounters with race-related prejudice and discrimination.

Consistent with the findings of Douglas (2009) and Dunn et al. (1994), it was found that black individuals experienced a greater degree of dissociation in comparison to white individuals. Furthermore, following the partialling out of pathological dissociators using Bayesian taxometric analysis, it was additionally found that remaining black individuals experienced a greater degree of nonpathological dissociation in comparison to white individuals. This suggests that, along the theoretical continuum of dissociative symptomatology and prior to pathology, black individuals may dissociate to a higher frequency in their day-to-day lives; however, these tendencies are not disruptive enough to be diagnostically recognized and require clinical intervention.

To explore the role of race-related stress and trauma in the heightened experiencing of nonpathological dissociation in black individuals, perceived exposure to racial discrimination and aggression was recorded and analyzed in conjunction with dissociative tendencies. It was theorized that dissociation may act as a habitual self-protective mechanism in response to the continued experiencing of racial trauma—with perceived direct exposure to racial aggression being understood as possibly more traumatic than perceived indirect or no exposure. While perceived exposure is an entirely novel factor to be considered thus far, previous literature has echoed the possible employment of dissociation as a maladaptive coping strategy in the mitigation of race-related stress as caused by discrimination and prejudice (Sue, 1981; Dunn et al., 1994; De Maynard, 2009). Although there was a significant difference in experienced nonpathological dissociation between white individuals and black individuals with perceived indirect or no exposure and the two other subgroups. Interestingly, despite the lack of statistical significance, the trend in this data as illustrated in Figure 2 suggests a pattern with

regards to the degree of exposure to racially traumatic encounters and the variability of nonpathological dissociation rates. One possible explanation for the lack of significance was the notable decrease in sample size during the process of categorizing by degree of exposure. Prior to analysis, the study was already quite limited in its initial sample of 50 black participants. After following exclusion criteria—and by dividing the remaining subjects into having direct or no/indirect exposure—the new participant sample sizes per group were decreased to 23 and 13, respectively.

This line of reasoning can be additionally applied to the observed findings in the subsequent correlational analysis. The insignificance in the performed ANOVA mirrors the insignificance of the biserial correlation. The observed pattern in the data may suggest that, with a larger sample, statistical significance could be achieved. Establishing a direct correlation between dissociation and exposure to racial abuse would greatly strengthen the arguments presented in this thesis—and its continued investigation is strongly encouraged.

The compelling nature of these findings necessitate further research that places an emphasis on 1) additional validated conceptualizations of racial trauma aside from perceived exposure to racial prejudice and 2) greater instrument validity in the measurement of said conceptualizations. One sustainable criticism of the current study is the lack of instrument reliability within the open-ended question provided to black participants. Although based on the procedure of Dorahy et al. (2003)—who designed a similar question to record participants' exposure levels to political violence in Northern Ireland—the specific question and framework utilized in the current study fails to have theoretical support from other research. While it can be argued that this limitation was unavoidable given that the study is the first of its kind to investigate subjective exposure levels to racial prejudice and related trauma, nevertheless, the lack of reliability and validity introduce a degree of uncertainty to the observed results. An additional limitation involved the immense difficulty in operationalizing racism and racial trauma. Experiences of race-related discrimination and inequality can and do often extend far beyond interpersonal interactions and exposure to prejudice. The institutional nature of racialized oppression in the United States has resulted in its ubiquitous presence throughout the many facets of black individuals' lives. Outside of direct racial confrontation and abuse, such systemic examples—which may have varying impacts of traumatic stress at the individual level—include racial discrepancies with regards to access to affordable and nutritious food (Walker et al., 2010); pollution exposure and subsequent health maladies (Kravitz-Wirtz et al., 2016); and opportunities for social and financial mobility as a result of zoning policies and economic stratification (Darity, 2005). While maintaining a tangible and detrimental effect on one's mental and physical well-being (Carter, 2007), an individual may be so desensitized to endure such oppression that they do not readily consider these experiences to be traumatic. In an attempt to best capture the complex subjective nature of experienced racism, the decision was made to employ an open-ended response form, such that participants may freely elaborate on their experiences without the structural limitations of a quantitative scale. There exist a handful of alternative instruments-albeit only published within the last decade-that attempt to operationalize and measure race-based traumatic stress and discrimination: the

Trauma Symptoms of Discrimination Scale (TSDS) (Williams et al., 2018); the Race-Based Traumatic Stress Symptom Scale (RBTSSS) (Carter et al., 2013); and the Racial Trauma Scale (RTS) (Williams et al., 2022). Despite reported strong internal consistency and validity, the measures are too recent to have yet been adequately utilized by research unrelated to the original authors. Two suggestions are proposed: future studies should either 1) attempt to replicate findings on racial trauma through the administration of one of the suggested scales to advance psychometric validity in the research of race-related trauma and discrimination or 2) construct an entirely novel instrument that incorporates both quantitative and qualitative data in order to most accurately measure the experience of racial trauma. For the latter suggestion, it is recommended to reference the Race-Based Traumatic Stress Injury model that is detailed by Carter (2007): "[t]he nonpathological race-based traumatic stress injury that is being proposed involves emotional or physical pain or the threat of physical and emotional pain that results from racism in the forms of racial harassment (hostility), racial discrimination (avoidance), or discriminatory harassment (aversive hostility). The target may and does experience significant emotional reaction(s), and symptom clusters emerge that reflect that reaction, but the racial component or encounter(s) is important in recognizing and connecting the racism to the emotional distress and pain... For race-based traumatic stress to be present, one must perceive the class of racism event(s)—racial discrimination, racial harassment, or discriminatory harassment—as negative (emotionally painful), sudden, and uncontrollable. Furthermore, one should have some elements of the following reactions: intrusion, avoidance, or arousal" (p. 88-90). In order for the intersectional development of the field of psychological trauma, sufficiently detailed measures must be constructed. This model seemingly captures the multitude of complexity that exists within the subjective nature of experienced racial trauma—and it is therefore advised that any future research utilizes this theoretical model as a basis for further investigation.

An interesting extension of the present study involves the examination of hierarchical emergentism and consciousness theory. Whilst exploring a much more philosophical tangent (e.g., Kant's discussion of a priori transcendental apperception), the merging of consciousness theory with the aforementioned frameworks of racial trauma and dissociation responses may lead to greater development in the understanding of hierarchical structuring of the human brain. Emergentist theory specifically posits consciousness as emerging from the integration of neuronal network activity (Guevara et al., 2020)-or, from a more philosophical perspective, the interweaving of different streams of consciousness into a singular "unified consciousness" (Zeki, 2003). The phenomena of dissociation may be explored through an emergentist lens due to its supposed fragmentation of identity and hierarchical salience (Riddle & Schooler). With particular regard towards the matter of race-related traumatic stress and dissociation in black individuals, certain literature has argued the deactivation of the racial identity in place of a detached, second identity within a racially oppressive culture (Pinderhughes, 1973; Sue, 1981; Dunn et al., 1994). In a certain sense, the racial self-concept is positioned lower in terms of hierarchical salience and can be potentially understood as a differentiated, independent stream of consciousness apart from the secondary identity activated by racialized traumatic stress. This

self fragmentation, as elaborated by De Maynard (2009), may lead to heightened dissociative tendencies in black individuals who use dissociative mechanisms as a means of emotional compartmentalization and avoidance. Presumably, a broader investigation into racialized dissociation and hierarchical emergentist theories of consciousness may yield highly intriguing findings.

In the current study, an exploration of racial discrepancies in dissociation was carried out. Empirical results supported past observations that black individuals experience a greater degree of dissociation than their white counterparts. A novel examination of nonpathological dissociation followed, providing findings that black individuals experience a greater degree of nonpathological dissociation than white individuals. While the additional investigation into perceived exposure to racial prejudice and aggression was less conclusive, the study nevertheless plays an integral role in calling attention to theories surrounding the adverse impacts that experienced racism has on an individual's mental health. The perpetual experiencing of systemic racism as well as interpersonal racial prejudice and abuse continues to be poorly acknowledged and researched—despite its known, severely detrimental effects on minority communities—leading to even further discrepancies in healthcare and quality of life. Further exploration of racial trauma and dissociation will prove to be greatly beneficial to the advancement of psychological trauma research as well as to the mental and physical health of the greater population.

# References

[1] Butler, L. D. (2006). Normative dissociation. Psychiatric Clinics of North America, 29(1), 45–62. https://doi.org/10.1016/j.psc.2005.10.004

[2] Cardeña, E. (2008). Dissociative disorders measures. In A. J. Rush, Jr., M. B. First, & D. Blacker (Eds.), Handbook of psychiatric measures (pp. 587–599). American Psychiatric Publishing, Inc..

[3] Cardeña, E., & Carlson, E. (2011). Acute stress disorder revisited. Annual Review of Clinical Psychology, 7, 245-267.

[4] Carlson, E. B., & Putnam, F. W. (1993). An update on the dissociative experiences scale. Dissociation: progress in the dissociative disorders.

[5] 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/10.1177/0011000006292033

[6] Carter, R. T., Mazzula, S., Victoria, R., Vazquez, R., Hall, S., Smith, S., . . . Williams, B. (2013). Initial development of the race-based traumatic stress symptom scale: Assessing the emotional impact of racism. Psychological Trauma: Theory, Research, Practice, and Policy, 5(1), 1-9. https://doi.org/10.1037/a0025911

[7] Classen, C., Koopman, C., & Spiegel, D. (1993). Trauma and dissociation. Bulletin of the Menninger Clinic, 57(2), 178. Retrieved from https://www.proquest.com/scholarly-journals/trauma-dissociation/docview/1298140784/s e-2

[8] Comas-Díaz, L., Hall, G. N., & Neville, H. A. (2019). Racial trauma: Theory, research, and healing: Introduction to the special issue. American Psychologist, 74(1), 1. https://doi.org/10.1037/amp0000442

[9] Cooper, H. L. (2015). War on drugs policing and police brutality. Substance use & misuse, 50(8-9), 1188-1194. https://doi.org/10.3109/10826084.2015.1007669

[10] Darity, W. (2005). Stratification economics: the role of intergroup inequality. Journal of Economics and finance, 29(2), 144.

[11] De Maynard, V. A. (2009). Dissociation in black or black-British people of African and African-Caribbean descent in the United Kingdom. International Journal of Mental Health, 38(2), 37-73. https://doi.org/10.2753/IMH0020-7411380203

[12] del Pilar Sánchez-López, M., & Dresch, V. (2008). The 12-Item General Health Questionnaire (GHQ-12): reliability, external validity and factor structure in the Spanish population. Psicothema, 20(4), 839-843.

[13] Dorahy, M. J., Lewis, C. A., Millar, R. G., & Gee, T. L. (2003). Predictors of nonpathological dissociation in Northern Ireland: The affects of trauma and exposure to political violence. Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies, 16(6), 611-615.

https://doi.org/10.1023/B:JOTS.0000004087.27216.24

[14] Douglas, A. N. (2009). Racial and ethnic differences in dissociation: An examination of the dissociative experiences scale in a nonclinical population. Journal of Trauma & Dissociation, 10(1), 24-37. https://doi.org/10.1080/15299730802488452
EXPERIENCED RACIAL ABUSE AND NONPATHOLOGICAL DISSOCIATION 24

[15] Dunn, G. E., Paolo, A. M., Ryan, J. J., Dunn, C. E., & Van Fleet, J. (1994). The impact of race on the dissociative experiences scale. Personality and Individual Differences, 17(1), 139-142. https://doi.org/10.1016/0191-8869(94)90271-2

[16] Goldberg, D., & Williams, P. (1988). A user's guide to the General Health Questionnaire. Windsor, UK: NFER-Nelson.

[17] Gradín, C. (2012). Poverty among minorities in the United States: Explaining the racial poverty gap for Blacks and Latinos. Applied Economics, 44(29), 3793-3804. https://doi.org/10.1080/00036846.2011.581219

[18] Guevara, R., Mateos, D. M., & Pérez Velázquez, J. L. (2020). Consciousness as an Emergent Phenomenon: A Tale of Different Levels of Description. Entropy (Basel, Switzerland), 22(9), 921. https://doi.org/10.3390/e22090921

[19] Hogg, M. A., Terry, D. J., & White, K. M. (1995). A tale of two theories: A critical comparison of identity theory with social identity theory. Social psychology quarterly, 255-269. https://doi.org/10.2307/2787127

[20] Hoyert, D. L. (2023). Maternal mortality rates in the United States, 2021. NCHS Health E-Stats. https://dx.doi.org/10.15620/cdc:124678

[21] Irwin, H. J. (1999). Pathological and nonpathological dissociation: The relevance of childhood trauma. The Journal of psychology, 133(2), 157-164. https://doi.org/10.1080/00223989909599730

[22] Jernigan, M. M., & Daniel, J. H. (2011). Racial trauma in the lives of Black children and adolescents: Challenges and clinical implications. Journal of Child & Adolescent Trauma, 4, 123-141. https://doi.org/10.1080/19361521.2011.574678

[23] Kira, Shuwiekh, H., Rice, K., Al Ibraheem, B., & Aljakoub, J. (2017). A Threatened Identity: The Mental Health Status of Syrian Refugees in Egypt and Its Etiology. Identity (Mahwah, N.J.), 17(3), 176–190. https://doi.org/10.1080/15283488.2017.1340163

[24] Kravitz-Wirtz, N., Crowder, K., Hajat, A., & Sass, V. (2016). The long-term dynamics of racial/ethnic inequality in neighborhood air pollution exposure, 1990-2009. Du Bois review: social science research on race, 13(2), 237-259. https://doi.org/10.1017/S1742058X16000205

[25] Levin, R., & Spei, E. (2004). Relationship of purported measures of pathological and nonpathological dissociation to self-reported psychological distress and fantasy immersion. Assessment, 11(2), 160-168. https://doi.org/10.1177/1073191103256377

[26] Litman, L., Robinson, J., & Abberbock, T. (2017). TurkPrime.com: A versatile crowdsourcing data acquisition platform for the behavioral sciences. Behavior Research Methods, 49(2), 433-442. https://link.springer.com/article/10.3758/s13428-016-0727-z

[27] Maaranen, P., Tanskanen, A., Honkalampi, K., Haatainen, K., Hintikka, J., & Viinamäki, H. (2005). Factors associated with pathological dissociation in the general population. Australian and New Zealand Journal of Psychiatry, 39(5), 387-394. https://doi.org/10.1080/j.1440-1614.2005.01586.x

Mauer, M., & King, R. S. (2007). Uneven justice: State rates of incarceration by race and ethnicity. https://www.jstor.org/stable/resrep27349

Nijenhuis, E. R., Van der Hart, O., & Kruger, K. (2002). The psychometric characteristics of the Traumatic Experiences Checklist (TEC): First findings among psychiatric outpatients. Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice, 9(3), 200-210. https://doi.org/10.1002/cpp.332

Parham-Payne, W. (2014). The role of the media in the disparate response to gun violence in America. Journal of Black Studies, 45(8), 752–768. https://doi.org/10.1177/0021934714555185

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/10.1037/a0020040

Pinderhughes, C. A. (1973). Racism in psychotherapy. In Willie, C., Kramer, B. & Brown, B. (Eds), Racism and mental health, 61-121. Pittsburg: University of Pittsburgh Press.

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

Riddle, J., & Schooler, J. Hierarchical Consciousness: the Nested Observer Windows Model. Unpublished manuscript.

Ross, C. A., Duffy, C. M., & Ellason, J. W. (2002). Prevalence, reliability and validity of dissociative disorders in an inpatient setting. Journal of Trauma & Dissociation, 3(1), 7-17. https://doi.org/10.1300/J229v03n01\_02

Schrnitz, N., Kruse, J., & Tress, W. (1999). Psychometric properties of the General Health Questionnaire (GHQ-12) in a German primary care sample. Acta Psychiatrica Scandinavica, 100(6), 462-468. https://doi.org/10.1111/j.1600-0447.1999.tb10898.x

Seck, N. (2013). The hypersexualization and undesirability of Black/African women. In Ruptures: Anti-colonial & anti-racist feminist theorizing. 91-103. https://doi.org/10.1007/978-94-6209-446-8\_8.

Sellers, R. M., Shelton, J. N., Cooke, D. Y, Chavous, T. M, Rowley, S. A. J., & Smith, M. A. (in press). A multidimensional model of racial identity: Assumptions, findings, and future directions. In R. L. Jones (Ed.), African American identity development: Theory, re search, and intervention. Hampton, VA: Cobb & Henry.

Sellers, R. M., Rowley, S. A., Chavous, T. M., Shelton, J. N., & Smith, M. A. (1997). Multidimensional Inventory of Black Identity: A preliminary investigation of reliability and construct validity. Journal of personality and social psychology, 73(4), 805-815. https://doi.org/10.1037/0022-3514.73.4.805

Steil, J. P., Albright, L., Rugh, J. S., & Massey, D. S. (2018). The social structure of mortgage discrimination. Housing studies, 33(5), 759-776. https://doi.org/10.1080/02673037.2017.1390076

Sue. D. W. (1981). Counseling the culturally different. New York: Wiley.

Thompson, V. L. S. (2006). Coping Responses and the Experience of Discrimination. Journal of Applied Social Psychology, 36(5), 1198–1214. https://doi.org/10.1111/j.0021-9029.2006.00038.x

Vonderlin, R., Kleindienst, N., Alpers, G. W., Bohus, M., Lyssenko, L., & Schmahl, C. (2018). Dissociation in victims of childhood abuse or neglect: A meta-analytic review. Psychological medicine, 48(15), 2467-2476.

Walker, R. E., Keane, C. R., & Burke, J. G. (2010). Disparities and access to healthy food in the United States: A review of food deserts literature. Health & place, 16(5), 876-884. https://doi.org/10.1016/j.healthplace.2010.04.013

Waller, N., Putnam, F. W., & Carlson, E. B. (1996). Types of dissociation and dissociative types: A taxometric analysis of dissociative experiences. Psychological methods, 1(3), 300.

Waller, N. G., & Ross, C. A. (1997). The prevalence and biometric structure of pathological dissociation in the general population: taxometric and behavior genetic findings. Journal of abnormal psychology, 106(4), 499.

West R. M. (2022). Best practice in statistics: The use of log transformation. Annals of clinical biochemistry, 59(3), 162–165. https://doi.org/10.1177/00045632211050531

Williams, M. T., Printz, D. M. B., & DeLapp, R. C. T. (2018). Assessing racial trauma with the Trauma Symptoms of Discrimination Scale. Psychology of Violence, 8(6), 735–747. https://doi.org/10.1037/vio0000212

Williams, M. T., Osman, M., Gallo, J., Pereira, D. P., Gran-Ruaz, S., Strauss, D., Lester, L., George, J. R., Edelman, J., & Litman, L. (2022). A clinical scale for the assessment of racial trauma. Practice Innovations, 7(3), 223–240. https://doi.org/10.1037/pri0000178

Zeki, S. (2003). The disunity of consciousness. Trends in Cognitive Sciences, 7(5), 214–218. https://doi.org/10.1016/S1364-6613(03)00081-0