

International Society for Traumatic Stress Studies

## The Effects of Microaggressions on Depression in Young Adults of Color: Investigating the Impact of Traumatic Event Exposures and Trauma Reactions

Evan E. Auguste D, Keith R. Cruise, and Maria C. Jimenez Department of Psychology, Fordham University, Bronx, New York, USA

Microaggressions are a common way that individuals experience racism in the United States. The current study examined the extent to which microaggressions contribute to mental health difficulties, namely trauma reactions and depression, after controlling for other traumatic event exposures. We sought to address gaps in the literature by quantitatively assessing the associations among microaggressions, posttraumatic stress symptoms, and depression symptoms. Participants were 140 young adults of color (68.8% female) who were recruited online. Linear regression analyses evidenced that microaggressions were uniquely associated with depression symptoms, B = 0.27, after controlling for lifetime traumatic event exposures, with this association partially mediated by trauma reactions, B = 0.49. These results suggest that microaggressions are a clinically relevant factor in understanding mental health problems reported by Black, Indigenous, and People of Color in the United States and warrant analysis, assessment, and intervention through a trauma lens.

Racial prejudice is a historically ubiquitous and uniformly detrimental stressor for Black, Indigenous, and People of Color (BIPoC) in the United States. Research over the last 20 years has focused on the insidious effects of implicit communications of racism (e.g., Dovidio & Gaertner, 2004), with the understanding that explicit racism continues to impact BIPoC (Nadal, 2017). Racial microaggressions, defined as brief verbal exchanges and experiences that denigrate BIPoC (Nadal, 2018; Sue et al., 2007), are a common expression of racism. The conversation around microaggressions represents a shift from solely unpacking the history of blatant and unabashed racial animus in the United States to understanding how the assumptions that underlie racist thinking have become commonplace (Sue et al., 2007).

A rigorous debate has centered on how best to assess and interpret the impact of microaggressions on mental health (Lilienfeld, 2017; Nadal, 2017; Sue et al., 2007). Within the scientific community, some scholars advocate for a more rigorous and precise assessment of microaggressions (Haidt, 2017; Lilienfeld, 2017), urging caution in developing microaggression policies that overreach the available scientific data. Other commentators understand the necessity of robust assessment but also advocate the need to prioritize urgency in a field that has historically underserved BIPoC (Nadal, 2017; Sue et al., 2007). In line with this position, many individuals support policies and/or system-level responses based on the current microaggression research given associations with mental health problems (Comas-Diaz, 2016; Nadal, 2018; M. T. Williams, 2020). The present study aimed to respond to these calls for continued empirical research on racial microaggressions.

Some authors have hypothesized that individuals who experience mental health difficulties in response to microaggressions are "hypersensitive" to these events due to their learning histories, sociocultural narratives, or personal dispositional attributes, such as negative emotionality (Lilienfeld, 2017; Thomas, 2008). These authors go on to suggest that events deemed to be microaggressions are often ambiguous and, sometimes, not deleterious in nature, and individuals who experience these events inject racial meanings and may have disproportionate reactions. West (2019) directly tested this hypothesis and found evidence that contested these notions: (a) ethnic minorities and ethnic majorities identified microaggressions similarly; (b) experiencing more microaggressions was associated with worse life satisfaction, a relation that was not moderated by minority identity; and (3) recalling a microaggression reduced positive affect and increased negative affect regardless of minority identity.

Other authors have posited that microaggressions and their associated mental health difficulties can be understood through a racial trauma framework (e.g., Flores et al., 2010; Nadal et al., 2019). The concept of racial trauma was developed to capture the clinically significant distress and prolonged reactions that

Correspondence concerning this article should be addressed to Evan Auguste, Fordham University, 441 East Fordham, Dealy 226, Bronx, NY 10458, USA. E-mail: eauguste@fordham.edu

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occur in response to racism (Bryant-Davis, 2007). Definitions of racial trauma characterize real or perceived experiences of racial discrimination as traumatic and note that these experiences can result in symptom patterns equivalent to those seen in posttraumatic stress disorder (PTSD; Carter, 2007; Comas-Diaz, 2016). In line with the trauma literature, researchers have noted that posttraumatic stress symptoms (PTSS) may occur in response to single racist acts as well as through repeated experiences of racism (Helms et al., 2010). In addition, similar to how posttraumatic stress has been identified as a mediator between traumatic event exposure and mental health sequelae (e.g., Kerig et al., 2009), researchers have noted that PTSS associated with experiencing racial discrimination may mediate the association between these experiences and other mental health problems (e.g., Carter, 2007). The phenomenological similarities between racial trauma and PTSD suggest that these are not separate constructs but rather that the definition of PTSD should be expanded. Although one might think that there are certain events that could be captured within Criterion A of PTSD that also represent the root of symptom overlap between PTSD and racial trauma, research findings indicate otherwise. In fact, there is evidence that racial discrimination uniquely contributes to PTSD after accounting for the effects of exposure to other traumatic events (e.g., Loo et al., 2001) and that subtle forms of racism create similar symptom patterns to overt racist acts (Carter et al., 2016).

Based on the current PTSD criteria, only overt racialized violence that is life-threatening would qualify as a Criterion A traumatic event. Therefore, it is important to consider if other more common forms of racism, such as microaggressions, operate in the same way. Findings from research that has specifically addressed microaggressions, PTSS, and mental health sequelae have demonstrated that microaggressions could be a form of racial trauma. Schoulte and colleagues (2011) found that single microaggression events that described experiences of implicit racism evoked significant distress in response to these events; moreover, event-related distress ratings were comparable for individuals who reported microaggressions and those who reported other types of traumatic events, including physical and sexual assault. Nadal and colleagues (2019) observed that individuals who experienced higher numbers of racial microaggressions, measured using the Racial and Ethnic Microaggression Scale (REMS; Nadal, 2011), reported more severe PTSS. As such, there is support for associations between PTSS and both individual microaggressions and one's cumulative microaggression load (Moody & Lewis, 2019; Nadal et al., 2019; Schoulte et al., 2011). One of the more consistently demonstrated associations between racial microaggressions and mental health problems concerns microaggressions and depression (e.g., Dale & Safren, 2020; Huynh, 2012; M. G. Williams & Lewis, 2019). These findings have invited inquiries into the mechanisms that create the deleterious consequences of microaggressions. Torres and Taknint (2015) conducted the only known study to examine how PTSS may mediate the association between microaggressions and mental health

problems, specifically depression. Through a cross-sectional survey, these researchers asked Latinx adults to report on their experiences of microaggressions as well as their ethnic identity, general self-efficacy, PTSS, and depression. Torres and Taknint (2015) documented that the frequency of self-reported PTSS fully mediated the association between the frequency of microaggressions and self-reported depressive symptoms. This led the authors to support the notion that the cumulative load of microaggressions is comparable to a Criterion A traumatic event, and PTSS that occur in response to microaggressions might help explain other mental health problems. However, these studies have one notable limitation: The researchers did not consider how other lifetime trauma exposure may account for or contribute to PTSS. Therefore, to further test the association between microaggressions and mental health, it is critical to replicate these studies while accounting for the relative contribution of exposure to other traumatic events along with microaggressions. Understanding the extent to which microaggressions and lifetime traumatic event exposure are similar with regard to cumulative impact would further elucidate and inform research, practice, and policy (Edwards et al., 2003; Schilling et al., 2007).

The current study sought to address this gap by (a) investigating the association between microaggressions and depression, (b) determining if PTSS mediate the association between microaggressions and depression, and (c) examining the extent to which these associations remain after evaluating the impact of previous traumatic event exposure. We investigated two hypotheses. First, we hypothesized that self-reported rates of microaggressions would be positively correlated with depressive symptom severity and that this association would remain significant after accounting for the frequency of lifetime traumatic event exposure. Second, we hypothesized that PTSS would mediate the association between microaggressions and depressive symptom severity. Further to this hypothesis, we posited that evidence of mediation would remain after accounting for lifetime trauma exposure.

## Method

## **Participants**

The inclusion criteria were as follows: (a) self-identification as a racial/ethnic minority, (b) 18–25 years of age, and (c) correct responses to five integrity questions embedded in the online survey. Out of 307 possible participants, 162 (52.8%) respondents completed the online consent process. Nine participants were excluded because they did not identify as a racial/ethnic minority, and 13 respondents were excluded due to age. After the removal of three outliers, the final sample consisted of 137 participants (see Table 1). The final sample was representative of the target age group (M = 22.76 years, SD = 2.15). There was a slight overrepresentation of women (n = 95, 69.3%), and about half of the sample had completed

## Table 1

Demographic Characteristics and Descriptive Statistics of the Total Sample (N = 137)

Variable	п	%	М	SD	Range	Skewness	Kurtosis
Gender							
Male	35	25.0					
Female	95	69.3					
Gender queer or	2	1.5					
nonconforming							
Other	5	3.6					
Age (years)			22.76	2.15	18-25	-0.74	-0.58
Race							
Black	41	29.9					
Asian	48	35.0					
Multiracial	24	17.5					
Other	34	24.8					
Ethnicity							
Hispanic/Latinx	27	19.7					
Non-Hispanic/Non-Latinx	110	80.3					
Occupation							
Employed for wages	68	49.6					
Student	50	36.5					
Out of work	9	6.6					
Other	10	7.3					
Educational attainment			4.01	2.31	0–17	1.92	8.64
(vears)							
PTSS (PCL-5 total score)			19.49	17.02	0-69	1.06	0.52
Depression symptoms			18.53	12.36	0-45	0.51	-0.84
(CES-D)			10,000	12.00	0 10	0.01	0101
Traumatic event exposures			3 18	2.18	0-10	0.91	1 12
(LEC-5)			5.10	2.10	0 10	0.91	1.12
Microaggressions (REMS			14 36	7 59	1-36	0.64	-0.25
total count)			11.50	1.07	1 50	0.01	0.20
Microaggression severity			2.37	0.95	1-43	0.11	-1.18
(REMS total score)			2.07	0.95	1 113	0.11	1.10
REMS subscale (total score)							
Assumptions of Inferiority			2 41	1 1 5	1–5	0.35	-0.70
Second Class			2.11	1.15	1-5	0.32	-1.01
Citizenshin/Assumptions			2.19	1.10	1 5	0.52	1.01
of Criminality							
Microinvalidations			2.86	1 31	1_5	_0.12	_1.26
Exoticization/Assumptions of			2.00	1.00	1-5	0.12	_0.97
Similarity			2.32	1.07	1-5	0.50	0.77
Environmental			2 18	1 08	1_5	0.62	_0.62
Workplace/School			2.10	1.00	1-5	0.02	-0.02
workplace/school			2.30	1.20	1-3	0.15	-1.10

*Note.* PTSS = posttraumatic stress symptoms; PCL-5 = Posttraumatic Stress Disorder Checklist for *DSM*-5; CES-D = Center for Epidemiological Studies–Depression scale; LEC-5 = Life Events Checklist for *DSM*-5; REMS = Racial and Ethnic Microaggression Scale.

at least 4 years of higher education (M = 4.01 years, SD = 2.31). Participants reported on their race and Latinx/Hispanic identity separately. Most participants identified as Asian (n = 48, 34.3%) or Black (n = 41, 29.3%). A minority identified as Hispanic/Latinx (n = 28, 20%).

## Procedure

All data collection procedures were approved by the Fordham University Institutional Review Board. We utilized two different online platforms to recruit participants. Reddit (San Francisco, CA) was utilized due to its established utility as a cost-effective method of online recruitment (Shatz, 2017). Reddit users have shown to be comparable to traditionally recruited populations and reasonably reflective of the larger population (Jamnik & Lane, 2017). Reddit users can engage anonymously in a range of communities, called "subreddits," devoted to particular topics. For the purpose of anonymous recruitment of BIPoC, an introductory message to participate in the study was submitted to 12 subreddits. These subreddits were either designed to create communities for specific racial/ethnic groups (e.g., r/AsianAmerican, r/Blackfellas, r/MixedRace) or related to issues affecting these groups of people (e.g., r/Racism). A companion procedure was used to sample from ResearchMatch (Harris et al., 2012), an online research-matching service with over 20,000 volunteers. Of note, ResearchMatch's volunteers predominantly identify as female (i.e., 72%; Harris et al., 2012). ResearchMatch delivers study descriptions to users who meet the study inclusion criteria. For the present study, once an interested participant read through a brief study description on the provided web link, they were directed to a separate webpage and presented with an electronic informed consent form.

Participants provided online consent after reviewing an electronic informed consent form, with informed consent obtained anonymously (i.e., "yes" or "no" question regarding consent). Study measures were presented in the following order: Life Events Checklist (LEC) for the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5*; i.e., LEC-5), PTSD Checklist for *DSM-5* (PCL-5), Center for Epidemiological Studies Depression Scale (CES-D), and REMS. This order was selected to first obtain estimates of broader life events and self-reported psychopathology and avoid bias with regard to self-reported microaggressions. After survey completion, participants were presented with a study debriefing page, accessible online resources for mental health support, and instructions on how to voluntarily enter a raffle for a \$50 (USD) gift card.

## Measures

## Lifetime Traumatic Event Exposure

The LEC-5 (Weathers et al., 2013) is a two-part self-report measure of 17 potentially traumatic events. For each exposure, respondents indicate how the event was experienced, selecting from the response options "happened to me," "witnessed it," "learned about it," "part of my job," "not sure," and "doesn't apply;" included events are consistent with those outlined in DSM-5 PTSD Criterion A (American Psychological Association [APA], 2013). Respondents are then asked to specify their "worst" event exposure and indicate how long ago it happened, how they experienced it, how many times they experienced it, if someone's life was in danger, if someone was seriously injured or killed, and whether the event included sexual violence. The LEC has displayed convergent validity with the Traumatic Life Events Questionnaire (r = -.55) and test–retest reliability over a 1-week period (item  $\kappa s = .37-.80$ ; Gray et al., 2004). In the current study, the frequency of trauma exposure was calculated by summing the number of LEC items endorsed with a response of "happened to me." This criterion was employed to identify the cumulative load of direct victimization experiences given research that direct victimizations have been shown to have the largest impact on mental health compared to other degrees of exposure (see Kulkarni et al., 2011).

## PTSS

The PCL-5 (Weathers et al., 2013) is a 20-item self-report measure of PTSS based on the DSM-5 diagnostic criteria for PTSD (APA, 2013). Respondents are asked to report how much they have been affected by each item during the past month, scoring responses on a 5-point Likert-type scale ranging from 0 (not at all) to 4 (extremely). Items are summed to obtain a total severity score, with higher scores representing more severe past-month PTSD symptoms. In line with measures that consider the effects of cumulative adverse event and trauma exposure (e.g., Grasso et al., 2015), participants were not asked to rate PCL-5 items in relation to symptoms stemming from an index traumatic event. The cutoff score used to designate clinically significant PTSD symptoms was 33 (Wortmann et al., 2016). The psychometric properties for the PCL-5 have been established in a sample of trauma-exposed college students aged 18 to 54 years (M age = 19.96; Blevins et al., 2015). The PCL-5 has displayed strong internal consistency (Cronbach's  $\alpha = .94$ ), test-retest reliability (r = .82), and convergent (rs =.74-.85) and discriminant (rs = .31-.60) validity in adolescent and young adult samples (Blevins et al., 2015). The PCL-5 total score has also been associated with scores on the Difficulties in Emotion Regulation Scale (r = .79, p < .001; Gratz & Roemer, 2004) and the nine-item Patient Health Ouestionnaire 9 (r = .83, p < .001; Kroenke & Spitzer, 2002), with such results supporting the validity of the PCL with college-aged samples (Adkins et al., 2008). In the current sample, the PCL-5 total score showed comparable internal consistency with prior research findings, Cronbach's  $\alpha = .94$ .

## **Depressive** Symptoms

The CES-D (Radloff, 1977) is a 20-item self-report measure of depressive symptoms. Respondents are asked to rate the extent to which they have experienced each item during the past week, scoring responses using a 3-point Likert-type scale ranging from 0 (rarely or none of the time [less than 1 day]) to 3 (most or all of the time [5-7 days])". Items are summed to obtain a total symptom severity score, with higher scores representing more severe symptoms of depression. Scores are not calculated if responses are missing for five or more items. The recommended cutoff score for the CES-D is 20 (Vilagut et al., 2016). The CES-D has displayed strong internal consistency (Cronbach's  $\alpha = .85$ ) and test-retest reliability (rs = .45-.70) in White adults (Radloff, 1977), and Herman and colleagues (2011) calculated the internal consistency reliability for the CES-D in a sample of ethnically diverse college students (Cronbach's  $\alpha s = .55-.88$  across different ethnic groups). The CES-D has displayed strong convergent validity with clinical interviewer ratings of depression (rs = .46-.53; Radloff, 1977). Carleton and colleagues (2013) found that the CES-D maintained factorial validity in an undergraduate sample. In the current sample, the CES-D total score showed comparable internal consistency with prior research findings, Cronbach's  $\alpha = .76$ .

## Microaggressions

The REMS (Nadal, 2011) is a 45-item self-report measure that is used to assess the frequency of racial and ethnic microaggressions an individual has experienced over the past 6 months. Modifications were made to the REMS in consultation with Dr. Nadal. First, to promote consistency with the LEC-5, respondents were asked to endorse either "yes" or "no" as opposed to reporting total frequency. Second, to investigate perceived stress associated with the experience of each endorsed microaggression, respondents provided a stress rating, scoring responses on a 6-point Likert-type scale ranging from 0 (not at all stressful) to 5 (extremely stressful), with ratings summed to obtain a total microaggression exposure score. In addition, specific items can be summed to obtain scores for six subscales, which represent distinct types of microaggressions: Assumptions of Inferiority (e.g., "Someone assumed that I would not be intelligent because of my race"), Second-Class Citizen and Assumptions of Criminality (e.g., "Someone assumed I would physically hurt them because of my race"), Microinvalidations (e.g., "I was told I should not complain about race"), Exoticization/Assumptions of Similarity (e.g., "Someone told me that all people in my racial group look alike"), Environmental Microaggressions (e.g., "I saw good role models of my race on television" [reverse coded]); and Workplace and School Microaggressions (e.g., "I was ignored at school because of my race"). The present study focused on overall microaggression exposure.

The REMS has evidenced strong internal consistency (Cronbach's  $\alpha = .88$ ) and concurrent validity with the Racism and Life Experiences Self Administration Version (r = .46, p < .001) in a sample of racially and ethnically diverse adults (Nadal, 2011). In a sample of young racial/ethnic minority adults (N = 376), the measure demonstrated good internal consistency reliability (Cronbach's  $\alpha = .88$ , with each subscale demonstrating an alpha value of .75 or higher; Forrest-Bank & Jenson, 2015). In the current study, the REMS total score reflected a count of endorsed microaggressions experienced during the past 6 months. In the present sample, the total score demonstrated good internal consistency, Cronbach's  $\alpha = .82$ , with alpha values for the subscales ranging from .64 to .82.

#### **Data Analysis**

The rates of endorsement on REMS and LEC-5 items were calculated to descriptively explore the different types of traumatic event exposures and microaggressions endorsed by participants in the current sample. In addition, average self-reported microaggression stress ratings were calculated. Summary scores, including distributional qualities, were calculated for all study variables to examine the appropriateness of correlational analyses. To assess missing data, Little's (1988) Missing Completely at Random tests were employed. We ran these analyses on the LEC-5, REMS, PCL-5, and CES-D and confirmed that all data on variables of interest were missing completely at random. Next, given the relatively small sample size, careful attention was paid to outliers that could impact regression models. Mahalanobis distance, Cook's distance, and leverage scores were examined to identify outliers (Tabachnick & Fidell, 2007). The results indicated the removal of three outliers on two of the four study variables. Eliminating these cases resulted in 137 participants retained for analyses.

All summary scores were examined by sex, race, and ethnicity, using either *t* tests or analyses of variance (ANOVAs), to explore the need to control for demographic differences in later analyses. Correlations were run using total scores from the REMS, LEC-5, PCL-5, and CES-D, as well as with age, to examine the associations among key study variables and the need to consider age as a covariate. Direct effects were tested through linear regression in SPSS (Version 25), and the mediation hypothesis was tested by employing the PROCESS macro Model 4 in SPSS (Hayes, 2013). The PROCESS macro uses ordinary least squares (OLS) regression to test mediation. Hayes (2013) outlined how the PROCESS macro can be used to obtain a 95% bootstrap confidence interval for indirect effects, noting that when the 95% bootstrap confidence interval does not contain 0, this indicates a statistically significant indirect effect.

#### Results

#### **Descriptive Analyses**

Descriptive statistics for the REMS, LEC-5, PCL-5, and CES-D are reported in Table 1. Participants endorsed having directly experienced an average of 3.18 (SD = 2.18) events on the LEC-5 (range: 0-10). Most participants (79.8%) endorsed direct exposure (i.e., "happened to me") of at least one potentially traumatic event. The most commonly endorsed events included transit accidents (86.1%) and unwanted sexual experiences (79.6%). On the REMS, participants endorsed experiencing an average of 14.36 (SD = 7.59) microaggressions over the past 6 months; the most commonly endorsed microaggressions included assumptions that the participant spoke a language other than English (62.0%); being told by someone else that they are colorblind (52.0%); not seeing positive portrayals of the participant's race in magazines (51.8%), movies (46.7%), TV shows (44.5%), or in positions of power at work or school (48.2%); and having a body part objectified because of their race (43.8%). The average microaggression severity rating on the REMS was 2.37 (SD = 0.95), with little variation across REMS subscales. As expected (see Cohen et al., 2016), most participants experienced some PTSS, but PCL-5 total scores averaged below the clinical cutoff of 33 (M = 19.49, SD =17.02). In total, 24 participants (17.1%) scored above the

	PTSS (PCL-5)		Depression (CES-D)		Lifetime trauma exposure (LEC-5)		Microaggressions (REMS)	
Variable	М	SD	М	SD	М	SD	М	SD
Gender								
Men	15.64	12.38	14.08	10.33	2.53	2.26	12.67	6.21
Women	20.86	18.25	20.12	12.67	3.42	2.12	14.97	7.97
	t(91.06) = -1.90,		$t(75.09) = -2.83^*,$		$t(135.00) = -2.13^*,$		t(78.68) = -1.77,	
	d	= 0.33	d	= 0.52	d :	= 0.41	d :	= 0.32
Ethnicity								
Hispanic/Latinx	26.56	17.92	21.00	12.69	3.70	2.25	15.19	9.16
Non-	17.75	16.41	17.93	12.26	3.05	2.15	14.16	7.19
Hispanic/non- Latinx	t(37.45) $d =$	$= -2.32^*,$ = 0.51	t(38.79) $d =$	= -1.14, = 0.25	t(38.55) $d =$	= -1.36, = 0.29	t(135.00) $d =$	= -0.63, 0.12

## Table 2 Demographic Comparisons on Key Study Variables

Note. PTSS = posttraumatic stress symptoms; PCL-5 = Posttraumatic Stress Disorder Checklist for DSM-5; CES-D = Center for Epidemiological Studies–Depression scale; LEC-5 = Life Events Checklist for DSM-5; REMS = Racial and Ethnic Microaggression Scale.

p < .05. p < .01. p < .001.

clinical cutoff, reflecting clinically significant PTSS. Depressive symptoms, as measured using the CES-D, were quite common in the sample, but symptom severity varied widely (M = 18.53, SD = 12.36); a total of 59 participants (42.1%) scored above the cutoff score indicative of clinically significant depression.

A consistent pattern related to gender differences was noted across key study variables (see Table 2). Female participants endorsing higher levels of traumatic event exposure and more severe depressive symptoms than male participants, ds = 0.41-0.52. Differences also emerged for ethnicity, such that Latinx participants endorsed more PTSS than non-Latinx participants, d = 0.51

Bivariate correlations were calculated between key study variables, with age included to detect potential effects of age (Table 3). None of the study variables demonstrated significant associations with age. Microaggressions were positively and weakly correlated with traumatic event exposures as well as with PTSS and depression. Traumatic event exposures were positively and moderately correlated with PTSS and positively and weakly correlated with depression. In addition, PTSS were positively and moderately correlated with depression.

## **Direct Effect of Microaggressions on Depression**

Our first hypothesis stated that self-reported microaggressions would be positively associated with the severity of depressive symptoms after controlling for lifetime traumatic event exposure. To test this association, gender and lifetime traumatic event exposure were entered as predictors in Block 1 of a linear regression model, with microaggressions entered as a predictor in Block 2 and depression entered as the criterion variable. Gender was added to the model to control for the aforementioned pattern of differences across key study variables. The regression model was significant,  $R^2 = .18$ , F(3, 136) = 9.83, p < 0.83.001, with microaggressions and lifetime traumatic event

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Note. PTSS = posttraumatic stress symptoms; PCL-5 = Posttraumatic Stress Disorder Checklist for DSM-5; CES-D = Center for Epidemiological Studies–Depression scale; LEC-5 = Life Events Checklist for DSM-5; REMS = Racial and Ethnic Microaggression Scale.

p < .05. p < .01. p < .001.

Correlations for Kev Study Variables

Table 3

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30 V 00	1 2 1		
Predictor	В	SE	<i>t</i> (136)
Gender (men vs. women)	4.04	2.24	1.80
Lifetime trauma exposure	1.13	0.47	$2.41^{*}$
Microaggressions	0.43	0.13	3.23*

# Table 4 Direct Effect of Microaggressions on Depressive Symptoms

p < .05. p < .01. p < .001. p < .001.

exposure emerging as significant predictors in the final model (see Table 4). After accounting for gender and traumatic event exposure, microaggressions demonstrated a significant association with depressive symptoms, B = 0.43 (SE = 0.13), t(136) = 3.23, p = .002.

#### **Mediation Analysis**

Our second hypothesis stated that PTSS would mediate the association between microaggressions and depressive symptoms after accounting for lifetime traumatic event exposure. We examined this hypothesis via a mediation model using the PRO-CESS macro (Hayes, 2013). The PROCESS macro employs OLS regression to test mediation. Lifetime traumatic event exposure and gender were entered as covariates, and microaggressions and PTSS were entered as predictors of depressive symptoms, with PTSS identified as a mediator (see Table 5). The model was significant,  $R^2 = .51$ , F(4, 132) = 34.58, p < .001, and had a large effect,  $f^2 = 1.04$ . A post hoc power analysis for linear multiple regression (i.e.,  $R^2$  deviation from 0) indicated that the power to detect this effect at the .05 alpha level was .99 for the overall model predicting depression. Within this model, the direct effect of microaggressions on depression remained significant after including PTSS as a mediator, B = 0.27 (SE = 0.11), t(132) = 2.57, p = .011. For this mediation model, the 95% bootstrap confidence interval, using 10,000 bootstrap samples, was 0.02 to 0.34, evidencing a positive and significant unstandardized indirect effect. Therefore, after controlling for lifetime traumatic event exposure, microaggressions remained a significant predictor of depressive symptoms, with evidence that PTSS partially mediated this association.

## Discussion

The present study sought to expand on extant empirical literature that has demonstrated consistent associations between microaggressions and depression (Dale & Safren, 2020; Huynh, 2012; Williams & Lewis, 2019). To this end, we examined microaggressions through a racial trauma framework (e.g., Bryant-Davis, 2007) that posited that this association might occur via PTSS, as has been previously demonstrated (Torres & Taknint, 2015). To further evidence the unique association between microaggressions and PTSS and address a gap in the available literature, we considered the contribution of lifetime trauma exposure in all analyses.

In line with previous studies, the results regarding our first hypothesis evidenced that microaggressions were uniquely associated with depression symptoms. Of note, individuals who reported more experiences of microaggression tended to report more severe symptoms of depression, after accounting for the effect of lifetime trauma exposure. The results of the second analysis lent support to Torres and Taknint's (2015) mediation hypothesis. In the current study, PTSS severity partially mediated the association between microaggression frequency and depression, and this remained the case after accounting for the contribution of lifetime trauma exposure. These findings invite further consideration of the mental health problems associated with experiences of microaggressions. The fact that PTSS severity was only a partial mediator suggests that when some individuals experience more microaggressions, some may report both PTSS and depressive symptoms, whereas others may report only depressive symptoms.

One point to consider is that microaggressions might result in PTSS by serving as a trigger for previously experienced Criterion A traumatic events. However, the finding that increased

#### Table 5

Mediation Analysis of Association Between Microaggressions and Depressive Symptoms

Variable	В	SE	t(132)
Gender (men vs. women)	3 39	1 74	1 95
Lifetime trauma exposure	-0.59	0.41	-1.46
Microaggressions PTSS	0.27 0.49	0.11 0.05	2.57 <sup>*</sup> 9.45 <sup>*</sup>

Note. PTSS = posttraumatic stress symptoms.

p < .05. p < .01. p < .001.

lifetime trauma exposure had no influence on the association between microaggressions and PTSS suggests such a hypothesis does not sufficiently explain this relation. In line with a racial trauma framework, it is plausible that racial microaggressions contribute to PTSS by serving to remind BIPoC of the ways their groups have and continue to experience racial oppression (Bryant-Davis, 2007).

This should be considered, however, in association with the finding that, on average, participants perceived microaggressions to be less than "somewhat stressful." This reveals the most substantial distinction in understanding microaggressions as traumatic in comparison to Criterion A traumatic events. Although traumatic events in isolation can often be sufficient to result in PTSD, exposure to individual microaggressions are generally not experienced as notably stressful. It is also possible that lower individual stress ratings could suggest a level of conflict avoidance that lends itself to a cumulative buildup, as individuals are not likely to take much offense or action until they feel the full cumulative load of different microaggressions over time (Lui & Quezada, 2019). It is also important to note that participants experienced different types of microaggressions as more stressful than others. Items from the Microinvalidations subscale (e.g., "Someone told me that they don't see color") averaged the highest stress rating, whereas items from the Environmental subscale (e.g., "Someone told me that people should not think about race anymore") averaged the lowest stress rating. This finding suggests that young adult BIPoC react more strongly when the realities of racism are dismissed by others.

It is also important to note that many scholars understand racial trauma as different from PTSD in that racial stressors, such as microaggressions, can be pervasive and make the threat of retraumatization constant, reflecting a set of unique posttraumatic reactions (Comas-Díaz et al., 2019). Although the current study did not address specific posttraumatic reactions associated with microaggressions, the current results support that the cumulative load of experienced microaggressions over a discrete period might share direct associations with PTSS and selfreported depression. Whether this association exists because microaggressions serve as individual triggers and, thus, exacerbate PTSS or serve as the catalyst on their own must be determined by future research.

There were many notable strengths in the current study. First, online sampling allowed for the recruitment of a racially and ethnically diverse sample representing Black, Asian, and multiracial individuals as well as a large group of participants who identified as Latinx/Hispanic. Second, this study incorporated the LEC-5 as a measure of lifetime trauma exposure (Gray et al., 2004), which refines and extends the existing microaggression literature supporting a unique effect of microaggressions on mental health outcomes. Third, all constructs were measured with empirically validated assessments that are commonly used in psychopathology research generally and in microaggression research specifically. The REMS demonstrates the most rigorous validation out of existing microaggression measures (Lilienfeld, 2017; Nadal, 2014), and current study modifications did not compromise the internal consistency at the scale and subscale levels.

There are also multiple limitations worth noting. The crosssectional nature of the current study limits any specific conclusions on directionality. Future studies should build upon microaggression research with the use of longitudinal methods, such as daily diaries (e.g., Livingston et al., 2017). Moreover, it is possible that the shared variance between constructs contributed to the significant results. Future research may examine how specific PTSD symptom clusters are associated with microaggressions and depression (APA, 2013; Armour et al., 2016). Race and other demographic variables were not considered as moderating variables, and it is possible that other moderating variables beyond lifetime trauma exposure might impact the link between microaggressions and posttraumatic stress. Torres and Taknint (2015), for instance, examined ethnic identity and self-efficacy as moderators in the association between microaggressions and PTSS and found evidence for a buffering effect. In addition, Moody and Lewis (2019) found that internalized oppression moderated the association between gendered racial microaggressions and traumatic stress among Black women.

Another notable limitation is that microaggression research is moving toward more fully incorporating intersectional theory (Crenshaw, 1989), and the current study offers little in this regard. Finally, only depressive symptoms were examined as an outcome variable. It is possible that microaggressions impact other mental health symptoms, and future studies could aim to more fully analyze the effect of microaggression exposures.

The results of the present study suggest that racial microaggressions are both routine and associated with mental health difficulties among young adult BIPoC. This study both replicated the findings from other microaggression studies (Forrest-Banks & Jenson, 2015; Torres & Taknint, 2015) and expands upon those findings by concluding that these associations remain after accounting for the impact of lifetime trauma exposure involving direct victimization experiences. The study also addressed criticisms of microaggression research by using empirically validated measures of the microaggression construct and including a stress rating for microaggression exposure. Consistent with prior research, there was support that microaggressions impact mental health.

These findings suggest that the association between microaggressions and depressive symptoms is partially explained by PTSS. More specifically, it is possible that the cumulative load of microaggressions uniquely contributes to PTSS among BIPoC given that the association between microaggressions, PTSS, and depression remained after accounting for lifetime trauma exposure. These results suggest that microaggressions are a clinically relevant factor in understanding mental health problems. Further replication of these findings will bolster the need for the microaggression research to turn toward examining both prevention and intervention efforts as a way to mitigate the negative effects of microaggressions on mental health among persons of color.

#### **Open Practices Statement**

The study reported in this article was not formally preregistered. Neither the data nor the materials have been made available on a permanent third-party archive; requests for the data or materials should be sent via email to the lead author at eauguste@fordham.edu.

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