COLLECTIVE ONGOING BETRAYAL TRAUMA: GENDERED AND RACIALIZED POLICE VIOLENCE TOWARD THE BLACK COMMUNITY

by

MELISSA L. BARNES

A DISSERTATION

Presented to the Department of Psychology
and the Graduate School of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy

September 2022

DISSERTATION APPROVAL PAGE

Student: Melissa L. Barnes

Title: Collective Ongoing Betrayal Trauma: Gendered and Racialized Police Violence toward the Black Community

This dissertation has been accepted and approved in partial fulfillment of the requirements for the Doctor of Philosophy degree in the Department of Psychology by:

Jennifer J. Freyd	Chairperson
Maureen Zalewsi	Core Member
Dare Baldwin	Core Member
Debra Merskin	Institutional Representative

and

Andrew Karduna	Interim Vice Provost for Graduate Studies

Original approval signatures are on file with the University of Oregon Graduate School.

Degree awarded September 2022

© 2021 Melissa L. Barnes
This work is licensed under a Creative Commons
Attribution-NonCommercial-NoDerivs (United States) License.

DISSERTATION ABSTRACT

Melissa L. Barnes

Doctor of Philosophy

Department of Psychology

September 2022

Title: Collective Ongoing Betrayal Trauma: Gendered and Racialized Police Violence toward the Black Community

Racialized and gendered police violence is a pernicious problem for Black communities. For my dissertation, I empirically tested a novel theoretical concept, Collective Ongoing Betrayal Trauma (COBT). COBT integrates the concepts of betrayal trauma, vicarious trauma, collective trauma, and institutional betrayal to examine the psychological consequences of indirect exposure to racialized and gendered police violence. I tested the theory of COBT by measuring the impact written vignettes that depicted gendered and racialized police violence toward Black Americans on Black participants' mental health and well-being. I also examined patterns in participants' reactions to the vignette based on participants' binary gender identity. Black, African American, and multi-racial participants were recruited through an online platform to complete an online survey. Each participant read one randomly selected vignette from five possible vignettes. Data were analyzed using 1,270 participants. Outcomes of interest include vicarious trauma, collective trauma, mental health symptoms, and changes in racial and gender identities. Three main takeaways are discussed. First, the facets of COBT were significantly correlated with each other, which provides support for COBT as a singular concept. Second, men and women, on average, experience indirect exposure to

discriminatory police violence in different ways, depending on who the victim is and what type of violence the victim is subjected to. Third, victim gender and type of violence are both important yet separate aspects of indirect exposure to discriminatory violence that should be considered in research, clinical, and advocacy work. Academic, societal, and clinical implications of this research are discussed, as well as future directions.

CURRICULUM VITAE

NAME OF AUTHOR: Melissa L. Barnes

GRADUATE AND UNDERGRADUATE SCHOOLS ATTENDED:

University of Oregon, Eugene, Oregon
Colorado College, Colorado Springs, Colorado

DEGREES AWARDED:

Doctor of Philosophy, Clinical Psychology, 2022, University of Oregon
Master of Science, Clinical Psychology, 2017, University of Oregon
Bachelor of Arts, Psychology, Feminist & Gender Studies, 2015, Colorado College

AREAS OF SPECIAL INTEREST:

Betrayal Trauma
Black Women's Trauma
Discriminatory Police Violence
Research-Informed Policy
Systemic Discrimination
Trauma and Substance Use

PROFESSIONAL EXPERIENCE:

Predoctoral Psychology Intern, Doctoral Psychology Internship Program, Puget Sound VA, Seattle, 2021-2022

Graduate Research Fellow, Department of Psychology, University of Oregon, 2020-Present

Doctoral Psychometrician, Private Practice External Practicum, 2017-Present

Special Issue Guest Editor, *Journal of Trauma & Dissociation,* "Discrimination, Violence, & Healing in Marginalized Communities", 2018-2020

Committee Member, University of Oregon Police Department Complaint Resolution Committee, 2016-2020

Doctoral Student Therapist, University of Oregon Psychology Clinic, 2016-2020

Graduate Teaching Fellow, Department of Psychology, University of Oregon, 2016-2020

Student Advisory Board Member, *Psychology of Women Quarterly,* 2016-2020

Co-Leader, Depression Prevention Group, Oregon Research Institute, 2016-2020

Doctoral Student Therapist, Eugene VA Behavioral Health Reintegration & Recovery Services, 2017-2019

Special Issue Guest Editor, *Journal of Trauma & Dissociation,* "Institutional Responses to Sexual Trauma", 2016-2018

Committee Member, University of Oregon Senate Responsible Reporting Working Group, 2015-2016

Committee Member, University of Oregon Senate Committee on Sexual and Gender-Based Violence, 2015-2016

Doctoral Student Therapist, University of Oregon Psychology Clinic, 2016-2020

GRANTS, AWARDS, AND HONORS:

Committee for an Inclusive Community Award, Collective Ongoing Betrayal Trauma: Gendered and Racialized Police Violence toward the Black Community, University of Oregon Psychology Department, 2021

Cultivating Healing, Advocacy, Nonviolence, Growth, and Equity (CHANGE)Grant, Collective Ongoing Betrayal Trauma: Gendered and Racialized Police Violence toward the Black Community, American Psychological Association Division 56 Trauma Psychology, 2020

Dissertation Funding Award, Collective Ongoing Betrayal Trauma: Gendered and Racialized Police Violence toward the Black Community, University of Oregon Division of Equity and Inclusion, 2020

Special Opportunity Grant, Collective Ongoing Betrayal Trauma: Gendered and Racialized Police Violence toward the Black Community, University of Oregon Graduate School, 2020

Summer Writing Fellowship, Collective Ongoing Betrayal Trauma: Gendered and Racialized Police Violence toward the Black Community, University of Oregon Center for the Study of Women in Society, 2020

Wayne State University Start-Up Funds, Collective Ongoing Betrayal Trauma: Gendered and Racialized Police Violence toward the Black Community, Wayne State University, 2020

Norman D. Sundberg Fellowship in Psychology, Collective Ongoing Betrayal Trauma, University of Oregon Psychology Department, 2019

Graduate Education Committee Travel Award, University of Oregon Psychology Department, 2017, 2018

NPEIV Murray Strauss Research Award, Who Would You Tell?: College Student Perspectives Regarding Sexual Violence Reporting on Campus, International Summit on Violence, Abuse, & Trauma, 2017

3 Minute Thesis Competition – First Place, Student Inclinations to Disclose to University Employees Under Two Reporting Policies, University of Oregon Psychology Department, 2017

Division of Equity and Inclusion Travel Award, APA Advanced Training Institute, University of Oregon, 2017

Science Directorate Travel Award, APA Advanced Training Institute, American Psychological Association, 2017

Promising Scholar Award, University of Oregon, 2015

RiSE Research Award, Honorable Mention, Attitudes toward Black Woman Targets: Interactions of Racism, Sexism, and Gender, Association for Psychological Science, 2015

PUBLICATIONS:

Barnes, M. L., Adams-Clark, A., Rosenthal, M. N., Smith, C. P., & Freyd, J. J. (2021). Pledged into harm: Sorority and fraternity members face increased risk of sexual assault and sexual harassment. *Dignity: A Journal on Sexual Exploitation and Violence, 6*(1), 1-30. https://doi.org/10.23860/dignity.2021.06.01.09

Gómez, J. M., Gobin, R. L., & **Barnes, M. L.** (2021). Discrimination, violence, & healing within marginalized communities. *Journal of Trauma & Dissociation.*

Holland, K. J., & **Barnes, M. L.** (2019). Institutional responses to sexual trauma. *Journal of Trauma & Dissociation, 20*, 259-262. https://doi.org/10.1080/15299732.2019.1592642

ACKNOWLEDGMENTS

I wish to extend immense gratitude to Jennifer Freyd, my mentor and collaborator. Your guidance has helped shape my passions and strengthen my voice. If it were not for your mentorship, I would not be defending my doctoral dissertation. Gratitude is also given to my dissertation committee members: Maureen Zalewski, Dare Baldwin, and Debra Merskin. You are the vital witnesses for this project's growth.

I want to give a special thanks to my lab members, Alexis Adams-Clark and Monika Lind. Alexis, your help was invaluable. Monika, your unwavering support is so appreciated. I am also grateful for my friends and family for their love, encouragement, and patience. Many thanks to Revelers Aerial Works for providing a space where I could detach myself from work, especially during the time of a pandemic.

This project would not have been possible without the support from multiple funding sources. Thank you to Jennifer Gómez and Wayne State University for your belief in the success of this research. This work was also supported by the American Psychological Association Division 56 Trauma Psychology Cultivating Healing, Advocacy, Nonviolence, Growth, and Equity (CHANGE) Grant; University of Oregon Psychology Department Committee for an Inclusive Community; University of Oregon Division of Equity and Inclusion Dissertation Award; University of Oregon Graduate School Special Opportunity Grant; and the University of Oregon Center for the Study of Women in Society Summer Writing Fellowship.

Finally, and perhaps most importantly, thank you to the participants of this study for their time and energy.

For all the souls who were taken too soon.
Who you were matters. Who they made you to be, should not.
For those who survive. I hope you thrive.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Trauma Theory	4
Betrayal Trauma	4
Betrayal Trauma and Police Violence	6
Institutional Betrayal	7
Police Violence as Institutional Betrayal	9
Vicarious Trauma	10
The Role of Empathy	12
Vicarious Trauma and Police Violence	13
Collective Trauma	14
Historical Aspects of Trauma	16
Collective Trauma and Police Violence	17
Race Theory	18
Intersectionality Theory	18
Intersectionality and Police Violence	19
Power and Control	21
Acknowledgement of History	22
Collective Ongoing Betrayal Trauma	23
Current Study	26
Study Aims and Hypotheses	27
Aim 1: Facets of COBT	27

Aim 2: Strength of Vignettes 27
Aim 3: Gender Differences and Vignette Details 27
Exploratory Aim 1: Racial and Gender Identity Changes 28
Exploratory Aim 2: Participant Characteristics and Direct Experiences ... 28
II. PILOT STUDY 30
Method 30
Results 31
III. METHOD 33
Participants and Recruitment 33
Power Analysis and Sample Size Rationale 34
Procedure 34
Measures 35
Participant Characteristics 35
Interpersonal Trauma History 36
Group Identity 36
Experiences with Law Enforcement 38
Open-Ended Attention Check Questions 39
Exposure to Police Violence 39
Identity as a Law Enforcement Officer 40
Demographic Information 40
Psychological Distress 40
Hypervigilance 40

Chapter Page

Dissociation 41

Emotional Distress 41

Experimental Vignettes 42

Learning and Manipulation Check 43

Collective Trauma 48

Institutional Betrayal – Discriminatory Police Violence 48

COVID-19 Exposure and Impact 49

Institutional Betrayal Questionnaire – COVID-19 49

Discrimination During the COVID-19 Pandemic 50

Data Analysis Plan 50

Preliminary Analyses 50

Aim 1: Facets of COBT 51

Aim 2: Strength of Vignettes 51

Aim 3: Gender Differences and Vignette Details 51

Exploratory Aim 1: Racial and Gender Identity Changes 52

Exploratory Aim 2: Participant Characteristics and Direct Experiences 52

IV. RESULTS 53

Preliminary Analyses 53

Participant Characteristics 54

Psychological Distress Measures 59

Aim 1: Facets of COBT 66

Aim 2: Strength of Vignettes 67

Chapter Page

Aim 3: Gender Differences and Vignette Details 68

Vicarious Trauma Outcome Composite Score 71

Collective Trauma 76

Institutional Betrayal – Police Violence 77

Exploratory Aim 1: Racial and Gender Identity Changes 79

Racial Identity 79

Gender Identity 81

Intersectional Identity: Race and Gender 86

Exploratory Aim 2: Participant Characteristics and Direct Experiences 88

V. DISCUSSION 93

Summary of Results 93

Takeaways from the Current Study 95

Limitations and Strengths of the Current Study 99

Implications 102

Academic and Societal Implications 102

Clinical Implications 104

Future Directions 109

Conclusion 111

APPENDIX: DISSERTATION SURVEY MATERIALS 112

REFERENCES CITED 133

LIST OF FIGURES

Figure | Page

1. Collective Ongoing Betrayal Trauma (COBT) Conceptualization........................ 25

2. Flow Chart for Exclusion Criteria.. 54

3. Psychological Distress Trait Measure PCA Scree Plot.. 63

4. Psychological Distress Pre-Vignette Measure PCA Scree Plot 64

5. Psychological Distress Post-Vignette Measure PCA Scree Plot 65

6. Association between Vignette Condition and Vicarious Trauma Outcome Difference Composite Scores 70

7. Association between Vignette Condition and Collective Trauma 70

8. Association between Vignette Condition and Institutional Betrayal – Police Violence 71

9. Distribution of Vicarious Trauma Outcome Difference Composite Scores 72

10. Distribution of Collective Trauma Scores 72

11. Distribution of Institutional Betrayal – Police Violence Scores 73

12. Two-Way Interaction Between Vignette Victim Gender and Vignette Type of Violence with Vicarious Trauma Outcome Difference Composite Scores as Outcome Variable 74

13. Main Effect of Vignette Type of Violence on Collective Trauma Scores............. 77

14. Main Effect of Participant Binary Gender on Institutional Betrayal - Police Violence Scores 78

15. Two-Way Interaction Between Vignette Victim Gender and Vignette Type of Violence with Racial Identity Pre/Post Difference Scores as Outcome Measure... 80

16. Two-Way Interaction Between Vignette Victim Gender and Vignette Type of Violence with Racial Identity Pre/Post Difference Scores as Outcome Measure: Men Participants Only 82

Figure Page

17. Two-Way Interaction Between Vignette Victim Gender and Vignette Type of Violence with Gender Identity Pre/Post Difference Scores as Outcome Measure 83

18. Two-Way Interaction Between Vignette Victim Gender and Vignette Type of Violence with Gender Identity Pre/Post Difference Scores as Outcome Measure: Men Participants Only 85

19. Main Effect of Vignette Type of Violence on Intersectional Identity Pre/Post Difference Scores: Women Participants Only 88

LIST OF TABLES

Table Page

1. Summary of Study Research Questions and Hypotheses 29

2. Study Measures 37

3. PROMIS Anxiety – Short Form 8a T-Score Conversion Table 44

4. PROMIS Depression – Short Form 8a T-Score Conversion Table 45

5. PROMIS Anger – Short Form 5a T-Score Conversion Table 46

6. PROMIS Meaning & Purpose – Short Form 8a T-Score Conversion Table......... 47

7. Overall Sample Demographics: Participant Self-Reported Identities 56

8. Overall Sample Demographics 57

9. Participant History Variables 57

10. Participant Gender by Vignette Condition 58

11. Psychological Distress Trait Scores: Means, Standard Deviations, and Correlations with Confidence Intervals 60

12. Psychological Distress Pre-Vignette Scores: Means, Standard Deviations, and Correlations with Confidence Intervals 61

13. Psychological Distress Post-Vignette Scores: Means, Standard Deviations, and Correlations with Confidence Intervals 62

14. Rotated Structure Matrix for PCA with Varimax Rotation of a One Component Solution: Psychological Distress Trait Measures 63

15. Rotated Structure Matrix for PCA with Varimax Rotation of a One Component Solution: Psychological Distress Pre-Vignette Measures.................................... 64

16. Rotated Structure Matrix for PCA with Varimax Rotation of a One Component Solution: Psychological Distress Post-Vignette Measures 65

17. Aim 1: Means, Standard Deviations, and Correlations with Confidence Intervals.. 67

Table | Page

18. Aim 2: Results of Three Independent Samples T-Tests Examining Differences Between Control and Active Vignettes 69

19. Aim 3: Fixed Effects ANOVA Results using Vicarious Trauma Outcomes Difference Composite Score as the Criterion 73

20. Aim 3: Fixed Effects ANOVA Results using Vicarious Trauma Outcomes Difference Composite Score as the Criterion – Women Participants Only 75

21. Aim 3: Fixed Effects ANOVA Results using Collective Trauma as the Criterion 76

22. Aim 3: Fixed Effects ANOVA Results using Institutional Betrayal - Police Violence as the Criterion 78

23. Exploratory Aim 1: Fixed Effects ANOVA Results using Racial Identity Difference Scores as the Criterion 80

24. Exploratory Aim 1: Fixed Effects ANOVA Results using Racial Identity Difference Scores as the Criterion – Men Participants Only 82

25. Exploratory Aim 1: Fixed Effects ANOVA Results using Gender Identity Difference Scores as the Criterion 83

26. Exploratory Aim 1: Fixed Effects ANOVA Results using Gender Identity Difference Scores as the Criterion – Men Participants Only 85

27. Exploratory Aim 1: Fixed Effects ANOVA Results using Intersectional (Gender & Race) Identity Difference Scores as the Criterion 87

28. Exploratory Aim 1: Fixed Effects ANOVA Results using Intersectional (Gender & Race) Identity Difference Scores as the Criterion – Women Participants Only 87

29. Exploratory Aim 2: Participant Characteristics and Experiences – Means, Standard Deviations, and Correlations with Confidence Intervals 90

30. Exploratory Aim 2: Summary of Hierarchical Regression Analysis for Variables Predicting Vicarious Trauma Outcomes Post-Vignette Score 92

31. Summary of Study Research Questions, Hypotheses, & Results 97

CHAPTER I

INTRODUCTION

Gendered and racialized police violence in the United States (U.S.) is a continuation of racial terror and control that began in the era of slavery for the Black community. Lynching, incarceration, and police violence are systemic tactics that use negative stereotypes of Black bodies to maintain the U.S. power hierarchy. Police violence is both racialized and gendered in that Black women are more often sexually victimized and Black men are more often physically victimized by law enforcement (e.g. Edwards, et al., 2019; Ritchie, 2018). To be clear, Black men are also sexually assaulted (e.g., Butler, 2017; Perrusquia, 2020) and Black women are also physically assaulted by police officers (e.g., Jacobs, 2017). However, an intersectional trauma psychology lens reveals the gendered nature of racialized police brutality in which sexual violence is more likely toward Black women and physical violence is more likely toward Black men.

With the emergence of social media, scholars and activists have been tracking law enforcement behavior on social media. Of the law enforcement officers whose behaviors have been tracked, 20% of current and 40% of retired officers met threshold criteria for violent or racist behavior on their social media accounts (Hoerner & Tulsky, 2019). Importantly, the knowledge we have about prevalence rates and sociopolitical contextual factors related to discriminatory police violence is mostly due to scholars and activists requesting documents from the criminal and civil justice systems or police departments voluntarily providing this information. Police departments are not required to disclose information that would help address the impetuses for and implications of police violence.

In this dissertation, I primarily use the terms "physical violence" and "sexual violence" to describe acts of police violence. However, at this point in time, prevalence rates of police violence are largely garnered from formal reports or cited grievances against law enforcement officers. When physical violence and sexual violence perpetrated by police officers are formally reported, these forms of violence are labelled as "excessive force" and "sexual misconduct", respectively. Thus, when writing about prevalence rates for different types of police violence in this dissertation I use the terms "excessive force" and "sexual misconduct".

The first most cited grievance against law enforcement is excessive force, which include physical violence and homicide. In a seven-year period beginning in 2005, Black males were killed by police officers three times as often as White males (Bryant-Davis et al., 2017; Staggers-Hakim, 2016). Black men are twice as likely to be unarmed compared to White men when killed by police (Bryant-Davis et al.; Staggers-Hakim). Eighteen percent of the Black males killed were under the age of 21 compared to about 9% of White males who were killed (Staggers-Hakim). The age associated with the highest risk of homicide for Black men is 20-35 years old (Edwards et al.). Recently, there were two papers that suggested there was no evidence Black people were disproportionately targets of police-involved shootings (Fryer, 2016; Johnson et al., 2019). However, researchers (Feldman, 2016; Knox et al., 2020; Ross et al., 2018, 2020) have challenged these two papers and Johnson et al. (2020) has since retracted their paper. As noted above, excessive force is the most cited grievance against law enforcement, with 57% of the excessive force cases involved physical violence with a weapon (Bryant-Davis et al.). The homicide indictment rate for the general population is 90%, but police officers are indicted in 1% of the law enforcement homicide cases. The rate of conviction for law enforcement homicide is 1

in every 1,000 cases. (Bryant-Davis et al.).

The second most cited grievance against law enforcement is sexual misconduct (Ritchie, 2018). At this point, very limited research is available that provides prevalence rates of police sexual misconduct through an intersectional lens. This is a significant consequence of the political intersectionality (Crenshaw, 1991) that plagues Black women and invalidates their experiences of sexual violence. At this point, psychology is seriously lacking in contributions to this issue. Andrea Ritchie, a police misconduct attorney, is one of the leading experts on gendered police violence toward Black women. Ritchie (2017) reported that women of color who are "perceived" to be involved in drug or sex trades, immigrants, people with disabilities, people with prior arrest records, people with limited English proficiency, and people who have been targets of police violence in the past are vulnerable to police sexual misconduct. There are documented cases, although not well-known, in which Black women who call the police for help in domestic violence or intimate partner violence situations have then been arrested themselves (e.g., Platt et al., 2009) or physically or sexually victimized by the police officers responding to the original call (Ritchie, 2017). Additionally, police officers have extorted sex from women who may be facing criminal charges, such as drug-related or prostitution charges. For example, an officer in Oklahoma was convicted for sexually assaulting 13 Black women and girls who were in these vulnerable situations. One-fifth of the law enforcement sexual misconduct cases involved forcible rape and one-fifth of the cases included forcible fondling (Ritchie, 2018). One prevalence study reported that half of the arrests of police officers for sexual misconduct including victims who were minors (National Institute of Justice, as cited in Ritchie, 2018). Women's prior interpersonal victimization may be a risk factor for experiencing subsequent

police violence (Fedina et al., 2018).

Clearly, the issue of police violence toward Black men and women needs to be better understood and addressed. However, the field of psychology currently lacks the theoretical foundation necessary to frame relevant research questions. I propose a multi-axis framework that integrates concepts from both Race Theory and Trauma Theory to address the deficient theoretical foundation. In this dissertation I introduce Collective Ongoing Betrayal Trauma (COBT), a theoretical framework that utilizes Trauma Theory and Race Theory to further understand impetuses for and implications of gendered and racialized police violence.

Trauma Theory

Betrayal Trauma

Historically, researchers have understood trauma to be a consequence of a fear-inducing, physical assault on the body (e.g., Herman, 1997; Tseris, 2013). Beginning in the 1990s, trauma psychologists brought to light a second, completely separate, dimension of trauma: interpersonal or social betrayal (e.g., DePrince & Freyd, 2002; Freyd, 1997, 2008). Freyd developed Betrayal Trauma Theory (BTT) to explain 1) the role that interpersonal trust or dependence has in the experiences of interpersonal trauma and 2) possible strategies victims use to maintain the trusted or depended upon relationship. The current study primarily focuses on the role of interpersonal dependence in experiences of interpersonal trauma, as related to police officers inflicting trauma on Black civilians.

BTT was developed on the premise that humans are social creatures and that we thrive when we have healthy interpersonal relationships. It is necessary to analyze the relationship between an abuser and a victim because we place such high importance on safe and trustworthy

attachment in relationships (e.g., Freyd, 2008; Freyd et al., 2007). If these crucial relationships are disrupted with violence, there is a likelihood that there will be significant implications. BTT posits that the level of trust or dependence in a relationship will be associated with posttrauma outcomes. Specifically, the more trust or dependence a relationship has, the stronger the association might be with negative posttrauma outcomes when that trust is violated. Without acknowledging the social betrayal aspect of trauma, we deny the experience of power dynamics, sociopolitical context, and emotional and psychological damage underlying interpersonal betrayal.

Betrayal traumas are associated with negative outcomes, including psychological, physical, and social outcomes. Broadly, betrayal traumas are positively associated with Posttraumatic Stress Disorder (PTSD) criteria symptoms, such as re-experiencing, avoidance, arousal, and alterations in cognitions and affect (Kelley et al., 2012). Gamache Martin et al. (2013) examined the relationship between cumulative trauma exposure and posttrauma symptoms. Cumulative trauma was defined as exposure to different types of betrayal traumas (e.g., physical assault, sexual assault, neglect, etc.). More than 60% of their sample reported experiencing cumulative interpersonal trauma. Experiences of cumulative trauma were positively associated with depressive symptoms, dissociation, and PTSD symptoms. This association was particularly strong when the betrayal traumas were perpetrated by someone close to the victim. Betrayal traumas are also associated with physical health issues and impairment in daily functioning (Brown & Freyd, 2008; Goldsmith et al., 2012). In general, women report more betrayal traumas perpetrated by someone close to them, such as a friend or intimate partner, compared to men (e.g., Gamache Martin et al.). Research shows a strong relationship between

violence perpetrated by close others and negative posttrauma psychological and physical outcomes.

Betrayal Trauma and Police Violence.

Betrayal Trauma Theory posits that violence perpetrated within a dependent relationship is an abuse of interpersonal power. Law enforcement's responsibility for social control implies that the Black community is dependent on this institution, and the individual police officers, because law enforcement holds legal and historical power. If officers view a Black woman as out of control, she could be exposed to police sexual misconduct as the officer's exertion of interpersonal power. This exertion of power is an interpersonal manifestation of sociocultural betrayal, in which societal attitudes, biases, and stereotypes impact law enforcement officers' behavior toward Black people (Platt et al., 2009). Betrayal Trauma Theory proposes that when perpetrators are confronted about their abuse of power, the perpetrator may wield more power in more destructive ways (Freyd, 1997). This can be easily applied to the relationship between law enforcement and the Black community. When the Black community collectively protests discriminatory police violence enacted by individual officers, law enforcement is likely to call upon their militarized special units (e.g., SWAT) to further exert power and control over Black bodies. Police officers also wield their power in more covert ways to maintain power over protest. For example, in early 2021 police officers in Beverly Hills, California were accused of playing copyrighted music while being filmed during interactions with civilians so that social media platforms would remove these videos (Thomas, 2021). Betrayal Trauma Theory contributes to the theoretical understanding of discriminatory police violence by characterizing the interpersonal nature of an individual police officer wielding power and perpetrating violence

toward Black citizens.

Institutional Betrayal

Within the past decade, researchers have begun to expand the conceptualization of Betrayal Trauma Theory to understand the impact of institutional actions. Freyd (2013) defined "institutional betrayal" as harmful institutional acts toward individuals who are dependent on that institution. These harmful acts include both institutional actions prior to an incident (omissive acts) and actions after an incident (commissive acts). Omissive acts can include organizational policies that make violence or discrimination more likely to occur or organizational environments that make it difficult to report an incident. Commissive acts can include punishing someone who reports an incident or covering up an incident. The concept of institutional betrayal provides a framework to analyze how interpersonal betrayal manifests at both the individual and organizational levels. Institutional betrayal has been most studied within higher education settings (e.g., Carroll, 2017; Pyke, 2018; Smidt et al., 2019; Smith et al., 2016; Stader & Williams-Cunningham, 2017; Wright et al., 2016). Various other institutions have been a focus of institutional betrayal research, including active duty and veteran military culture (e.g., Andresen et al., 2019; Holliday & Monteith, 2019; Monteith et al., 2016); healthcare systems (e.g., Smith, 2017; Tamaian et al., 2016); high school (Lind et al., 2020); churches (Brand et al., 2018); and professional associations, such as the American Psychological Association or journalism (e.g., Dadouch & Lilly, 2020; Gómez et al., 2016). Institutional betrayal has also been studied within specific events or incidents, including environmental disasters (Beamish, 2001), the COVID-19 pandemic (e.g., Adams-Clark & Freyd, under review; Bachem et al., 2020), and intimate partner violence (e.g., Lee et al., 2019). A few researchers have critically attended to the

implications of institutional betrayal specifically for Black Americans, American Indians, and lesbian, gay, or bisexual people (Cromer et al., 2017; Gómez, 2015; Smith et al., 2016). The consensus of the available research is that institutional betrayal is pervasive: it can occur within many organizations and under many different circumstances.

Similar to betrayal trauma, institutional betrayal is associated with wide-ranging mental health and well-being outcomes. The first empirical study on institutional betrayal found that for college students experiences of institutional betrayal related to a sexual trauma were associated with increased anxiety, dissociation, and sexual difficulties, as compared with similar interpersonal trauma but without the institutional betrayal. Throughout the institutional betrayal literature, studies show that experiences of institutional betrayal are associated with increased posttraumatic stress symptoms, dissociation, depression, lower self-esteem, anxiety, and rumination (e.g., Hannan et al., 2020; Lee et al., 2019; Smith et al., 2016). Research with military personnel who experienced military sexual trauma has found that in addition to the typical findings noted above, institutional betrayal is also associated with increased risk for suicide attempts (Monteith et al., 2016).

Sometimes individuals are able to choose which institutions they trust or depend on, such as when students choose a college to attend. Other times there is less choice, such as dependence on the government. Marginalized groups are particularly forced to depend on societal structures and organizations because of structural and intentional power differentials. Additionally, these societal structures have played a role in marginalizing the dependent group (Burstow, 2003). This forced dependence on historically oppressive and harmful institutions might manifest different implications for group members compared to when individuals have more of a choice to

initiate a relationship with an institution. Research is warranted to explore this research question. Even though institutional betrayal research is relatively new, and there are some gaps to address, there is strong evidence to suggest that omissive and commissive institutional acts can harm individuals above and beyond the initial traumatic event.

Police Violence as Institutional Betrayal.

It has been well documented that the institutional origin of U.S. law enforcement were slave patrols, which were responsible for capturing escaped enslaved people and preventing revolts (e.g., Ralph, 2019; Waxman, 2017). These patrols were created to maintain the status quo, or to control the social hierarchy. Law enforcement's historic responsibility for social control forced the Black community to become dependent on the institution of law enforcement for literal survival. We see enforcement of social control within every historical era: enslavement, Reconstruction, Jim Crow, de-segregation, black liberation, and Black Lives Matter. Thus, generations of Black Americans have been socialized into a dependent relationship with institutional law enforcement. The historical sociopolitical context of law enforcement as an organization contains many instances of omissive institutional acts that perpetuate systemic harm toward Black communities. The responses that law enforcement agencies and the criminal justice system have to recent incidents of discriminatory police violence are clear examples of commissive institutional betrayal acts, such as transferring officers to a different department, refusing to revise policies that protect officers from punishment or accountability, or declining to publicly provide prevalence rates of police misconduct within their department.

At this point, there is no available empirical research on institutional betrayal and law enforcement or the criminal justice system. There is one paper that provides a critical analysis of

the justice system with the frame of institutional betrayal. This paper extends the concept of institutional betrayal to a specific realm: "judicial betrayal" (Smith et al., 2014). The institution of law enforcement has remained untouched in this new era of labelling institutions that act in ways to betray or harm those who depend on these institutions. Institutional betrayal conceptually illustrates the reciprocal nature between structural dependence Black communities have on law enforcement and the discriminatory violence Black citizens experience at the hands of police officers.

Vicarious Trauma

The concept of vicarious trauma has helped to progress the understanding of implications of betrayal trauma, in that vicarious trauma describes an indirect traumatization that can lead to significant outcomes. Historically, only direct traumatic experiences that comprised threat to physical integrity (e.g., Herman, 1997) were considered truly traumatic. McCann and Pearlman (1990) developed this concept to describe a process in which individuals experience long-term psychological distress after learning about someone else's victimization. Vicarious trauma manifests as a long-term alteration in cognitive schemas, beliefs, expectations, and assumptions for the person who learned about another's victimization.

Researchers have mostly studied vicarious trauma with individuals in professional helping roles. Community professionals, health workers, marriage and family therapists, domestic violence therapists, sexual assault nurse examiners, among others, have reported experiencing vicarious traumatization (Ben-Porat, 2015; Howlett & Collins, 2014; Jordan, 2016; Lim & Oo, 2015; Wies & Coy, 2013). For example, Schauben and Frazier (1995) found that female counselors who had a higher number of clients with treatment focusing on interpersonal

trauma experiences reported more disrupted beliefs, more posttraumatic disorder (PTSD) symptoms, and more self-reported vicarious trauma. Individuals who are in volunteer roles, instead of higher-level professional roles, are also vulnerable to emotional distress after indirect exposure to trauma. Researchers have consistently included the professionals' own trauma history as a possible contextual factor that impacts the manifestation of vicarious trauma; although the research is mixed on the association between helpers' trauma history and prevalence of vicarious trauma (Izzo & Miller, 2018; Schauben & Frazier, 1995). The theoretical and empirical findings support the hypothesis that professional helpers are in a particular position that increases their vulnerability to experience vicarious traumatization.

Many scholars conceptualize vicarious trauma as the precipitating event related to traumatic reactions. Research suggests that professionals who have encountered vicarious traumatization are also likely to report posttraumatic stress symptoms (e.g., McCann & Pearlman, 1990; Schauben & Frazier, 1995). Hypervigilance, suspicion about others motives and behaviors, sleep disturbances, anxiety, numbness, anhedonia, feeling estranged from others, and cognitive distortions have been exhibited by professional helpers who also report vicarious traumatic experiences (Jordan, 2016). Izzo and Miller (2018) expanded upon the possible trauma responses that have support in the research. The authors posit that disruptions in the cognitive schema of a person's "helper" identity can occur after vicarious traumatization. Additionally, the authors described responses of feeling fearful for family members, somatization, and feelings of incompetence that might accompany vicarious trauma. Posttrauma reactions to vicarious trauma appear to parallel posttrauma responses exhibited after direct exposure to trauma, with some possible specific symptom manifestations related to the helper's role and responsibilities.

The Role of Empathy.

When someone is indirectly exposed to trauma, a vicarious traumatic response may be associated, in part, with the empathic response to witnessing another person's pain. Research on empathy suggests there is a social group component that determines the level of empathy an individual feels for the victim disclosing betrayal trauma. Empathic intragroup bias describes how individuals may be more likely to empathize with people who appear to be in the same social group as them (e.g., Cikara et al., 2011; Cundiff & Komarraju, 2008). A number of researchers have focused on race-based social groups to understand the role of empathy in intergroup empathy. In a study conducted after Hurricane Katrina, White and non-White participants were asked about their intentions to volunteer for hurricane relief efforts. Participants who believed outgroup victims experienced fewer uniquely human emotions compared to ingroup members were less likely to report an intention to volunteer (Cuddy et al., 2007). Dehumanizing outgroup members likely decreased the empathy felt toward outgroup members, and in this study, was negatively associated with intention to volunteer. Similar results are found with neural empathic responses. When viewing someone of the same race being pricked by a needle, empathic resonance is higher than when viewing someone of a different race being pricked by the needle (Cikara et al., 2011; Xu et al., 2009). Additionally, reduced empathic response to an outgroup member's pain was correlated with higher implicit racial bias (Cikara, Bruneau, & Saxe). Decreased empathic response is observed at the brain-level and empathic response is negatively associated with implicit bias, according to this research.

Research suggests that reserving empathic resources occurs in early childhood and with novel social groups. For example, children exhibited more empathy bias favoring ingroup

members after one week of ingroup identification, in which they were grouped by colors (Masten et al., 2010). We learn early on in the lifespan that empathy leads to usage of emotional resources and that allocation of these resources should be reserved for ingroup members. It is not that people are not able to empathize with outgroup members, but the effortful cost may seem too high and an adequate motivation is not present (e.g., Laurent & Hodges, 2009). In situations that threaten physical or psychological integrity, people may tighten the ingroup boundaries even more so as to preserve the effort it takes to empathize with others.

Vicarious Trauma and Police Violence.

The concept of vicarious trauma (McCann & Pearlman, 1990) contributes to an understanding of discriminatory police violence by validating the chronic indirect exposure to this violence within the Black community. Marginalized people whose community has historically been subjected to traumatic discrimination may experience vicarious traumatization similar to professional helpers. Learning about Black community members being racially profiled and violently attacked by police may evoke vicarious traumatization for community members who were not the direct targets of the violence. As described above, empathy likely plays a role in vicarious trauma. Research suggests there is an empathic intragroup bias in which individuals may be more likely to empathize with people who appear to be in the same group (e.g., Cikara et al., 2011; Cundiff & Komarraju, 2008). It is possible that due to the multiple social identities involved (i.e., race and gender) Black community members may unknowingly empathize with a police violence victim who is doubly identified as an in-group member. For example, Black men may report feeling more traumatized when another Black man is the victim of police brutality than when a Black woman is the victim. This gendered empathic bias may be

evidenced more so with Black men than with Black women. Black women may experience vicarious trauma similarly if a police violence victim is a Black women or a Black man due to political intersectionality implications that force Black women to support the entire Black community (i.e. prioritize racial discrimination over gendered discrimination). Incorporating the concept of vicarious trauma into the theoretical conceptualization of discriminatory police violence further illuminates and legitimizes the psychosocial effects of indirect exposure to this violence.

To date, there has not been any research focused on vicarious trauma exposure through media reports of police violence within the Black community. However, vicarious trauma has been studied within a few semi-related contexts. Research on the vicarious trauma effects from mass shootings have found a positive relationship between viewing news reports describing mass shootings and psychological distress (e.g., Fallahi, 2017; Fallahi & Lesik, 2009). Research with Iraqi refugees found that media exposure to war news was strongly associated with PTSD symptoms and negative health outcomes after controlling for previous trauma experiences (Kira et al., 2008). In the domain of sexual violence, research has focused more on the effects of victims' sense of agency and control over the narrative. Themes of this research include 1) re-exploitation of victims by appropriating the victims' narratives and 2) allies embodying a "savior" complex when victims have not asked to be "rescued" (Countryman-Roswurm & Patton Brackin, 2017; Lindsey, 2010). While this literature can help to inform our understanding of vicarious exposure to discriminatory police violence, contextual factors remain that warrant specific attention to outcomes of vicarious exposure to police violence in the Black community.

Collective Trauma

The concept of collective trauma bridges interpersonal and group trauma in that collective trauma elicits both individual and group-level psychological responses. Collective trauma refers to a traumatic event that happens to a specific group of people. Collective trauma has been researched within two broad domains. First, a single, catastrophic human-made or natural disaster can evoke an experience of collective trauma within the group of people who were directly involved in the catastrophe, such as major earthquakes or terrorist attacks (e.g., Gist & Lubin, 1999; Wlodarczyk et al., 2016). Second, collective trauma can create a sense of unresolved suffering for a group of people who experienced historical violence, such as genocide or internment (e.g., Aydin, 2017; Yellow Horse Brave Heart, 1999; Yellow Horse Brave Heart et al., 2011). This historical violence may or may not include mass death. Several scholars refer to the systemic colonization and attempts to destroy culture, language, and religion without direct mass death as cultural genocide, or ethnocide (MacDonald & Hudson, 2012). Some groups have experienced both mass death and ethnocide. For example, American Indigenous groups were massacred in the early history of what is now known of as the United States. In modern history, the American Indigenous populations have also been a target of ethnocide through forced separation of Indigenous children and placement into colonial boarding schools. At these schools, behaviors were shaped that sharply contrasted the traditional values and customs of their tribe of origin (e.g., Yellow Horse Brave Heart). Collective trauma that includes betrayal of a trusted or depended upon relationship undoubtedly fosters negative psychosocial outcomes at both the individual and group levels.

Collective responses to trauma appear to include both typical PTSD responses and broader, culturally relevant responses. Typical PTSD responses to collective trauma have been

exhibited within different groups, including children who lived through the Rwandan genocide, as well as with Jewish Holocaust survivors (Dyregrov et al., 2000; Neugebauer et al., 2014; Prot, 2010; Whitbeck et al., 2004). Culturally relevant responses to collective trauma focus on cultural identity, schemas, and memory. Collective trauma can negatively impact individual and collective schemas, as well as disrupt individual and cultural identities (Aydin, 2017). Systematic destruction of a group based on specific group characteristics violates assumptions and schemas about other people, themselves, and their group identity. This likely occurs through a process similar to how cognitions become distorted after individual betrayal traumas. An individual's identity development occurs within their particular sociocultural context. Depending on the sociocultural context, cultural responses may include identity disruption (e.g., internalized prejudice), defensive violence, denial, shame, and/or fear (Pearlman, 2013). This context shapes both individual and cultural identities, including individual and collective responses to traumatic events.

***Historical Aspects of Trauma*.**

One notable aspect of the standard conceptualization of collective trauma is that the trauma was in the past. Research on genocide, mass murder, ethnocide and other interpersonal collective traumas focuses on initial trauma events that have already occurred, whether a month or decades ago, and that are not ongoing. Research with Indigenous people, African Americans, and Jewish people theorize the group's collective history through a trauma lens (Burstow, 2003; Cromer et al., 2017). Through this lens, the initial trauma has ended. However, the collective traumatic history shapes current cultural identities, individual identities, and life events. For example, research within U.S. Lakota tribes shows that historical ethnocide has perpetuated

cumulative emotional and psychological wounding throughout generations (Yellow Horse Brave Heart, 1999; Yellow Horse Brave Heart et al., 2011). While boarding schools for Indigenous people are now voluntary, the communities and younger generations continue to suffer the consequences of internalized prejudice, family separation, and ethnocide. At the individual level, children who grew up in the boarding schools were physically and psychologically abused by those they were dependent upon for survival. The forced separation of children and placement of these children into boarding schools highlights the institutional betrayal by a depended upon institution, namely government and educational institutions (Cromer et al.). Collective betrayal trauma experiences are complex because of the individual, group, and institutional participation, as well as the historical and contemporary aspects of these experiences.

Collective Trauma and Police Violence.

Collective trauma directly pertains to discriminatory police violence because the basic definition of collective trauma is a traumatic event that happens to a specific group or people. The Black community is a collective of people who have endured traumatic police violence. However, the literature, up to this point, has only focused on past traumatic events that have happened to a group of people, although the collective may continue to experience trauma sequelae (e.g., Aydin, 2017; Yellow Horse Brave Heart, 1999). I argue that communities who continue to experience collective trauma and violence likely experience individual and collective implications of collective trauma. These implications may include cultural identity disruptions, internalized prejudice, defensive violence, collective memory impairment, and altered cognitive schemas about other people or the world (e.g., Aydin; Pearlman, 2017). Collective trauma acknowledges the historical oppression Black communities have experienced by law

enforcement. The implicit assumption of prior scholarship on collective trauma that the trauma is securely in the past suggests this concept should be extended to conceptualize current collective trauma, such as modern discriminatory police violence that has roots in past oppression, as also a form of collective trauma.

Race Theory

Broad concepts from Race Theory that can be useful in critically thinking about discriminatory police violence include intersectionality theory, power and control, and acknowledgement of history.

Intersectionality Theory

Kimberlé Crenshaw developed Intersectionality Theory to change the single-axis perspective of marginalization within the criminal justice system and other domains. Experiences will vary within a marginalized community depending on the intersection of multiple identities, such as race, gender, sexuality, socioeconomic status, etc. In Race Theory, Black women's racial and gender identities have become placed in contention with each other due to the single-axis perspective of social issues focused solely on the role of either racial or gender identity in the active marginalization of groups from the dominant society. Intersectionality Theory was initially developed to give voice to Black women's experiences using a multi-axial framework that does not treat social identities as mutually exclusive (Crenshaw, 1989, 1991). A crucial concept within Intersectionality Theory is that social identities do not intersect in an additive way; instead, social identities intersect in interactive ways. Intersectionality is critical for understanding who wields power and who becomes disenfranchised. Intersectionality Theory outlines three types of intersectionality: structural, political, and representational. Structural

intersectionality refers to the intersection of social structures responsible for organizing different social categories. Political intersectionality emphasizes the grouping of people and their experiences by political agendas. Representational intersectionality attends to cultural depictions of communities that impact their experiences within the broader society. These three types of intersectionality are critical for understanding who wields power and who becomes disenfranchised, even within marginalized groups.

Intersectionality and Police Violence.

The inherent nature of gendered and racialized police violence calls for the use of Crenshaw's (1989) Intersectionality Theory to unpack these experiences. Structural intersectionality highlights how law enforcement as an institution has been structured around maintaining a power hierarchy within the U.S. Recall that in its infancy, American law enforcement was tasked with maintaining the American slavery system. Modern-day law enforcement continues to be structured as an agent of social control, which authorizes law enforcement officers to use various control and intimidation tactics toward Black Americans. Law enforcement has also maintained their general tactics throughout history: physical violence (e.g., lynching or choke-holding) is typically targeted toward Black men and sexualized violence (e.g., rape or sex trafficking) is typically targeted toward Black women.

Political intersectionality plays a role in determining which type of police violence is acknowledged and addressed. Discourse and rhetoric are two important concepts to consider when working to understand political intersectionality. Discourse is written or spoken communication and rhetoric is the art of discourse. In other words, rhetoric is the strategy and discourse is the product. Political agendas have utilized rhetoric that consists of a single-axis

perspective in which police violence is primarily race-based trauma, with similar psychological impact on victims regardless of other social identities (Bryant-Davis et al., 2017). The resulting discourse around police violence is that an *antiracist* agenda is the only relevant agenda in both political, intellectual, and social domains. This discourse further invalidates *gendered* racism in discriminatory police violence (e.g., Bryant-Davis et al.). We do not often see national attention for Black women who were physically violated by police officers, let alone sexually violated. When we do, these Black women's stories are often associated with Black men's victimization. For example, in 2020 little national attention was given to the murder of Breonna Taylor until George Floyd was murdered by police. Our society's erasure of Black women from the discourse around causes and consequences of discriminatory police violence is an explicit example of political intersectionality.

Representational intersectionality, as noted above, illustrates the power of cultural stereotypes in justifying systemic control of marginalized groups. Stereotypes are widely held, oversimplified, and fixed ideas of particular people or things. Media is a strong force in creating and perpetuating stereotypes at a cultural level. Stuart Hall developed the concept of re-presentation to describe how media ascribes particular representations to people or situations (e.g., Hall et al., 1975; Hall et al., 2013). While there are many possible representations media could use in reporting, media often regress toward the stereotypical representation. Again, if we consider rhetoric and discourse as strategy and product, respectively, then re-presentation is the rhetorical strategy that can create a discourse that perpetuates cultural stereotypes. When reporting incidents of police violence, media choose which pictures to use and which words to describe the police officer and the victim. Outside of specific police violence incidents, we see

media present extremely successful Black women athletes in erotic and objectified ways (e.g., McKay & Johnson, 2008), Black men as aggressive and/or as criminals (e.g., Dixon & Linz, 2000), White women as victims of violent crimes (e.g., Parrott & Titcomb Parrott, 2015), and White men as protectors or the ultimate authority (e.g., Katz, 2015). These re-presentations likely have a role in shaping viewers' perceptions of these groups of people. Even though media does not *always* re-present these groups in these stereotypical ways, the consistent presentation of cultural stereotypes likely strengthens a cultural stereotype more than an occasional non-stereotypical presentation could weaken the cultural stereotype.

Political and representational intersectionality merge here because Black women are expected to split their energy between rejecting both stereotypes of Black men being (sexual) predators and Black women being unchaste or sexually promiscuous. The immense consequences for Black men, historically, who have been accused of violence or aggression toward White women have relegated Black women to supportive roles: take care of the family, fight for Black men's justice, etc. This supportive role takes up a lot of resources, including time, money, and cognition. Additionally, Black women may choose silence over disclosure of gendered racist police violence for fear that Black men will be further penalized due to the Black woman's "deviance". To note, this "deviance" would be the justification for police officers "punishing" her with physical or sexual violence.

Power and Control

Discriminatory violence has always been used as a form of racial terror to exert power and control over the Black community in the U.S., which functionally perpetuates the current racial hierarchy. The history of American law enforcement has generated so much structural

power within this institution that law enforcement has become the hegemonic agent of social control over people of color. Legitimacy of this role has been reinforced by the militarization of law enforcement (Embrick, 2015; Hughey, 2015). In the past few decades, federal legislation has authorized the transfer of military equipment to local and state law enforcement agencies. This equipment includes weapons, transportation, and other gear. Law enforcement agencies created specialized teams who became the experts in social control through militarized means (e.g., Hughey). Special Weapons and Tactics Units (SWAT) were created in response to the Los Angeles race riots in 1992. It appears that when communities of color challenge the social hierarchy, law enforcement is given more freedom to exert social control. The escalating militarization of law enforcement increases the intimidating visualization of officers as well as their capability to enact significant destruction on a community. The ideologies that law enforcement espouse also contribute to their responsibility of social control. For example, space has been ideologically racialized since the Jim Crow era and law enforcement has been tasked with monitoring these spaces. People of color who are in spaces understood to be white spaces (e.g., neighborhoods, schools, etc.) are more likely to become targets for law enforcement contact. People of color are seen as out of place in these ideologically racialized spaces, which invite racialized social control under the guise of "racially neutral" appeals to safety and space (Hughey). Law enforcement has long been the agents of social order and control and discriminatory violence has historically been an effective strategy to maintain the power hierarchy.

Acknowledgement of History

When analyzing the history of oppression targeted toward the Black community, two

historical sociopolitical factors become apparent. The first factor, as described in the previous paragraph, is the literally lethal relationship between law enforcement and the Black community (e.g., Freedman, 2013; Hughey, 2015; McGuire, 2010). The cultural representation of law enforcement is one of protection; however, for protection to occur there has to be something to be protected from. The hegemonic White narrative has historically named the Black community as the source from which they needed protection.

The second historical sociopolitical factor that becomes apparent is a larger pattern of institutional betrayal (Burstow, 2003; Cromer et al., 2017; Hill Collins, 1998; Smith & Freyd, 2014) that has created collective mistrust toward organizations that could be useful resources for people who have experienced violence. For example, the Black community has valid reasons to mistrust the medical care system. In the Tuskegee Syphilis Study that began in 1932, Black men were misled to believe that they were receiving treatment when, in fact, they were not. Henrietta Lack's cells have been used in medical intervention and discovery since the 1950's; however, she never gave permission for her bodily tissue to be collected or redistributed by doctors. Within modern medicine, Black individuals are more than three times more likely to have a limb amputated as a result of diabetes compared to White individuals who are more likely to receive alternative interventions (Hughey, 2015). Broad mistrust of institutions leaves Black men and women who experience discriminatory violence with few resources to ameliorate individual and collective suffering.

Collective Ongoing Betrayal Trauma

Betrayal trauma, institutional betrayal, vicarious trauma, and collective trauma have accurately labeled traumatic experiences that many people experience. However, Black

communities' experiences of discriminatory violence is a particular type of violence that has not yet been fully captured within trauma or race theory. I have developed a theoretical approach that merges betrayal, vicarious, and collective trauma within an intersectional perspective to assess Black men and women's experiences of gendered and racialized police violence, which constitutes indirect, chronic, group-level trauma. At this time, I have named this concept "Collective Ongoing Betrayal Trauma" (COBT) to capture the chronicity and also the group-level experiences of interpersonal discriminatory attacks. Figure 1 summarizes the conceptualization of COBT.

When creating the argument for a novel concept or theory, it is often helpful to also outline what the new theory does not encompass. COBT does not address the outcomes of direct, first-hand exposure to trauma. COBT is primarily focused on the indirect exposure to trauma. COBT is not equivalent to PTSD. PTSD is the cluster of symptoms that occur after an initial trauma; COBT refers to this initial trauma and posttrauma symptoms may be an outcome of COBT. COBT is also not equivalent to the idea of countertransference. Countertransference encompasses intrusions that are typically short-term, such as confined within a therapy session. COBT, on the other hand, is conceptualized as having insidious and chronic consequences. COBT is not an example of burnout or compassion fatigue. Burnout and compassion fatigue are concepts most relevant to vicarious trauma that helping professional might experience. Burnout and compassion fatigue refers to psychological exhaustion and diminished interest in helping work. COBT is not focused on helping professionals' experiences and, instead, is focused on marginalized communities' indirect exposure to discriminatory violence. COBT is not the same as intergenerational transmission of trauma, which is a secondary impact of trauma that is passed

Figure 1

Collective Ongoing Betrayal Trauma (COBT) Conceptualization

	Betrayal Trauma	Vicarious Trauma	Collective Trauma	Institutional Betrayal	COBT
Characteristics of a Trauma					
Interpersonal violence	✓ (green)	✓ (orange)	✓ (orange)	✓ (orange)	✓ (green)
Direct abuse of power/trust	✓ (green)		✓ (orange)	✓ (green)	✓ (green)
Indirect exposure to trauma		✓ (green)		✓ (orange)	✓ (green)
Role of empathy		✓ (green)			✓ (green)
Trauma involving a group			✓ (green)	✓ (orange)	✓ (green)
Historical oppression			✓ (green)	✓ (orange)	✓ (green)
Potential Trauma Outcomes					
Internalized prejudice			✓ (orange)		✓ (orange)
Memory impairment	✓ (orange)		✓ (orange)	✓ (orange)	✓ (orange)
Altered cognitions	✓ (orange)	✓ (orange)	✓ (orange)	✓ (orange)	✓ (orange)
Alterations/disruptions in identity	✓ (orange)	✓ (orange)	✓ (green)	✓ (orange)	✓ (green)
Emotional distress	✓ (green)	✓ (green)	✓ (green)	✓ (green)	✓ (green)

Note: Green checkmarks represent characteristics that are always present in a concept. Orange checkmarks represent characteristics that can sometimes be present in a concept.

down through parenting practices, modeled behaviors, etc. COBT acknowledges historically relevant sociopolitical and interpersonal contexts. However, COBT is directly focused on the current collective experience of vicarious trauma. Finally, COBT is not the same as complex trauma. Complex trauma refers to prolonged, cumulative trauma directly experienced by an individual. COBT increases the nuance of complex trauma with a focus on *both* the individual experience *and* the collective experience of trauma. COBT was developed to recognize, honor, and make space for Black Americans' experiences of indirect exposure to discriminatory police violence. While many of the concepts outlined in this section are related to COBT, the conceptualization of COBT and this empirical work aims to stand COBT apart from these concepts.

Current Study

The primary purpose of the current study was to empirically evaluate the concept of Collective Ongoing Betrayal Trauma as a means to understand Black people's experiences of discriminatory police violence. This study was an online survey that comprised a between-subject experimental written vignette with four active vignette conditions and one control vignette condition. The vignettes described an incident between a civilian and police officer. The survey assessed the impact the vignettes had on participants' psychological distress and group identity. This study also explicitly focused on potential gender differences in experiences of collective discriminatory police violence. Black women continue to be excluded from research because a single-axis framework requires research to focus on either racialized or gendered discriminatory violence. Additionally, Black people who are not men have historically been expected to prioritize Black men's exposure to violence and trauma. Thus, Black women and

Black men may experience Collective Ongoing Betrayal Trauma in different ways.

Study Aims and Hypotheses

Aim 1: Facets of COBT

Empirically explore the value of the COBT framework by assessing the extent to which characteristics of betrayal trauma, institutional betrayal, vicarious trauma, and collective trauma are present after presentation of experimental vignettes.

Hypothesis 1. Regardless of vignette condition, participant reports of post-vignette psychological distress (i.e., vicarious trauma outcomes) will be positively correlated with their reports of collective trauma and institutional betrayal.

Aim 2: Strength of Vignettes

Examine the effectiveness, or strength, of the active vignette conditions compared to the control vignette condition.

Hypothesis 1. Participants who read one of the four active vignettes will report a more significant increase in psychological distress post-vignette, will report a stronger sense of collective trauma, and will exhibit a higher institutional betrayal score compared to participants who read the control vignette.

Aim 3: Gender Differences and Vignette Details

Examine binary gender differences in participants' reported experiences of collective ongoing betrayal trauma based on 1) vignette victim gender and 2) type of violence depicted in the vignette.

Hypothesis 1. There will be an interaction between participant gender and vignette victim gender, in which men participants will report higher levels of vicarious trauma outcomes, collective trauma, and institutional betrayal after reading the vignettes

with the man victim and women participants will have similar scores on outcome measures regardless of whether they read a vignette depicting a man or a woman victim.

Exploratory Hypothesis. Men and women participants may report different levels of vicarious trauma outcomes, collective trauma, and institutional betrayal depending on whether they viewed a vignette that depicted physical violence or sexual violence.

Exploratory Aim 1: Racial and Gender Identity Changes

Observe how participant scores on racial and gender identity measures change after viewing the experimental vignettes. This is an exploratory aim because there is theoretical support that participants might engage in a protective mechanism by either 1) moving closer toward their groups (e.g., Fong & Luttmer, 2009) or 2) distancing themselves from the groups (Fein & Spencer, 1997) after the presence of a group threat.

Exploratory Aim 2: Participant Characteristics and Direct Experiences

Explore the potential effects of specific participant characteristics, such as age, direct experiences with law enforcement, trauma history, actual exposure to news reports of police violence, and participation in social justice protests.

A summary of this study's aims, research questions, and hypotheses are provided in Table 1.

Table 1
Summary of Study Research Questions and Hypotheses

Aim	Research Question	Hypothesis
Aim 1: Facets of COBT	1. To what extent do the facets of COBT correlate with each other?	a. Vicarious trauma outcomes, collective trauma, and institutional betrayal will be positively, moderately correlated with each other.
Aim 2: Strength of Vignettes	1. Will the control and active vignette conditions lead to significantly different outcomes?	a. Participants who read one of the active vignettes will report a more significant increase in vicarious trauma outcomes, higher collective trauma, and higher institutional betrayal scores compared to participants in the control vignette condition.
Aim 3: Gender Differences and Vignette Details	1. What is the impact of participant gender and vignette victim gender on outcome measures?	a. There will be an interaction between participant gender and vignette victim gender.
	2. What is the impact of vignette type of violence on outcome measures?	a. Exploratory: There may be an interaction between participant gender and vignette type of violence.
Exploratory Aim 1: Racial and Gender Identity Changes	1. How will participants' racial, gender, and intersectional identities change after reading one of the vignettes?	a. Exploratory: no hypothesis
Exploratory Aim 2: Participant Characteristics and Direct Experiences	1. Are there specific participant characteristics or experiences that are moderately or strongly correlated with the outcome measures?	a. Exploratory: no hypothesis

CHAPTER II

PILOT STUDY

Method

I conducted a small pilot study to assess the viability of the experimental vignettes and to evaluate the structure of measure administration. Each participant read one of the five vignettes and completed the learning and attention check items related to the vignette. Prior to reading the vignette, participants were randomly selected to complete two psychological distress measures to determine the most appropriate manner to present these measures in the full study. The trait and state versions of the Dissociative Experiences Measure, Oxford (DEMO; Černis et al., 2018) were presented either as separate measures or in a matrix format in which participants read each measure item and provided answers for "the past two weeks" and "right now". The trait and state versions of the Brief Hypervigilance Scale (BHS; Bernstein et al., 2015) were administered in non-matrix form for all participants.

In collaboration with Jennifer Gómez, Ph.D., I recruited participants from an online platform (prolific.ac) that facilitates large-scale data collection. The pilot study took approximately 10 minutes to complete. Participants were compensated $1.75 through the Prolific platform. Fifty-two participants completed the pilot study. Participants were adults who currently lived in the U.S., were over the age of 18-years-old, and self-identified as Black, African American, or multi-racial (identifying as Black/African American). Eleven participants read the control vignette, 11 participants read the Black man/physical violence vignette, 10 participants read the Black man/sexual violence vignette, 9 participants read the Black woman/physical violence vignette, and 11

participants read the Black woman/sexual violence vignette.

Results

I reviewed the pilot data to assess the potency of the vignette. I also analyzed the difference scores (Trait – State) for matrix and non-matrix DEMO presentations.

Overall, participants answered a mean of 2.88 questions correctly and 92.3% (*n* = 48) of participants correctly answered all three learning items. Participants who viewed the Black man/physical violence vignette correctly answered an average of 2.91 learning questions and 90.9% of participants (*n* = 10) correctly answered all three learning items. Participants who viewed the Black man/sexual violence vignette answered an average of 3.00 learning questions and 100% of participants (*n* = 10) correctly answered all three learning items. Participants who viewed the Black woman/physical violence vignette correctly answered an average of 3.00 learning questions and 100% of these participants (*n* = 9) correctly answered all three learning items. Participants who viewed the Black woman/sexual violence vignette correctly answered an average of 3.0 learning items and 100% of participants (*n* = 11) correctly answered all three learning items. Participants who viewed the Control vignette correctly answered an average of 2.50 learning questions and 72.7% of these participants (*n* = 8) correctly answered all three learning items.

I conducted an ANOVA to examine potential differences in learning item scores among the different vignette conditions. The overall ANOVA was statistically significant ($F(4,47) = 2.57$, $p = .05$; $\eta^2 = 0.18$). Participants who read the control vignette answered fewer learning items correctly ($M = 2.55$) compared to participants who read the Black man/sexual violence ($M = 3.00$; $p = .09$) and Black woman/sexual violence ($M = 3.00$; $p = .08$) vignettes. The difference in learning item scores between active vignettes and the

control vignette suggests that the active vignettes were more memorable than the control vignette. However, the average learning score for the control vignette was above the desired minimal score of two out of three correct answers.

I also analyzed participants' subjective learning experiences. Participants who viewed the control vignette believed they correctly answered an average of 2.91 learning items. The actual average for this group was 2.50. Participants who viewed the Black man/physical violence vignette believed they correctly answered an average of 3 learning items. The actual average for this group was 2.91. Participants who viewed the Black man/sexual violence vignette believed they correctly answered an average of 2.78 learning items. The actual average for this group was 3.00. Participants who viewed the Black woman/physical violence vignette believed they correctly answered an average 3.00 learning items. The actual average for this group was 3.00. Participants who viewed the Black woman/sexual violence vignette believed they correctly answered 3.00 learning items. The actual average for this group was 3.00. Overall, participants appeared to have remembered important aspects of the vignette and they believed they remembered these aspects. The five experimental vignettes appeared to be methodologically strong enough for participants to remember the pertinent aspects of the story. Thus, the same vignettes were used in the full study.

Regarding the structure of the DEMO measure, it did not appear that matrix format significantly differed in participant responses when compared to a non-matrix format ($t(49.56) = 0.87$, $p = .39$, $CI[-3.00, 7.54]$, $d = .24$). Thus, to streamline the survey for participants, the DEMO was presented in matrix form for the full survey.

CHAPTER III

METHOD

Participants and Recruitment

For the full study, participants were adults who currently lived in the U.S., were over the age of 18-years-old, and self-identified as Black, African American, or multi-racial (identifying as Black/African American). The sample represents a range of personal interaction with law enforcement and interpersonal trauma histories. As with the pilot study, I collaborated with Jennifer Gómez, Ph.D. to recruit participants from the Prolific online data collection platform. Participants were compensated $10 after they completed the survey. The approximate completion time for the survey was 60 minutes.

Participants read the following message prior to clicking on the study link:

> *We are conducting a research study about Black/African American people's experiences with law enforcement. This study has been developed to respect and acknowledge Black people's experiences with law enforcement. To participate, you must be at least 18 years old, live in the United States, and identify as Black/African American. People who identify with multiple races or ethnicities are able to participate as long as you identify as Black/African American. Each survey will take about 60 minutes to complete. Once the survey is completed, participants will be prompted to click a completion link that will verify participation in the Prolific system. Participants will be paid $10 for completing the study.*

People with all gender identities were allowed to complete the study. Preliminary analyses assessed for the feasibility of including participants with non-binary gender

identities in analyses with gender as a predictor/independent variable. Due to the limited number of participants who identified with a non-binary gender, these participants will only be included in analyses that do not include gender as a variable.

Power Analysis and Sample Size Rationale

I conducted a priori power analyses for all three aims of this study. G Power does not have an option to conduct a prior power analyses for a three-way ANOVA, which is the most complex analysis in this study. Thus, I conducted a power analysis for a two-way repeated measures ANOVA. According to this power analysis, 122 participants were required to identify a large effect size, 303 participants were required to identify a medium effect size, and 1,862 participants were required to identify a small effect size. Due to funding limitations, our goal was to recruit 1,260 participants, which equates to approximately 250 participants per vignette condition. After accounting for participants' data who did not pass the attention and learning check items, I anticipated at least 200 participants in each vignette condition.

Procedure

After informed consent, participants were randomly selected into one of five vignette conditions. The vignettes are structured in a 2 (victim gender) x 2 (type of police violence) design, with a separate control vignette (see "Experimental Vignettes"). After reading the vignette, participants completed the attention and learning check items. Through self-report measures, participants reported their level of psychological distress (i.e., vicarious trauma outcomes) and group identity (racial, gender, and intersectional) before and after exposure to the vignette. Participants indicated the extent to which they considered the situation depicted in the vignette to impact the Black community as a

whole (i.e., collective trauma), as well as the roles of law enforcement and the criminal justice system (i.e., institutional betrayal). Participants also provided information about their direct experiences with law enforcement within the past five years; interpersonal trauma history; COVID-19 exposure and perceived discrimination during the pandemic; actual exposure to news and social media stories about police violence; participation in related protests; and demographic information. Upon completion participants were debriefed about the study and provided with a culturally sensitive list of mental health resources.

Measures

See Table 2 for a full list of the study measures. These measures are described in full detail below. The measures were presented in a chunked randomization method. Similar measures were presented together in a chunk and the measures within the chuck were randomized. For example, the measures related to COVID-19 were chunked together and then randomized for participants: COVID-19 Exposure and Family Impact Survey, Institutional Betrayal Questionnaire – COVID 19, and Discrimination during the COVID-19 pandemic. The only chunk of measures that were not randomized was the chunk that included the Police & Law Enforcement Scale, Exposure to Discriminatory Police Violence Through Media and Protests, and screener questions about the participants or family members/friends working as a law enforcement officer. Table 2 is color-coded to summarize the measure chunks. The Appendix provides the full study materials in the order participants viewed the materials. Internal reliability will not be reported for measures that consist of single indicators that do not combine to measure an underlying construct (e.g., trauma history, experiences with law enforcement, exposure to

COVID-19, etc.; Bollen & Lennox, 1991; Netland, 2001).

Participant Characteristics

Interpersonal Trauma History. The Brief Betrayal Trauma Survey (BBTS; Goldberg & Freyd, 2006; revised in 2007) is a 15-item self-report measure that assesses betrayal trauma history (0 = *Never*, 2 = *More than [2 times]*). Two items in this measure ask about non-interpersonal traumas (i.e., natural disasters, car accidents). The remaining 13 items ask about psychological, emotional, physical, and sexual trauma. Six items ask about betrayal traumas perpetrated by someone close to the participant. Five items ask about betrayal traumas perpetrated by someone not close to the participant. Each set of items were summed to assess participants' history of high betrayal trauma (i.e., perpetrator close to victim) and medium betrayal trauma (i.e., perpetrator not close to victim). Low betrayal items include non-interpersonal betrayal traumas.

Group Identity. The Multidimensional Inventory of Black Identity (MIBI; Sellers et al., 1997) was modified for this study to measure participants' identification with their racial and gender groups. The original MIBI measures three dimensions:: Centrality, Regard, and Ideology. These dimensions have one subscale, two subscales, and four subscales, respectively. For the current study, only the Centrality (e.g., *"In general, being Black is an important part of my self-image"*) and Private Regard (e.g., *"I feel good about Black people"*) subscales were used. The Centrality subscale measures the extent to which a person defines themselves with their racial identity. The Private Regard subscale assess a person's attitude toward the group and their membership in the group. The Centrality subscale consists of eight items and the Private Regard subscale consists of seven items. The items in these two subscales were modified for this study to

Table 2
Study Measures

Participant Characteristics
1. Demographic Information
2. Trauma history (BBTS)
3. Group identity (adapted MIBI for race, gender, and intersectional identities)
4. COVID-19 Exposure and Family Impact Survey (CEFIS)
5. IBQ-COVID 19
6. Discrimination during the COVID-19 pandemic
7. Experiences with law enforcement (PLES & novel measure)
8. Exposure to police violence/protests
Psychological Distress
1. Hypervigilance (BHS)
2. Dissociation (DEMO)
3. Depression (PROMIS)
4. Anxiety (PROMIS)
5. Anger (PROMIS)
6. Meaning & Purpose (PROMIS)
7. Collective Trauma
8. IBQ – Police Violence
Vignette Conditions – Between Subjects
1. Black woman target of physical violence
2. Black woman target of sexual violence
3. Black man target of sexual violence
4. Black man target of physical violence
5. Control: unidentified person receives a speeding ticket

Note. Measures are color-coded to denote measures that were chunked together and then order randomized for presentation to participants. Measures that are not color-coded were not order randomized in the survey. Participants completed the measures in the following order: BBTS, psychological distress trait measures (coded in green), psychological distress pre-vignette measures (coded in green), MIBI pre-vignette measures (coded in blue), experimental vignette, collective trauma/IBQ (coded in purple), psychological distress (coded in green), MIBI measures (coded in blue), experiences with law enforcement measures, exposure to police violence/protests items, COVID-19 experiences (coded in gray), and demographic information.

assess for participants' identity with their gender group and to assess participants' intersectional identities with race and gender (e.g., *"I am happy with my gender"* or *"I feel good about Black people who are the same gender as me."*). Responses range from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). The items were averaged for a mean score. Cronbach's Alpha for these subscales were 0.75 and 0.61, respectively, in the scale development study with African American university students. In the current study, Cronbach's alpha for the 6 MIBI measures ranged from $\alpha = 0.86$ to $\alpha = 0.90$. Participants completed the three versions of this measure before and after they read the vignette, so participants have 6 MIBI scores summed total scores. To assess for pre-post differences in the MIBI scores, a difference score was calculated by subtracting the post-vignette score from the pre-vignette score for each of the three versions of this measure.

Experiences with Law Enforcement. The Police and Law Enforcement Scale (PLE; English et al., 2017) was modified for this study to assess participants' direct negative and positive experiences with law enforcement. The original PLE is an eight-item self-report scale that asked about negative experiences with officers. The modified scale has 34 items (0 = *Never*, 2 = *More than [2 times]*). I modified this measure to inquire about direct personal experiences with law enforcement (e.g., *"In the past 5 years, how often have police or law enforcement accused you of having or selling drugs?")* as well as indirect experiences (e.g., *"In the past 5 years, how often have police or law enforcement accused someone close to you of having or selling drugs?").* I added 8 items asking about direct and indirect experiences with use of force, accusations of selling sex, and sexual abuse from law enforcement. I also added 10 items that asked about direct and indirect positive experiences with law enforcement (e.g., *"In the past 5*

years, how often have police or law enforcement treated you with respect?"). Twelve items focus on direct negative experiences, 12 items focus on indirect negative experiences, 5 items ask about direct positive experiences, and 5 items ask about indirect positive experiences. Four subscale summed scores were compiled for this measure: direct positive experiences, indirect positive experiences, direct negative experiences, and indirect negative experiences.

Open-Ended Attention Check Questions. Two open-ended questions that asked participants to describe their most positive and most negative direct experience with law enforcement within the past five years were added to the study for two purposes. First, these questions will give us qualitative data about participants' direct experiences with law enforcement. Second, these questions act as an attention check to ensure participants are honestly responding to the survey items; participant answers should be unique for these questions.

Exposure to Police Violence. A 10-item measure was created for this study to assess participants' indirect exposure to police violence through news or social media and to inquire about participants' engagement in protests related to discriminatory police violence. One item asked, "How often are you attending to the news right now?". Six items asked about how news and media attention on police violence impacted their survey responses (e.g., *"How much did the news over the last year about police violence toward Black women, like Breonna Taylor, impact your responses on this survey?").* Three items asked about engagement in protests (e.g., *"How much have you participated in in-person protests related to police violence toward Black people in the past year?"*) and the effect of this behavior on their survey responses (e.g., *"How much did your level*

of participation in protests related to police violence toward Black people impact your responses on this survey?"). No subscale scores were calculated for this measure. Items were analyzed as individual variables.

Identity as a Law Enforcement Officer. Participants indicated whether they have "*worked as a police officer or law enforcement officer*". Participants also reported whether a close other, friend, or family member has ever been employed as a law enforcement officer. These two items were created for this study.

Demographic Information. Standard demographic information was collected from participants (e.g., education level, gender, sexual orientation, perceived social status, houselessness, history of food insecurity, etc.).

Psychological Distress

Vicarious trauma has been conceptualized as a type of psychological distress that is experienced after learning about someone else's suffering. In the current study, the following measures have been compiled to operationally measure vicarious trauma.

Instructions that accompanied the psychological distress measures have been modified to measure the psychological construct as both *trait* and *state* experiences. For example, an original measure that instructed participants to think about how they have felt in the past two months (i.e., *trait*) was modified to also have instructions for participants to think about how they feel at that moment (i.e., *state*). Prior to vignette exposure, participants completed these measures with both the *state* and *trait* instructions. After participants read the vignette, they were asked to complete the same measures with only the *state* instructions.

Hypervigilance. The Brief Hypervigilance Scale (BHS; Bernstein et al., 2015) is

a five-item scale that measures elevated vigilance behaviors after a traumatic event (e.g., *"I feel that if I don't stay alert and watchful, something bad will happen")*. Responses range from 0 (*Not at all like me/never true)* to 4 *(very much like me/always true)*. Cronbach's alpha for this measure was 0.81 in the development study with undergraduate students. In the current study, Cronbach's alpha were the following: trait $\alpha = 0.82$, pre-vignette $\alpha = 0.88$, and post-vignette $\alpha = 0.90$. Participant trait, pre-vignette state, and post-vignette state scores were summed for 3 total scores.

Dissociation. The Dissociative Experiences Measure, Oxford (DEMO; Černis et al., 2018) is a 30-item scale that measures experiences of dissociation without the use of substances. The DEMO has five subscales: unreality (e.g., *"everything is unreal")*, numb and disconnected (e.g., *"emotionally numb")*, memory blanks (e.g., *"I find myself in situations or places with no memory of how I got there")*, zoned out (e.g., *"I often think about nothing")*, and vivid internal world (e.g., *"Unwanted images from my past come into my head")*. Responses range from 1 (*Not at all*) to 5 (*Most of the time*). The original DEMO questionnaire asks about experiences in the "past two weeks". The original version was used in the current study to measure *trait* dissociation. The measure was modified to also measure *state* dissociation by asking participants about their experiences "right now". Cronbach's alpha for this scale was 0.95 in the development and validation study with a general population adult sample. Cronbach's alpha for the current study was as follows: trait $\alpha = 0.95$, pre-vignette $\alpha = 0.95$, and post-vignette $\alpha = 0.96$. Participant trait, pre-vignette state, and post-vignette state scores were summed for 3 total scores.

Emotional Distress. The Patient-Reported Outcomes Measurement Information System (PROMIS; NIH) is comprised of numerous brief scales that measure mental,

physical, and social well-being. I included four scales from PROMIS for this study: depression (e.g., *"I feel helpless")*, anxiety (e.g., *"I feel nervous")*, anger (e.g., *"I feel annoyed")*, and meaning and purpose (e.g., *"My life has significance")*. These four scales contain a total of 29 items that assessed participants' long-term and immediate psychological distress. Responses for the depression, anxiety, and anger scales range from 0 (*"Never")* to 4 (*"Always"*). Responses for the meaning and purpose scale ranges from 0 (*"Not at all/strongly disagree"*) to 4 (*"Very much/Strongly agree"*). Internal reliability has been reported as adequate in multiple studies (e.g., Cella et al., 2010; Cook et al., 2016; Pilkonis et al., 2011; Salsman et al., 2014; Schalet et al., 2016). In the current study, Cronbach's alphas for the Anxiety scale were the following: trait $\alpha = 0.94$, pre-vignette $\alpha = 0.95$, and post-vignette $\alpha = 0.96$. Cronbach's alpha for the Depression scale were the following: trait $\alpha = 0.96$, pre-vignette $\alpha = 0.97$, and post-vignette $\alpha = 0.97$. Cronbach's alpha for the Anger scale were the following: trait $\alpha = 0.90$, pre-vignette $\alpha = 0.92$, and post-vignette $\alpha = 0.92$. Cronbach's alpha for the Meaning & Purpose scale were the following: trait $\alpha = 0.96$, pre-vignette $\alpha = 0.97$, and post-vignette $\alpha = 0.97$. Participant responses on the trait, pre-vignette state, and post-vignette state measures were summed for 3 total scores. Guidelines provided by PROMIS Health Measures recommends the summed scores be converted to a standardized T-score using pre-determined calculations. Conversion tables are available online for free at healthmeasures.net (search "PROMIS scoring manuals"). Tables 3-6 provide T-score conversion tables for PROMIS measures raw scores. However, for the purposes of this study, and for the ability to create a composite psychological distress score, only raw summed scores were used.

Experimental Vignettes

The vignettes were structured in a 2 (gender) x 2 (type of police violence) active vignette design, with a separate control vignette. For the active vignettes, the victim's gender was either man or woman and the type of violence was either a gun shot or sexual assault. The race of the victim was described as Black for all four active vignette conditions. The experimental vignettes were written as a brief news report and represented information typically presented in actual news article reports of discriminatory police violence. The control vignette was also written as a brief news report but depicted an unidentified civilian who received a speeding ticket from a police officer. All five vignettes included one police officer and one civilian. I created vignettes that were similar in total length, sentence length, and detail specificity. These vignettes mirrored the experiences that Black Americans have when they learn about discriminatory police violence through news media, social media, or other types of media. Participants were randomly selected into one of the five vignette conditions. For example, 20% of participants viewed the vignette that depicted a Black *woman* who experienced *sexual assault* from a police officer.

Learning and Manipulation Check. After reading through the vignette, participants answered three manipulation check questions about the vignette. Participants were then instructed to re-read the same vignette, indicate how many learning items they believe they accurately answered, and type out the details they remember from the vignette. Participants were also asked if they recorded the story in any way (e.g., screenshot) to remember the details of the story, as well as how much they identified with the victim/civilian and police officer in the vignette.

Table 3
PROMIS Anxiety – Short Form 8a T-Score Conversion Table

Raw Summed Score	Scale Score (T-Score)	Standard Error (SE)
8	37.1	5.5
9	43.2	3.3
10	45.9	2.8
11	47.8	2.5
12	49.4	2.3
13	50.8	2.2
14	52.1	2.1
15	53.2	2.0
16	54.3	2.0
17	55.4	2.0
18	56.4	2.0
19	57.4	2.0
20	58.4	2.0
21	59.4	2.0
22	60.4	2.0
23	61.4	2.0
24	62.5	2.0
25	63.5	2.0
26	64.5	2.0
27	65.6	2.0
28	66.6	2.0
29	67.7	2.0
30	68.7	2.0
31	69.8	2.0
32	70.8	2.0
33	71.9	2.0
34	73.0	2.0
35	74.1	2.0
36	75.4	2.0
37	76.7	2.1
38	78.2	2.3
39	80.0	2.6
40	83.1	3.4

Table 4
PROMIS Depression – Short Form 8a T-Score Conversion Table

Raw Summed Score	Scale Score (T-Score)	Standard Error (SE)
8	38.2	5.7
9	44.7	3.3
10	47.5	2.7
11	49.4	2.3
12	50.9	2.0
13	52.1	1.9
14	53.2	1.8
15	54.1	1.8
16	55.1	1.7
17	55.9	1.7
18	56.8	1.7
19	57.7	1.7
20	58.5	1.7
21	59.4	1.7
22	60.3	1.7
23	61.2	1.7
24	62.1	1.8
25	63.0	1.8
26	63.9	1.8
27	64.9	1.8
28	65.8	1.8
29	66.8	1.8
30	67.7	1.8
31	68.7	1.8
32	69.7	1.8
33	70.7	1.8
34	71.7	1.8
35	72.8	1.8
36	73.9	1.8
37	75.0	1.9
38	76.4	2.0
39	78.2	2.4
40	81.3	3.4

Table 5
PROMIS Anger – Short Form 5a T-Score Conversion Table

Raw Summed Score	Scale Score (T-Score)	Standard Error (SE)
5	32.9	5.3
6	38.1	4
7	41.3	3.7
8	44.0	3.5
9	46.3	3.4
10	48.4	3.3
11	50.6	3.3
12	52.7	3.2
13	54.7	3.2
14	56.8	3.2
15	58.8	3.2
16	60.8	3.3
17	62.9	3.2
18	65.0	3.2
19	67.2	3.2
20	69.4	3.3
21	71.7	3.3
22	74.1	3.3
23	76.8	3.4
24	79.6	3.4
25	82.9	3.5

Table 6
PROMIS Meaning & Purpose – Short Form 8a T-Score Conversion Table

Raw Summed Score	Scale Score (T-Score)	Standard Error (SE)
8	16.3	3.3
9	18.6	3.3
10	20.6	3.2
11	22.5	3.0
12	24.1	2.9
13	25.7	2.8
14	27.1	2.8
15	28.5	2.8
16	29.5	2.7
17	31.0	2.7
18	32.2	2.7
19	33.5	2.7
20	34.7	2.7
21	35.9	2.7
22	37.1	2.8
23	38.3	2.8
24	39.5	2.8
25	40.7	2.8
26	42.0	2.8
27	43.3	2.8
28	44.6	2.9
29	46.0	2.9
30	47.4	2.9
31	48.8	2.9
32	50.3	2.9
33	51.8	2.9
34	53.4	2.9
35	55.0	3.0
36	56.8	3.1
37	58.8	3.3
38	61.1	3.6
39	64.1	4.2
40	68.4	5.2

Collective Trauma

This five-item measure was created for the current study to examine participants' experiences of the vignette details as collective trauma. The items in this measure ask about participant opinions about how the discriminatory violence depicted in the vignette has currently and historically impacted the Black community (e.g., *"How do you think the event described in the news story affects the Black community as a whole?"*). The following three items were averaged together: *"How much do you think the Black community has been disadvantaged by this type of event in the past in the United States?"; "How much do you think the Black community is disadvantaged by this type of current event in the United States?"; and "Using [the provided definition] of 'collective trauma' do you think the news story you read is an example of collective trauma?".* These three items were answered on a five-point Likert scale (0 = *Not at all/Definitely no,* 4 = *A great deal/Definitely yes*). The second item was reverse coded to fit this Likert scale, with the original anchor points as 0 = *A great deal* and 4 = *Not at all*. The item, *"How do you think the event described in the news story affects the Black community as a whole?"* was not included in the averaged score because the Likert scale was six points rather than five points (0 = *Not at all,* 1 = *Very negatively*, 5 = *Very positively).*

Institutional Betrayal – Discriminatory Police Violence

The Institutional Betrayal Questionnaire (Smith & Freyd, 2013) was adapted to assess the level of institutional betrayal participants perceived on behalf of law enforcement and the criminal justice system after reading the experimental vignette (IBQ-PV). The modified questionnaire contained 11 items and participants checked a box next to the items they endorsed (e.g., *"When thinking about the event described in the*

news story, do you think the institution of law enforcement or the criminal justice system plays a role by…covering up the experience?"). The items were summed for a total score.

COVID-19 Exposure and Impact

The COVID-19 Exposure and Family Impact Survey (CEFIS; Center for Pediatric Traumatic Stress, 2020) is an 11-item measure that asked about participants' direct exposure to coronavirus and the impact of the pandemic on their access to resources since the pandemic began in March 2020. Five items asked about exposure to the virus (e.g., *"Someone in my household had symptoms or was diagnosed with COVID-19."*). *Yes* responses were summed for a total score. Four items asked about access to resources during the pandemic (e.g., *"I, or a person in my household, had difficulty getting food."*). *Yes* responses were summed for a total score. One item asked participants to rate how much their responses to the survey were impacted by the COVID-19 outbreak (0 = *Strongly disagree*, 4 = *Strongly agree*). The final item of the measure asked participants, *"Overall, how much distress have you experienced related to COVID-19?"* (0 = *No distress*, 10 = *Extreme distress*).

Institutional Betrayal Questionnaire – COVID-19

The Institutional Betrayal Questionnaire (Smith & Freyd, 2013) was adapted by Veldhuis and collaborators (2021) to assess the level of institutional betrayal participants have experienced related to the COVID-19 pandemic. The modified questionnaire contained a total of 11 items (e.g., *"The organization(s) takes proactive steps to prevent the pandemic.").* Seven items were presented with check boxes and participants checked the items they have experienced during the pandemic. These items were summed for a

total score. Four individual items focused on contextual aspects of the experiences (e.g., participants' trust in the organization).

Discrimination During the COVID-19 Pandemic

A nine-item measure was created for this study to assess participants' experiences with feared or actual discrimination during the pandemic. A series of three questions asked about racial, gender, and gendered racial discrimination during the pandemic (e.g., *"Do you think you have experienced racial discrimination during and related to the COVID-19 pandemic?").* Each series of questions were summed for three total scores: racial discrimination, gender discrimination, gendered racial discrimination.

Data Analysis Plan

Preliminary Analyses

Prior to conducting analyses to address the study aims and hypotheses, I analyzed the data, using descriptive statistics such as frequencies, to evaluate the quality of the data (e.g., data distribution, possible outliers, etc.). Scores on the vignette learning items and qualitative answers on the open-ended questions that asked about participants' direct experiences with law enforcement were used to screen for data quality. Participants had to correctly answer at least two of three vignette learning items and had to have unique answers to the two open-ended questions to pass these checks. An initial analysis of missing data was conducted to assess the amount of missing data within the dataset after participants who did not meet the learning check and attention check criteria were removed from the dataset.

I gathered descriptive information for participant characteristics, with a particular focus on participant characteristics across vignette groups to assess comparability across

vignette conditions. Frequencies for gender categories were gathered to assess the feasibility of including data from participants who identify with non-binary genders in analyses with gender as an independent or predictor variable.

I calculated Pearson correlation matrices to determine whether trait, pre-vignette, and post-vignette composite psychological distress scores were warranted. As detailed in the Results section, the psychological distress measures were strongly positively correlated with each other for each time point, so I conducted a principal component analysis for each time period to explore how many components the six measures loaded onto. Each analysis indicated the measures loaded significantly onto one factor. Thus, I created one composite psychological distress scores per time period.

Aim 1: Facets of COBT

To evaluate the hypothesis in Aim 1, I conducted Pearson correlations between the post-vignette psychological distress composite score, collective trauma, and the IBQ-PV. A correlation matrix was calculated for each vignette condition group.

Aim 2: Strength of Vignettes

To evaluate the hypothesis in aim 2, I conducted an Independent T-tests, with the four active vignette conditions grouped together to compare them against the control condition. Outcome variables included the psychological distress composite difference scores, collective trauma scores, and IBQ- PV scores.

Aim 3: Gender Differences and Vignette Details

To evaluate the hypotheses in aim 3, I conducted three-way ANOVAs (participant gender x vignette victim gender x vignette violence type). Participants who self-identified as either man or woman were included in this analysis due to the limited cell sizes for

participants who identified with a non-binary gender. Appropriate follow-up analyses were conducted to thoroughly address this aim. Outcome variables were psychological distress composite difference scores, collective trauma, and IBQ-PV. Separate binary gender analyses were also conducted with each outcome variable.

Exploratory Aim 1: Racial and Gender Identity Changes

To address this aim, I conducted three-way ANOVAs, similar to Aim 3, with the three group identity differences scores as the outcome variables. Appropriate follow up analyses were then conducted.

Exploratory Aim 2: Participant Characteristics and Direct Experiences

I calculated a large Pearson correlation matrix to identify possible moderating variables, such as participant age, trauma history, experiences with law enforcement, exposure to news reports of police violence, participation in protests, and COVID-19 pandemic related issues. The correlations examined the relationships between the possible moderator variables, psychological distress, group identity, collective trauma, and institutional betrayal measures. As detailed in the Results section, two-way ANCOVAs were conducted with cumulative interpersonal trauma history as a moderating variable with psychological distress difference composite scores as the outcome variable.

CHAPTER IV

RESULTS

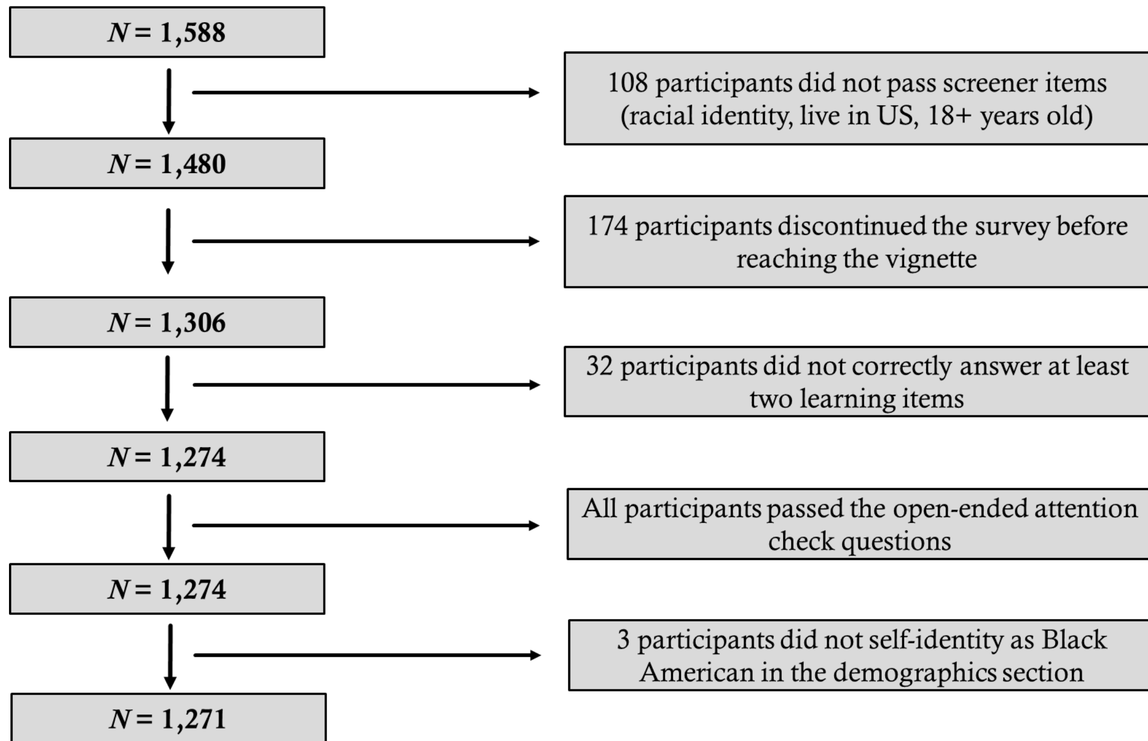
Preliminary Analyses

A total of 1,588 people opened the survey through the Prolific platform. One hundred and eight participants (6.8%) did not pass the screener items that asked about racial identity, currently location in the U.S., and at least 18-years-old. Of the remaining 1,480 participants, 174 participants discontinued the survey at some point between the screener items and the vignette condition. Thirty-two participants (2.2%) did not pass the vignette learning check. All participants who completed the open-ended question checks passed this check. Three participants did not identify as Black or African American when they provided demographic information at the end of the survey. The remaining participants (N = 1,271) were stratified among the vignette conditions: 257 participants (20.2%) in the Black man/physical violence condition, 260 (20.5%) participants in the Black man/sexual violence condition, 260 (20.5%) participants in the Black woman/physical violence condition, 252 (19.8%) participants in the Black woman/sexual violence condition, and 242 (19.0%) participants in the control condition. See Figure 2 for a flow diagram of participant exclusion.

Analyses to check for missing data show that, overall, the amount of missing data was 5.7% of the entire dataset. When looking at missing data within individual survey items, missing data was below 10%. Within scored variables, the DEMO pre-vignette summed score had 16.3% missing data. None of the individual pre-vignette DEMO items had significant missing data. Fifty-two participants had missing data above 10%, which comprises 4.1% of the sample used for data analysis. Based on the amount of missing

Figure 2

Flow Chart for Exclusion Criteria



data, pairwise deletion was used within each analysis, unless stated otherwise. Formal outlier analyses indicated there were potential outliers in the cleaned dataset; however, evaluation of the potential outliers deemed it appropriate to include them in the analyses.

Participant Characteristics

According to information on Prolific (dated 04/25/2021), approximately 4,818 active members were eligible for this study using "Black/African American" and "Mixed" as eligibility criteria. When using only "Black/African American" as racial/ethnic eligibility criteria, approximately 2,799 active members were eligible for the study. With the initial sample size of 1,480 participants this study has captured

approximately 31-53% of the available population on the Prolific platform.

Of the sample used for data analysis (*N* = 1,271), 47.8% (*n* = 608) identified as women, 40.2% (*n* = 511) identified as men, 2.2% (*n* = 28) identified as a gender not listed in this question, 1.9% (*n* = 24) identified as genderqueer or gender non-conforming, 1.3% (*n* = 16) identified as transgender, and 1.0% (*n* = 13) of the sample indicated they preferred not to answer this question. The demographics for each vignette condition indicated that between 42.4% and 54.0% (*n* =109, *n* = 136) of the sub-samples were women. A Pearson's Chi-Square test was conducted to ensure the binary gender distribution was similar across vignette conditions. There was no significant difference in participant binary gender across conditions, $X^2(4, N = 1271) = 6.67, p = .154$. Unfortunately, based on these frequencies, analyses that include participant gender as a variable will only include participants who identify as either cisgender man or cisgender woman.

Of the sample used for data analysis, 75.3% (*n* = 957) identified as solely Black/African American. For participants who identified with at least one additional race or ethnicity, 7.8% (*n* = 99) identified as Caucasian/White European, 1.6% (*n* = 20) identified as Hispanic/Latino, 1.5% (*n* = 19) identified as Asian, % and less than 1% identified as either American Indigenous (*n* = 12), Middle Eastern (*n* = 3), or Native Hawaiian/Pacific Islander (*n* = 1). Twenty-two participants (1.7%) reported identifying as both Black American and with a race or ethnicity not included in the provided options. Participants who identified with at least three races or ethnicities comprised 4.2% (*n* = 54) of the sample. Thirteen participants reported their identified race/ethnicity was not included in the provided options and three participants stated they preferred not to answer this question. See Tables 7-10 for a full panel of sample demographic information.

Table 7

Overall Sample Demographics: Participant Self-Reported Identities

Variable	Identifier	N (%)
Race/Ethnicity	Black/African American	957 (75.3)
	Black & Caucasian/White	99 (7.8)
	Black & Hispanic/Latinx	20 (1.6)
	Black & Asian	19 (1.5)
	Black & American Indigenous	12 (<1.0)
	Black & Middle Eastern	3 (<1.0)
	Black & Native Hawaiian/Pacific Islander	1 (<1.0)
	Identified with three or more options	54 (4.2)
	Identified with a race/ethnicity not listed	35 (<1.0)
	Preferred not to answer	3 (<1.0)
Sexual Orientation	Heterosexual (straight)	947 (74.5)
	Bisexual	135 (10.6)
	Homosexual (gay/lesbian)	42 (3.3)
	Asexual	31 (2.4)
	Queer	25 (2.0)
	A sexual orientation not listed	14 (1.1)
	Prefer not to answer	10 (<1.0)
Relationship Status	Single	544 (42.8)
	Married	343 (27.0)
	In a relationship	186 (14.6)
	Divorced/separated	48 (3.8)
	Living with partner	34 (2.7)
	Domestic partnership	17 (1.3)
	Widowed	3 (<1.0)

Note. Percentages were calculated with the data analysis sample size (N = 1,271).

Table 8

Overall Sample Demographics

Variable	*N*	*M(SD)/Median*	Range
Age	1182	31.38(10.30)	18-76
Subjective Social Status - US	1156	4.90(1.60)	1-10
Subjective Social Status - Community	1200	5.15(1.73)	1-10
Education Level	1204	Associate degree	Less than a high school education : Professional degree
Current Employment	1202	Part-time employment	Not working : Full time employment
Household Income	1206	50,000-69,999	Less than $10,000 : $100,000+

Table 9

Participant History Variables

Variable	Response	N (%)
Houseless History	None	942 (74.1)
	In Childhood	94 (7.4)
	In Adulthood	128 (10.1)
	Childhood & Adulthood	38 (3.0)
Food Insecurity History	None	761 (59.9)
	In Childhood	199 (15.7)
	In Adulthood	117 (9.2)
	Childhood & Adulthood	128 (10.1)
Foster Care History	No	1158 (91.1)
	Yes	41 (3.2)

Table 10

Participant Gender by Vignette Condition

	Vignette Condition					
Participant Gender	**Control (%)**	**Black Man, Physical Violence (%)**	**Black Man, Sexual Violence (%)**	**Black Woman, Physical Violence (%)**	**Black Woman, Sexual Violence (%)**	**Overall Sample (%)**
Cisgender woman	115 (49.8)	109 (45.0)	132 (53.4)	116 (47.9)	136 (56.9)	608 (50.6)
Cisgender man	100	113	105	105	88	511
Transman	4	2	1	2	2	11
Transwoman	1	1	1	1	1	5
Genderqueer/ Gender non-conforming	3	8	1	9	4	25
A gender not listed	6	4	5	7	6	28
Prefer not to answer	2	5	2	2	2	13
# Participants in Condition	*231*	*242*	*247*	*242*	*239*	*1,201*

Psychological Distress Measures

Correlation matrices were calculated to determine the correlational relationships between the six psychological distress measures at each of the three time periods (trait, pre-vignette, and post-vignette). Prior to these analyses, the Meaning & Purpose items were reverse coded. The correlation matrix for all three time points showed moderate to strong positive correlations between most of the measures ($r = .33$ to $r = .84$, all $p <$ .001). The only small correlation within each time point was between the PROMIS Meaning & Purpose measure and the hypervigilance measure (trait: $r = .24$; pre-vignette: $r = .21$; post-vignette: $r = .23$, all $p < .001$). See Tables 11-13 for correlation matrices.

Principal Components Analyses (PCA) were conducted for each time point to evaluate the feasibility of composite scores for the psychological distress measures. The suitability of a PCA was assessed prior to analysis. Inspection of the correlation matrices showed that all six variables had at least one correlation coefficient greater than 0.30. Additionally, when all of the items in the six measures were analyzed for internal reliability together, there was exceptional reliability (trait $\alpha = 0.97$, pre $\alpha = 0.97$, post $\alpha =$ 0.98). For each time point, PCA indicated that one component had an eigenvalue greater than 1 and which explained 65% (trait), 63% (pre), and 63% (post) of the total variance. Visual inspection of the scree plot indicated that a one component solution was appropriate (see Figures 3-5). Varimax orthogonal rotations were completed and component loadings are reported in Tables 14-16.

I created a vicarious trauma outcome composite score for each time period by calculating the z-scores for four of the six psychological distress measures and then adding together the z-scores ($C = Z_{BHS} + Z_{Anxiety} + Z_{Anger} + Z_{Purpose}$; Mi-Kyung et al.,

Table 11

Psychological Distress Trait Scores: Means, Standard Deviations, and Correlations with Confidence Intervals

Variable	*M*	*SD*	1	2	3	4	5
1. BHS Trait Total	7.01	4.96					
2. DEMO Trait Total	54.36	20.15	.52**				
			[.48, .57]				
3. Anxiety Trait Total	11.45	8.73	.49**	.64**			
			[.45, .53]	[.61, .67]			
4. Depression Trait Total	10.33	9.17	.43**	.65**	.82**		
			[.39, .48]	[.62, .69]	[.80, .84]		
5. Anger Trait Total	7.12	5.06	.44**	.60**	.79**	.76**	
			[.39, .48]	[.56, .63]	[.77, .81]	[.73, .78]	
6. Meaning & Purpose Trait Total - Reverse Coded	11.06	9.11	.24**	.45**	.53**	.71**	.49**
			[.19, .29]	[.40, .50]	[.49, .57]	[.69, .74]	[.45, .53]

Note. M and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates $p < .05$. ** indicates $p < .01$.

Table 12

Psychological Distress Pre-Vignette Scores: Means, Standard Deviations, and Correlations with Confidence Intervals

Variable	*M*	*SD*	1	2	3	4	5
1. BHS Pre-Vignette Total	7.27	5.44					
2. DEMO Pre-Vignette Total	46.98	18.52	.48**				
			[.44, .53]				
3. Anxiety Pre-Vignette Total	7.01	8.41	.48**	.59**			
			[.43, .52]	[.55, .63]			
4. Depression Pre-Vignette Total	6.87	9.11	.40**	.58**	.82**		
			[.35, .44]	[.54, .62]	[.80, .84]		
5. Anger Pre-Vignette Total	3.65	4.85	.42**	.61**	.79**	.76**	
			[.38, .47]	[.57, .65]	[.77, .81]	[.74, .79]	
6. Meaning & Purpose Pre-Vignette Total - Reverse Coded	11.08	9.46	.21**	.33**	.49**	.67**	.43**
			[.16, .27]	[.27, .38]	[.45, .54]	[.64, .70]	[.39, .48]

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates $p < .05$. ** indicates $p < .01$.

Table 13

Psychological Distress Post-Vignette Scores: Means, Standard Deviations, and Correlations with Confidence Intervals

Variable	*M*	*SD*	1	2	3	4	5
1. BHS Post-Vignette Total	7.35	5.69					
2. DEMO Post-Vignette Total	50.56	21.22	.54** [.50, .58]				
3. Anxiety Post-Vignette Total	7.07	8.56	.47** [.42, .51]	.63** [.59, .66]			
4. Depression Post-Vignette Total	6.86	9.17	.41** [.36, .45]	.60** [.56, .64]	.84** [.82, .85]		
5. Anger Post-Vignette Total	3.99	4.97	.43** [.39, .48]	.58** [.54, .61]	.80** [.77, .82]	.76** [.73, .78]	
6. Meaning & Purpose Post-Vignette Total - Reverse Coded	11.00	9.66	.23** [.17, .28]	.41** [.36, .45]	.50** [.45, .54]	.65** [.61, .68]	.41** [.36, .45]

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates $p < .05$. ** indicates $p < .01$.

Figure 3

Psychological Distress Trait Measure PCA Scree Plot

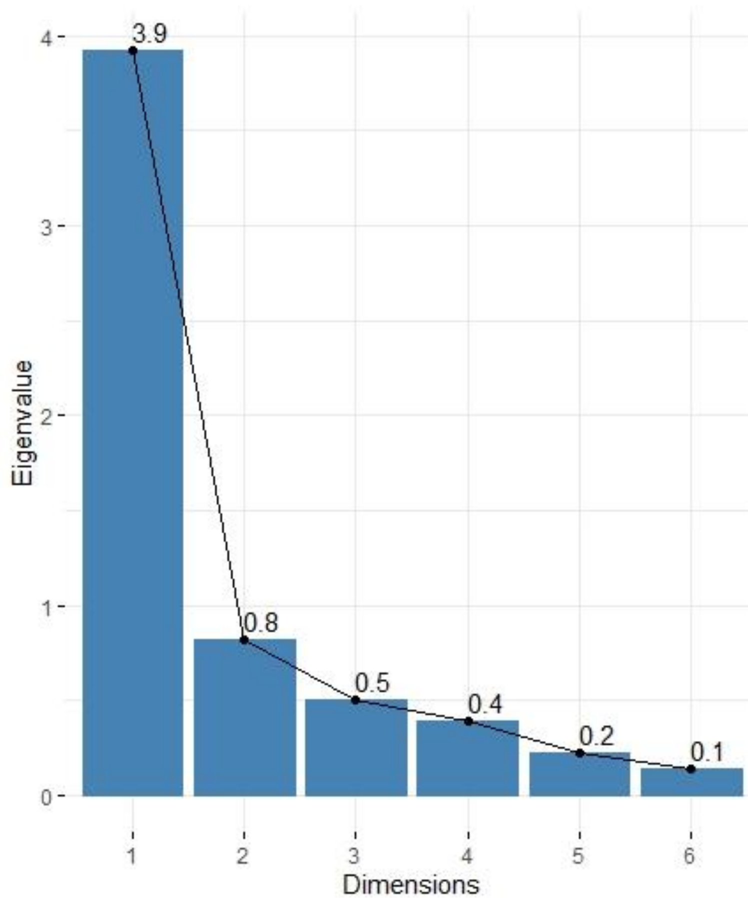


Table 14

Rotated Structure Matrix for PCA with Varimax Rotation of a One Component Solution: Psychological Distress Trait Measures

Items	Rotated Component Coefficients	Communalities (h^2)
Brief Hypervigilance Scale (BHS)	0.62	0.38
Dissociative Experiences Measure, Oxford (DEMO)	0.80	0.64
PROMIS – Anxiety	0.90	0.81
PROMIS – Depression	0.92	0.85
PROMIS – Anger	0.86	0.74
PROMIS – Meaning & Purpose (Reverse Scored)	0.71	0.50

Figure 4

Psychological Distress Pre-Vignette Measures PCA Scree Plot

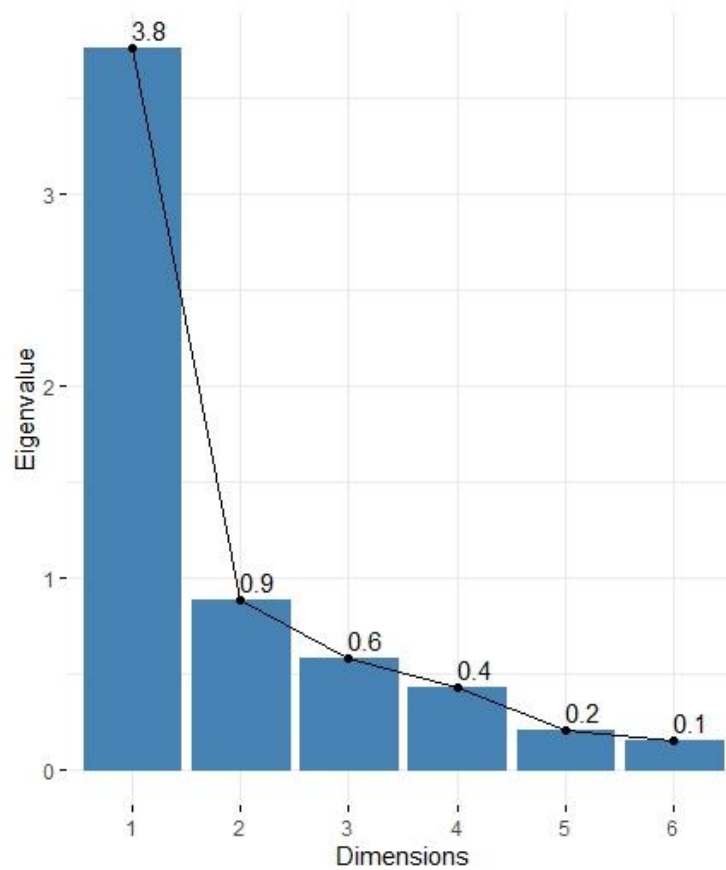


Table 15

Rotated Structure Matrix for PCA with Varimax Rotation of a One Component Solution: Psychological Distress Pre-Vignette Measures

Items	Rotated Component Coefficients	Communalities (h^2)
Brief Hypervigilance Scale (BHS)	0.60	0.36
Dissociative Experiences Measure, Oxford (DEMO)	0.76	0.58
PROMIS – Anxiety	0.90	0.82
PROMIS – Depression	0.91	0.83
PROMIS – Anger	0.87	0.76
PROMIS – Meaning & Purpose (Reverse Scored)	0.65	0.43

Figure 5

Psychological Distress Post-Vignette Measures PCA Scree Plot

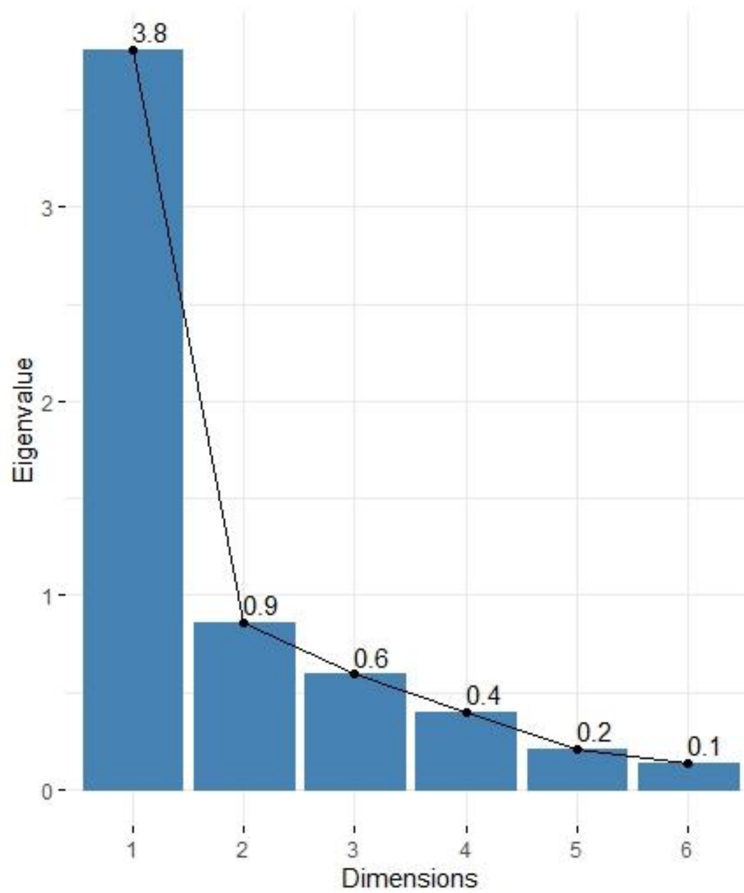


Table 16

Rotated Structure Matrix for PCA with Varimax Rotation of a One Component Solution: Psychological Distress Post-Vignettes Measures

Items	Rotated Component Coefficients	Communalities (h^2)
Brief Hypervigilance Scale (BHS)	0.62	0.38
Dissociative Experiences Measure, Oxford (DEMO)	0.79	0.62
PROMIS – Anxiety	0.91	0.82
PROMIS – Depression	0.91	0.83
PROMIS – Anger	0.85	0.73
PROMIS – Meaning & Purpose (Reverse Scored)	0.66	0.43

2013). I also calculated the difference scores for each psychological distress measure (pre-post) and created a composite score to represent the difference scores across the four measures. DEMO and PROMIS Depression scores were not included in the composite score. DEMO scores were not included because data in the three time points contributed the most to missing data, which significantly increased the amount of missing data in the composite score variables. PROMIS Depression scores were not included in the composite score because it was very strongly correlated with the PROMIS Anxiety scores (trait $r = 0.82$, $p < .001$; pre-vignette $r = 0.82$, $p < .001$; post-vignette $r = 0.84$, $p < .001$). Since the composite scores are based on z-scores, negative scores indicate a score below the sample mean and positive scores indicate a score above the sample mean.

Available Item Analysis (AIA) was conducted to address missing data within the psychological distress measures. This strategy is recommended when there is an overall low percentage of missing data and the measures of interest are internally consistent (Parent, 2013; Tylka & Wood-Barcalow, 2015). AIA takes each participants' available item responses to create a total score for that participant without imputing numbers into individual measure items. Results from analyses using the psychological distress scores with AIA were consistent with the results from the pairwise deleted analyses. Results reported below are from the original data analyses, without AIA.

Aim 1: Facets of COBT

To evaluate the value of the COBT framework, I calculated a correlation matrix for scores of vicarious trauma outcomes composite, collective trauma, and institutional betrayal. The results support my hypothesis. Small positive correlations were found between all three outcomes. Vicarious trauma outcomes were associated with collective

trauma ($r = .08$, $p = .008$) and institutional betrayal ($r = .18$, $p < .001$). Collective trauma and institutional betrayal were also associated with each other ($r = .14$, $p < .001$; see Table 17).

Table 17

Aim 1: Means, Standard Deviations, and Correlations with Confidence Intervals

Variable	*M*	*SD*	1	2	3
1. Psych Distress Post-Vignette Composite (6 Measures)	-0.01	4.72			
2. Psych Distress Post-Vignette Composite (4 Measures)	-0.02	3.09	.98**		
			[.98, .98]		
3. Collective Trauma Average Score	2.18	0.52	.08**	.08**	
			[.02, .14]	[.02, .13]	
4. IBQ - Police Violence Total Score	6.23	3.24	.18**	.18**	.14**
			[.12, .23]	[.13, .24]	[.09, .19]

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates $p < .05$. ** indicates $p < .01$.

Aim 2: Strength of Vignettes

To evaluate my hypothesis that the four active vignettes will elicit a stronger vicarious trauma response, stronger sense of collective trauma, and a higher institutional betrayal score I conducted an independent t-test with the four active conditions grouped together and compared to the control vignette. Test assumptions were evaluated and met. The hypothesis was partially supported. The participants who were in the active vignette

conditions reported significantly lower vicarious trauma outcome composite scores (*M* = -0.12, *SD* = 2.48) compared to participants who were in the control vignette condition (*M* = 0.53, *SD* = 2.25; *t* (348.22) = 3.70, $p < .001$, *d* = 0.27, *CI*[0.30,0.99]). Participants in the active conditions reported significantly higher collective trauma scores (*M* = 2.22, *SD* = 0.50) compared to participants who were in the control condition (*M* = 2.01, *SD* = 0.56; *t* (334.70) = -5.32, $p < .001$, *d* = 0.41, *CI*[-0.29,-0.13]). Participants in the active conditions reported significantly higher institutional betrayal scores (*M* = 6.55, *SD* = 3.16) compared to participants who were in the control condition (*M* = 4.86, *SD* = 3.24; *t* (356.92) = -7.34, $p < .001$, *d* = 0.53, *CI*[-2.14,-1.24]). In summary, participants who read one of the active vignette conditions reported lower vicarious trauma outcomes, higher collective trauma, and higher institutional betrayal (see Table 18 and Figures 6-8).

Aim 3: Gender Differences and Vignette Details

To evaluate my hypotheses that participant gender will impact experiences of COBT, I conducted three three-way ANOVAs (Participant Gender x Vignette Victim Gender x Vignette Violence Type). I also conducted six post-hoc three-way ANOVAs to separately explore patterns for men and women participants (three with women participants and three with men participants). The outcome variables were vicarious trauma outcome composite difference scores, collective trauma, and institutional betrayal. Effect sizes are reported as generalized eta squared ($\eta_G{}^2$). Effect sizes reported in this study follow these definitions: .02 is small, .13 is medium, and .26 is large (Bakeman, 2005; Olejnik & Algina, 2003).

I completed assumptions tests for each of the aim 3 ANOVAs. According to Shapiro-Wilk and Kolmogorov-Smirnov normality tests, the three outcome measures are

Table 18.

Aim 2: Results of Three Independent Samples T-Tests Examining Differences Between Control and Active Vignettes

	Control Condition		*Active Conditions*		t(x)	p	*CI*	Cohen's d
Outcome Measure	*M*	*SD*	*M*	*SD*				
Psych Distress Post-Vignette Composite (4 Measures)	0.53	2.25	-0.12	2.48	t (348.22) = 3.70	< .001	[0.31,0.99]	0.27
Collective Trauma Average Score	2.01	0.56	2.22	0.50	t (334.70) = -5.32	< .001	[-0.29,-0.13]	0.41
IBQ - Police Violence Total Score	4.86	3.24	6.55	3.16	t (356.92) = -7.34	< .001	[-2.14,-1.24]	0.53

Note. Participants who read one of the active vignette conditions reported lower vicarious trauma outcomes, higher collective trauma, and higher institutional betrayal compared to participants who read the control vignette.

Figure 6

Association between Vignette Condition and Vicarious Trauma Outcome Difference Composite Scores

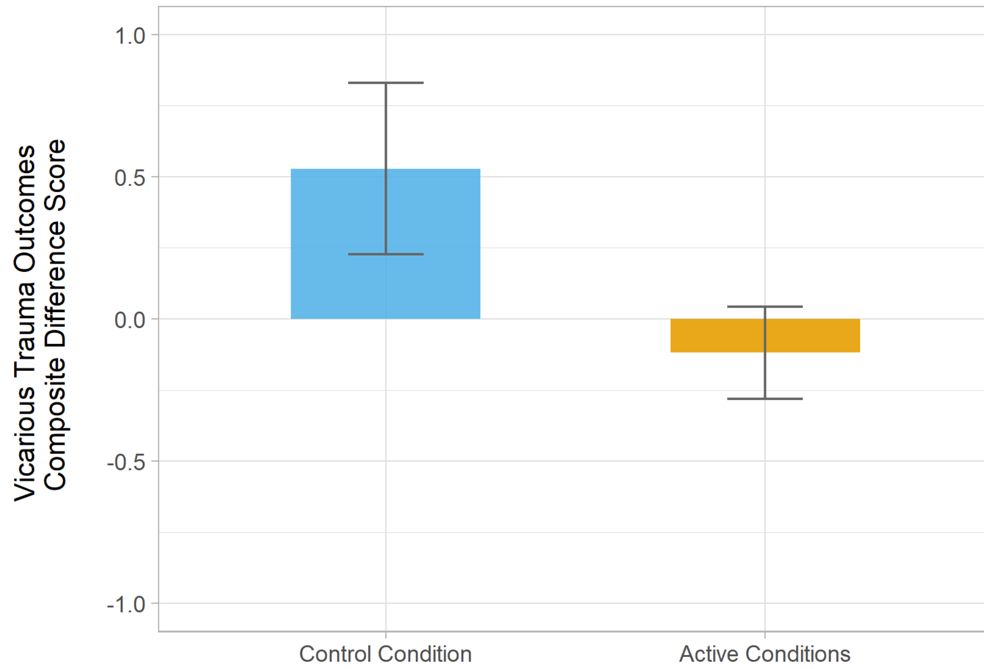


Figure 7

Association between Vignette Condition and Collective Trauma

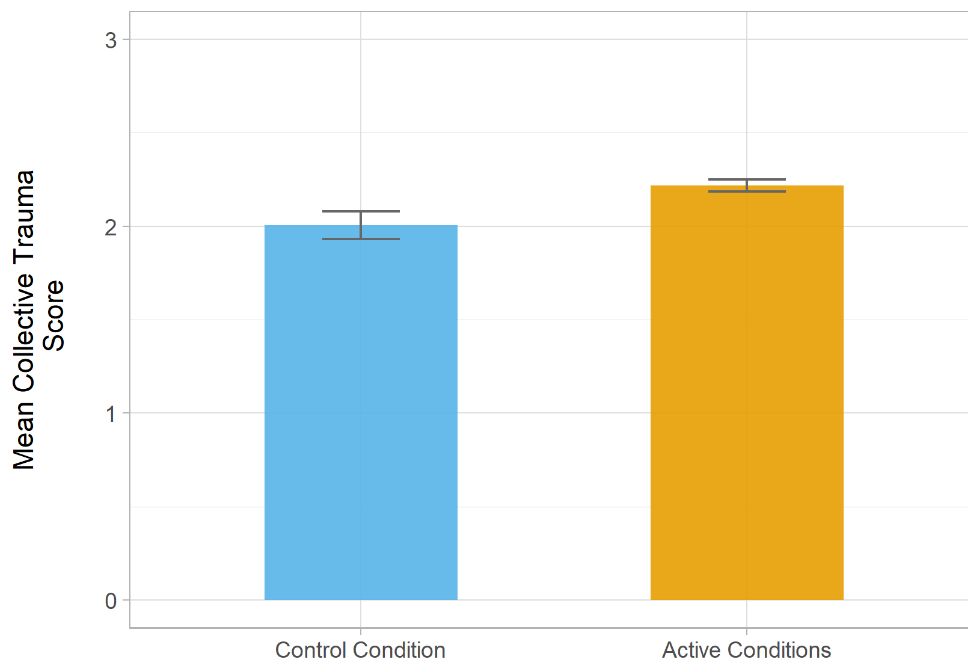
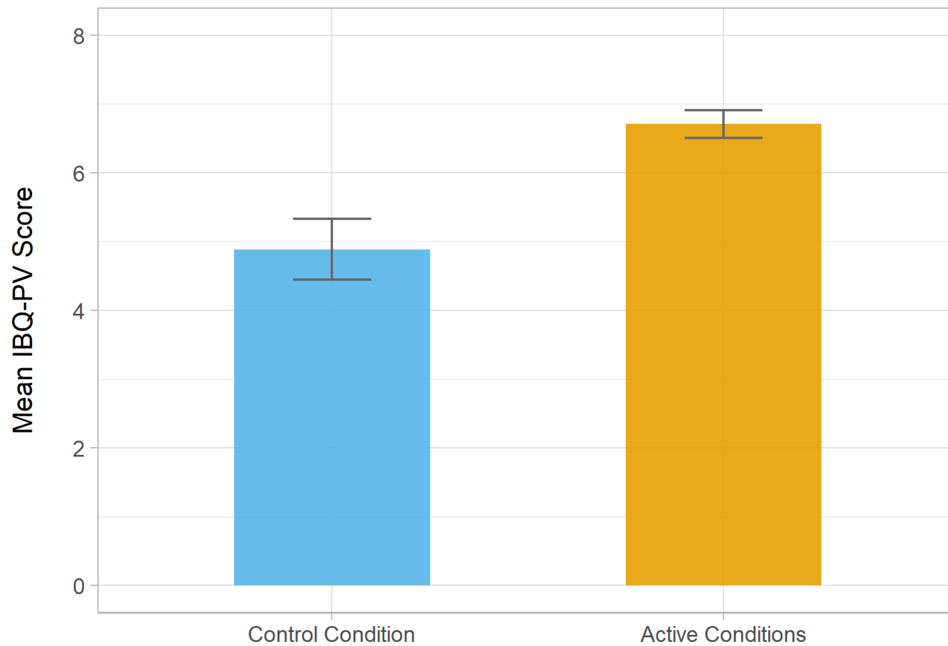


Figure 8

Association between Vignette Condition and Institutional Betrayal – Police Violence



not normally distributed. This would suggest that the normality assumption is violated for ANOVA tests. However, a number of resources suggest that with large sample sizes normality tests are less necessary and statistical violations of normal distributions do not accurately indicate actual non-normal data distributions (e.g., Ghasemi, & Zahediasl, 2012). Visual depictions of the three outcome measures suggest relative normal distribution for the vicarious trauma outcome composite score and the collective trauma measure (see Figures 9-11). Institutional betrayal scores visually appeared somewhat less normally distributed; however, because this measure is assessing experiences of individual behaviors rather than an underlying construct there was minimal concern about its distribution.

Vicarious Trauma Outcome Composite Score

There was a significant two-way interaction between vignette victim gender and vignette type of violence, $F(1,800) = 5.00$, $p = .026$, $\eta_G{}^2 = .006$ (see Table 19). An

Figure 9

Distribution of Vicarious Trauma Outcome Difference Composite Scores

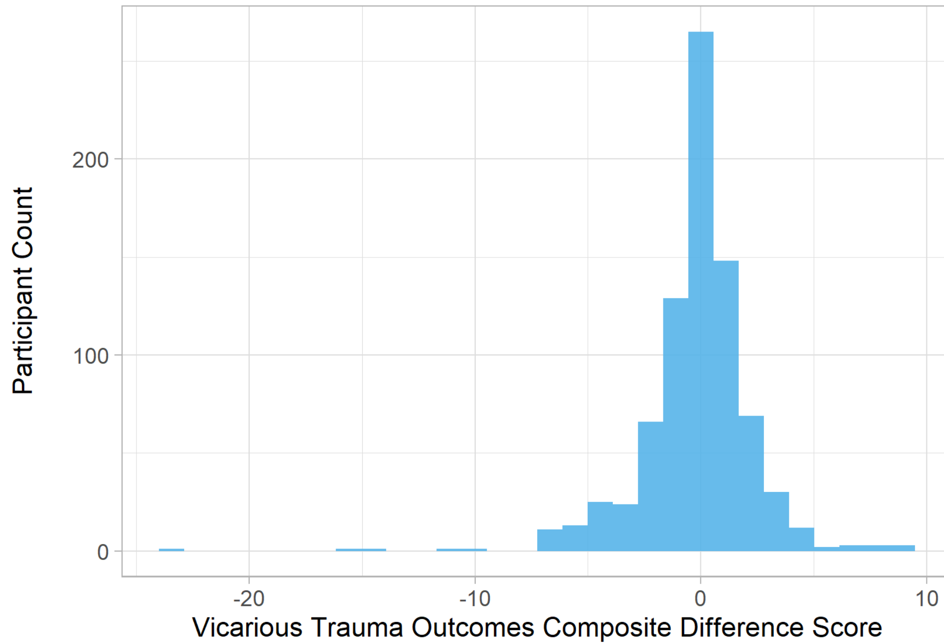


Figure 10

Distribution of Collective Trauma Scores

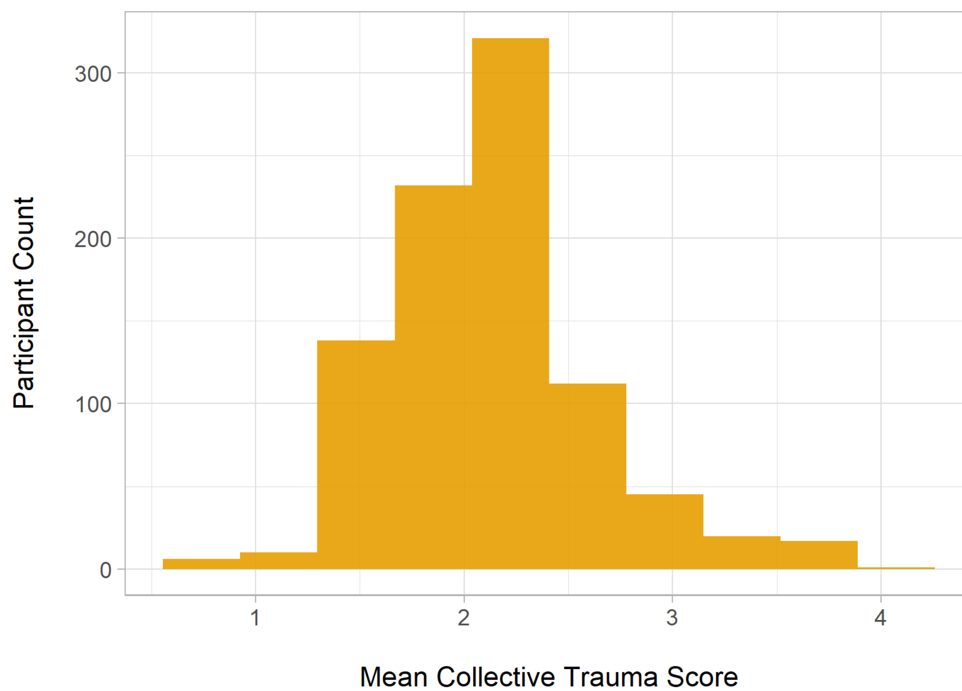


Figure 11

Distribution of Institutional Betrayal – Police Violence Scores

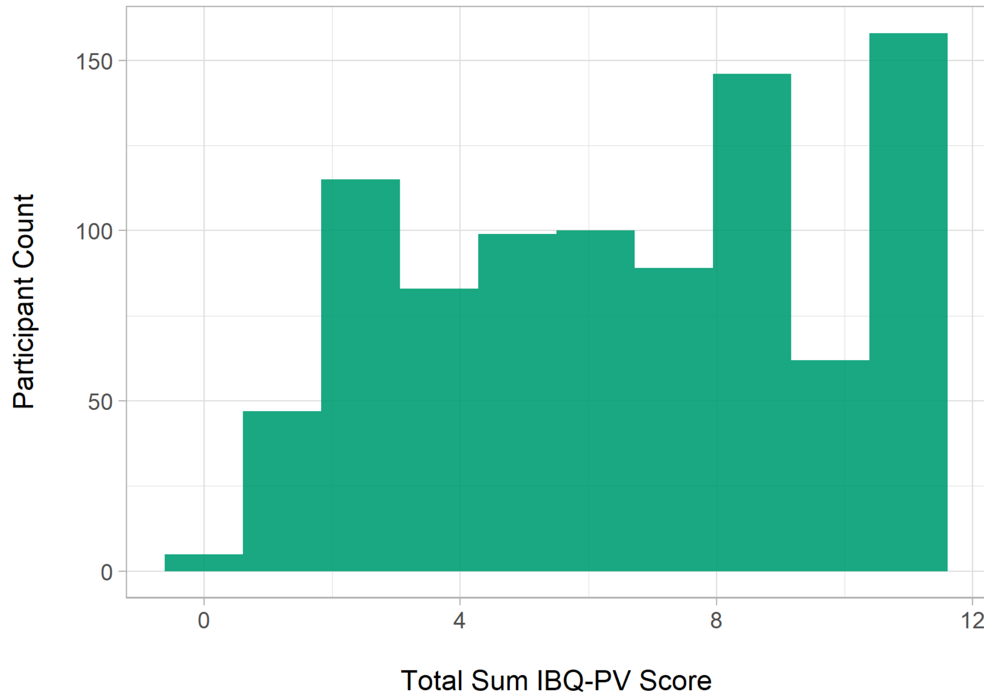


Table 19

Aim 3: Fixed Effects ANOVA Results using Vicarious Trauma Outcomes Difference Composite Score as the Criterion

Predictor	df_n	df_d	F	p	η_G^2
Participant Binary Gender	1	800	1.81	.179	.002
Vignette Type of Violence	1	800	0.004	.951	<.001
Vignette Victim Gender	1	800	0.03	.859	<.001
Participant Gender x Vignette Violence	1	800	1.02	.313	.001
Participant Gender x Vignette Gender	1	800	0.95	.329	.001
Vignette Violence x Vignette Gender	1	800	5.00	$.026^*$	.006
Participant Gender x Vignette Violence x Vignette Gender	1	800	0.14	.705	<.001

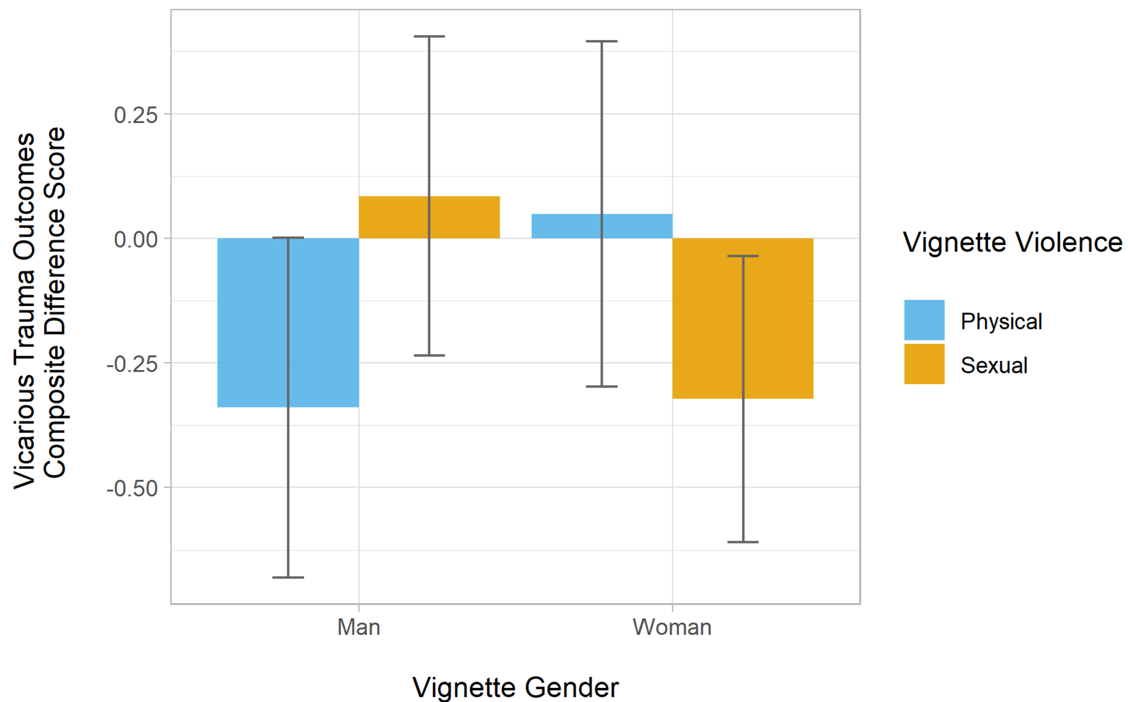
Note. $^*p \leq .05$

analysis of simple main effects for vignette type of violence was conducted with statistical significance receiving a Bonferroni adjustment. There was a marginally statistically significant difference in mean vicarious trauma outcome composite scores

between the physical violence vignette (M = -0.34, SD = 2.59) and the sexual violence vignette (M = 0.08, SD = 2.52) when the vignette victim was a Black man ($F(1, 804)$ = 2.69, p = .086, η_G^2 = .004; see Figure 12). There was not a significant main effect for the vignette conditions with a Black woman victim. In summary, participants who read the sexual violence vignette with a Black man victim reported vicarious trauma outcome difference scores that were lower than average, which means their psychological distress scores changed less than the average from pre-score to post-score. Participants who read the physical violence vignette with a Black man victim reported difference scores that changed more than the average from pre-score to post-score. This pattern was not seen for the vignettes with a Black woman victim, nor did participant gender have a statistically significant impact on vicarious trauma outcome composite scores.

Figure 12

Two-Way Interaction Between Vignette Victim Gender and Vignette Type of Violence with Vicarious Trauma Outcome Difference Composite Scores as Outcome Variable



Post-hoc separate binary gender analyses suggest a two-way interaction between vignette victim gender and vignette type of violence for women participants, $F(1,444) = 4.70$, $p = .031$, $\eta_G^2 = .01$ (see Table 20). An analysis of simple main effects for vignette type of violence was conducted with statistical significance receiving a Bonferroni adjustment. Similar to the combined binary gender analyses, there was a statistically significant difference in mean vicarious trauma outcome composite scores between the physical violence vignette ($M = -0.26$, $SD = 2.42$) and the sexual violence vignette ($M = 0.36$, $SD = 2.03$) when the vignette victim was a Black man ($F(1,444) = 4.28$, $p = .03$, $\eta_G^2 = .01$). Women participants who read the sexual violence vignette with a Black man victim reported vicarious trauma outcome difference scores that changed less than the average from pre-score to post-score. Women participants who read the physical violence vignette with a Black man victim reported differences scores that changed more than the average from pre-score to post-score. There was not a significant main effect for the vignette conditions with a Black woman victim. Separate binary gender analyses with men participants did not indicate a significant interaction or main effects of vignette victim gender or vignette type of violence.

Table 20

Aim 3: Fixed Effects ANOVA Results using Vicarious Trauma Outcomes Difference Composite Score as the Criterion - Women Participants Only

Predictor	df_n	df_d	F	p	η_G^2
Vignette Type of Violence	1	444	0.53	.467	.001
Vignette Victim Gender	1	444	1.04	.309	.002
Vignette Violence x Vignette Gender	1	444	4.70	.031*	.010

Note. *p ≤ .05

Collective Trauma

There were not statistically significant three-way or two-way interactions (see Table 21). There was a marginally statistically significant main effect of vignette violence type, in which participants reported a higher collective trauma score after reading the physical violence vignette (M = 2.25, SD = 0.48) compared to participants who read the sexual violence vignette (M = 2.20, SD = 0.52; $F(1,894) = 2.79$, $p = .096$, $\eta_G^2 = .003$, see Figure 13). Overall, participants experienced the physical violence vignettes as more of a collective trauma compared to participants who read the sexual violence vignettes. The vignette victims' gender and the participants' gender did not play a statistically significant role in their experience of collective trauma. Post-hoc separate binary gender analyses did not indicate any statistically significant interactions or main effects for vignette victim gender or vignette type of violence.

Table 21

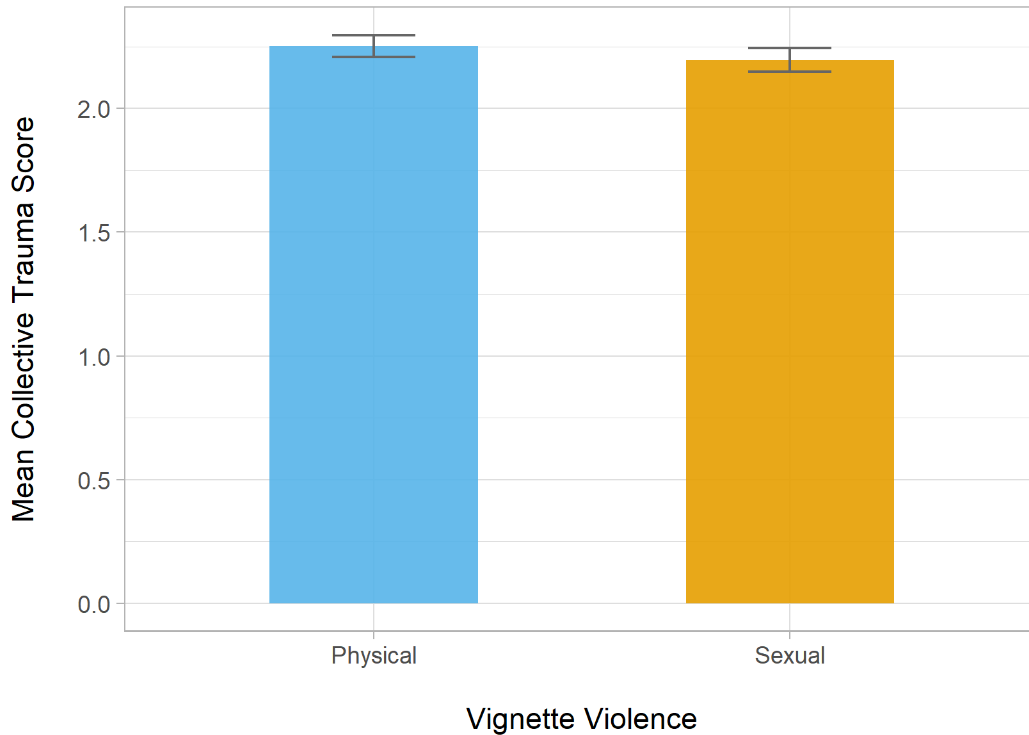
Aim 3: Fixed Effects ANOVA Results using Collective Trauma as the Criterion

Predictor	df_n	df_d	F	p	η_G^2
Participant Binary Gender	1	894	0.05	.828	<.001
Vignette Type of Violence	1	894	2.79	.096	.003
Vignette Victim Gender	1	894	0.56	.454	<.001
Participant Gender x Vignette Violence	1	894	0.05	.831	<.001
Participant Gender x Vignette Gender	1	894	0.48	.488	<.001
Vignette Violence x Vignette Gender	1	894	0.0008	.977	<.001
Participant Gender x Vignette Violence x Vignette Gender	1	894	1.20	.275	.001

Note. There were no statistically significant main effects or interactions for this model.

Figure 13

Main Effect of Vignette Type of Violence on Collective Trauma Scores



Institutional Betrayal – Police Violence

There were not statistically significant three-way or two-way interactions. There was a statistically significant main effect of participant binary gender on institutional betrayal, $F(1,896) = 27.74$, $p < .001$, $\eta_G{}^2 = .03$ (see Table 22). Women reported higher institutional betrayal scores ($M = 7.11$, $SD = 3.08$) after reading a vignette compared to men ($M = 6.05$, $SD = 3.05$; see Figure 14). Overall, women reported experiencing more acts of institutional betrayal by the law enforcement and criminal justice systems than men after reading a vignette. The vignette victims' gender and type of violence depicted did not have a statistically significant role participants' experiences of institutional betrayal. Consistent with the combined binary gender analyses, post-hoc separate binary gender analyses did not show any statistically significant interactions or main effects for

vignette victim gender or vignette type of violence.

Table 22.

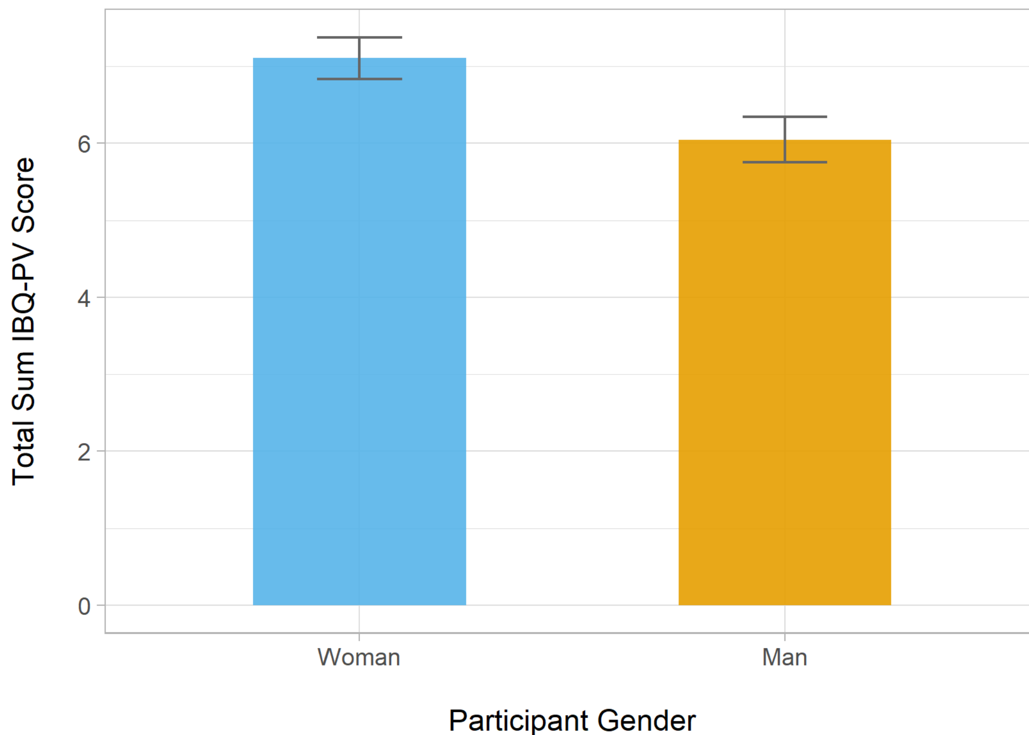
Aim 3: Fixed Effects ANOVA Results using Institutional Betrayal – Police Violence as the Criterion

Predictor	df_n	df_d	F	p	η_G^2
Participant Binary Gender	1	896	27.74	$<.0001^{***}$	.030
Vignette Type of Violence	1	896	2.51	.114	.003
Vignette Victim Gender	1	896	0.29	.591	<.001
Participant Gender x Vignette Violence	1	896	0.83	.361	<.001
Participant Gender x Vignette Gender	1	896	0.45	.503	<.001
Vignette Violence x Vignette Gender	1	896	1.20	.273	.001
Participant Gender x Vignette Violence x Vignette Gender	1	896	1.35	.245	.002

Note. $^{*}p \leq .05$, $^{**}p \leq .01$, $^{***}p \leq .001$

Figure 14

Main Effect of Participant Binary Gender on Institutional Betrayal – Police Violence Scores



Exploratory Aim 1: Racial and Gender Identity Changes

To examine the possible influence of the vignettes on racial and gender identity measures, I conducted three three-way ANOVAs with the three group identity difference scores as the outcome variables. I also conducted six post-hoc three-way ANOVAs to separately explore patterns for men and women participants (three with women participants and three with men participants). Effect sizes are reported as generalized eta squared ($\eta_G{}^2$). Effect sizes reported in this study follow these definitions: .02 is small, .13 is medium, and .26 is large (Bakeman, 2005; Olejnik & Algina, 2003).

Racial Identity

There was a significant two-way interaction between vignette victim gender and vignette type of violence, $F(1,848) = 6.32$, $p = .012$, $\eta_G{}^2 = .007$ (see Table 23). An analysis of simple main effects for vignette type of violence was conducted with statistical significance receiving a Bonferroni adjustment. There was a statistically significant difference in mean racial identity difference scores between the sexual violence vignette ($M = -0.07$, $SD = 0.34$) and the physical violence vignette ($M = 0.0006$, $SD = 0.45$) when the vignette victim was a Black man ($F(1, 852) = 4.17$, $p = .041$, $\eta_G{}^2 = .005$, see Figure 15). There was not a significant main effect for the vignette conditions with a Black woman victim. The mean scores for these two groups indicate that, overall, participants' racial identity increased after reading the sexual violence vignettes and slightly decreased for participants who read the physical violence vignettes. This pattern was not seen for the vignettes with a Black woman victim, nor did participant gender have a statistically significant impact on vicarious trauma outcome composite scores.

Table 23

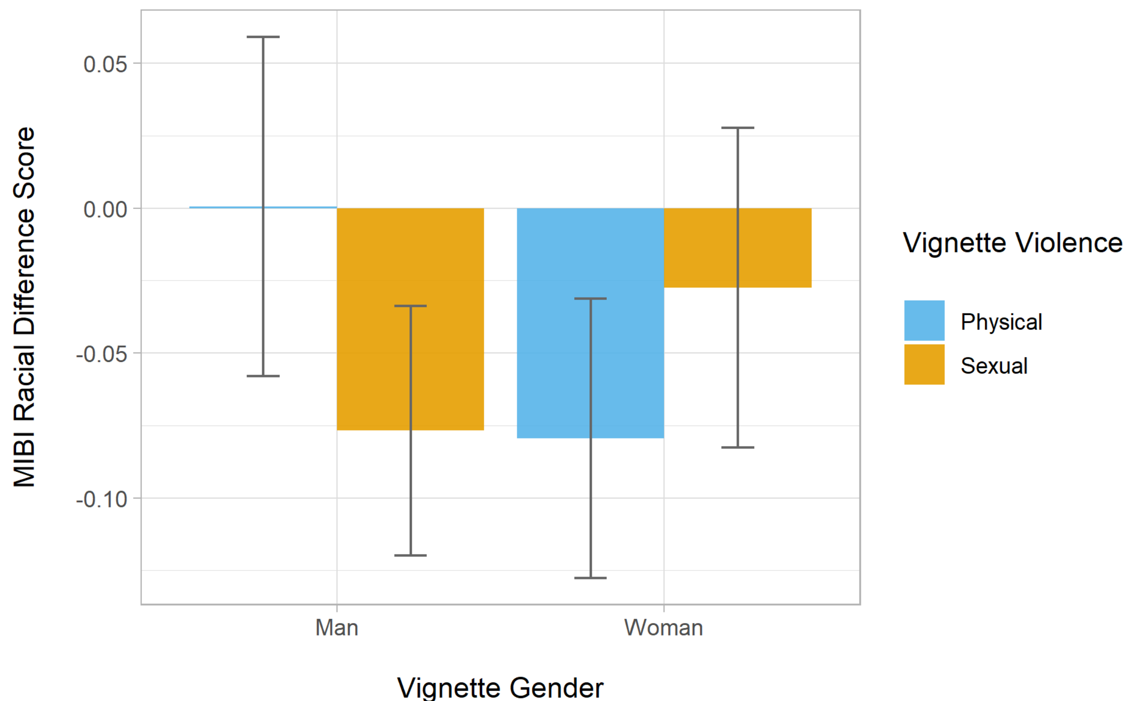
Exploratory Aim 1: Fixed Effects ANOVA Results using Racial Identity Difference Scores as the Criterion

Predictor	df_n	df_d	F	p	η_G^2
Participant Binary Gender	1	848	0.005	.946	<.001
Vignette Type of Violence	1	848	0.25	.617	<.001
Vignette Victim Gender	1	848	0.31	.579	<.001
Participant Gender x Vignette Violence	1	848	3.44	.064	.004
Participant Gender x Vignette Gender	1	848	0.66	.417	<.001
Vignette Violence x Vignette Gender	1	848	6.32	.012*	.007
Participant Gender x Vignette Violence x Vignette Gender	1	848	0.66	.416	<.001

Note. *p ≤ .05

Figure 15

Two-Way Interaction Between Vignette Victim Gender and Vignette Type of Violence with Racial Identity Pre/Post Difference Scores as Outcome Measure



Post-hoc separate binary gender analyses suggested a significant two-way interaction between vignette type of violence and vignette victim gender for men participants, $F(1,387) = 5.36$, $p = .021$, $\eta_G{}^2 = .01$ (see Table 24). An analysis of simple

main effects for vignette type of violence was completed with statistical significance receiving a Bonferroni adjustment. There was a statistically significant difference in mean racial identity difference scores between the sexual violence vignette (M = 0.03, SD = 0.42) and the physical violence vignette (M = -0.11, SD = 0.42) when the vignette victim was a Black woman ($F(1, 387) = 5.51$, $p = .019$, $\eta_G^2 = .01$, see Figure 16). The mean scores for these two groups indicate that after reading the sexual violence vignette with a Black woman victim, Black men tended to report lower racial identity than before the vignette. Additionally, Black men participants' racial identity scores increased, overall, after reading the physical violence vignette with a Black woman victim. Separate binary gender analyses with women participants did not indicate a significant interaction or main effects for vignette victim gender or vignette type of violence.

Gender Identity

There was a significant two-way interaction between vignette victim gender and vignette type of violence, $F(1,850) = 7.09$, $p = .008$, $\eta_G^2 = .008$ (see Table 25). An analysis of simple main effects for vignette type of violence was conducted with statistical significance receiving a Bonferroni adjustment. There was a statistically significant difference in mean gender identity difference scores between the sexual violence vignette (M = -0.12, SD = 0.43) and the physical violence vignette (M = -0.02, SD = 0.45) when the vignette victim was a Black man ($F(1, 854) = 5.36$, $p = .021$, η_G^2 = .006, see Figure 17). There was not a significant main effect for the vignette conditions with a Black woman victim. In summary, the means for these two groups indicate that after reading these two types of vignettes, participants' gender identity increased after reading both types of vignette. Participants who read the sexual violence vignette with a

Table 24

Exploratory Aim 1: Fixed Effects ANOVA Results using Racial Identity Difference Scores as the Criterion - Men Participants Only

Predictor	df_n	df_d	F	p	η_G^2
Vignette Type of Violence	1	387	0.95	.329	.002
Vignette Victim Gender	1	387	0.006	.939	<.001
Vignette Violence x Vignette Gender	1	387	5.36	.021*	.014

Note. $^{*}p \leq .05$

Figure 16

Two-Way Interaction Between Vignette Victim Gender and Vignette Type of Violence with Racial Identity Pre/Post Difference Scores as Outcome Measure: Men Participants Only

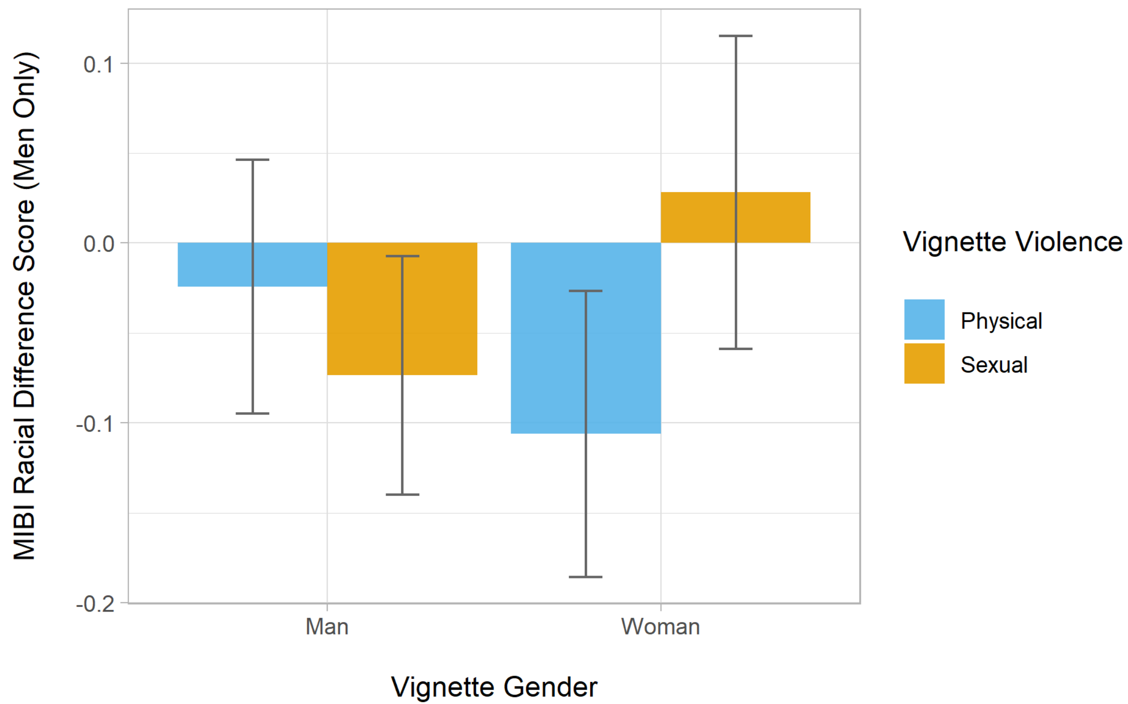


Table 25

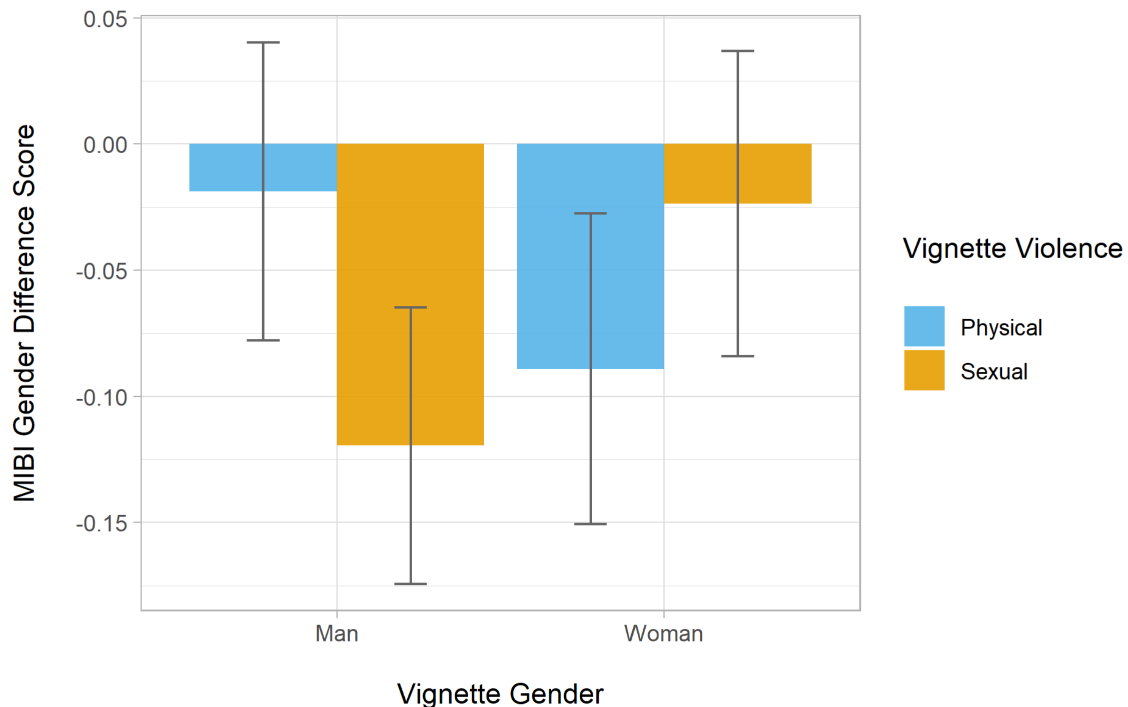
Exploratory Aim 1: Fixed Effects ANOVA Results using Gender Identity Difference Scores as the Criterion

Predictor	df_n	df_d	F	p	η_G^2
Participant Binary Gender	1	850	0.05	.819	<.001
Vignette Type of Violence	1	850	0.33	.568	<.001
Vignette Victim Gender	1	850	0.25	.618	<.001
Participant Gender x Vignette Violence	1	850	2.10	.148	<.001
Participant Gender x Vignette Gender	1	850	0.13	.717	.002
Vignette Violence x Vignette Gender	1	850	7.09	.008**	.008
Participant Gender x Vignette Violence x Vignette Gender	1	850	2.93	.087	.003

Note. *p ≤ .05, **p ≤ .01

Figure 17

Two-Way Interaction Between Vignette Victim Gender and Vignette Type of Violence with Gender Identity Pre/Post Difference Scores as Outcome Measure



Black man victim reported a more significant difference in gender identity difference scores than participants who read the physical violence vignette with a Black man victim. This pattern was not seen for the vignettes with a Black woman victim, nor did participant gender have a statistically significant impact on vicarious trauma outcome composite scores.

Post-hoc separate binary gender analyses suggested a significant two-way interaction between vignette type of violence and vignette victim gender for men participants, $F(1,381) = 8.12$, $p = .005$, $\eta_G^2 = .02$ (see Table 26). An analysis of simple main effects for vignette type of violence was completed with statistical significance receiving a Bonferroni adjustment. There was a statistically significant difference in mean gender identity difference scores between the sexual violence vignette ($M = -0.18$, $SD = 0.47$) and the physical violence vignette ($M = 0.03$, $SD = 0.47$) when the vignette victim was a Black man ($F(1, 381) = 8.99$, $p = .003$, $\eta_G^2 = .02$, see Figure 18). The mean scores for these two groups indicate that after reading the sexual violence vignette with a Black man victim, Black men tended to report stronger gender identity than before the vignette. Additionally, Black men participants' gender identity scores decreased, overall, after reading the physical violence vignette with a Black man victim. Separate binary gender analyses with women participants did not indicate a significant interaction or main effects for vignette victim gender or vignette type of violence.

Table 26

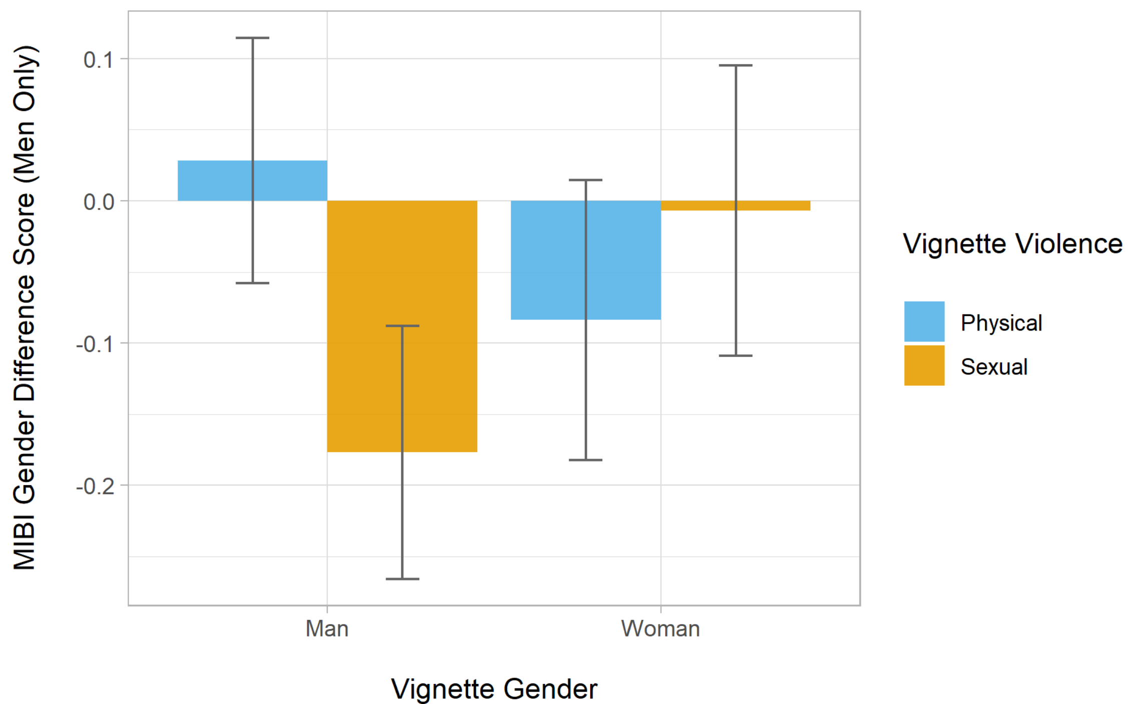
Exploratory Aim 1: Fixed Effects ANOVA Results using Gender Identity Difference Scores as the Criterion - Men Participants Only

Predictor	df_n	df_d	F	p	η_G^2
Vignette Type of Violence	1	381	2.02	.156	.005
Vignette Victim Gender	1	381	0.18	.668	<.001
Vignette Violence x Vignette Gender	1	381	8.12	$.005^{**}$	.021

Note. $^{*}p \leq .05$, $^{**}p \leq .01$

Figure 18

Two-Way Interaction Between Vignette Victim Gender and Vignette Type of Violence with Gender Identity Pre/Post Difference Scores as Outcome Measure: Men Participants Only



Intersectional Identity: Race and Gender

There were no statistically significant interactions or main effects for intersectional identity difference scores (see Table 27).

There was a marginally significant main effect of vignette type of violence, $F(1,854) = 3.27$, $p = .071$, $\eta_G^2 = .004$. Overall, participants' intersectional identity increased after reading either the physical violence or sexual violence vignettes. However, participants who read the sexual violence vignettes ($M = -0.06$, $SD = 0.44$) reported a more significant difference in intersectional identity differences scores than participants who read the physical violence vignettes ($M = -0.01$, $SD = 0.41$).

There was also a marginally significant interaction between participant binary gender and vignette type of violence, $F(1,854) = 3.74$, $p = .054$, $\eta_G^2 = .004$. An analysis of simple main effects for vignette type of violence was completed with statistical significance receiving a Bonferroni adjustment. There was a statistically significant difference in mean intersectional identity difference scores between the sexual violence vignettes ($M = -0.07$, $SD = 0.46$) and the physical violence vignettes ($M = 0.03$, $SD = 0.40$) for women participants ($F(1, 858) = 6.97$, $p = .008$, $\eta_G^2 = .008$). These mean scores indicate that after reading the sexual violence vignettes Black women participants tended to report a stronger intersectional identity than before the vignette. Additionally, Black women participants intersectional identities decreased, overall, after reading the physical violence vignettes.

Table 27

Exploratory Aim 1: Fixed Effects ANOVA Results using Intersectional (Gender & Race) Identity Difference Scores as the Criterion

Predictor	df_n	df_d	F	p	η_G^2
Participant Binary Gender	1	854	0.79	.373	<.001
Vignette Type of Violence	1	854	3.27	.071	.004
Vignette Victim Gender	1	854	0.09	.760	<.001
Participant Gender x Vignette Violence	1	854	3.74	.054	.004
Participant Gender x Vignette Gender	1	854	0.03	.859	<.001
Vignette Violence x Vignette Gender	1	854	0.008	.927	<.001
Participant Gender x Vignette Violence x Vignette Gender	1	854	0.12	.733	<.001

Note. There were no statistically significant main effects or interactions for this model.

Post-hoc separate binary gender analyses suggested a significant main effect of vignette type of violence for women participants, $F(1,469) = 6.73$, $p = .010$, $\eta_G^2 = .01$ (see Table 28). Women participants who read the physical violence vignettes tended to report lower post-vignette intersectional identity scores than pre-vignette ($M = 0.03$, $SD = 0.40$). Women participants who read the sexual violence vignettes reported higher post-vignette intersectional identity scores than pre-vignette ($M = -0.07$, $SD = 0.46$, see Figure 19). Separate binary gender analyses with men participants did not indicate a significant interaction or main effects for vignette victim gender or vignette type of violence.

Table 28

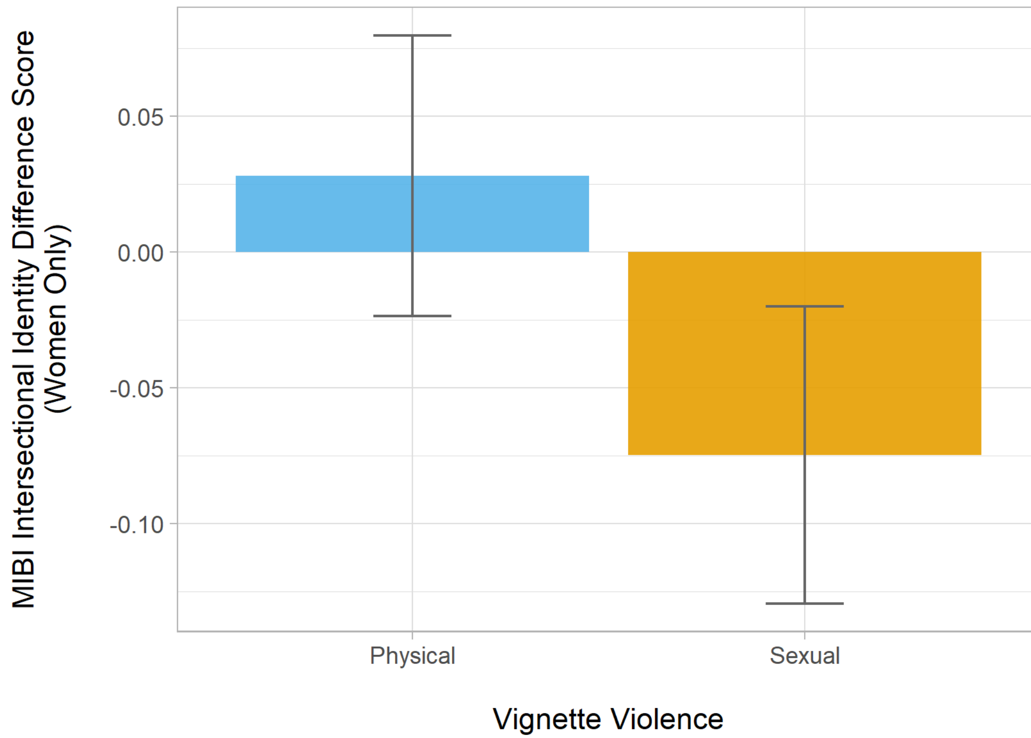
Exploratory Aim 1: Fixed Effects ANOVA Results using Intersectional (Gender & Race) Identity Difference Scores as the Criterion - Women Participants Only

Predictor	df_n	df_d	F	p	η_G^2
Vignette Type of Violence	1	469	6.73	$.010^{**}$	.014
Vignette Victim Gender	1	469	0.12	.731	<.001
Vignette Violence x Vignette Gender	1	469	0.03	.874	<.001

Note. $^{*}p \leq .05$

Figure 19

Main Effect of Vignette Type of Violence on Intersectional Identity Pre/Post Difference Scores: Women Participants Only



Exploratory Aim 2: Participant Characteristics and Direct Experiences

To explore the potential relationships between participant characteristics on participants' experiences of COBT, I calculated a large Pearson correlation matrix with participant age, cumulative trauma history, trait psychological distress composite scores, experiences with law enforcement, exposure to news reports of police violence, participation in protests, and COVID-19 pandemic related issues as participant characteristics of interest. The correlations examined the relationships between the possible moderator variables, psychological distress composite difference scores, group identity, collective trauma, and institutional betrayal measures.

Notably, cumulative lifetime interpersonal trauma history was moderately and positively correlated with psychological distress composite scores for trait distress (r = .41, $p < .001$), pre-vignette distress ($r = .36$, $p < .001$), and post-vignette distress ($r = .37$, $p < .001$). Additionally, institutional betrayal related to police violence and institutional betrayal related to the COVID-19 pandemic were moderately and positively correlated with each other ($r = .34$, $p < .001$; see Table 29).

Based on these results I conducted a hierarchical regression, comparable to the aim 2 (Vignette Strength) t-test analysis. The regression model was set up with cumulative trauma history in the first step, control/active vignette condition in the second step, and vicarious trauma post-vignette scores as the outcome variable. The pattern from aim 2 remained even when controlling for cumulative trauma history. Participants in the active vignette conditions still had statistically significantly lower vicarious trauma post-vignette outcome scores compared to participants in the control vignette condition when controlling for trauma history ($F(2,1044) = 4.23$, $p = .015$, $R^2 = .006$; see Table 30).

Table 29

Exploratory Aim 2: Participant Characteristics and Experiences: Means, Standard Deviations, and Correlations with Confidence Intervals

Variable	*M*	*SD*	1	2	3	4	5	6	7
1. Childhood Cumulative Trauma	2.16	2.22							
2. Adulthood Cumulative Trauma	1.93	2.20	.66** [.62, .69]						
3. Lifetime Cumulative Trauma	4.07	4.02	.91** [.90, .92]	.91** [.90, .92]					
4. Psychological Distress - Trait	-0.02	4.80	.39** [.33, .44]	.27** [.22, .33]	.36** [.31, .42]				
5. Psychological Distress – Pre Vignette	-0.03	4.66	.34** [.28, .39]	.27** [.21, .33]	.34** [.28, .39]	.90** [.89, .91]			
6. Psychological Distress – Post Vignette	-0.01	4.72	.34** [.29, .40]	.28** [.22, .33]	.34** [.29, .39]	.88** [.86, .89]	.95** [.94, .95]		
7. Institutional Betrayal – COVID 19	2.12	1.19	.08** [.02, .13]	.07* [.02, .13]	.09** [.03, .15]	.14** [.08, .20]	.07* [.01, .13]	.10** [.04, .16]	

Table 29 (continued)

Variable	*M*	*SD*	1	2	3	4	5	6	7
8. Institutional Betrayal – Police Violence	6.23	3.24	.09**	.04	.07*	.21**	.15**	.18**	.35**
			[.03, .14]	[-.02, .09]	[.01, .12]	[.15, .27]	[.09, .21]	[.12, .23]	[.30, .39]

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates $p < .05$. ** indicates $p < .01$.

Table 30

Exploratory Aim 2: Summary of Hierarchical Regression Analysis for Variables Predicting Vicarious Trauma Outcomes Post-Vignette Score

	Model 1			*Model 2*		
Variable	*B*	*SE B*	*t*	*B*	*SE B*	*t*
Intercept	-0.01	0.11	-0.11	0.44	0.19	2.34*
Cumulative Interpersonal Trauma History	0.004	0.02	0.19	0.004	0.02	0.23
Vignette Condition (Control vs. Active)				-0.56	0.19	-2.91**
R^2	<.001			0.006		
F for ΔR^2				8.43**		

Note. N = 1,202. * indicates $p < .05$. ** indicates $p < .01$.

CHAPTER V

DISCUSSION

Summary of Results

The results of this study support the idea that indirect exposure to racialized and gendered police violence leads to a complex pattern of outcomes. The first aim of this study was to assess whether the three facets of COBT (vicarious trauma, collective trauma, and institutional betrayal) hang together as one concept. Results support this hypothesis and all three facets were statistically significantly correlated with each other.

The second aim of the study was to ensure the active vignettes that depicted discriminatory police violence elicited different responses compared to the control vignette. This hypothesis was partially supported. As hypothesized, collective trauma and vignette-related institutional betrayal were higher for the active vignette conditions than for the control condition. However, the vicarious trauma scores post-vignette scores were lower, indicating less distress, for the active conditions than for the control condition.

Results for the third aim of the study suggest there is a complicated relationship between individuals' gender and their experiences of racialized and gendered police violence. My first hypothesis for this aim was that there would be an interaction between participant gender and vignette victim gender. This hypothesis was not supported. Participant gender was not a significant factor (interaction or main effect) when looking at vicarious trauma outcomes or collective trauma. However, there was a significant main effect of participant gender with institutional betrayal as an outcome. Women participants reported higher institutional betrayal than men participants regardless of the vignette they read. My exploratory hypothesis for aim 3 predicted that men and women participants

might report different levels of vicarious trauma outcomes, collective trauma, and institutional betrayal depending on the type of violence they read about. This hypothesis was not supported. There was a marginally significant effect in that participants who read the physical violence vignettes reported a more significant experience of collective trauma than participants who read the sexual violence vignettes. However, this pattern was not seen with vicarious trauma outcomes or institutional betrayal and there were no significant gender differences in collective trauma scores based on vignette type of violence.

This study also had two exploratory aims. First, I wanted to observe the effects of the active vignette conditions on participant identities. Results for this aim depict a complicated relationship between individuals' identities and their experiences of racialized and gendered police violence. For example, overall, results suggest participant racial and gender identities statistically significantly changed after reading one of the two vignettes that depicted discriminatory violence toward a Black man victim. Participants who read the Black man, physical violence vignette, overall, reported decreased racial identity scores and increased gender identity scores. Participants who read the Black man, sexual violence vignette tended to report increased racial and gender identity scores. However, these patterns were not seen with participants who read the vignettes with a woman victim. It does not appear that the active vignettes had a significant impact on participants' intersectional (race x gender) identities. Additionally, when participants were separated out by binary gender there were different patterns in identity pre/post changes for men and women participants depending on vignette victim gender and vignette type of violence.

Men participants reported significant changes in racial and gender identities after reading one of the vignettes with a Black man victim. Men participants did not report comparable identity differences after reading one of the vignettes with a Black woman victim. For Black women participants, vignette type of violence appeared to have an effect on their intersectional identity scores, but not on their racial or gender identity scores. Vignette victim gender did not have a statistically significant impact on women participants' identity scores.

The second exploratory aim was to explore the potential effects of specific participant characteristics and experiences on COBT experiences. Two participant characteristics or experiences stand out. Cumulative lifetime interpersonal trauma history was moderately and positively correlated with psychological distress composite scores (vicarious trauma outcome composite scores) for trait distress, pre-vignette distress, and post-vignette distress. Additionally, institutional betrayal related to the COVID-19 pandemic and institutional betrayal related to police violence were moderately and positively correlated with each other. An exploratory hierarchical regression revealed that cumulative trauma history did not have a significant effect on post-vignette vicarious trauma scores. The pattern remained that participants in the active vignette conditions reported lower vicarious trauma post-vignette outcome scores comparted to control condition participants.

Takeaways from the Current Study

The size of this study can make it seem daunting to narrow in on what might be important to discuss with different audiences. In this section, I will highlight three primary takeaways from the results of this study (see Table 31).

1. Results from aim 1 and aim 2 of the study show that vicarious trauma outcomes, collective trauma, and institutional betrayal significantly correlate with each other. Additionally, vignette studies appear to be a viable method of investigating effects of indirect exposure to discriminatory police violence. These results provide support for the concept of COBT and provides support for future studies to be modeled off this study.
2. Results from aim 3 and exploratory aim 1 suggest men and women likely experience indirect exposure to discriminatory police violence in different ways, depending on who the victim is and what type of violence the victim is subjected to. While the only significant main effect or interactive effect of participant gender was with institutional betrayal with full sample analyses, separate binary gender analyses provide evidence that men and women in this sample experienced different outcome patterns in relation to vicarious trauma, collective trauma, institutional betrayal, racial identity, gender identity, and intersectional identity. Future culturally sensitive research can prioritize these gender differences, as well as give space for research focused on participants who identify with different genders or gender characteristics (e.g., feminine and masculine continuums).
3. Results from aim 3 and exploratory aim 1 indicate that victim gender and type of violence are both important yet separate aspects of indirect exposure to discriminatory violence that should be considered in research, clinical, and advocacy work. The interaction of vignette victim gender and vignette type of violence had a significant impact on vicarious trauma pre/post difference scores, racial identity, and gender identity for all study participants. Type of violence had

Table 31
Summary of Study Research Questions, Hypotheses, & Results

Aim	Research Question	Hypothesis	Supported?
Aim 1: Facets of COBT	1. To what extent do the facets of COBT correlate with each other?	a. Vicarious trauma outcomes, collective trauma, and institutional betrayal will be positively correlated with each other.	Supported
Aim 2: Strength of Vignettes	1. Will the control and active vignette conditions lead to significantly different outcomes?	b. Participants who read one of the active vignettes will report a more significant increase in vicarious trauma outcomes, higher collective trauma, and higher institutional betrayal scores compared to participants in the control vignette condition.	Partially supported[1]
Aim 3: Gender Differences and Vignette Details	1. What is the impact of participant gender and vignette victim gender on outcome measures?	c. There will be an interaction between participant gender and vignette victim gender.	Not supported[2]
	2. What is the impact of vignette type of violence on outcome measures?	d. Exploratory: There may be an interaction between participant gender and vignette type of violence.	Not supported
Exploratory Aim 1: Racial and Gender Identity Changes	1. How will participants' racial, gender, and intersectional identities change after reading one of the vignettes?	e. Exploratory: no hypothesis	N/A[3]
Exploratory Aim 2: Participant Characteristics and Direct Experiences	1. Are there specific participant characteristics or experiences that are moderately or strongly correlated with the outcome measures?	f. Exploratory: no hypothesis	N/A[4]

Table 31 (continued)

[1] Collective trauma and institutional betrayal, but not vicarious trauma outcomes, were higher for the active vignette conditions than for the control condition.

[2] There was no interaction between participant gender and vignette victim gender, but there was a main effect of participant gender on institutional betrayal.

[3] Participants' racial and gender identities, but not intersectional identities, increased after reading one of the active vignettes.

[4] Cumulative lifetime interpersonal trauma history was moderately and positively correlated with vicarious trauma outcome scores at all three time points (trait, pre-vignette, post-vignette). However, controlling for cumulative trauma history did not significantly change the statistical model from aim 2 that included vicarious trauma post-vignette scores as the outcome variable.

a significant and individual impact on experiences of collective trauma for all participants. Future research that includes a within-subjects design could provide novel insight into experiences of indirect exposure to discriminatory police violence based on victim gender and type of violence.

Limitations and Strengths of the Current Study

Though these results support the need for future research into psychological consequences of indirect exposure to police violence, there are limitations to note. Theoretical and conceptual limitations are areas in which critical thinking can lead to new translatable findings. The current study uses Betrayal Trauma Theory (BTT; Freyd, 1997) to highlight the role that interpersonal dependence has in experiences of betrayal trauma. However, the current study does not address a second aspect of BTT which looks at betrayal blindness as a strategy victims might use to maintain the depended upon relationship. Betrayal blindness refers to a person's inability to see the betrayal trauma for what it is and/or the brain's unwillingness or inability to perceive or process the trauma (Freyd, 1996; Freyd & Birrell, 2013). It will be important in future research to consider how to operationalize and measure betrayal blindness generally and also within the context of indirect exposure to discriminatory police violence. Relatedly, the relationship between dissociation and distress needs to be critically contemplated for future directions within the current study and beyond. Dissociation is often used as a coping strategy to decrease distress; thus, high dissociation could be considered be an indicator of high distress. Moving forward, we must be deliberate and thoughtful in how we define and use dissociation as a measure of psychological distress. Results from aim 2 of the current study underscores that vicarious trauma outcomes were actually lower after

the active vignette conditions compared to the control condition, while collective trauma and institutional betrayal were higher after the active vignette conditions. This unexpected result deserves pause and contemplation.

Practical and design limitations for the current study provide opportunities for future research to both extend and deepen findings from the current study. This study was a between-subjects vignette design. It would be interesting to contemplate how to design a within-subjects vignette design without significantly increasing demand characteristics. Demand characteristics should be considered with every study. In the current study, it is possible that participants were able to perceive the study hypotheses because the informed consent stated the study was about interactions with law enforcement and the active vignettes clearly depicted discriminatory police violence. However, because the design was between subjects participants did not know that vignette victim gender and vignette type of violence varied by conditions. It would be interesting to use a scaled version of the IBQ-PV rather than a "Yes/No" or checklist prompt to gain insight into potentially more nuanced experiences of institutional betrayal. Recruitment was only through the Prolific platform and there are many Black people who are not active users of this platform, likely for various reasons (e.g., access to consistent internet, awareness of the platform, trust in research, etc.). Additionally, there is a possibility that selection bias influenced the final sample. Potential participants read a recruitment message that stated the survey was about Black Americans' experiences with law enforcement. It is possible that potential participants decided not to participate because of this information.

While there are both theoretical and practical limitation to the current study, significant time was put toward designing a strong study. I would like to note five

particular strengths of the study. First, intentional recruitment was targeted at only people who identify as Black or African American. Relatedly, the sample explicitly recruited both individuals who identify with one race and those who identify with multiple races. COBT was created specifically to provide space in psychological research for Black experiences; thus, these are the people I recruited. Additional strengths of the current study are the large sample size and that the sample is a significant portion of the available population on the Prolific platform. Aim 2 results provided support for vignette designs and suggested that the vignettes created for this study were strong enough to elicit real-life reactions from participants. Finally, the study design included psychological distress measures at three time points: trait, pre-vignette, and post-vignette. These study strengths could be carried forward into future research.

For this study, the concept of time can be considered both a strength and a weakness. Data collection occurred over a period of two months (February – April 2021). A strength of online studies, including this one, is that they require relatively short time periods for data collection. However, many national or global events can happen within a short timespan that should be contextualized within data collection timelines. Within the two-month span of this study’s data collection, the murder trial for former police officer Derek Chauvin began in Minnesota (March 08), Daunte Wright was killed by a police officer who thought she was using a taser gun (April 10) 10 miles from where the Chauvin trial was unfolding, and a video went viral online (April 13) that showed a Black young man being harassed and physically intimidated in a South Carolina suburban neighborhood. The Chauvin trial verdict and the death of a Black teenage girl, Ma’Khia Bryant, occurred a few days after data collection had been completed for this study.

These events need to be contextualized within the data collection timeline because they are the very events this project is focused on. For example, after the murder of Daunte Wright there was a significant uptick in completed survey submissions. In the five days prior to Wright's death, a total of 15 completed surveys were submitted. On the day of Wright's death, 5 surveys were completed. In the five days after Wright's death, 154 surveys were completed and data collection ended – there likely would have been even more submissions if there were available slots. Future research related to police violence (and really all socially relevant research) should acknowledge the context in which data collection occurs.

Implications

Despite the limitations of the current study, there are many academic, societal, and clinical implications of this work.

Academic and Societal Implications

At the academic level, this study provides an empirical evaluation of a novel theoretical approach that critically examines the psychological consequences of indirect exposure to gendered and racialized police violence. This research highlights how discriminatory police violence targeted toward the Black community is relevant to both interpersonal trauma and gender inequity domains. The findings from this study bolster the idea that gendered and racialized police violence create a complex structure of psychological consequences for members of the Black community, even when community members are indirectly exposed to the violence. This study further strengthens the call to trauma psychologists for deliberate integration of an intersectional (e.g., Crenshaw, 1991), multicultural framework into research questions.

At the societal level, my findings provide additional validation for Black individuals' experiences of police violence. The mainstream rhetoric around police violence often dismisses the racialized and gendered aspects of these incidents. This research demonstrates the immediate importance to consider gender within the racialized context of discriminatory police violence. In this study, Black women's experiences were observed separate from Black men's experiences of discriminatory police violence. Additionally, Black women were identified as victims of police violence in this study. This study was borne with the hope that psychological research can tangibly contribute to the #sayhername and #blacklivesmatter movements. It is not enough for #blacklivesmatter to focus solely on race and it is not enough for #sayhername to focus solely on Black women dying at the hands of police. We must also recognize the direct victims of police violence who live to cope with this betrayal and identify the indirect victims who may not have been physically or sexually brutalized by law enforcement but vicariously experience this trauma through media re-presentations.

This study supports the argument that media's re-presentation of interpersonal trauma can be traumatizing within itself (e.g., Countryman-Roswurm & Patton Brackin, 2017; Maercker & Mehr, 2006). The available research has not explored the retraumatizing factor for media's retelling of discriminatory police violence. Anecdotal accounts and related research strongly suggest there are associations between media's portrayal of this violence and psychological distress for Black Americans. For example, a recent U.S. Census study (as cited by Fowers & Wan, 2020) noted that Black people reported a significant five percent increase in anxiety and depressive symptoms over a one-week period after George Floyd was killed in May 2020. However, the Census

survey did not directly ask participants their level of media consumption in the targeted time period. Gabrielle Union, a Black actress, described in an interview that "waking up every day to the brutalization, the murder of Black bodies… is like one big anxiety attack…it just feels like terror in my body". The current study extends the reach of these anecdotes to include Black women victims, as well as both physical and sexual police violence. Our society can take tangible steps to recognize and change experiences of indirect exposure to police violence. For example, our society can critically evaluate how media is representing these stories. On an individual level, non-Black people can consider how dissemination of these tragedies on their personal social media accounts might affect their friends or followers.

Clinical Implications

Black individuals who overcome the systemic and historical barriers to seek treatment should be given the same respect, care, and thoughtfulness that other clients receive from therapists. This includes therapists utilizing culturally sensitive theoretical frameworks and treatment plans that take into account the current and historical sociopolitical context in which the individual client has experienced collective ongoing betrayal trauma.

Relational Cultural Theory (RCT) is a framework in which Race Theory and Trauma Theory can easily merge. RCT was developed to understand the power of the therapist-client relationship in facilitating a sense of safety that allows the client to explore reconnection (Miller & Stiver, 1997). The premise of RCT is that human growth and development occurs often within the context of social relationships. The function of RCT is to amend the disconnection that occurs after interpersonal trauma violates

relationship trust or dependence (e.g., Banks, 2006; Comstock et al., 2008; Freyd & Birrell, 2013). Mutuality and empathy are two relationship values highlighted in RCT. Mutuality refers to the client observing the impact they have on a therapist. Empathy refers to the moment in which a therapist understands a client's experience on a cognitive and affective level. Mutuality and empathy facilitate the client's movement out of isolation and toward social connection (e.g., Brown, 2004). Essentially, mutuality and empathy generate validation of the client's experiences in a profound way. Herman's (1997) model of recovery mirrors RCT. Creating safety, providing space for the client to tell the trauma story, and reconnection to the self and other are all possible within both frameworks. Treatment is not completed until after the client has successfully generalized the reconnection and growth within the therapist-client relationship to outside relationships, ideally generating new healthy relationships (e.g., Banks; Burstow, 2003). Comstock et al. propose that RCT complements a multicultural perspective by serving as a framework in which therapists can explore how social identities, power, dominance, and marginalization can impact mental health and relational development.

The RICH framework was developed to evaluate the sophistication of collective trauma treatments (Pearlman, 2013). The four components of the RICH framework are respect, information, connection, and hope. Respect refers to acknowledgment from others of the unjust violence and its damage. Information refers to the dissemination of facts regarding the traumatic event, how the event occurred, the impact, paths to recovery, resources, etc. Connection is exemplified when a treatment provides opportunity for the client to connect meaning to the traumatic event and re-establishing community that provides support. Hope is represented by the client investing in the

future, contributing other's well-being, and experiencing posttraumatic growth (Tedeschi & Calhoun, 2004).

Aydin's (2017) trauma processing theory of active forgetting demonstrates three of the four characteristics of a sophisticated intervention. The necessary components for active forgetting of trauma recognition, cultural symbolic processing, and sublimation correspond to the RICH components of respect, connection, and hope, respectively. The process of active forgetting as a collective recovery, however, does not include the RICH component of information dissemination. Aydin posits that active forgetting is necessary for a culture to thrive after a collective trauma. Active forgetting is also selective remembering: suppress negative and traumatic memories while keeping the memories in the collective consciousness. Future research and theoretical work could explore how the process of active forgetting both at the individual and cultural level can be incorporated into individual therapy.

Trauma Recovery treatments that were developed from Cognitive Behavioral Theory (CBT), such as Prolonged Exposure or Cognitive Processing Therapy, could potentially influence interventions specifically for victims of vicarious discriminatory police violence (e.g., Foa & Jaycox, 1999; Hupp et al., 2008). Seven of Beck's (2011) ten principles of CBT demonstrate, to an extent, three of the four RICH characteristics. CBT principles that establish respect include having an evolving conceptualization, sound therapeutic alliance, collaboration and active participation, and using a variety of techniques. These principles respect the client's expertise in their experiences and utilize the client's strengths. CBT principles that demonstrate connection include goal-orientation and teaching clients to identify, evaluate, and respond to dysfunctional

thoughts or beliefs. These two principles provide opportunities for the client to reconnect with themselves; however, there is a lack of explicit reconnection with the client's community. The RICH component of hope can be seen in the CBT principle of emphasizing relapse prevention. Relapse prevention empowers the client to remain in control of their thoughts, behaviors, and emotional responses. The RICH component that appears to be missing in many trauma processing treatments is the dissemination of information. This gap is likely due to the primary focus on the individual, with limited examination of or interaction with the client's community. A community-oriented framework provides opportunities for reconnection and reinforcement of community support or strength after traumatic experiences (e.g., Bryant-Davis et al., 2010; Pearlman, 2013; Yellow Horse Brave Heart et al., 2011). Community-oriented frameworks recognize the value and importance placed upon a shared cultural identity. Should therapists choose to operate within this framework, they can help restore safety, trust, and empowerment at both the individual and collective levels in Black communities exposed to discriminatory police violence.

Often, trauma recovery treatments focus on decreasing clients' fear response to triggering stimuli. However, theory or practice recommendations on how to prepare clients for future revictimization, such as collective ongoing betrayal trauma, remain limited. Some recovery models that focus on healing for Black individuals have adopted Herman's (1997) three stage model of recovery: safety, remembrance and mourning, and reconnection. Danzer (2012) describes the utility of Herman's model when helping Black community members recover from historical collective trauma. However, the focus of this healing is solely on traumatic events that are in the past, not also in the present.

Bryant-Davis (2005) developed a trauma processing theory focused on helping Black individuals thrive after traumatic experiences. Bryant-Davis explicitly states that the model is based on Herman's recovery model; and also, the component of "thriving" was developed specifically for the multicultural model. Clients who thrive experience growth, enhancement, and fulfillment in their lives. This seems beneficial for all traumatized clients; yet, the concept of thriving may be particularly empowering for communities and its members who have been immensely oppressed and socially controlled by discriminatory systemic violence.

Therapists must be aware that Black individuals may engage in specific coping strategies that are considered acceptable in their community. Culturally specific coping strategies are established within the following domains: spirituality, community support, activism, creativity, confrontation, humor, escapism, internalized prejudice, among others (e.g., Bryant-Davis, 2005; Bryant-Davis et al., 2017; Ford, 2012; Stevens-Watkins et al., 2014). Additionally, recent evidence suggests that online communities have become places for Black people to cope as a collective, especially when the online communities are connected to social movements (e.g., #BlackWomenMatter; Schuschke & Tynes, 2016). The extent to which Black individuals deploy these coping strategies may depend on their level of cultural identity, which the therapist should assess as part of the conceptualization.

Multicultural and feminist perspectives on treatment provide therapists with many concepts they can rely on to provide inclusive, validating treatment for marginalized individuals. Cultural humility and cultural competence are two concepts derived from multicultural counseling frameworks. Cultural competence refers to the acquisition of

knowledge and skills used when working with clients of marginalized status (Sue & Sue, 2016). To embody cultural humility, a therapist practices respect toward others, egalitarianism, humbleness, minimizing feeling superior over a client, and accepting therapist limitations. The focus of cultural humility is on the client's experience of therapy. Therapists who work with victims of discriminatory violence must aspire to practice cultural humility, which is a more sophisticated practice than cultural competence. Feminist perspectives on treatment prioritize sociopolitical context, client empowerment, and appreciation for clients' subjective truths. Feminist therapy is an integrative approach to treatment that is highly theory driven (e.g., Brown, 2004). The overarching goal is for a client to develop an awareness that their suffering is a consequence of systemic invalidation, exclusion, and silencing toward the marginalized group(s) they identify with, rather than a consequence of individual deficits.

Future Directions

Prior to publication, there remain a few conceptual and analytical issues I want to spend time on. Some researchers argue that calculation of difference scores (pre-post) might wash out significant results for these measures. I will contemplate alternative strategies to analyze pre-post differences. For instance, I will contemplate the value of calculating Reliable Change Index scores for the pre/post measures in this study (Jacobson & Truax, 1991) to focus on clinical significance rather than statistical (p-value) significance. Another alternative would be to use the post-vignette scores as outcome measures while controlling for pre-vignette scores. This could help to account for individual differences in baseline scores. I would also like to spend some more time critically thinking about the role of dissociation in COBT experiences and how to

analytically understand the role of dissociation. As noted in the Limitations section, dissociation can be thought of as both a coping mechanism to decrease psychological or somatic distress and also an indicator of distress. The overall objective for the immediate future directions is to provide a strong foundational study and interpretation of the results for longer term future directions.

Future research can be designed to extend the current study's results and can largely address conceptual issues related to COBT experiences. Results from this study suggest the vignette design is a strong design for this type of research. Future research can deploy this research method within different Black community samples and use varied recruitment strategies to further generalize the results of this study. Future research can also include different aspects of police violence that are not covered in the current study. For example, the vignette police officer was White in the current study's vignettes and the vignette victims were either a man or woman. Future research can observe outcome effects if the police officer was Black or a person of color. Future research can also increase the gender diversity of depicted victims. For example, depicted victims could be identified as transgender, gender non-conforming, or not be labelled as a specific gender and instead described with masculine and feminine characteristics. Another route for future research is to focus on the outcome measures used to represent vicarious trauma outcomes, collective trauma, and institutional betrayal. The measure for collective trauma and institutional betrayal related to police violence were both created or modified specifically for this study. The composite score for vicarious trauma outcomes were also created specifically for this study. The development of COBT will benefit from future research that narrows in on effective ways to measure COBT outcomes. Relatedly,

future psychometric research could focus on convergent and discriminatory validity for COBT outcome measures.

Conclusion

COBT describes racialized and gendered police violence as a unique combination of betrayal trauma, institutional betrayal, vicarious trauma, and collective trauma. This combination of Trauma Theory concepts is further contextualized through Race Theory concepts, such as intersectionality, power and control, and acknowledgement of history. This empirical study provided support for the viability of COBT as a theoretical concept that furthers our understanding of the impetuses for and implications of indirect exposure to discriminatory police violence for Black Americans. This study also provides ample prospects for related future research focused on this societal and public health crisis. Future research is warranted to refine methods to measure COBT. However, this dissertation has provided the groundwork for COBT to be considered a theoretical framework that can be used in research, education, clinical work, policy reform, and other forms of activism.

Appendix

Dissertation Survey Materials

**Note: Instructions in orange were presented to participants after they read the vignette.*

Prescreen/screening Items

1. Do you identify as Black, Black American, African American, or Afro Caribbean?
2. Are you at least 18 years old?
3. Have you worked as a police or law enforcement officer?
4. Has a close other, friend, or family member worked as a police or law enforcement officer?

Brief Betrayal Trauma Survey – (BBTS; Goldberg & Freyd, 2006; revised in 2007)

*Note: The possible answers for this measure will include:

Before you were 18 years old	*When you were at least 18 years old*
Never	*Never*
1-2 times	*1-2 times*
More than that	*More than that*

Instructions: Have each of the following events happened to you, and if so, how often?

1. Been in a major earthquake, fire, flood, hurricane, or tornado that resulted in a significant loss of personal property, serious injury to yourself or a significant other, the death of a significant other, or the fear of your own death?
2. Been in a major automobile, boat, motorcycle, plane, train, or industrial accident that resulted in similar consequences?
3. Witnessed someone with whom you were very close (such as a parent, brother or sister, caretaker, or intimate partner) committing suicide, being killed, or being injured by another person so severely as to result in marks, bruises, burns, blood, or broken bones. This might include a close friend in combat.
4. Witnessed someone with whom you were not close undergoing a similar kind of traumatic event
5. Witnessed someone with whom you were very close deliberately attack another family member so severely as to result in marks, bruises, blood, broken bones, or broken teeth
6. You were deliberately attacked that severely by someone with whom you were very close
7. You were deliberately attacked that severely by someone with whom you were not close
8. You were made to have some form of sexual contact, such as touching or penetration, by someone with whom you were very close (such as a parent or lover).
9. You were made to have such sexual contact by someone with whom you were not close
10. You were emotionally or psychologically mistreated over a significant period of

time by someone with whom you were very close (such as a parent or lover).

11. You were emotionally or psychologically mistreated over a significant period of time by someone with whom you were not close
12. You were neglected or had basic essential needs or resources (e.g., psychological: caring, attention, love, concern; physical: food, clothing, shelter, medical care; or financial) withheld from you by someone with whom you were very close. This neglect or withdrawal of basic needs could have been willful or not, as is often the case when a parent or guardian uses alcohol or drugs or suffers from depression or other serious mental illness.
13. You were neglected or had basic essential needs or resources withheld from you by someone with whom you were not close.
14. You experienced the death of one of your own children.
15. You experienced a seriously traumatic event not already covered in any of these questions.

Multidimensional Inventory of Black Identity (MIBI – Centrality and Private Regard subscales only; Sellers et al., 1997)

Instructions: You will be asked about your race identity, gender identity, and the combination of your race and gender identity (e.g., Black, woman, and Black woman). Please respond to the extent which you agree with the following statements right now.
Instructions: You may find that these questions are the same as or similar to questions you have answered before. Please answer based on how you are feeling and what you are thinking right now.

*Note: The possible answers for this measure (and the next two measures) will include:
1 = strongly disagree   2   3   4   5   6   7 = strongly agree

1. Overall, being Black has very little to do with how I feel about myself.
2. In general, being Black is an important part of my self-image.
3. My destiny is tied to the destiny of other Black people.
4. Being Black is unimportant to my sense of what kind of person I am.
5. I have a strong sense of belonging to Black people.
6. I have a strong attachment to other Black people.
7. Being Black is an important reflection of who I am.
8. Being Black is not a major factor in my social relationships.
9. I feel good about Black people.
10. I am happy that I am Black.
11. I feel that Blacks have made major accomplishments and advancements.
12. I believe that because I am Black, I have many strengths.
13. I often regret that I am Black.
14. Blacks contribute less to society than others.
15. Overall, I often feel that Blacks are not worthwhile.

Multidimensional Inventory of Black Identity (MIBI – Centrality and Private Regard subscales only; Sellers et al., 1997; modified for gender identity)

1. Overall, my gender has very little to do with how I feel about myself.

2. In general, my gender is an important part of my self-image.
3. My destiny is tied to the destiny of other people with the same gender as me.
4. My gender is unimportant to my sense of what kind of person I am.
5. I have a strong sense of belonging to my gender.
6. I have a strong attachment to other people with the same gender as me.
7. My gender is an important reflection of who I am.
8. My gender is not a major factor in my social relationships.
9. I feel good about people with the same gender as me.
10. I am happy with my gender.
11. I feel people with the same gender as me have made major accomplishments and advancements.
12. I believe that because of my gender, I have many strengths.
13. I often regret that I am the gender that I am.
14. People with the same gender as me contribute less to society than others.
15. Overall, I often feel people with the same gender as me are not worthwhile.

Multidimensional Inventory of Black Identity (MIBI – Centrality and Private Regard subscales only; Sellers et al., 1997; modified for intersectional identity)

1. Overall, the combination of my gender and being Black has very little to do with how I feel about myself.
2. In general, the combination of my gender and being Black is an important part of my self-image.
3. My destiny is tied to the destiny of other people with Black people who are the same gender as me.
4. The combination of my gender and being Black is unimportant to my sense of what kind of person I am.
5. I have a strong sense of belonging to Black people who are the same gender as me.
6. I have a strong attachment to other Black people who are the same gender as me.
7. The combination of my gender and being Black is an important reflection of who I am.
8. The combination of my gender and being Black is not a major factor in my social relationships.
9. I feel good about Black people who are the same gender as me.
10. I am happy with the combination of my gender and being Black.
11. I feel Black people with the same gender as me have made major accomplishments and advancements.
12. I believe that because of the combination of my gender and being Black, I have many strengths.
13. I often regret that I am Black and the gender that I am.
14. Black people with the same gender as me contribute less to society than others.
15. Overall, I often feel Black people with the same gender as me are not worthwhile.

Brief Hypervigilance Scale (Bernstein et al., 2015; modified to assess for both trait and state hypervigilance)

Instructions: Please respond to each of the statements with the answer that best applies

to you. There is no right or wrong response for each statement.

To help you decide your answer for each item, answer based either on "*About how much the statement is true as it relates to you,*" or on "*About how often the statement is true as it relates to you.*"

Instructions: You may find that these questions are the same as or similar to questions you have answered before. Please answer based on how you are feeling and what you are thinking right now. There is no right or wrong response for each statement.

*Note: The possible answers for this measure will include:

Over the past month	*Right Now*
Not at all like me (never true)	*Not at all like me*
Somewhat like me (sometimes true)	*Somewhat like me*
Much like me (often true)	*Much like me*
Mostly like me (very often true)	*Mostly like me*
Very much like me (always true)	*Very much like me*

1. As soon as I wake up and for the rest of the day, I am watching for signs of trouble.
2. When I am outside, I think ahead about what I would do (or where I would go) if someone would try to surprise or harm me.
3. I notice that when I am in public or new places, I need to scan the crowd or surroundings.
4. When I am in public, I feel overwhelmed because I cannot keep track of everything going on around me.
5. I feel that if I don't stay alert and watchful, something bad will happen.

Dissociative Experiences Measure, Oxford (Černis et al., 2018; modified to assess for both trait and state dissociation)

Instructions: Please answer the questions below based on how things have been for you in the past two weeks and today/right now. If you are not sure, go with your best guess. Please only answer about experiences you have had while not under the influence of alcohol, drugs, or 'legal highs'.

Instructions: You may find that these questions are the same as or similar to questions you have answered before. Please answer based on how you are feeling and what you are thinking right now. If you are not sure, go with your best guess. Please only answer about experiences you have had while not under the influence of alcohol, drugs, or 'legal highs'.

*Note: The possible answers for this measure will include:

Past two weeks	*Right Now*
1 = Not at all	*1 = Not at all*
2 = Rarely	*2 = Rarely*

3 = Sometimes *3 = Sometimes*
4 = Often *4 = Often*
5 = Most of the time *5 = Most of the time*

1. I have the feeling that other people, other things and the world surrounding me are not real.
2. I have the feeling that everything is unreal.
3. I feel as if I don't exist, am not real.
4. I feel like I am in a parallel world.
5. The world around me feels detached or unreal, as if there were an invisible barrier between me and the outside world.
6. I feel like the external world is not real, a joke, a lie.
7. I feel emotionally numb.
8. I just feel numb and empty inside.
9. I feel I can't make a proper connection with anyone around me.
10. I do not seem to feel anything at all.
11. I feel like I'm 'just existing'.
12. I turn inwards, trying to work out why I feel so disconnected.
13. I find myself in situations or places with no memory of how I got there.
14. I suddenly notice that I find myself in a place that is unknown to me without knowing how I got there.
15. I find evidence of something I've done recently (e.g. through finding notes or drawings) but I don't remember doing it.
16. I find new articles among my things without being able to remember ever having purchased them.
17. I find myself somewhere and do not remember how I got there.
18. I have big gaps in my memory for recent things in my life.
19. I stare aimlessly without thinking about anything.
20. I 'zone out' and don't see or hear what's going on around me.
21. I sometimes sit staring off into space, thinking of nothing, and am not aware of the passage of time (or other people tell me that I do this).
22. I often think about nothing.
23. Sometimes my mind is absolutely blank.
24. My mind just goes empty.
25. I can remember something that happened before so vividly that it's like a video playing in my head.
26. Unwanted images from my past come into my head.
27. I am surprised by or don't expect some of the thoughts or images that happen in my head.
28. I experience past memories as if they are happening here and now.
29. I can get so involved in fantasies or daydreaming that it seems to be really happening and I lose touch with what is happening in the real world at that moment.
30. I hear someone talking when no-one nearby has actually said anything.

<u>PROMIS – Emotional Distress – Anxiety – Short Form 8a (PROMIS Health</u>

Organization & PROMIS Cooperative Group; modified for state and trait items)
Instructions: Please respond to each question or statement by marking one box per row.

Instructions: You may find that these questions are the same as or similar to questions you have answered before. Please answer based on how you are feeling and what you are thinking right now. Respond to each question or statement by marking one box per row.

*Note: The possible answers for this measure will include:

Never
Rarely
Sometimes
Often
Always

In the past 7 days…

1. I felt fearful.
2. I found it hard to focus on anything other than my anxiety.
3. My worries overwhelmed me.
4. I felt uneasy.
5. I felt nervous.
6. I felt like I needed help for my anxiety.
7. I felt anxious.
8. I felt tense.

Right now…

1. I feel fearful.
2. I find it hard to focus on anything other than my anxiety.
3. My worries overwhelm me.
4. I feel uneasy.
5. I feel nervous.
6. I feel like I need help for my anxiety.
7. I feel anxious.
8. I feel tense.

PROMIS – Emotional Distress – Depression – Short Form 8a (PROMIS Health Organization & PROMIS Cooperative Group; modified for state and trait items)
Instructions: Please respond to each question or statement by marking one box per row.

Instructions: You may find that these questions are the same as or similar to questions you have answered before. Please answer based on how you are feeling and what you are thinking right now. Respond to each question or statement by marking one box per row.

*Note: The possible answers for this measure will include:

Never
Rarely
Sometimes

Often
Always

In the past 7 days…
1. I felt worthless.
2. I felt that I had nothing to look forward to.
3. I felt helpless.
4. I felt sad.
5. I felt like a failure.
6. I felt depressed.
7. I felt unhappy.
8. I felt hopeless.

Right now…
1. I feel worthless.
2. I feel that I have nothing to look forward to.
3. I feel helpless.
4. I feel sad.
5. I feel like a failure.
6. I feel depressed.
7. I feel unhappy.
8. I feel hopeless.

PROMIS – Emotional Distress – Anger – Short Form 5a (PROMIS Health Organization & PROMIS Cooperative Group; modified for state and trait items)
Instructions: Please respond to each question or statement by marking one box per row.

Instructions: You may find that these questions are the same as or similar to questions you have answered before. Please answer based on how you are feeling and what you are thinking right now. Respond to each question or statement by marking one box per row.

*Note: The possible answers for this measure will include:
Never
Rarely
Sometimes
Often
Always

In the past 7 days…
1. I was irritated more than people knew.
2. I felt angry.
3. I felt like I was ready to explode.
4. I was grouchy.
5. I felt annoyed.

Right now…

1. I am irritated more than people know.
2. I feel angry.
3. I feel like I am ready to explode.
4. I am grouchy.
5. I feel annoyed.

PROMIS – Emotional Distress – Meaning and Purpose – Short Form 8a (PROMIS Health Organization & PROMIS Cooperative Group)

Instructions: Please respond to each question or statement by marking one box per row.

Instructions: You may find that these questions are the same as or similar to questions you have answered before. Please answer based on how you are feeling and what you are thinking right now. Respond to each question or statement by marking one box per row.

*Note: The possible answers for this measure will include:

5 = *Not at all/Strongly disagree*
A little bit/disagree
Somewhat/Neither agree nor disagree
Quite a bit/Agree
Very much/Strongly agree

In the past 7 days/right now…

1. I have a good sense of what makes my life meaningful.
2. I generally feel that what I do in my life is valuable and worthwhile.
3. I have very clear goals and aims for my life.
4. My life has meaning.
5. My life has significance.
6. I have a clear sense of direction in life.
7. I experience deep fulfillment in my life.
8. My life has purpose.

Vignettes (created for this study)

Black man physical violence vignette

Instructions: Please read the following de-identified brief news report about a Black man who was a target of police violence.

A Black man was unlawfully shot by a White police officer when the officer responded to a call, according to the police department. When the man was shot he collapsed on a street, according to police and autopsy reports. Video from a nearby surveillance camera showed a portion of the encounter. The police department confirms there are car and body camera video, but the video has not yet been released. Police have not said whether any weapons were found on the man. It is unclear whether the victim was part of the call the officer was responding to when they approached the man.

Black woman physical violence vignette

Instructions: Please read the following de-identified brief news report about a Black woman who was a target of police violence.

A Black woman was unlawfully shot by a White police officer when the officer responded to a call, according to the police department. When the woman was shot she collapsed on a street, according to police and autopsy reports. Video from a nearby surveillance camera showed a portion of the encounter. The police department confirms there are car and body camera video, but the video has not yet been released. Police have not said whether any weapons were found on the woman. It is unclear whether the victim was part of the call the officer was responding to when they approached the woman.

Black man sexual violence vignette

Instructions: Please read the following de-identified brief news report about a Black woman who was a target of police violence.

A Black man was unlawfully sexually assaulted by a White police officer after the officer approached him on the street, according to the police department. The man sustained physical injuries from the rape, according to police and medical reports. Video from a nearby surveillance camera showed a portion of the encounter. The police department confirms there are car and body camera video, but the video has not yet been released. Police have not said whether any weapons were found on the man. It is unclear whether the officer had reason to approach the male victim.

Black woman sexual violence vignette

Instructions: Please read the following de-identified brief news report about a Black woman who was a target of police violence.

A Black woman was unlawfully sexually assaulted by a White police officer after the officer approached her on the street, according to the police department. The women sustained physical injuries from the rape, according to police and medical reports. Video from a nearby surveillance camera showed a portion of the encounter. The police department confirms there are car and body camera video, but the video has not yet been released. Police have not said whether any weapons were found on the woman. It is unclear whether the officer had reason to approach the female victim.

Control vignette

Instructions: Please read the following de-identified news report about a person who was given a ticket by a police officer.

A driver was given a speeding ticket by a police officer after the officer stopped the driver in a school zone during school hours. The driver was in a red sports car and was driving a similar speed as other cars. The driver has filed a petition to dismiss the speeding ticket. Video from a nearby surveillance camera showed a portion of the encounter. The police department confirms there are car and body camera video, but the video has not yet been released. Police have not said whether any other drivers were

given speeding tickets around the same time in that school zone.

Instructions: You will now be asked a brief series of questions to make sure that you read the news article on the previous page.

1. What was the race of the victim in the news story? ________________
2. What was the gender of the victim in the news story? ______________
3. What type of victimization did they experience? ___________________

1. What color was the car the driver had in the news story? _______________
2. Where was the driver stopped in the news story? _______________
3. What did the driver receive from the police officer? _______________

Instructions: Please carefully re-read the news report. This is the same news report that you read earlier.

Instructions: Please answer the following question honestly. There is not a correct answer. We are interested in your honest opinion.

1. How many questions about the news story do you think you correctly answered?
   0 1 2 3

Instructions: Please use the box below to write down all the details you remember about the news story. Once you are done re-writing the news story, please answer the questions at the bottom of the page.

____
____
____

We would like to know if you recorded the story in any way to help you remember the news story, such as taking a screenshot. Your participation in this survey will not be affected if you did or did not record the story. We are just interested in this behavior.

1. Did you record the news story in any way, such as taking a screenshot?
   Yes
   No
   I prefer not to answer.

2. How much do you identify with the victim in the news story?
   A great deal
   A lot
   A moderate amount
   A little
   Not at all
3. How much do you identity with the police officer in the news story?
   A great deal
   A lot
   A moderate amount

A little
Not at all

Collective Trauma (created for this study)

The following questions will ask you to think about the event described in the previous news story. There are not correct answers. We are interested in your opinion.

1. Please read the following definition of collective trauma.

   "Collective trauma is trauma that happens to large groups of individuals and can affect entire communities and/or future generations."

   Using this definition of "collective trauma" do you think the news story you read is an example of collective trauma?
   - *Definitely yes*
   - *Maybe yes*
   - *I don't know*
   - *Maybe no*
   - *Definitely no*
2. How do you think the event described in the news story affects the Black community as a whole?
   - *Very negatively*
   - *Somewhat negatively*
   - *Both negatively and positively*
   - *Somewhat positively*
   - *Very positively*
   - *Not at all*
3. Please describe how you think this type of event affects the Black community. For example, you could write, "This type of event negatively impacts Black families", "Black men/women are impacted", "This increases Black people's protection of each other", or "This does not affect the Black community."

   ____
   ____
   ____

4. How much do you think the Black community has been disadvantaged by this type of event in the past in the United States?
   - *A great deal*
   - *A lot*
   - *A moderate amount*
   - *A little*
   - *Not at all*
5. How much do you think the Black community is disadvantaged by this type of current event in the United States?
   - *A great deal*
   - *A lot*
   - *A moderate amount*

A little
Not at all

Institutional Betrayal Questionnaire – Discriminatory Police Violence (created for this study; modified from Smith & Freyd, 2013)

Instructions: The following questions will ask you to think about the event described in the previous news story. There are not correct answers. We are interested in your opinion.

When thinking about the event described in the news story, do you think the institution of law enforcement or the criminal justice system plays a role by (check all that apply)…

1. Not taking proactive steps to prevent this type of experience?
2. Creating an environment in which this type of experience seemed common or normal?
3. Creating an environment in which this experience seemed more likely to occur?
4. Making it difficult to report the experience?
5. Appropriately reporting the frequency of this type of experience?
6. Responding inadequately to the experience, if reported?
7. Covering up the experience?
8. Denying the experience in some way?
9. Punishing a person in some way for reporting the experience (e.g., loss of privileges, creating legal issues)?
10. Creating an environment where you no longer felt safe when interacting with law enforcement or the criminal justice system?
11. Making it difficult to know the actual details of this type of experience?

Police and Law Enforcement Scale (English et al., 2017; modified for this study)

1. Have you had any experiences with police or law enforcement in the past 5 years?
   Yes
   No
   Do not know
   Refuse to answer
2. Have other people close to you had any experiences with police or law enforcement in the past 5 years?
   Yes
   No
   Do not know
   Refuse to answer

Instructions: The following questions will ask you about events that may have happened to you and events that may have happened to someone who is close to you, like a good friend or a family member.

In the past 5 years, how often have police or law enforcement…
*Note: The possible answers for this measure will include:

Never
1-2 times
More than that

1. Accused you of having or selling drugs?
2. Accused someone close to you of having or selling drugs?
3. Accused you of selling sex?
4. Accused someone close to you of selling sex?
5. Pulled you over for no reason while you were driving?
6. Pulled someone close to you over for no reason while they were driving?
7. Been verbally abusive to you?
8. Been verbally abusive to someone close to you?
9. Been physically abusive to you?
10. Been physically abusive to someone close to you?
11. Shot a gun at you?
12. Shot a gun at someone close to you?
13. Discharged a taser gun at you?
14. Discharged a taser gun at someone close to you?
15. Been sexually abusive to you?
16. Been sexually abusive to someone close to you?
17. Treated you unfairly because of how you dress?
18. Treated someone close to you unfairly because of how they dress?
19. Stopped and searched you for no reason?
20. Stopped and searched someone close to you for no reason?
21. Assumed you were a thief?
22. Assumed someone close to you was a thief?
23. Arrested you for something you didn't do?
24. Arrested someone close to you for something they didn't do?

Instructions: In the past 5 years, how often have police or law enforcement…

1. Helped you?
2. Helped someone close to you?
3. Protected you?
4. Protected someone close to you?
5. Greeted you in a friendly manner?
6. Greeted someone close to you in a friendly manner?
7. Treated you with respect?
8. Treated someone close to you with respect?
9. Provided satisfactory service to you?
10. Provided satisfactory service to someone close to you?

Open-Ended Attention Check Items (written for this study)

Instructions: For the next two questions, please answer with details of your experience. For example, you could include the race and gender of the law enforcement or police officer and/or you can state whether the interaction occurred on the street, in a home, in a store, etc. Please do not provide identifying information, including your name or the

names of anyone involved, including the law enforcement officer.

1. In the past 5 years (since 2015), what is the most positive experience you have had with law enforcement?
   ____

2. In the past 5 years (since 2015), what is the most distressing experience you have had with law enforcement?
   ____

<u>COVID-19 Exposure and Family Impact Survey (CEFIS; Center for Pediatric Traumatic Stress, 2020; modified by for this survey)</u>

<u>Instructions:</u> This section will ask you questions about social issues that may have impacted your responses to this survey.

*Note: The possible answers for items 2-10 will include:
Yes
No

1. My responses to this survey were impacted by the COVID outbreak.
   1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree.
2. I, or a person in my household, had difficulty getting food.
3. I, or a person in my household, had difficulty getting medicine.
4. I, or a person in my household, had difficulty getting healthcare when we needed it.
5. I, or a person in my household, had difficulty getting other essentials. (If yes, specify)
6. I, or a person in my household, self-quarantined due to travel or possible exposure.
7. Someone in my household had symptoms or was diagnosed with COVID-19. Who? ____
8. Someone in my household was hospitalized for COVID-19. Who? ___
9. Someone in my household was in the Intensive Care Unit (ICU) for COVID-19. Who? __
10. Someone in my household died from COVID-19. Who? ___
11. Overall, how much distress have you experienced related to COVID-19?
    1 = No distress 10 = extreme distress

<u>Institutional Betrayal Questionnaire – COVID 10(Smith & Freyd, 2013; modified by Veldhuis et al., 2021)</u>

Instructions: We are interested in your experiences with institutions related to the coronavirus pandemic. When answering the following questions, please think about large systems such as hospitals, workplaces, or an organized religion. You may also think about parts of these systems such as a health clinic, a supervisor, or clergy. In thinking about how organizations you have interacted with has handled the coronavirus pandemic, would you say…

1. Not taking proactive steps to prevent unpleasant experiences (e.g., by explaining procedures, providing flexible work expectations)?
2. Creating an environment in which unpleasant experiences seemed common or normal (e.g., minimizing your concerns, negative feedback on time spent managing family life)
3. Creating an environment in which a negative experience seemed more likely to occur (e.g., an apparent lack of communication between providers, denial of flexible work expectations)?
4. Making it difficult to report a negative experience or share concerns (e.g., difficulty contacting provider, not being given a chance to ask questions, no clear avenue for sharing dissatisfaction)?
5. Responding inadequately to your concerns or reports of a negative experience, if shared (e.g., you were given incorrect or inadequate information or advice that was not feasible for you to follow)?
6. Mishandling your protected personal information (e.g., unauthorized release of medical history, losing records, not keeping track of complaints or concerns)?
7. Covering up adverse events (e.g., not immediately informing you of a mistake on the part of the institution)?
8. Denying your experience in some way (e.g., your concerns were treated as invalid, your prior history was dismissed as unimportant)?
9. Punishing you in some way for reporting a negative experience (e.g., you were labeled as problematic or responsible for a lack of help)?
10. Suggesting your experience might affect the reputation of the institution (e.g., your experience was contrasted with the "typical" one, you were discouraged from seeking a second opinion or sharing your experiences with others)?
11. Creating an environment where you no longer felt like a valued member of the institution (e.g., you had to repeatedly remind providers of your identity or treatment history, you were discriminated against due to a personal characteristic)?
12. Creating an environment where continuing to seek help or support was difficult for you (e.g., your appointments were repeatedly changed or cancelled at short notice, seeking healthcare was financially or personally difficult and not supported by the institution)?
13. Prior to this experience, was this an institution or organization you trusted?
    - Not at all
    - Very little
    - A good deal
    - Very much
14. Prior to this experience, did you feel like your needs and concerns were important to the organization(s)?
    - Not at all
    - Somewhat
    - Very much
14. How has the pandemic affected how you feel about these organizations?
    - No change
    - Feel more positively

- Feel more negatively

15. Please briefly identify the institution(s) involved (e.g., insurance company, doctor's office, workplace, etc. Please do not provide a specific name): ________________

<u>Experiences of Discrimination during the COVID-19 Pandemic (created for this survey)</u>

*Note: The possible answers for this measure will include:

Yes

No

1. Do you think you have experienced racial discrimination during the COVID-19 pandemic?
2. Do you think that you have experienced gender discrimination during the COVID-19 pandemic?
3. Do you think that you experienced discrimination due to the combination of your gender and race during the COVID-19 pandemic?

4. Did you delay seeking help or support from an institution during the COVID-19 pandemic because you were worried about racial discrimination?
5. Did you delay seeking help or support from an institution during the COVID-19 pandemic because you were worried about gender discrimination?
6. Did you delay seeking help or support from an institution during the COVID-19 pandemic because you were worried about discrimination due to the combination of your gender and race?

7. Did you decide not to seek help or support from an institution during the COVID-19 pandemic because you were worried about racial discrimination?
8. Did you decide not to seek help or support from an institution during the COVID-19 pandemic because you were worried about gender discrimination?
9. Did you decide not to seek help or support from an institution during the COVID-19 pandemic because you were worried about discrimination due to the combination of your gender and race?

<u>Exposure to Discriminatory Police Violence through the Media and Protests (created for this study)</u>

Instructions: For the following questions, please think of your news exposure via news outlets (e.g., newspapers, television, etc.) and social media (e.g., Twitter, Instagram, etc.).

1. How much are you attending to the news right now?
   a. Daily
   b. 4-6 times a week
   c. 2-3 times a week
   d. Once a week
   e. Never

2. How much did the news over the last year about police violence toward Black women impact your responses on this survey (e.g., Breonna Taylor, XX, etc.)?
    a. Not at all
    b. A little
    c. A moderate amount
    d. A lot
    e. A great deal
3. How much did the news over the last year about police violence toward Black men impact your responses on this survey (e.g., George Floyd, XX, etc.)?
    a. Not at all
    b. A little
    c. A moderate amount
    d. A lot
    e. A great deal
4. How much did the news over the last year about police violence toward Black transgender and/or non-binary individuals impact your responses on this survey (e.g., Tony McDade, XX, etc.)?
    a. Not at all
    b. A little
    c. A moderate amount
    d. A lot
    e. A great deal
5. How much did the lack of news coverage over the last year about police violence toward Black women impact your responses on this survey?
    a. Not at all
    b. A little
    c. A moderate amount
    d. A lot
    e. A great deal
6. How much did the lack of news coverage over the last year about police violence toward Black men impact your responses on this survey?
    a. Not at all
    b. A little
    c. A moderate amount
    d. A lot
    e. A great deal
7. How much did the lack of news coverage over the last year about police violence toward Black transgender and/or non-binary individuals impact your responses on this survey?
    a. Not at all
    b. A little
    c. A moderate amount
    d. A lot
    e. A great deal
8. How much have you participated in in-person protests related to police violence toward Black people in the past year?

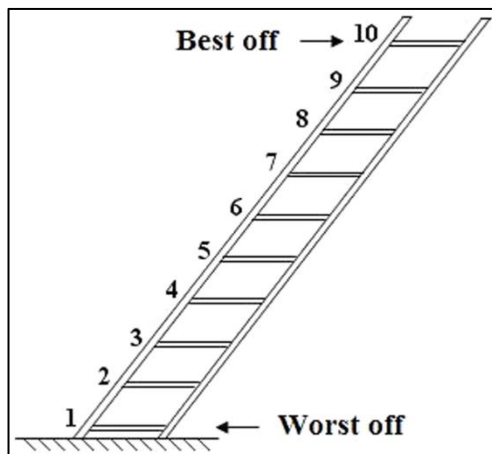
a. Not at all
b. A little
c. A moderate amount
d. A lot
e. A great deal

9. How much have you participated in any type of protest (social media, online strikes, etc.) related to police violence toward Black people in the past year?
    a. Not at all
    b. A little
    c. A moderate amount
    d. A lot
    e. A great deal
10. How much did your level of participation in protests related to police violence toward Black people impact your responses on this survey?
    a. Not at all
    b. A little
    c. A moderate amount
    d. A lot
    e. A great deal

Demographics

1. What year were you born? ________
2. What is the highest level of school you have completed or the highest degree you have received?
    a. Less than high school degree
    b. High school diploma or equivalent (including GED)
    c. Some college but no degree
    d. Associate degree in college (2-year)
    e. Bachelor degree in college (4-year)
    f. Master's degree
    g. Doctoral degree
    h. Professional degree (JD, MD)
3. Which statement best describes your current employment status?
    a. Working full time (paid employee)
    b. Working part time (paid employee)
    c. Working (self-employed)
    d. Not working (student)
    e. Not working (temporary layoff from a job)
    f. Not working (looking for work)
    g. Not working (retired)
    h. Not working (disabled)
    i. Not working (other) ____________________
    j. Prefer not to answer
4. Information about income is very important to understand. Would you please give your best guess? Please indicate the answer that includes your <u>entire household</u> income in 2019 before taxes.

    a. Less than $10,000
    b. $10,000 to $29,999
    c. $30,000 to $49,999
    d. $50,000 to $69,999
    e. $70,000 to $89,999
    f. $90,000 to $99,999
    g. $100,000 or more
    h. I cannot even begin to guess.
5. Including yourself, how many people depend on your household income?
    a. 1
    b. 2
    c. 3
    d. 4
    e. 5 or more
6. In which state do you currently reside? (option of 50 U.S. states, D.C., and Puerto Rico)
7. Please write in the five digit zip code where you live. We will only use this information for data analysis purposes. We will not publish your individual information.
8.

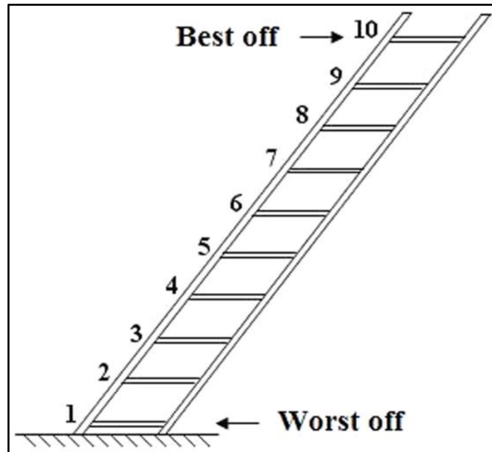


(Adler et al., 2008) Think of this ladder as representing where people stand in the United States.

At the **top** of the ladder are the people who are the best off – those who have the most money, most education, and the most respected jobs. At the **bottom** are the people who are the worst off – who have the least money, least education, worst jobs, and the least respected jobs or no job. The higher up you are on this ladder, the closer you are to the people at the very top; the lower you are, the closer you are to the people at the very bottom.

Where would you place yourself on this ladder? Please indicate the number of the rung where you think you stand at this time in your life, relative to other people in the United States.

9.



Think of this ladder as representing where people stand in their communities.

People define community in different ways; please define it in whatever way is most meaningful to you. At the **top** of the ladder are the people who have the highest standing in their community. At the **bottom** are the people who have the lowest standing in their community.

Where would you place yourself on this ladder? Please indicate the number of the rung where you think you stand at this time in your life, relative to other people in your community.

10. Have you ever been homeless?
    a. Yes, in childhood.
    b. Yes, in adulthood.
    c. Yes, in childhood and adulthood.
    d. No, I have never been homeless.
11. Have you ever experienced unreliable access to a sufficient quantity of affordable, nutritious food?
    e. Yes, in childhood.
    f. Yes, in adulthood.
    g. Yes, in childhood and adulthood.
    h. No, I have never experienced food insecurity.
12. Have you ever been in the foster care system?
    a. Yes
    b. No
13. My relationship status is:
    a. Single
    b. In a relationship
    c. Married
    d. Domestic partnership
    e. Living with partner
    f. Divorced/separated
    g. Widowed

14. Which of the following best describes your race/ethnicity? Check all that apply.
    a. American Indian/Alaska Native
    b. Asian
    c. Black/African American
    d. Hispanic/Latino American
    e. Middle Eastern
    f. Native Hawaiian/Pacific Islander
    g. Caucasian/White European
    h. A race/ethnicity not listed here: __________________
15. Which of the following best describes your sexual orientation?
    a. Asexual
    b. Bisexual
    c. Heterosexual (straight)
    d. Homosexual (gay/lesbian)
    e. Queer
    f. A sexual orientation not listed here ______________
    g. Prefer not to answer
16. Which of the following best describes your gender?
    a. Woman
    b. Man
    c. Transman
    d. Transwoman
    e. Genderqueer/Gender non-conforming
    f. A gender not listed here: ________________
    g. Prefer not to answer

<u>Final Question</u>

1. Please use this textbox to tell us anything else that you would like us to know about any of the questions that were asked in this survey. Please do not include your name, other people's names, or any other identifying information.

REFERENCES CITED

Adams-Clark, A. A., & Freyd, J. J. (under review). COVID-19-Related Institutional Betrayal Associated with Trauma Symptoms among Undergraduate Students. Submitted to PLoSONE.

Adler, N. E., Singh-Manoux, A., Schwartz, J. E., Stewart, J., Matthews, K., & Marmot, M. G. (2008). Social status and health: A comparison of British civil servants in Whitehall II with European- and African-Americans in CARDIA. *Social Science & Medicine, 66*(5), 1034-1045. https://doi.org/10.1016/j.socscimed.2007.11.031

Andresen, F. J., Monteith, L. L., Kugler, J., Cruz, R. A., & Blais, R. K. (2019). Institutional betrayal following military sexual trauma is associated with more severe depression and specific posttraumatic stress disorder symptom clusters. https://doi.org/10.1002/jclp.22773

Aydin, C. (2017). How to forget the unforgettable? On collective trauma, cultural identity, and mnemotechnologies. *An International Journal of Theory and Research, 17*, 125-137. https://doi.org/10.1080/15283488.2017.1340160

Bachem, R., Tsur, N., Levin, Y., Abu-Raiya, H., & Maercker, A. (2020). Negative affect, fatalism, and perceived institutional betrayal in times of the coronavirus pandemic: A cross-cultural investigation of control beliefs. https://dx.doi.org/10.3389%2Ffpsyt.2020.589914

Bakeman, R. (2005). Recommended effect size statistics for repeated measures designs. *Behavior Research Methods, 37*(3), 379-384. https://doi.org/10.3758/BF03192707

Banks, A. (2006). Relational therapy for trauma. *Journal of Trauma Practice, 5*(1), 25-47. https://doi.org/10.1300/J189v05n01_03

Beamish, T. D. (2001). Environmental hazard and institutional betrayal: Lay-public perceptions of risk in the San Luis Obispo County oil spill. https://doi.org/10.1177%2F1086026601141001

Beck, J. S. (2011). *Cognitive behavior therapy: Basics and beyond* (2nd ed.). New York City, NY: Guilford Press.

Ben-Porat, A. (2015). Vicarious post-traumatic growth: Domestic violence therapists versus social service department therapists in Israel. *Journal of Family Violence, 30*, 923–933. https://doi.org/10.1007/s10896-015-9714-x

Bernstein, R. E., Delker, B. C., Knight, J. A., & Freyd, J. J. (2015). Hypervigilance in college students: Associations with betrayal and dissociation and psychometric properties in a Brief Hypervigilance Scale. *Psychological Trauma: Theory, Research, Practice, & Policy,* 7, 448-445. https://doi.org/10.1037/tra0000070

Bollen, K., & Lennox, R. (1991). Conventional wisdom on measurement: A structural equation perspective. *Psychological Bulletin, 110*(2), 305-314. https://doi.org/10.1037/tra0000070

Brand, B. L., Collins, S. J., & McEwen, L. E. (2018). *The Keepers*: The stunning illumination of a cover up of child sexual abuse and institutional betrayal. https://doi.org/10.1080/15299732.2018.1452526

Brown, L. S. (2004). Feminist paradigms of trauma treatment. *Psychotherapy: Theory, Research, Practice, Training, 41*(4), 464-471. https://doi.org/10.1037/0033-3204.41.4.464

Brown, L. S., & Freyd, J. J. (2008). PTSD criterion A and betrayal trauma: A modest proposal for a new look at what constitutes danger to self. *Trauma Psychology, Division 56, American Psychological Association, Newsletter*, *3*(1), 11-15.

Bryant-Davis, T. (2005). *Thriving in the wake of trauma: A multicultural guide.* Altamira Press.

Bryant-Davis, T., Adams, T., Alejandre, A., & Gray, A. A. (2017). The trauma lens of police violence against racial and ethnic minorities. *Journal of Social Issues, 73*(4), 852-871. https://doi.org/10.1111/josi.12251

Bryant-Davis, T., Ullman, S. E., Tsong, Y., Tillman, S., & Smith, K. (2010). Struggling to survive: Sexual assault, poverty, and mental health outcomes of African American women. *American Journal of Orthopsychiatry, 8*(1), 61-70. https://dx.doi.org/10.1111%2Fj.1939-0025.2010.01007.x

Burstow, B. (2003). Toward a radical understanding of trauma and trauma work. *Violence Against Women, 9*(11), 1293-1317. https://doi.org/10.1177%2F1077801203255555

Butler, P. (2017, August 14). Sexual torture: American policing and the harassment of black men. *The Guardian.* https://www.theguardian.com/us-news/2017/aug/14/stop-and-frisk-policing-black-men-torture-sexual-harassment-paul-butler

Carroll, D. (2017). A faculty Woman of Color and micro-invalidations at a White research institution: A case of intersectionality and institutional betrayal. *Administrative Issues Journal, 7*(1). http://dx.doi.org/10.5929/2017.7.1.2

Cella, D., Riley, W., Stone, A. A., Rothrock, N., Reeve, B. B., Yount, S., Amtmann, D., Bode, R., Buysse, D., Choi, S., Cook, K., Devellis, R., DeWalt, D., Fries, J. F., Gershon, R., Hahn, E. A., Lai, J. S., Pilkonis, P., Revicki, D., … PROMIS Cooperative Group. (2010). The Patient Reported Outcomes Measurement Information System (PROMIS) developed and tested its first wave of adult self-reported health outcome item banks: 2005-2008. *Journal of Clinical Epidemiology 63*(11), 1179-1194. https://doi.org/10.1016/j.jclinepi.2010.04.011

Center for Pediatric Traumatic Stress. (2020, June 15). *COVID-19 Exposure and Family Impact Survey (CEFIS).* Health Care Toolbox. https://www.healthcaretoolbox.org/tools-and-resources/covid-19-cefis.html

Černis, E., Cooper, M., & Chan, C. (2018). Developing a new measure of dissociation: The Dissociative Experiences Measure, Oxford (DEMO). *Psychiatry Research, 269,* 229-236. https://doi.org/10.1016/j.psychres.2018.08.060

Cikara, M., Bruneau, E. G., & Saxe, R. R. (2011). Us and them: Intergroup failures of empathy. *Current Directions in Psychological Science, 20*(3), 149-153. https://doi.org/10.1177%2F0963721411408713

Comstock, D. L., Hammer, T. R., Strentzsch, J., Cannon, K., Parsons, J., & Salazar II, G. (2008). Relational-cultural theory: A framework for bridging relational, multicultural, and social justice competencies. *Journal of Counseling & Develoment,86*(3), 279-287. https://doi.org/10.1002/j.1556-6678.2008.tb00510.x

Cook, K. F., Jensen, S. E., Schalet, B. D., Beaumont, J. L., Amtmann, D., Czajkowki, S., Dewalt, D. A., Fries, J. F., Pilkonis, P. A., Reeve, B. B., Stone, A. A., Weinfurt, K. P., & Cella, D. (2016). PROMIS measures of pain, fatigue, negative affect, physical function, and social function demonstrated clinical validity across a range of chronic conditions. *Journal of Clinical Epidemiology, 73*, 89-102. https://doi.org/10.1016/j.jclinepi.2015.08.038

Countryman-Roswurm, K., & Patton Brackin, B. (2017). Awareness without re-exploitation: Empowering approaches to sharing the message about human trafficking. *Journal of Human Trafficking, 3*(4), 327-334. https://doi.org/10.1080/23322705.2016.1201374

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum, 1989*(1), 139-167.

Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, *43*(6), 1241-1299.

Cromer, L. D., Gray, M. E., Vasquez, L., & Freyd, J. J. (2017). The relationship of acculturation to historical loss awareness, institutional betrayal, and the intergenerational transmission of trauma in the American Indian experience. *Journal of Cross-Cultural Psychology, 49*(1), 99-114. https://doi.org/10.1177%2F0022022117738749

Cuddy, A. J. C., Rock, M. S., & Norton, M. I. (2007). Aid in the aftermath of Hurricane Katrina: Inferences of secondary emotions and intergroup helping. *Group Processes & Intergroup Relations, 10*(1), 107-118. https://doi.org/10.1177%2F1368430207071344

Cundiff, N. L., & Komarraju, M. (2008). Gender differences in ethnocultural empathy and attitudes toward men and women in authority. *Journal of Leadership & Organizational Studies, 15*(1), 5-15. https://doi.org/10.1177/1548051808318000

Dadouch, Z., & Lilly, M. M. (2020). Post-trauma psychopathology in journalists: The influence of institutional betrayal and world assumptions. https://doi.org/10.1080/17512786.2020.1755606

Danzer, G. (2012). African Americans' historical trauma: Manifestations in and outside of therapy. *Journal of Theory Construction & Testing, 16*(1), 16-21.

DePrince, A. P., & Freyd, J. J. (2002). The harm of trauma: Pathological fear, shattered assumptions, or betrayal? In J. Kauffman (Ed.) *Loss of the assumptive world: A theory of traumatic loss.* (pp. 71-82). New York, NY: Brunner-Routledge.

Dixon, T. L., & Linz, D. (2000). Overrepresentation and underrepresentation of African Americans and Latinos as lawbreakers on television news. *Journal of Communication, 50*(2), 131-154. https://doi.org/10.1111/j.1460-2466.2000.tb02845.x

Dyregrov, A., Gupta, L., Gjestad, R., & Mukanoheli, E. (2000). Trauma exposure and psychological reactions to genocide among Rwandan children. *Journal of Traumatic Stress, 13(1),* 3-21. https://doi.org/10.1023/A:1007759112499

Edwards, F., Lee, H., & Esposito, M. (2019). Risk of being killed by police use of force in the United States by age, race-ethnicity, and sex. *Proceedings of the National Academy of Sciences of the United States of America, 116*(34), https://doi.org/10.1073/pnas.1821204116

Embrick, D. G. (2015). Two nations, revisited: The lynching of Black and Brown bodies, police brutality, and racial control in 'post racial' Amerikkka. *Critical Sociology, 41*(6), 835-843. https://doi.org/10.1177%2F0896920515591950

English, D., Bowleg, L., Del Río-González, A. M., Tschann, J. M., Agans, R. P., & Malebranche, D. J. (2017). Measuring Black men's police-based discrimination experiences: Development and validation of the Police and Law Enforcement (PLE) Scale. *Cultural Diversity & Ethnic Minority Psychology, 23*(2), 185-199. https://doi.org/10.1037/cdp0000137

Fallahi, C. R. (2017). Social media and news coverage as vicarious exposure. In L. C. Wilson (Ed.), *The Wiley Handbook of the Psychology of Mass Shootings* (pp. 136-152). John Wiley & Sons.

Fallahi, C. R., & Lesik, S. A. (2009). The effects of vicarious exposure to the recent massacre at Virginia Tech. *Psychological Trauma: Theory, Research, Practice, and Policy, 1*(3), 220–230. https://doi.org/10.1037/a0015052

Fedina, L., Backes, B. L., Hyun-Jin, J., Shah, R., Nam, B., Link, B. G., & DeVylder, J. E. (2018). Police violence against women in four U.S. cities. *Preventative Medicine, 106,* 150-156. https://doi.org /10.1016/j.ypmed.2017.10.037

Fein, S., & Spencer, S. J. (1997). Prejudice as self-image maintenance: Affirming the self through derogating others. *Journal of Personality and Social Psychology, 73*(1), 31–44. https://doi.org/10.1037/0022-3514.73.1.31

Feldman, J. M. (2016, July 12). *Roland Fryer is wrong: There is racial bias in shootings by police.* Harvard University Blog. https://scholar.harvard.edu/jfeldman/blog/roland-fryer-wrong-there-racial-bias-shootings-police

Foa, E. B., & Jaycox, L. H. (1999). Cognitive-behavioral theory and treatment of posttraumatic stress disorder. In D. Spiegel (Ed.), *Efficacy and cost effectiveness of psychotherapy* (pp. 23-61). Washington, D.C.: American Psychiatric Press.

Fong, C. M., & Luttmer, E. F. P. (2009). What determines giving to Hurricane Katrina victims? Experimental evidence on racial group loyalty. *American Economic Journal: Applied Economics, 1*(2). doi: 10.1257/app.1.2.64

Ford, J. (2012). Ethnoracial and educational differences in victimization history, trauma-related symptoms, and coping style. *Psychological Trauma: Theory, Research, Practice, and Policy, 4*(2), 177-185. https://doi.org/10.1037/a0023670

Fowers, A., & Wan, W. (2020, June 12). Depression and anxiety spiked among Black Americans after George Floyd's death. *Washington Post.* https://www.washingtonpost.com/health/2020/06/12/mental-health-george-floyd-census/?arc404=true

Freedman, E. B. (2013). *Redefining rape sexual violence in the era of suffrage & segregation.* Harvard University Press.

Freyd, J. J. (1996). *Betrayal trauma: The logic of forgetting abuse.* Cambridge, MA: Harvard University Press.

Freyd, J. J. (1997). Violations of power, adaptive blindness and betrayal trauma theory. *Feminism & Psychology, 7*(1), 22–32. https://doi.org/10.1177/0959353597071004

Freyd, J. J. (2008). Betrayal trauma. In G. Reyes, J. D. Elhai, & J. D. Ford (Eds). *Encyclopedia of psychological trauma* (pp. 76). New York, NY: John Wiley & Sons.

Freyd, J. J. (2013). Preventing betrayal. [Editorial]. *Journal of Trauma & Dissociation, 14*. 495-500. https://doi.org/10.1080/15299732.2013.824945

Freyd, J. J., & Birrell, P. (2013). *Blind to betrayal: Why we fool ourselves we aren't being fooled.* Hoboken, NJ: John Wiley & Sons.

Freyd, J. J., DePrince, A. P., & Gleaves, D. H. (2007). The state of betrayal trauma theory: Reply to McNally—conceptual issues and future directions. *Memory, 15*(3), 295-311. http://dx.doi.org/10.1080/09658210701256514

Fryer, R. G., Jr. (2016). An empirical analysis of racial differences in police use of force. *National Bureau of Economic Research*. Available at https://www.nber.org/papers/w22399

Gamache Martin, C., DePrince, A. P., Cromer, L. D., & Freyd, J. J. (2013). The role of cumulative trauma, betrayal, and appraisals in understanding trauma symptomatology. *Psychological Trauma: Theory, Research, Practice, & Policy, 5*(2), 110-118. https://dx.doi.org/10.1037%2Fa0025686

Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: A guide for non-statisticians. *International Journal of Endocrinology & Metabolism, 10*(2), 486-489. https://dx.doi.org/10.5812%2Fijem.3505

Gist, R., & Lubin, B. (1999). *Response to disaster: Psychosocial, community, and ecological approaches.* Philadelphia, PA: Taylor & Francis.

Goldberg, L. R., & Freyd, J. J. (2006). Self-reports of potentially traumatic experiences in an adult community sample: Gender differences and test-retest stabilities of the items in a Brief Betrayal-Trauma Survey. *Journal of Trauma & Dissociation*, *7*(3), 39-63. https://doi.org/10.1300/J229v07n03_04

Goldsmith, R., Freyd, J. J., & DePrince, A. P. (2012). Betrayal trauma: Associations with psychological and physical symptoms in young adults. *Journal of Interpersonal Violence, 27*(3), 547-567. https://doi.org/10.1177/0886260511421672

Gómez, J. G. (2015). Microaggressions and the enduring mental health disparity: Black Americans at risk for institutional betrayal. https://doi.org/10.1177%2F0095798413514608

Gómez, J. M., Smith, C. P., Gobin, R. L., Tang, S. S., & Freyd, J. J. (2016). Collusion, torture, and inequality: Understanding the actions of the American Psychological Association as institutional betrayal. https://doi.org/10.1080/15299732.2016.1214436

Hall, S., Clarke, J., Critcher, C., Jefferson, T., & Roberts, B. (1975). Newsmaking and crime. *Centre for Contemporary Cultural Studies.*

Hall, S., Critcher, C., Jefferson, T., Clarke, J., & Roberts, B. (2013). The social production of news. *Policing the crisis: Mugging, the state and law and order* (pp. 56-82). Palgrave Macmillan.

Hannan, S. M., Zimnick, J., & Park, C. (2020). Consequences of sexual violence among college students: Investigating the role of PTSD symptoms, rumination, and institutional betrayal. https://doi.org/10.1080/10926771.2020.1796871

Herman, J. L. (1997). *Trauma and recovery.* New York, NY: Basic Books.

Hill Collins, P. (1998). The tie that binds: Race, gender, and US violence. *Ethnic and Racial Studies, 21*(5), 917-938. https://doi.org/10.1080/014198798329720

Hoerner, E., & Tulsky, R. (2019, July 23). Police post racist and violent messages on Facebook, a review shows. *Buzzfeed News.* https://www.buzzfeednews.com/article/emilyhoerner/police-facebook-racist-violent-posts-comments-philadelphia

Holliday, R., & Monteith, L. L. (2019). Seeking help for the health sequalae of military sexual trauma: A theory-driven model of the role of institutional betrayal. https://doi.org/10.1080/15299732.2019.1571888

Howlett, S. L., & Collins, A. (2014). Vicarious traumatisation: Risk and resilience among crisis support volunteers in a community organisation. *South African Journal of Psychology, 44*(2), 180–190. https://doi.org/10.1177/0081246314524387

Hughey, M. W. (2015). The five i's of five-o: Racial ideologies, institutions, interests, identities, and interactions of police violence. *Critical Sociology, 41*(6), 857-871. https://doi.org/10.1177%2F0896920515589724

Hupp, S. D. A., Reitman, D., & Jewell, J. D. (2008). Cognitive-behavioral theory. In M. Hersen & A. M. Gross (Eds.), *Handbook of clinical psychology* (vol.2; pp. 263-287). Hoboken, NJ: John Wiley & Sons.

Izzo, E., & Miller, V. C. (2018). *Second-hand shock: Surviving and overcoming vicarious trauma.* Scottsdale, AZ: HCI Press.

Jacobs, M. S. (2017). The violent state: Black women's invisible struggle against police violence. *William & Mary Journal of Race, Gender, and Social Justice, 24*(1), 39-100.

Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology, 59*(1), 12-19. https://doi.org/10.1037//0022-006x.59.1.12

Johnson, D. J., Tress, T., Burkel, N., Taylor, C., & Cesario, J. (2019). Officer characteristics and racial disparities in fatal officer-involved shootings. *PNAS, 116*(32), 15877-15882. https://doi.org/10.1073/pnas.1903856116

Johnson, D. J., Tress, T., Burkel, N., Taylor, C., & Cesario, J. (2020). Retraction for Johnson et al., Officer characteristics and racial disparities in fatal officer-involved shootings. *PNAS, 117*(30), 18130. https://doi.org/10.1073/pnas.2014148117

Jordan, K. (2016). Training the trauma-informed marriage and family therapist. In *Couple, marriage, and family therapy supervision* (pp. 391–415). New York, NY: Springer.

Katz, J. (2015). Rush Limbaugh, conservative talk radio, and the defiant assertion of white male authority. In G. Dines & J. M. Humez (Eds.), *Gender, race, and class in media: A critical reader* (4th edition, pp.157-162). Sage Publishing.

Kelley, L. P., Weathers, F. W., Mason, E. A., & Pruneau, G. M. (2012). Association of life threat and betrayal with posttraumatic stress disorder symptom severity. *Journal of Traumatic Stress, 25*(4), 408-415. https://doi.org/10.1002/jts.21727

Kira, I. A., Templin, T., Lewandowski, L., Ramaswamy, V., Ozkan, B., & Mohanesh, J. (2008). The physical and mental health effects of Iraq War media exposure on Iraqi refugees. *Journal of Muslim Mental Health, 3*(2), 193-215. https://doi.org/10.1080/15564900802487592

Knox, D., Lowe, W., & Mummolo, J. (2020). Administrative records mask racially biased policing. *American Political Science Review, 114*(3), 619-637. https://doi.org/10.1017/S0003055420000039

Laurent, S. M., & Hodges, S. D. (2009). Gender roles and empathic accuracy: The role of communion in reading minds. *Sex Roles, 60,* 387-398. https://doi.org/10.1007/s11199-008-9544-x

Lee, J. Y., Micol, R. L., & Davis, J. L. (2019). Intimate partner violence and psychological maladjustment: Examining the role of institutional betrayal among survivors. https://doi.org/10.1177%2F0886260519836783

Lim, A. G., & Oo, E. K. S. (2015). Vicarious traumatization and resilience of health workers. In K. Allden & N. Murakami (Eds.), *Trauma and recovery on war's border: A guide for global health workers* (pp. 219-241). Hanover, NH: Dartmouth College Press.

Lind, M. N., Adams-Clark, A. A., & Freyd, J. J. (2020). Isn't high school bad enough already? Rates of gender harassment and institutional betrayal in high school and their association with trauma-related symptoms. https://doi.org/10.1371/journal.pone.0237713

Lindsey, R. (2010). From atrocity to data: Historiographies of rape in Former Yugoslavia and the gendering of genocide. *Patterns of Prejudice, 36*(4), 59-78. https://doi.org/10.1080/003132202128811556

MacDonald, D. B., & Hudson, G. (2012). The genocide question and Indian residential schools in Canada. *Canadian Journal of Political Science/Revue canadienne de science politique, 45*(2), 427–449. https://doi.org/10.1017/S000842391200039X

Maercker, A., & Mehr, A. (2006). What if victims read a newspaper report about their victimization? *European Psychologist, 11*(2), 137-142. https://doi.org/10.1027/1016-9040.11.2.137

Masten, C. L., Gillen-O'Neel, C., & Spears Brown, C. (2010). Children's intergroup empathic processing: The roles of novel ingroup identification, situational distress, and social anxiety. *Journal of Experimental Child Psychology, 106*(2-3), 115-128. https://doi.org/10.1016/j.jecp.2010.01.002

McCann, L. I., & Pearlman, L. A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress, 3*(1), 131–149. https://doi.org/10.1007/BF00975140

McGuire, D. L. (2010). *At the dark end of the street: Black women, rape, and resistance – a new history of the Civil Rights Movement from Rosa Parks to the rise of black power.* New York, NY: Vintage.

McKay, J., & Johnson, H. (2008). Pornographic eroticism and sexual grotesquerie in representations of African American sportswomen. *Social Identities, 14*(4), 491-504. https://doi.org/10.1080/13504630802211985

Mi-Kyung, S., Feng-Chang, L., Ward, S. E., & Fine, J. P. (2013). Composite variables: When and how. *Nursing Research, 62*(1), 45-49. https://dx.doi.org/10.1097%2FNNR.0b013e3182741948

Miller, J. B., & Stiver, I. P. (1997). *The healing connection: How women form relationships in therapy and in life.* Beacon Press.

Monteith, L. L., Bahraini, N. H., Matarazzo, B. B., Soberay, K. A., & Smith, C. P. (2016). Perceptions of institutional betrayal predict suicidal self-directed violence among veterans exposed to military sexual trauma. https://doi.org/10.1002/jclp.22292

Netland, M. (2001). Assessment of exposure to political violence and other potentially traumatizing events: A critical review. *Journal of Traumatic Stress, 14,* 311-326. https://doi.org/10.1023/A:1011164901867

Neugebauer, R., Turner, B. T., Fisher, P. W., Yamabe, S., Zhang, B., Neria, Y., Gameroff, M., Bolton, P. A., & Mack, R. (2014). Posttraumatic stress reactions among Rwandan youth in the second year after the genocide: Rising trajectory among girls. *Psychological Trauma: Theory, Research, Practice, and Policy, 6*(3), 269-279. http://dx.doi.org/10.1037/a0035240

Olejnik, S. & Algina, J. (2003). Generalized eta and omega squared statistics: Measures of effect size for some common research designs. *Psychological Methods, 8*(4), 434-447. https://doi.org/10.1037/1082-989X.8.4.434

Parent, M. C. (2013). Handling item-level missing data: Simpler is just as good. *The Counseling Psychologist, 41*(4), 586-600. https://doi.org/10.1177%2F0011000012445176

Parrott, S., & Titcomb Parrott, C. (2015). U.S. television's "mean world" for white women: The portrayal of gender and race on fictional crime dramas. *Sex Roles, 73*, 70-82. https://doi.org/10.1007/s11199-015-0505-x

Pearlman, L. A. (2013). Restoring self in community: Collective approaches to psychological trauma after genocide. *Journal of Social Issues, 69*(1), 111–124. https://doi.org/10.1111/josi.12006

Perrusquia, M. (2020, October 01). Memphis police officers suspended in connection with Black man's sexual assault allegation. *Daily Memphian.* https://dailymemphian.com/article/17206/memphis-police-officers-suspended-sexual-assault

Pilkonis, P. A., Choi, S. W., Reise, S. P., Stover, A. M., Riley, W. T., & Cella, D., & PROMIS Cooperative Group. (2011). Item banks for measuring emotional distress from the Patient-Reported Outcomes Measurement Information System (PROMIS): Depression, anxiety, and anger. *Assessment, 18*(3), 263-283. https://doi.org/10.1177/1073191111411667

Platt, M., Barton, J., & Freyd, J. J. (2009). A betrayal trauma perspective on domestic violence. In E. Stark & E. S. Buzawa (Eds.) *Violence against Women in Families and Relationships* (Vol. 1, pp. 185-207). Westport, CT: Greenwood Press.

Prot, K. (2010). Late effects of trauma: PTSD in Holocaust survivors. *Journal of Loss & Trauma, 15*(1), 28–42. https://doi.org/10.1080/15325020902925506

Pyke, K. D. (2018). Institutional betrayal:: Inequity, discrimination, bullying, and retaliation in academia. https://doi.org/10.1177%2F0731121417743816

Ralph, L. (2019). The logic of the slave patrol: The fantasy of black predatory violence and the use of force by the police. https://doi.org/10.1057/s41599-019-0333-7

Ritchie, A. (2017). *Invisible no more: Police violence against Black women and women of color.* Beacon Press.

Ritchie, A. (2018, January 12). How some cops use the badge to commit sex crimes: Sexual misconduct persists during traffic stops, ridealongs and mentorship programs. *The Washington Post.* https://www.washingtonpost.com/outlook/how-some-cops-use-the-badge-to-commit-sex-crimes/2018/01/11/5606fb26-eff3-11e7-b390-a36dc3fa2842_story.html?utm_term=.be5e1d1869b8

Ross, C. T., Winterhalder, B., & McElreath, R. (2018). Resolution of apparent paradoxes in the race-specific frequency of use-of-force by police. *Humanities & Social Sciences Communications, 4*, 1-9. https://doi.org/10.1057/s41599-018-0110-z

Ross, C. T., Winterhalder, B., & McElreath, R. (2020). Racial disparities in police use of deadly force against unarmed individuals persist after appropriately benchmarking shooting data on violent crime rates. *Social Psychology and Personality Science, 12*(3), 323-332. https://doi.org/10.1177%2F1948550620916071

Salsman, J., Lai, J.-S., Hendrie, H., Butt, Z., Zill, N., Pilkonis, P. A., Peterson, C., Stoney, C. M., Brouwers, P., & Cella, D. (2014). Assessing psychological well-being: Self-report instruments for the NIH toolbox. *Quality of Life Research, 23*(1), 205-215. https://doi.org/10.1007/s11136-013-0452-3

Schalet, B. D., Pilkonis, P. A., Yu, L., Dodds, N., Johnston, K. L., Yount, S., Riley, W., & Cella, D. (2016). Clinical validity of PROMIS depression, anxiety, and anger across diverse clinical samples. *Journal of Clinical Epidemiology, 73*, 119-127. https://doi.org/10.1016/j.jclinepi.2015.08.036

Schauben, L. J., & Frazier, P. A. (1995). Vicarious trauma: The effects on female counselors of working with sexual violence workers. *Psychology of Women Quarterly, 19*(1), 49-64. https://doi.org/10.1111/j.147 1-6402.1995.tb00278.x

Schuschke, J., & Tynes, B. M. (2016). Online community empowerment, emotional connection, and armed love in the Black Lives Matter movement. In S. Y. Tettegah (Eds.), *Emotions and Technology: Communication of Feelings For, With, and Through Digital Media* (pp. 25-47). Elsevier.

Sellers, R. M., Rowley, S. A. J., 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

Smidt, A. M., Rosenthal, M. N., Smith, C. P., & Freyd, J. J. (2019). Out and in harm's way: Sexual minority students' psychological and physical health after institutional betrayal and sexual assault. https://doi.org/10.1080/10538712.2019.1581867

Smith, C. P. (2017). First, do no harm: Institutional betrayal and trust in health care organizations. https://dx.doi.org/10.2147%2FJMDH.S125885

Smith, C. P., Cunningham, S. A., & Freyd, J. J. (2016). Sexual violence, institutional betrayal, and psychological outcomes for LGB college students. *Translational Issues in Psychological Science, 2*(4), 351–360. https://doi.org/10.1037/tps0000094

Smith, C. P., & Freyd, J. J. (2013). Dangerous safe havens: Institutional betrayal exacerbates sexual trauma. *Journal of Traumatic Stress, 26*(1), 119-124. https://doi.org/10.1002/jts.21778

Smith, C. P., & Freyd, J. J. (2014). Institutional betrayal. *American Psychologist, 69*(6), 575-587. http://dx.doi.org/10.1037/a0037564

Smith, C. P., Gómez, J. M., & Freyd, J. J. (2014). The psychology of judicial betrayal. *Roger Williams University Law Review, 19*(2). 451-475. https://docs.rwu.edu/rwu_LR/vol19/iss2/6

Stader, D. L., & Williams-Cunningham, J. L. (2017). Campus sexual assault, institutional betrayal, and Title IX. https://doi.org/10.1080/00098655.2017.1361287

Staggers-Hakim, R. (2016). The nation's unprotected children and the ghost of Mike Brown, or the impact of national police killings on the health and social development of African American boys. *Journal of Human Behavior in the Social Environment, 26*(3-4), 390-399. https://doi.org/10.1080/10911359.2015.1132864

Stevens-Watkins, D., Sharma, S., Knighton, J. S., Oser, C. B., & Leukefeld, C. G. (2014). Examining cultural correlates of active coping among African American female trauma survivors. *Psychological Trauma: Theory, Research, Practice, and Policy, 6*(4), 328-336. https://doi.org/10.1037/a0034116

Sue, D. W., & Sue, D. (2016). *Counseling the culturally diverse: Theory and practice.* John Wiley & Sons.

Tamaian, A., Klest, B., & Mutschler, C. (2016). Patient dissatisfaction and institutional betrayal in the Canadian medical system: A qualitative study. https://doi.org/10.1080/15299732.2016.1181134

Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry, 15*(1), 1-18. https://doi.org/10.1207/s15327965pli1501_01

Thomas, D. (2021, February 09). Is this Beverly Hills cop playing Sublime's 'Santeria' to avoid being live-streamed? *Vice News.* https://www.vice.com/en/article/bvxb94/is-this-beverly-hills-cop-playing-sublimes-santeria-to-avoid-being-livestreamed

Tseris, E. J. (2013). Trauma theory without feminism? Evaluating contemporary understandings of traumatized women. *Affilia, 28*(2), 153-164. https://doi.org/10.1177%2F0886109913485707

Tylka, T. L., & Wood-Barcalow, N. L. (2015). The Body Appreciation Scale-2: Item refinement and psychometric evaluation. *Body Image, 12*, 53-67. https://doi.org/10.1016/j.bodyim.2014.09.006

Veldhuis, C. B., Nesoff, E. D., McKowen, A. L. W., Rice, D. R., Ghoneima, H., Wootton, A. R., Papautsky, E. L., Arigo, D., Goldberg, S., & Anderson, J. C. (2021). Addressing the critical need for long-term mental health data during the COVID-19 pandemic: Changes in mental health from April to September 2020. *Preventive Medicine*, *146*, 106465. https://doi.org/10.1016/j.ypmed.2021.106465

Waxman, O. (2017). How the U.S. got its police force. https://time.com/4779112/police-history-origins/

Whitbeck, L. B., Adams, G. W., Hoyt, D. R., & Chen, X. (2004). Conceptualizing and measuring historical trauma among American Indian people. *American Journal of Community Psychology, 33*(3-4), 119-130. https://doi.org/10.1023/b:ajcp.0000027000.77357.31

Wies, J. R., & Coy, K. (2013). Measuring violence: Vicarious trauma among sexual assault nurse examiners. *Human Organization, 72*(1), 23-30. https://www.jstor.org/stable/44148679

Wlodarczyk, A., Basabe, N., Pàez, D., Amutio, A., García, F. E., Reyes, C., & Villagrán, L. (2016). Positive effects of communal coping in the aftermath of a collective trauma: The case of the 2010 Chilean earthquake. *European Journal of Education and Psychology, 9*(1), 9-19. http://dx.doi.org/10.1016/j.ejeps.2015.08.001

Wright, N. M., Smith, C. P., & Freyd, J. J. (2016). Experience of a lifetime: Study abroad, trauma, and institutional betrayal. https://doi.org/10.1080/10926771.2016.1170088

Xu, X., Zuo, X., Wang, X., & Han, S. (2009). Do you feel my pain? Racial group membership modulates empathic neural responses. *Journal of Neuroscience, 29*(26), 8525-8529. https://doi.org/10.1523/JNEUROSCI.2418-09.2009

Yellow Horse Brave Heart, M. (1999). Oyate Ptayela: Rebuilding the Lakota Nation through addressing historical trauma among Lakota parents. *Journal of Human Behavior in the Social Environment, 2*(1-2), 109-126. https://doi.org/10.1300/J137v02n01_08

Yellow Horse Brave Heart, M., Chase, J., Elkins, J., & Altschul, D. B. (2011). Historical trauma among Indigenous peoples of the Americas: Concepts, research, and clinical considerations. *Journal of Psychoactive Drugs, 43*(4), 282-290. https://doi.org/10.1080/02791072.2011.628913