Distribution Agreement

In presenting this thesis as a partial fulfillment of the requirements for a degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis in whole or in part in all forms of media, now or hereafter now, including display on the World Wide Web. I understand that I may select some access restrictions as part of the online submission of this thesis. I retain all ownership rights to the copyright of the thesis. I also retain the right to use in future works (such as articles or books) all or part of this thesis

Anna Duncan March 18th, 2017

Conceptualizations of Interpersonal Violence: A Narrative and Psychophysiological Exploration of Trauma in Low-Income Black Women

By

Anna Duncan

Dr. Robyn Fivush

Advisor

Dr. Seth Norrholm

Advisor

Psychology Department

Dr. Harold Gouzoules

Committee Member

Dr. Pamela Scully

Committee Member

2017

Conceptualizations of Interpersonal Violence: A Narrative and Psychophysiological Exploration of Trauma in Low-Income Black Women

By

Anna Duncan

Dr. Robyn Fivush

Advisor

Dr. Seth Norrholm

Advisor

An abstract of
a thesis submitted to the Faculty of Emory College of Arts and Sciences
of Emory University in partial fulfillment
of the requirements of the degree of
Bachelor of Arts with Honors

Department of Psychology

2017

Abstract

Conceptualizations of Interpersonal Violence: A Narrative and Psychophysiological Exploration of Trauma in Low-Income Black Women

By Anna Duncan

Beginning with case studies of hysteria in the 1800s and continuing through studies of "shellshock" of World War I, trauma has been subject of academic inquiry for several centuries. The introduction of the diagnosis of Posttraumatic Stress Disorder in the DSM-III (1980) sparked a proliferation of research on trauma, with increased attention to the impact of interpersonal violence against women. The present study uses a mixed-methodology of quantitative and qualitative research methods to holistically examine the impact of interpersonal violence on an under-researched population of low-income, highly traumatized Black women. The quantitative portion of the study analyzed participant fear potentiated startle scores in order to assess for exaggerated startle response, a psychophysiological symptom of PTSD. Startle scores demonstrated that participants who experienced traumas of interpersonal violence in adulthood had significantly higher startle scores than those who experienced non-interpersonal traumas, suggesting that trauma type is associated with severity of psychophysiological reaction. The qualitative portion of the study used Glaser and Strauss's (1967) method of grounded theory to analyze and better understand how participants conceptualized their traumas of interpersonal violence. Analysis of the narratives revealed high levels of emotional blunting and normalization of the traumas, with little meaning-making and reflection. The results presented a discrepancy between heightened startle response and comparatively low levels of emotional reactivity in the narratives, pointing to dissociation between conceptual and psychophysiological responses to trauma. After completing the startle and narrative analyses, scores on the Beck Depression Inventory (II), Anxiety Sensitivity Index and Connor-Davidson Resilience Scale were analyzed to see level of post-trauma psychopathology for each participant. Self-report measures showed high levels of depression, anxiety sensitivity and resilience among the sample. The results demonstrate a complex picture of trauma: high levels of emotional blunting in the narratives contradict the high acoustic startle responses and psychophysiological arousal. Additionally, high levels of resilience and patterns of posttraumatic growth emerged as potentially important factors in understanding trauma. The results of the present study are exploratory, and implications of future research of trauma in underrepresented minority populations are discussed.

Conceptualizations of Interpersonal Violence: A Narrative and Psychophysiological Exploration of Trauma in Low-Income Black Women

By

Anna Duncan

Dr. Robyn Fivush

Advisor

Dr. Seth Norrholm

Advisor

A thesis submitted to the Faculty of Emory College of Arts and Sciences
of Emory University in partial fulfillment
of the requirements of the degree of
Bachelor of Arts with Honors

Department of Psychology

2017

Acknowledgements

I would first like to thank Dr. Robyn Fivush and Dr. Seth Norrholm for their unending guidance and incredible mentorship throughout this process. I could not have asked for better advisors and role models. I would like to thank Dr. Harold Gouzoules for both serving on my committee, and for his continued guidance and support throughout my four years at Emory; my experience in the psychology department would not be the same without you. I would like to thank Dr. Pamela Scully for serving on my committee, and for her amazing mentorship and deep love for her students. I would like to thank Dr. Tanja Jovanovic and the rest of the Grady Trauma Project researchers and staff for their guidance and continued support. I would like to thank the Emory Center for Ethics and the Emory Civic Scholars program for giving me the financial support and opportunity to intern at Grady Trauma Project. I would like to thank my family and friends for their endless support and love; this project would not be possible without them. Finally, I would like to thank the Grady Trauma Project and the women who shared their stories with me.

Table of Contents

Introduction

Traumatic events, defined by Judith Herman (1992) as "threats to life or bodily integrity, or as close personal encounter[s] with violence and death," persist as a condition of the human experience. Trauma overwhelms a person's sense of safety, inciting feelings of helplessness, disorganization and terror. In response to experiencing a traumatic event, many individuals will successfully process the subsequent emotional responses to the event; however, others will develop maladaptive symptoms that can interfere with normal functioning. These symptoms, which can include hyperarousal, disassociation, avoidance, and intrusive re-experiencing of the event, are understood as common, persistent psychological and psychophysiological reactions to the unfathomable event of trauma.

Significant research on trauma exists across disciplines, yet there is little understanding of how to link psychophysiological symptoms of trauma to cognitive explorations of trauma. A divide exists in the current literature between quantitative, psychophysiological approaches to trauma, and qualitative, narrative approaches. The major objective of this study is to use both quantitative and qualitative research methods to more holistically understand the impact of trauma on an individual. In particular, the use of mixed methodology is chosen in an effort to better capture the complexities of traumatic experiences in a highly under-researched population of low-income Black women from Grady Trauma Project in Atlanta, Georgia.

To place the current study in context, I will first give a brief history of psychological conceptualizations of trauma and the development of Posttraumatic Stress Disorder (PTSD) as a clinical diagnosis. In particular, I will highlight how academic research on trauma traditionally excludes and further marginalizes women and people of color, and has only recently expanded research to explore the experiences of these populations.

Historic Understandings of Trauma

Conceptualizations of trauma have changed dramatically over time. Jean-Martin Charcot, a French neurologist, conducted some of the earliest documented research on trauma in the late 19th century (Herman, 1992). He pioneered the study of "hysteria," which was then defined as a female affliction of unexplained symptoms originating in the uterus. Charcot's work, although highly problematic in its treatment of women, established the foundation for studying psychological responses to trauma (Herman, 1992). Sigmund Freud, Pierre Janet, and Joseph Breuer closely followed his lead, and research on hysteria and, what Freud coined "double consciousness," continued to grow (Herman, 1992). After World War I, trauma emerged as a salient public health issue as soldiers returned from war with frequent mental breakdowns, earning the name "shellshock." Abram Kardiner, an American psychiatrist, developed a clinical framework for trauma still in use today based on the "combat neuroses" of war veterans (van der Kolk et al., 1996). Despite the significant increase in understandings of trauma throughout the 20th century as studies of veterans proliferated, it was not until the 1970s that civilian experiences of trauma were shown to have maladaptive signs and symptoms similar to those observed in combat veterans (Herman, 1992). Significantly, until researchers Ann Burgess and Linda Holstrom first connected the symptoms of rape to symptoms of war neuroses, terming it "rape trauma syndrome" in 1974, trauma was widely seen as solely an affliction of combat and war. In particular, the women's liberation movement and contributions of feminist research profoundly shifted conceptualizations of trauma, providing an important space for research of interpersonal civilian violence (i.e., rape, domestic violence, sexual assault, etc.) to grow (Herman, 1992).

As a result of this extensive history of trauma research, the symptoms observed in response to experiencing significant trauma were officially introduced into the *Diagnostic and Statistical Manual of Mental Disorders-III* (DSM-III) in 1980 under the name Posttraumatic Stress Disorder (PTSD). Although in 1980 PTSD was still widely understood as an affliction of war, an explosion of research after its inclusion in the DSM-III allowed for rapid expansion of knowledge. In particular, Judith Herman's publication of *Trauma and Recovery* in 1992 prominently established the possibility of developing PTSD after sexual assault, shifting the literature to address the trauma of violence against women. Feminist analyses and approaches to treatment of trauma grew rapidly, pushing psychology's academic community to recognize the hidden traumas experienced by women every day (Brown, 2013). These hidden traumas include experiences such as incest, marital rape, domestic violence, sexual assault, and other traumas that often take place in secret. This challenged the DSM-III criteria that a trauma is something *outside the range of human experience*, and brought awareness to the rampant commonality of violence against women.

Furthermore, research on the impact of racial violence and chronic racism expanded, furthering understandings of trauma to include systems of oppression and the power of racism (Franklin, Boyd-Franklin, & Kelly, 2006; Ponds, 2013). Current literature has grown to reflect the heightened risk of violence that racial and ethnic minority populations face, showing that experiences of daily racial micro-aggressions, racialized violence and the privileging of whiteness in American culture (and across the globe) lead to symptoms of trauma and psychological harm (Franklin, Boyd-Franklin, & Kelly, 2006; Ponds, 2013) In addition, through white privilege and the pervasiveness of anti-Black racism in American society, research shows that racial and ethnic minorities experience heightened socioeconomic discrimination, with the

highest proportion of Black families (compared to other racial and ethnic groups) living under the federal poverty line (Proctor, Semega, & Kollar, 2016). Moreover, according to the most recently published Census Bureau research on poverty in the United States (2015), the median household incomes of Black families has remained the lowest of any racial or ethnic group from 1967 to 2015 (Proctor, Semega, & Kollar, 2016). These risk factors of racial violence, systematic oppression and socioeconomic discrimination contribute to Black women's particularly high vulnerability to trauma exposure and violence, and substantial research is needed to better understand the lived experiences of marginalized populations and the power of systems of oppression to inflict trauma (Franklin, Boyd-Franklin, & Kelly, 2006).

There is significant research by Black Feminist theorists on the particular traumatic experiences of Black women. A consideration of Black feminist theory's contributions to the psychological trauma literature is necessary when researching the lives of a population of Black women, because one cannot study Black women without a foundation for their lived experiences. Kimberlé Crenshaw's theory of intersectionality (1991) is useful in understanding the way that multiple identities constantly interact with each other and shape a person's lived experiences. The lived experience of being a Black woman in the United States is far different from that of other identities: the intersection of two oppressed identities, being Black and a woman, creates a particular lived experience separate from identifying as a woman or identifying as Black. Due to their marginalized position of living under multiple forms of oppression, Black Women are at in increased risk for psychological and physical violence.

Comprehensive knowledge of how research on trauma developed rapidly over time is critical to understanding its current state in psychology, because, like much of psychological research, a primary focus on experiences of white men has resulted in a gap in the trauma

literature regarding the specific traumatic experiences faced by women, and perhaps even more significantly, the specific traumatic experiences faced by racial minorities and marginalized populations (van der Kolk et al, 1996). As this brief review indicates, trauma is a widespread condition of the human experience impacting every population, and is subject of over a century of research. However, research has historically centered on white men, providing a particular gap in the literature on Black women's experiences of trauma.

Current Understandings of Trauma and PTSD

According to the current definition of PTSD in the DSM-5, the first of the PTSD diagnosis criteria is the experiencing of a "Criterion A Trauma." This is defined as a situation in which an individual feels real or perceived threat of death for themselves or for someone important to them (American Psychiatric Association, 2013). After experiencing a Criterion A Trauma, an individual must show symptoms from four diagnostic clusters to be diagnosed with PTSD: negative cognition and mood, intrusion, changes in arousal/reactivity, and avoidance (American Psychiatric Association, 2013). Additionally, a PTSD diagnosis requires that an individual experience these symptoms for more than thirty days after the trauma occurs, and that the symptoms result in clinically significant distress or a reduced or impaired ability to function (American Psychiatric Association, 2013).

PTSD in Relation to Other Variables

PTSD is commonly comorbid with other psychological disorders, with particularly high rates of comorbidity with Major Depressive Disorder and Anxiety Disorders. It is estimated that eighty percent of individuals with PTSD also have a comorbid psychological disorder, with many having as many as three or more other disorders (Brady, 1997; Brady, Killeen, Brewerton, & Lucerini, 2000). Given this high rate of psychological disorders co-occurring with PTSD, the

current study examined self-reports of Major Depressive Disorder using the Beck Depression Inventory (BDI-II), and Anxiety Sensitivity, using the Anxiety Sensitivity Index (ASI) in order to better understand experiences of trauma within this population.

Major Depressive Disorder (MDD) is a mood disorder characterized by at least two weeks of low mood and sadness, often accompanied by irritability, low interest, psychophysiological changes and an inability to experience pleasure (American Psychiatric Association, 2013). MDD occurs in approximately fifty percent of individuals with PTSD and is the most common psychological disorder to co-occur with PTSD (Rytwinski, Scur, Feeny, & Youngstrom, 2013; Flory & Yehuda, 2015; Brady, Killeen, Brewerton, & Lucerini, 2000). Interestingly, the presence of MDD prior to experiencing a trauma can increase the likelihood of developing PTSD, and in comparison to PTSD alone, the co-occurrence of PTSD and Major Depressive Disorder results in higher levels of clinically significant distress, impairment and use of healthcare resources (Rytwinski, Scur, Feeny, & Youngstrom, 2013; Brady, Killeen, Brewerton, & Lucerini, 2000). Significant to the current study, which examines instances of interpersonal violence, higher rates of MDD are reported in people who have experienced interpersonal violence or served in the military in comparison to non-interpersonal violence (such as natural disasters or motor vehicle accidents) (Rytwinski, Scur, Feeny, & Youngstrom, 2013). Given the clear relationship between MDD and PTSD, it is useful to consider depression scores or level of depressive symptoms when attempting to understand the experience of trauma holistically.

Anxiety sensitivity is defined as the "fear of the physical symptoms of anxiety and related symptoms" (Kılıç, Kılıç, & Yılmaz, 2008, p. 81). Anxiety sensitivity is important to measure and understand in the context of a person who has experienced trauma, because research shows that

anxiety sensitivity and PTSD are reciprocally related, with anxiety sensitivity serving as a predictor of PTSD symptom severity (Marshall, Miles, & Stewart, 2010; Kılıç, Kılıç, & Yılmaz, 2008).

Additionally, the current study assessed for resilience using the psychometric self-report measure Connor-Davidson Resilience Scale (CD-RISC). The trait of resilience, which is defined as the ability to manage stress and flourish in situations of adversity, facilitates an understanding of the relationship between an individual and their traumatic experiences. Research demonstrates that resilience plays an important role in mediating the relationship between psychological maltreatment and negative self-concept in adulthood (Arslan, 2015). Therefore, resilience is meaningful to consider while researching women who have experienced significant trauma, because it can give important information about the meaning of experiencing trauma and the potential impact of heightened resilience on symptomatology (Connor & Davidson, 2003).

PTSD, Gender and Race.

Although estimates of the prevalence of PTSD differ, it is predicted that 10% of women in the United States who have experienced a Criterion A trauma will go on to develop PTSD ("Women, Trauma and PTSD," 2015). Further, women are twice as likely to develop PTSD than men (Breslau, 2009; "PTSD Statistics," 2013). Although a relatively small percentage of people go on to develop PTSD, experiencing a traumatic event is exceedingly common in the general population. Research suggests that by onset of adulthood, 25% of individuals will have experienced a significant trauma, and by mid-adulthood, 70% of individuals will have experienced a significant trauma in their lifetime ("PTSD Statistics," 2013; Norris & Sloane, 2013).

PTSD rates also differ significantly based on race. Research indicates that Black people in the United States have the highest lifetime prevalence of PTSD compared to rates of White, Latino and Asian populations (Roberts, Gilman, Breslau, Breslau, & Koenen, 2011; Alegría et al., 2013). Furthermore, racial and ethnic minorities are less likely to receive treatment for PTSD and trauma-related symptoms (Roberts, Gilman, Breslau, Breslau, & Koenen, 2011). This finding has been attributed to multiple factors, including cultural stigmas surrounding mental health care, lack of trust in medical authorities, low levels of cultural sensitivity in healthcare, and reduced access to healthcare services due to socioeconomic status and location (Roberts, Gilman, Breslau, Breslau, & Koenen, 2011). Additionally, Black women face particularly high levels of violence, and are at heightened risk for interpersonal and intimate partner violence compared to white women (West, 2004; Hien & Ruglass, 2009; Caetano, Cunradi, Schafer, & Clark, 2000). Their marginalized status places Black women at a disproportionately high risk for witnessing and experiencing community violence, being victims of racially motivated violence, being of low socioeconomic status, and inheriting the psychophysiological effects of intergenerational trauma (See: West, 2004 for a review). Given the heightened prevalence and lack of treatment for PTSD in racial and ethnic minority women, particularly Black women, it is necessary to examine the multifaceted ways in which trauma impacts the population of low-income Black women investigated by the current study.

Psychophysiological Reactivity as a Symptom of Trauma

A major symptom of post-trauma psychopathology is the inability to inhibit fear in "safe" situations, where no threat to self or others is present. These heightened levels of fear and anxiety are often exhibited as flashbacks, excessive physical reactions to stimuli such as loud noises, and hypervigilance when exposed to public situations or trauma-related stimuli (Jovanovic et al.,

2012). These symptoms, falling within the arousal/reactivity symptom cluster of PTSD in the DSM-5, stem from a common inability for individuals with PTSD to discern between present day reality and past memories of trauma when faced with a triggering stimulus. Research suggests this phenomenon is not only characterized by an increased level of fear in individuals with PTSD, but also an impaired ability to suppress their fear response (Norrholm et al., 2015; Briscione et al., 2014). This is reflected neurologically through both an excessive firing of the amygdala, and a lowered ability for the prefrontal cortex to inhibit the hyperactive amygdala (Jovanovic et al., 2010). This heightened fear response and exaggerated startle experienced by individuals with PTSD can cause persistent difficulty adjusting to everyday life and clinically significant distress, because their physical reactions to various stimuli reflect an over-expression of fear and inability to suppress inappropriate physiological reactions. Due to the distress caused by exaggerated psychophysiological symptoms of trauma, considerable research on fear response has been conducted in recent years.

Current researchers have developed several paradigms to examine conditioned fear response in order to better understand the psychophysiological characteristics of PTSD. Fear potentiated startle is particularly effective as a paradigm used to measure fear responses and inhibition, and there is significant research detailing the connection between high fear potentiated startle scores and PTSD (Jovanovic et al., 2009; Norrholm et al., 2015; Briscione et al., 2014; Careaga, Girardi, & Suchecki, 2016). Fear potentiated startle is defined as "the relative increase in the amplitude of the acoustic startle reflex when elicited in the presence of a conditioned stimulus (CS) previously paired with an aversive stimulus" (unconditioned stimulus, US; Jovanovic et al., 2005). The acoustic startle reflex, which is present in all mammals, is a rapid response of the eye blink musculature (i.e., *orbicularis oculi)* and can be characterized as a defensive reflex

demonstrating how quickly and intensely one reacts to a potentially aversive stimulus (Jovanovic et al., 2009). Using the acoustic startle response, the strength of a startle reflex is measured, with higher startle indicating a dysregulation of fear systems in the body as a result of trauma.

Psychophysiological paradigms that utilize assessment of the fear potentiated startle response provide information on whether or not an individual effectively inhibits a learned fear response in a safe situation. Heightened arousal and increased startle responses are a common psychophysiological characteristic of PTSD, and the potentiation of the acoustic startle response in the presence of cues linked to aversive outcomes can be an indication of dysregulated and exaggerated fear responses. Importantly, participants with PTSD often exhibit increased psychophysiological arousal symptoms without reporting conscious awareness of them, demonstrating that trauma symptoms can operate outside of cognitive control (Jovanovic et al., 2012). Although understanding these psychophysiological symptoms of trauma is fundamental, it is also important to explore the role cognitive processing plays in an individual's understanding of traumatic experiences as well.

Shattered Sense of Self as a Reaction to Trauma

One of the central aspects of processing traumatic experiences often includes making sense of the event and assimilating it into one's self-concept. Janoff-Bulman (1992) argues that trauma results in the shattering of an individual's internal world; the fundamental assumptions that form their reality seem to no longer hold true. In particular, Janoff-Bulman's (1992) schema theory of trauma argues that individuals generally hold three core beliefs: belief in a benevolent world, a meaningful world, and a sense of self worth. Trauma is powerful because it challenges these fundamental assumptions that are regarded as the way the world works. The cognitive dissonance accompanying a traumatic experience often results in an inability for the survivor to

integrate the experience into their consciousness, because it does not fit into their preconceived schema of the world (MacCurdy, 2007). Further, this inability to integrate the event is theorized to result in intrusion of traumatic symptoms, potentially causing irreversible damage to the individual's schemas (Horowitz, 1991; Janoff-Bulman, 1992).

Narrative Approaches to Trauma

Explorations of sense of self and development of world schemas after experiencing trauma are often expressed through narrative. Narrative identity is a construct defined as a person's continuous, developing incorporation of past life events and experiences into a sense of self, and the use of past memories and the imagined future to create meaning and purpose in their life (McAdams & Mclean, 2013). Furthermore, narrative identity is a mode through which individuals integrate life experiences into their personhood, creating a cohesive schema of their lives and themselves through verbal or written storytelling (McAdams & Mclean, 2013). Importantly, the ability to construct a coherent narrative of identity is found to be associated with increased levels of psychological wellbeing, and more specifically, higher levels of purpose and meaning-making (Waters & Fivush, 2015). Interestingly, research also suggests that a well-developed sense of identity alone does not necessarily predict psychological wellbeing, indicating that the ability to coherently narrate life experiences plays an important role in integrating events into a unified sense of self (Waters & Fivush, 2015).

Given the critical role narratives play in integrating life events into a person's identity, narratives of trauma have emerged as important methods of exploring, understanding, and healing from trauma. A trauma narrative is the creation of verbal or written representation of a trauma; the action of putting feelings and images of a stressful, painful event into words (Mucci, 2013). Often used in literary, psychological, and feminist disciplines, the concept of the trauma

narrative allows one to better understand a traumatic event, integrate it into one's sense of self, and transition into a shifted identity. The trauma narrative serves to help individuals and collective communities explore and share painful experiences, often aiding in the healing process as it provides an avenue to represent the unspeakability of trauma (Mucci, 2013).

Indeed, in her autobiographical account of her brutal rape and attempted murder, Brison (2003) argues that recovering from trauma requires the formation of a personal narrative. She asserts that the integration of trauma into one's sense of self through creating and recreating a narrative is critical to the healing process, because it facilitates a personal journey of rebuilding the self and an understanding of the world. For Brison, the act of creating a trauma narrative allowed her to rebuild herself and integrate the unspeakable act of trauma into her identity.

The extensive work of Pennebaker (1990; 1999) demonstrates the physical and psychological health benefits from speaking and writing about traumatic life experiences. In particular, Pennebaker (1990) argues that the very act of translating images and memories of trauma into words changes or reformulates the experience, allowing for increased mental organization around the event and an ability to externalize the experience to some degree. This, he argues, allows for lowered cognitive load as the mind is able to better make sense of the experience, resulting in increased emotional and mental clarity. Both psychophysiological and immune-system related benefits have been observed as a result of personal disclosure and storytelling, along with increased levels of psychological and cognitive wellbeing (Frattaroli, 2006). A myriad of studies support Pennebaker's findings (see: Frattaroli, 2006 for a meta analysis on self-disclosure), establishing the benefits of narrative formation and meaning-making for healing after experiencing trauma. Although a study conducted by Seery et al. (2008) on responses to the 9/11 terrorist attacks in 2001 suggests that disclosure of traumatic events can be

detrimental immediately post-trauma, the extant literature generally supports the psychological and psychophysiological benefits of talking about traumatic experiences (Frattaroli, 2006).

The use of narrative and personal disclosure has been successfully replicated and utilized across a variety of transcultural and transnational contexts, further providing support for the efficacy of personal disclosure in recovery from trauma. In particular, narration of trauma has been used widely across cultures as a method of healing from both personal and collective, cultural traumas. Trauma narratives, especially in the form of testimonials or narrative therapy, have been used with survivors of the Holocaust, Apartheid in South Africa, the Khmer Rouge regime in Cambodia, and others, importantly demonstrating their effectiveness in promoting healing across transnational contexts (Becker, Beyene, & Ken, 2000; Wiseman, Metzl, & Barber, 2006; Agger, Igreja, Kiehle, & Polatin, 2012; Yule, 1993). Additionally, one study on narrative therapy in South Africa (Yule, 1993) observed that use of narrative can be particularly important for people from politically and/or socially disempowered contexts, because it privileges the narrator's agency to create their own story and (in South Africa) reflects a larger African cultural tradition of oration and shared storytelling over time. This finding can be extrapolated to culturally, racially, ethnically, socioeconomically dis-empowered populations inside and outside of the United States, providing an important method for understanding diverse and varying experiences of trauma. In the current trauma literature and psychological literature at large, there is substantial need for research on the experiences of racially, ethnically and transculturally diverse populations, and the use of narratives has begun to carve out a critical space for empowered experiential sharing, reflection and agency within historically disempowered communities (Yule, 1993; Chase, 2005)

The use of narrative is particularly relevant to the current study due to its historical use in the Black community (Oikkonen, 2013). Narrative and storytelling function as both educational tools, methods of passing down wisdom, and forms of life analysis in Black culture and the larger African tradition (Oikkonen, 2013). Furthermore, narrative can serve as an act of reclaiming historically oppressed and silenced voices, challenging stereotypes of marginalized populations (Oikkonen, 2013). Therefore, narrative is an appropriate way to begin to examine how trauma impacts this population of low-income, highly traumatized Black women.

It is important to note that schema and narrative theories of post-trauma psychopathology and PTSD have been criticized for an inability to account for the higher likelihood of developing PTSD after multiple experiences of trauma or living in chronic violence. According to the theories, experiences of chronic or multiple traumas would result in lower levels of PTSD due a prior integration of trauma in their worldview, not higher levels of PTSD as robustly shown in the literature (Cahill & Foa, 2007). Furthermore, schema theories of trauma do not account for why some individuals develop PTSD symptoms after experiencing significant trauma while others do not (Cahill & Foa, 2007). However, despite these theoretical limitations, narrative and schematic approaches to understanding post-trauma psychopathology remain central to the field, because they provide an important platform for self-exploration and development of self-concept after experiencing significant trauma.

Qualitative Research Methods

Schema theories, cognitive approaches, and narrative often utilize qualitative research methods in their investigations of traumatic experiences. Despite the common privileging of quantitative research methods and positivist epistemologies in the current field of psychology, qualitative methods are used to gain unique insight into the lived experiences of individuals and

groups of people (Roberts, 2016; Gough & Lyons, 2016). In particular, the qualitative nature of narratives allows for a deeper understanding of a specific sociocultural context and moment in time (Chase, 2005). Importantly, the complexity of the human experience as both an individual and member of various identities and communities can be captured differently through qualitative rather than quantitative data; the qualitative approach resists reduction of lived experience and promotes a radical space to explore the intricacies of the human experience (Gough & Lyons, 2016; Chase, 2005).

In her paper on PTSD, Carolyn West (2004) argues that "to advance the field [of trauma studies], researchers must develop more creative and culturally sensitive theories and methodologies to define, measure, and understand violence in Black communities" (p. 14889). Her arguments are particularly relevant to the current study, because the qualitative methodology allows for the narratives to speak for themselves, rather than mapping a preformed theory of trauma onto the lives of women whose experiences are not represented in the literature. Qualitative methodologies provide an approach to culturally sensitive understandings of trauma to emerge by privileging experiential knowledge and allowing the space for varying responses to trauma. Furthermore, qualitative methods are invaluable for providing an avenue to express the "unspeakable" nature of trauma.

Wangelin and Tuerk (2015) conducted one of the only known studies aiming to connect more subjective, qualitatively oriented tasks with psychophysiological measures of trauma. In the study, the skin conductance and heart rate of thirty-five male combat veterans were recorded while they simultaneously completed a trauma imagery task. The study concluded that the measurement of psychophysiological reactivity during the completion of a trauma imagery task aided in objective understanding of the efficacy of PTSD treatments, and has the potential to help

individualize specific PTSD treatments in the future. Apart from this preliminary finding, there is no current research linking narrative to psychophysiological data, creating a gap in the literature regarding how the two different approaches to trauma may be related.

Current Study

The current study seeks to examine the psychological experiences of trauma in a population of low-income, urban, highly traumatized Black women from Atlanta, Georgia. In particular, this exploratory study aims to investigate 1) quantitative, psychophysiological reactions to trauma using fear potentiated startle response; 2) cognitive conceptualizations of trauma through qualitative analysis of narratives; and 3) how levels of depression, anxiety sensitivity, and resilience as described on self-report measures may inform and influence the larger experience of trauma and recovery after trauma. Given the current divide in the literature between quantitative, psychophysiological and qualitative, narrative approaches to trauma and PTSD research, the current study seeks to marry the two approaches in order to more holistically understand experiences of trauma. Furthermore, the use of mixed methodology is chosen in an effort to better capture the complexities of traumatic experiences in a highly under-researched population of low-income Black women. Lastly, by examining the potential interaction (or lack thereof) between psychophysiological startle responses and narrative patterns, important conclusions can be drawn regarding how the two complementary methodologies inform post-trauma symptomatology in this population.

This study expands the current trauma literature by incorporating Black feminist theory and understandings of lived experiences of Black women, because one cannot study Black women without a foundation for their lived experiences. Thus, this study serves as both a psychological and feminist project with the purpose of better understanding the multifaceted and

complex traumatic experiences of Black women. This is done through investigation of the interplay between psychophysiological and cognitive symptoms of trauma, while providing a space for Black women to voice to their experiences.

Methods

Participants

Participants were selected through the Grady Trauma Project, a civilian trauma study examining the psychological and clinical impacts of trauma exposure on a largely low income, urban, highly traumatized Black population in Atlanta, Georgia. The Grady Trauma Project includes several sub-studies within the larger examination of genetic and trauma-related risk factors for PTSD. These sub-studies include the Mom/Kids intergenerational trauma study, the emergency department trauma study, an examination of the relationship between diabetes and PTSD, and several neurophysiological research projects. All participants within the Grady Trauma Project are initially recruited through screening interviews in the waiting rooms of Grady Memorial Hospital, during which twenty psychological measures are administered to assess for trauma history, PTSD symptoms, depression, anxiety sensitivity, resilience, drug and alcohol use, and additional psychologically and behaviorally relevant information. Grady Memorial Hospital is the primary public hospital serving the city of Atlanta and surrounding areas. After completing the initial screening interview, certain participants with qualifying trauma history are called back to specific studies within the project for additional testing. Minimal compensation is provided for participants for their contribution and time. All procedures were approved by the Institutional Review Board and meet all guidelines for the ethical and responsible conduct of research.

Narrative Participants

Eleven women were chosen for narrative analysis from the larger cohort of the Mom/Kids Project of Grady Trauma Project participants. All women identified as Black, were between the ages of 18 and 44, were of low socioeconomic status (reported a household income of less than $2,000 dollars per month), and were mothers of a child or children between the ages of eight and twelve. The Mom/Kids Project participants were specifically chosen because the project procedures include an extensive interview (through which a narrative can be collected) and fear potentiated startle measures. By selecting participants through this project, both qualitative narrative and quantitative psychophysiological data could be examined for each participant. Given individual differences in interview style, the participants were selected from a pool interviewed by one of two clinical interviewers. This was done in order to maintain consistency in interview style across the participants. After transcribing the narratives of the initial eleven participants, six were selected for intensive qualitative analysis because they described experiences interpersonal violence. Interpersonal violence is defined as "the intentional use of physical force or power, threatened or actual, against another person or against a group or community that results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation" (Dahlberg & Krug, 2006). In contrast, non-interpersonal violence is defined as violence that is not characterized by the intention to hurt or have power over others, but can still result in the harming of a person or community; this includes traumas such as natural disasters, motor vehicle accidents, and life-threatening illnesses.

Psychophysiological Startle Participants

The fear potentiated startle scores were analyzed for two samples of women from Grady Trauma Project in order to assess potential fear response dysregulation as a result of

experiencing trauma. The first sample consisted of the same eleven women whose narratives were transcribed. Although only six of the eleven narratives transcribed were analyzed, the startle data of the entire sample was analyzed in order to obtain increased statistical power, and to compare between startle scores of interpersonal violence and non-interpersonal violence. The second sample used for psychophysiological analysis consisted of 330 low-income Black women from the larger Grady Trauma Project cohort of women.

Procedure

Psychophysiological Assessment

As part of the Mom/Kids study within Grady Trauma Project, the fear potentiated startle score was measured for each participant. Fear potentiated startle was evaluated using the A+/B- paradigm, originally AX+/BX- (Norrholm et al., 2011; Norrholm et al., 2006). In this paradigm, there are two phases: fear acquisition and fear extinction. Fear acquisition consisted first of a habituation phase, in which the conditioned stimuli (CSs) were presented to the participant without reinforcement, meaning two differently colored shapes were presented on a computer monitor to participants without any aversive stimuli. After becoming successfully habituated to the CS shapes, a conditioning phase was employed, in which three blocks of four trials of each type (40-msec, 108-dB noise probe alone [NA]; a reinforced conditioned stimulus [CS+]; and a non-reinforced conditioned stimulus [CS-]) were presented to the participant. Both CS+ and CS- were presented in the form of different colored shapes, and were displayed on a computer screen for 6 seconds each. The unconditioned stimulus (US) was a 250-msec, 140-p.s.i air blast administered toward the participant's larynx, which was paired with the CS+ shape. Therefore, a participant with a normative fear response learned to successfully pair the CS+ shape with the

aversive air blast, and accurately discriminated between the CS+ and the CS- shapes, which did not predict an aversive air blast.

Following acquisition phase, participants engaged in a trauma-neutral task for ten minutes in order to evaluate their attention. After the ten minutes, participants began the fear extinction phase, which involved four blocks with four trials of each type (CS+, CS- and NA). CS+ was not reinforced by the US (air blast) in this phase, allowing for the fear response to extinguish in a psychophysiologically "normative" response pattern. The degree of fear-potentiated startle was defined as a Difference Score such that:

Difference Score = [mean startle magnitude to the noise probe in the presence of the CS+] – [mean startle magnitude to the noise probe alone]. Thus, a higher score indicates increased psychophysiological arousal, which is a symptom demonstrating dysregulation of the natural fear response. Exaggerated startle is a maladaptive psychophysiological symptom often observed in individuals exposed to trauma, and can cause significant difficulty in navigating everyday life. The startle response data were collected using the electromyography module of the BIOPAC MC150. The acoustic startle response was assessed through electromyography recordings of the right *orbicularis oculi* muscle (Norrholm et al., 2011). Participant expectancy of receiving the reinforced US air blast for each CS+ and CS- presentation was evaluated using a response keypad. In the current study, the acquisition and extinction data for 1) eleven narrative participants and 2) 330 participants from the larger sample of Grady Trauma Project were analyzed using SPSS and Microsoft Excel. Additionally, an analysis of covariance was conducted to control for number of traumas experienced over the life span of each participant.

Narrative Collection, Transcription and Analysis

As part of the Grady Trauma Project, each Mom/Kids Project participant completed a Day 1 interview. Typically several hours in length, the purpose of the interview is to gain an in-depth understanding of the trauma and psychological history of the participant, learn their daily habits and social support systems, and give context to their traumas. Specific consent is collected from each participant to videotape their interview for educational and research purposes.

The Clinician-Administered PTSD Scale for DSM-5 (CAPS-5) structured interview is one of the measures administered during the interview in order to determine PTSD diagnosis and gain a detailed trauma history of the participant. For each trauma queried on the CAPS-5, the participant is asked to freely describe the trauma. The participant's narrative description of the most impactful adulthood trauma was chosen as the narrative to analyze, with adulthood defined as age 18 or over. The narrative of adulthood trauma rather than childhood trauma was selected for several reasons. First, the brain is almost fully developed at age 18, whereas in childhood, there is much more variability in brain development from year to year. By analyzing adult traumas, which are defined as occurring at age 18 or older, brain development will be similar regardless of the participant's age. Second, adults have acquired the language skills and vocabulary to express their trauma in more accurate and complex ways, whereas in early to mid-childhood, many children do not have the language acquisition to adequately communicate their experience. Further, language skills are critical in making meaning from experiences at the time of their occurrence, which directly impacts how the memory is remembered and reconstructed over time.

In the current study, the participant's description of their most impactful adulthood trauma as queried on the CAPS-5 was transcribed verbatim from the videotape. Throughout

transcription, pauses in speech and undistinguishable words were noted, and specific vernacular phrases were preserved from speech as closely as possible in written form. Eleven adult trauma narratives were transcribed, and six out of the total eleven were analyzed. The six were chosen for analysis because they detailed traumas of interpersonal violence; the purpose was to better understand how participants in this population processed, understood and conceptualized traumas of interpersonal violence on a qualitative level. Traumas of interpersonal violence have been found to have significantly different effects on PTSD symptoms than non-interpersonal violence, and are theorized to have a stronger impact than non-interpersonal violence because they challenge assumptions of a just and benevolent world in ways that accidental traumas do not (i.e. it is easier to attempt to understand the randomness of a car accident than an ex-partner holding a gun to your head).

Qualitative analysis of the six narratives of interpersonal violence was conducted using Glaser and Strauss's (1967) general method of grounded theory. Grounded theory is a qualitative method of analysis, defined as "an ongoing systematic process of collecting, coding, analyzing and theoretically categorizing data using the information that emerges from the data itself, rather than forcing preconceived ideas onto the coding and subsequent analysis" (Higginbottom & Lauridsen, 2014, p. 9). Grounded theory resists reducing the lived experiences of an individual to a statistic; the method attempts to holistically capture an experience through meaningful and purposeful analysis of the data. Through the qualitative methodology of grounded theory, salient themes emerged from the narratives and informed our understanding of the traumas.

After completing narrative analysis, descriptions of the non-verbal cues and body language of the women as they narrated their traumas were recorded. Additionally, scores on three self-report measures were calculated for each participant: the Beck Depression Inventory-

II (BDI-II), Anxiety Sensitivity Index (ASI), and Connor-Davison Resilience Scale (CD-RISC). The BDI-II is a twenty-one item self-report measure used to assess for severity of depressive symptom and depression diagnosis, and is scored using a Likert scale model. Based on the calculated score, the BDI-II differentiates between four categories of depressive symptoms: a score of 0-13 = minimal depressive symptoms; 14-19 = mild depression; 20-28 = moderate depression; 29-63 = severe depression. The ASI is a sixteen item self-report measure used to assess severity of anxiety sensitivity, and is scored using a Likert scale. Lastly, the CD-RISC is a self-report measure used to assess for level of resilience using a Likert scale. A modified twelve-question version of the CD-RISC was used (the original CD-RISC has three versions: twenty-five item, ten item and two item).

Results

Quantitative Fear Potentiated Startle Results

Narrative Sample Startle Outcomes Psychophysiological data from the smaller sample of eleven GTP women whose narratives were collected for the qualitative portion of the study were analyzed using a mixed model Analysis of Variance (ANOVA). Fear-potentiated startle data were collected during the Fear Acquisition and Fear Extinction phases of the experiment.

Difference Scores during the acquisition and extinction phases were compared between the five women who did not report a Criterion A trauma of interpersonal violence (non-IPV) as their most traumatic experience in adulthood (as queried on the CAPS-5), and the six women who had reported a trauma of interpersonal violence (IPV) on CAPS-5 as their most traumatic experience in adulthood. It is important to note that only one of the five non-IPV women reported on the TEI an experience of interpersonal violence in adulthood. The other four did not.

Acquisition:

A 2(IPV) x 3(block) x 4(trial) mixed model ANOVA with IPV status as a between-subjects variable, block and trial as within-subjects variables, and startle response as the dependent variable was used to test potentially significant interactions between startle response and IPV status during the acquisition phase. As displayed in Figure 1, results indicated a main effect for IPV status, $F(1, 9) = 6.01$, $p = .037$, a main effect for trial type, $F(1, 9) = 8.43$, $p = .017$, and no main effect for block. In addition, there was a significant interaction between IPV status and block, $F (1, 9) = 6.282$, $p = .034$. No other significant results were found.

Overall, women with a history of non-IPV trauma exposure in adulthood showed normative patterns of arousal compared to the startle responses of women who did report IPV trauma exposure in adulthood. As indicated in Figure 1, the non-IPV group demonstrated a normative response to the fear potentiated startle paradigm evidenced by a decrease in startle to the CS- across trials, which is consistent with previous studies from the Grady Trauma Project population (e.g., Norrholm et al., 2006). During the third block of the acquisition phase, when we would expect fear learning to be at its maximum (Norrholm et al., 2011), participant responses in the non-IPV group showed greater startle responses to the CS+ as compared to those elicited in the presence of the non-reinforced CS- and compared to presentation of the noise probe alone (baseline). These findings demonstrate that the non-IPV group was successfully fear conditioned to the CS+ (meaning they had heightened startle in expectation to the CS+ aversive airblast) and was able to discriminate between the CS+ and the CS-.

The IPV group, however, exhibited a non-normative response profile during acquisition compared to that of the non-IPV group. Women with a history of IPV demonstrated an overall increase in startle under all conditions: (1) at baseline, (2) in the presence of the CS+, and (3) in

the presence of the non-reinforced CS-. The significant interaction between IPV status and block demonstrated that women with a history of adult IPV trauma exposure significantly differed in their startle response within each block compared to the responses of women without adult IPV exposure. This is reflective of a state of hyperarousal (see: Norrholm et al., 2011), and it appears that this non-specific state of enhanced startle impaired the ability of these women to discriminate between the CS+ and CS- at the psychophysiological level.

The main effect observed between IPV and non-IPV status indicates that the two groups significantly differed in overall startle scores in acquisition of the fear response, with startle response scores of the IPV group significantly higher than those of the non-IPV group. In addition, the main effect of trial type was expected, as each trial (NA, CS+, CS-) aims to elicit a different participant response.

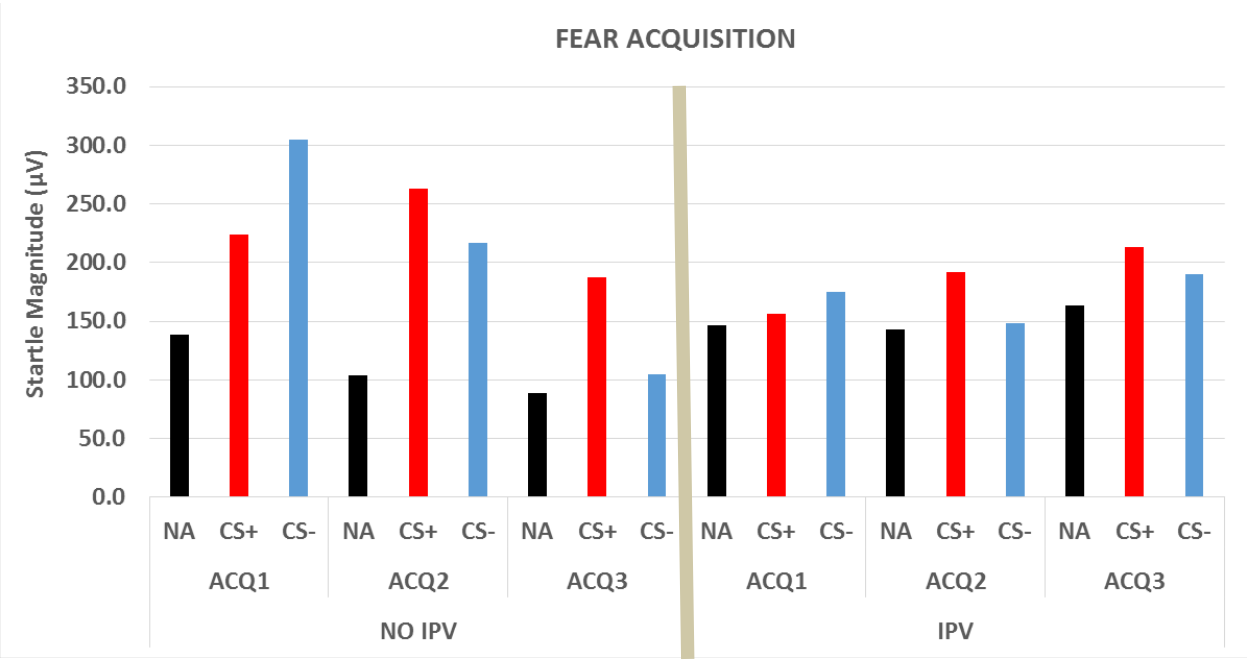

Figure 1. Fear potentiated startle scores during Fear Acquisition phase for Narrative Sample

Extinction:

A 2(IPV) x 4(block) x 4(trial) mixed model ANOVA with IPV status as a between-subjects variable, block and trial as within-subjects variables, and startle response as the dependent variable was used to test potentially significant interactions between startle response and IPV status during the extinction phase. As displayed in Figure 2, results indicated a main effect for IPV status, $F(1, 9) = 6.01$, $p = .037$. No main effects were found for block or trial. Further, there was a significant interaction between IPV status and trial, $F(1, 9) = 7.631$, $p = .022$. No other significant results were found.

The significant interaction between IPV status and trial demonstrates that women with a history of adult IPV trauma exposure show a generally higher startle response to each trial type compared to the responses of women without adult IPV exposure. As indicated in Figure 2, the non-IPV group showed an extinction profile consistent with previous research with this population (see: Norrholm, 2011; Norrholm, 2015 for reference). There was clear extinction of the conditioned fear response (i.e., a reduction over time of the fear-potentiated startle response) in the non-IPV group over the four Blocks, demonstrating successful habituation to the CS+ no longer being paired with the aversive air blast. The IPV group, however, again exhibited an overall display of hyperarousal: fear potentiated startle responses did not diminish over the four Blocks of Extinction as was observed in the non-IPV group. Rather, the IPV sample's similar degree of startle to the NA and CS+ trials illustrated a lack of discrimination between the two trial types, therefore showing an inability for the women to psychophysiologically extinguish the previously learned conditioned startle response. Again, this points to a maladaptive, dysregulated fear response present in IPV women that was not found in non-IPV women.

The main effect observed between IPV and non-IPV status indicates that the two groups significantly differed in overall startle scores in extinction of the fear response, with the IPV group showing significantly higher startle responses compared to the non-IPV group.

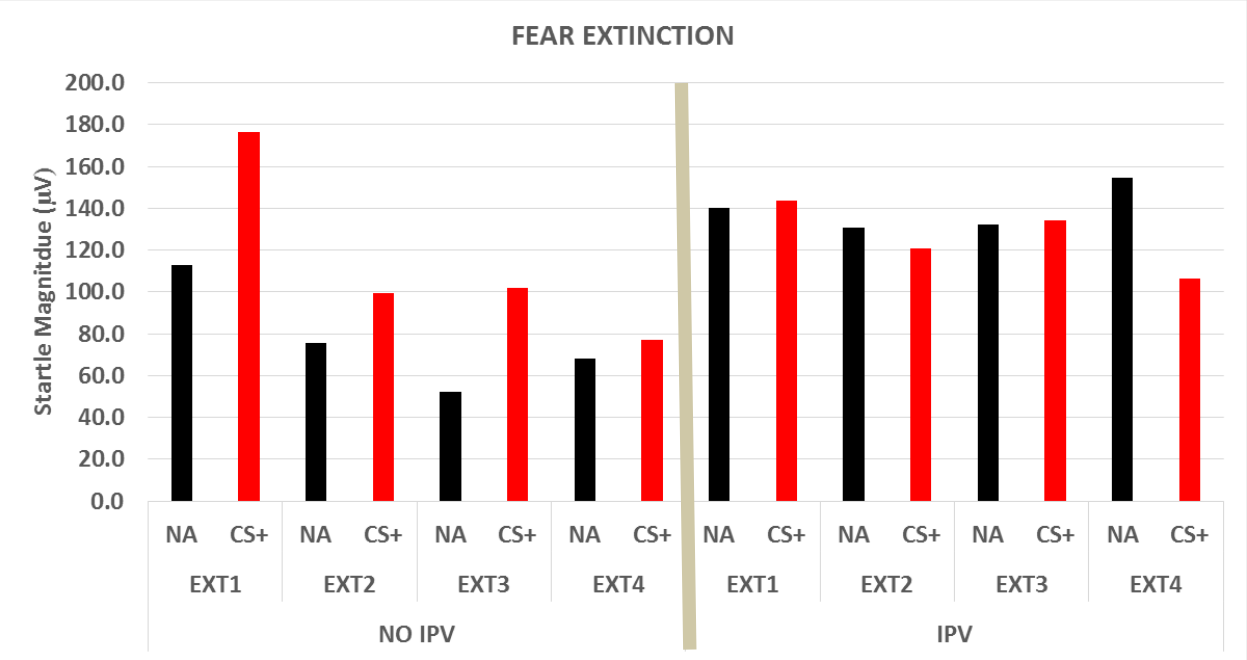

Figure 2. Fear potentiated startle scores during Fear Extinction phase for Narrative Sample

Grady Trauma Project Community Sample Outcomes Psychophysiological data from the expanded comparative sample of 330 GTP women was analyzed using a mixed model Analysis of Variance (ANOVA). Fear-potentiated startle data were collected during the Fear Acquisition and Fear Extinction phases of the experiment.

Difference Scores during the acquisition and extinction phases were compared between the 78 participants who did not report experiencing a Criterion A trauma of interpersonal violence (non-IPV) in adulthood (as queried on the Traumatic Events Inventory), and the 252 women who had reported experiencing a trauma of interpersonal violence (IPV) in adulthood.

Acquisition:

A 2(IPV) x 3(block) x 4(trial) mixed model ANOVA with IPV status as a between-subjects variable, block and trial as within-subjects variables, and startle response as the dependent variable was used to test potentially significant interactions between startle response and IPV status. Results indicated a main effect for IPV status, $F(1, 328) = 4.359$, $p = .038$. No main effects were found for block or trial. In addition, there was a significant interaction between IPV status and block, $F(1, 328) = 4.619$, $p = .0032$, and a significant interaction between IPV status and trial, $F(1, 328) = 5.197$, $p = .023$. No other significant results were found.

Women with a history of IPV in adulthood showed an overall higher startle response than women with no history of IPV. In addition, the significant interactions between IPV status and trial, and IPV status and block, demonstrate that women with a history of adult IPV trauma exposure significantly differed in their startle response to each trial type and within each block compared to the responses of women without adult IPV exposure. Meaning, the IPV and non-IPV samples are significantly different across multiple variables, providing further support for a significant difference in startle response between IPV and non-IPV trauma exposure. As indicated in Figure 3, the non-IPV and IPV groups both demonstrate normative patterns of successful acquisition: both groups displayed potentiated startle in the presence of the reinforced CS+ as compared to baseline, and startle scores reflected discrimination between the CS+ and CS-. However, as evidenced by an increased magnitude of the difference between startle to the CS+ and startle to the noise probe alone (baseline), there was heightened fear expression in the IPV group during fear acquisition. This over-expression of fear to the CS+ has been termed “fear load” (Norrholm et al., 2015), and is evident in the IPV group but not in the non-IPV group. Further, although the acquisition of fear potentiated startle to the CS+ as compared to Noise

Probe Alone baseline in the IPV group is considered normative for this type of traumatized population (Norrholm et al., 2011), the degree of discrimination between CS+ and CS- responses is reduced in the IPV group as compared to the non-IPV group. This shows that the IPV sample had psychophysiological difficulty regulating their fear response, which is indicative of higher severity of trauma symptoms. For the Acquisition phase, analysis of variance (ANOVA) in the expanded GTP sample revealed findings that mirrored those found in the smaller Narrative Sample.

The main effect observed between IPV and non-IPV status indicates that the two groups significantly differed in overall startle scores in acquisition of the fear response, with startle response scores of the IPV group significantly higher than those of the non-IPV group.

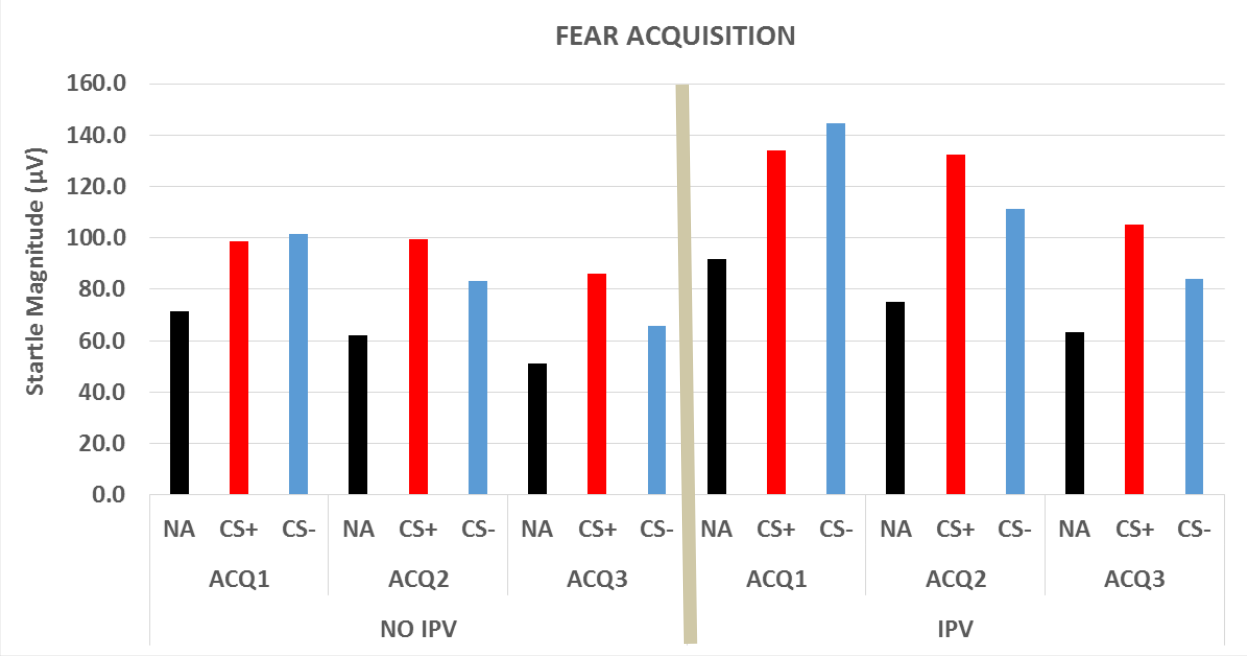

Figure 3. Fear potentiated startle scores during Fear Acquisition phase for Grady Trauma Project Community Sample

Extinction:

A 2(IPV) x 4(block) x 4(trial) mixed model ANOVA with IPV status as a between-subjects variable, block and trial as within-subjects variables, and startle response as the dependent variable was used to test potentially significant interactions between startle response and IPV status during the extinction phase. Results indicated a main effect for IPV status, $F(1, 328) = 4.359$, $p = .038$. No main effects were found for block or trial, and no other significant interactions were found.

The IPV group exhibited much higher levels of fear expression, as evidenced by increased CS+ responses. This "fear load" diminished over the four blocks in a manner that is not seen in the non-IPV group, meaning that IPV women showed overall less extinction of the learned fear response than non-IPV women.

The main effect observed between IPV and non-IPV status indicates that the two groups significantly differed in overall startle scores in extinction of the fear response, with startle response scores of the IPV group significantly higher than those of the non-IPV group.

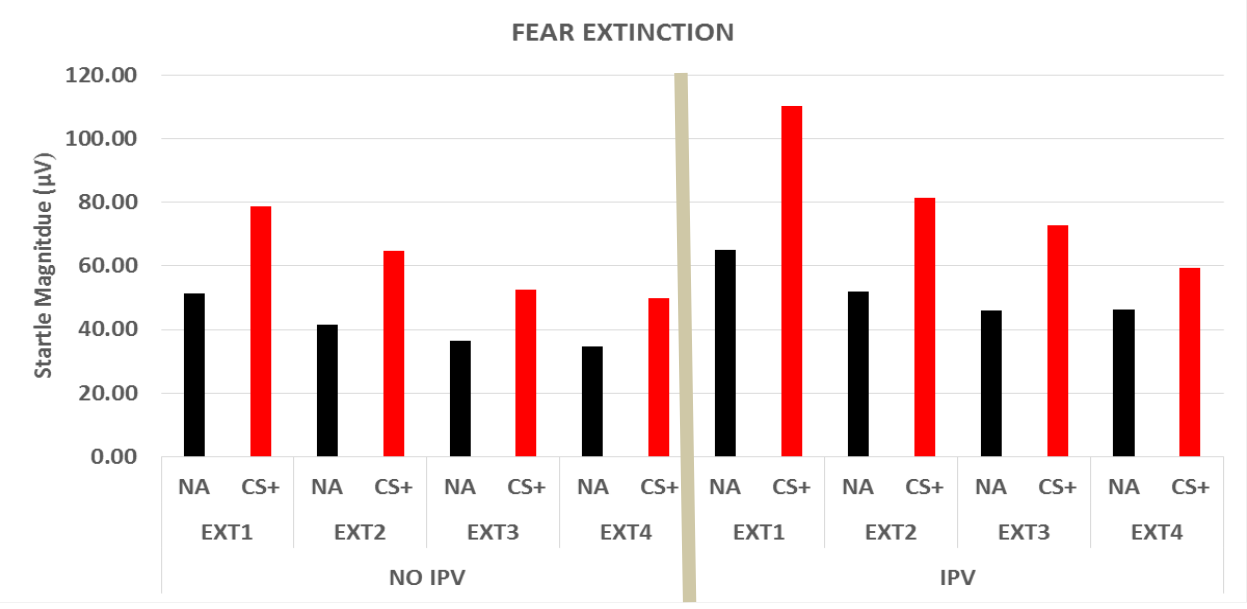

Figure 4. Fear potentiated startle scores during Fear Extinction phase for Grady Trauma Project Community Sample

For both samples, it was observed that women with adult IPV trauma history experienced a significantly higher number of traumas than non-IPV women. After co-varying for number of lifetime traumas, the main effect found between IPV and non-IPV fear potentiated startle scores remained.

Qualitative Narrative Analysis Results

The qualitative narrative findings are presented below in the form of a profile of each participant. Each profile includes a brief summary of the narrative, a description of the qualitative analysis, a description of non-verbal body language and vocal cues during video from which narratives were transcribed, and the participant's scores on three self-report measures (Beck Depression Inventory-II, Anxiety Sensitivity Index, and Connor-Davidson Resilience Scale). All narratives detail the primary adult trauma queried on the CAPS-5 for each participant. By creating a profile for each participant, a holistic and intentional story is formed about her experience of trauma.

Reflexivity and Positionality as a Researcher

In qualitative research, reflexivity is defined as the process of reflecting on the research process, and how a particular researcher's own identity and social position impact the research they conduct. Reflexivity is important for providing the reader with the context of the research conducted and how knowledge was formed throughout the process. Moreover, reflexivity is seen as particularly imperative for research conducted with racial or ethnic minorities, especially if the researcher is White. To reflect on my own positionality as a researcher, I am a White, middle class woman attending an elite university.

It is important to note that I interned at Grady Trauma Project for multiple months leading up to the start of this study. Although I did not specifically interview the women chosen

for the current study, I conducted daily interviews with women in this particular population and have significant experience speaking to and learning from them. With the understanding that every woman's experiences are unique and distinct, I have spent significant time with this population and therefore felt comfortable proceeding with narrative analysis. Given the difference in lived experience, race, and socioeconomic status between the study participants and myself, it is important to address my position as a researcher. As a researcher, I want to acknowledge the complex implications of my interpreting the participants' narratives, whose lived experiences are vastly different from my own.

Participant 1

Summary:

The participant describes how she was in the house when her romantic partner returned home, drunk. He hit her face, damaging both of her eyes, and then held a gun to her head. He threatened to kill her as he held the gun to her head. Later, (the participant indirectly references that some time passed), her romantic partner went to court, and the participant moved out so that he couldn't find her. She ends the narrative by stating that he is dead, and that she will never tell her daughter about his abusive actions. The participant wants her daughter to think that her father was "the greatest daddy in the world."

Analysis:

The participant begins the narrative with "I don't even know what happened," suggesting a distancing from the memory and a lack of understanding of the motivation behind the events. This opening to the narrative also implies a lack of control in the situation and passivity in the events that follow, because she sees herself as "without knowledge" and is still confused by the

situation in retrospect. By stating that she doesn't know what happened, she communicates that her romantic partner's actions are still unexplained, and do not make sense to her. The participant describes the situation without use of any emotion words, telling the events chronologically without any affect. This is particularly significant when she describes her partner threatening to kill her and holding a gun to her head, because this experience is described without any discussion of her feelings during that moment. The participant expresses agentic behavior when she "moved out my house and lived here 'fore closed on, and he, so he couldn't find me," because she took active steps to get herself out of an abusive and problematic situation. However, she does not ever reflect on her agency to leave the situation. Rather, she just describes what happened. As a whole, the narrative is void of any reflection; the participant does not reflect on her own feelings or the broader significance of the events. This suggests a sense of normalcy to these events, and that to the participant, they are not out of the ordinary. At the end of the narrative, the participant describes how her daughter will never know the truth about her father, and that, "that's the one part of my life she will never know." This sense of protection over her daughter demonstrates a small amount of generativity: from this experience, she has gained the perspective to protect her daughter and has hope for a better life for her. The memory is not completely contaminated. Although the generativity is minimal, this discussion of her daughter brings the memory into the present and provides a small amount of context for the narrative, which is not given earlier.

Non-Verbal Body Language During Narrative:

The participant begins the narrative crying from a previous question in the interview, but quickly recovers and does not cry again. Her voice is monotone, with sad affect indicated by a low pitch, slow speech and low emotionality. The participant looks off into the distance as she

describes how her ex-partner was going to put a gun to her head and kill her, and her eyes widen as she describes he couldn't find her when she left. She does not look the interviewer in the eye, often averting her gaze. The participant's tone implies a sense of "getting through it," and a matter-of-fact approach to life. When asked how she handles the stress of thinking about the event, she replies, "I deal with it," and her tone indicates a straightforward way of approaching the trauma. Throughout the interview, she is postured cross-legged, touching her face a lot, and places her hands crossed over her legs. Her body language is protective.

Self-Report Measure Scores:

Beck Depression Inventory (II): 13

Anxiety Sensitivity Index: 50

Connor-Davidson Resilience Scale: 38

PTSD Diagnosis: Yes

Participant 2

Summary:

In this narrative, the participant describes how a past romantic partner took complete control over her life. He made himself a key to her apartment, planned to move in with her, and would walk her places to make sure he knew where she was. When the participant told the partner that she didn't want to see him anymore, he hit her and then raped her. A week or two later, she tried to break up with him again, and he raped her again. Realizing she couldn't confront him about it due to his violence, the participant talked to her apartment manager to figure out what options she had because she didn't want him living with her. The participant also told another man living in the apartments about the situation, who then confronted her romantic partner and pulled a gun on him, telling him to leave the participant alone. After this incident, her

partner told her he was going to kill her. She prepared to defend herself with mace and a knife, but ultimately couldn't get away from the abusive partner. Several days later, when her partner briefly left the apartment, the participant called her brother to get her out of the situation. Her brother picked her up and she was able to leave the situation. She ran into her ex-romantic partner on a bus six months later, but has not seen him since.

Analysis:

This narrative begins with the participant describing a complete loss of control in her relationship with her partner. She states that "he basically took over my life" and he made it "his place," showing that he took control over her and she felt a loss of power. However, she says early in the narrative that she thought, "I am gonna get away from this guy," demonstrating a strong sense of agency and agentic thought early in the relationship with this partner. Agency is a strong theme throughout the rest of the narrative. The participant seeks out advice from people she was "interacting with" at work, along with later asking her apartment manager for help. Additionally, she prepares herself to fight against her partner with mace and a knife, and ultimately gets herself out of the situation through asking her brother to pick her up from her apartment complex. Despite being placed in a position of physical oppression, the participant demonstrates strong agency throughout the narrative in her ability to remove herself from the situation. The narrative also includes high levels of reflection. The participant uses language such as "*I realized* pretty quickly," showing her ability to have outside perspective on the situation and to see that her partner's actions were not okay with her. When describing his raping her, she reflects to the interviewer, "you know I didn't want to." The participant is clear regarding her feelings and opinions on the situation. Additionally, reflection is present when she discusses her fighting back against her partner with mace and a knife. She describes how "he still

had ahold of me…so that whole thing *backfired*." By using the reflective word "backfired," the participant demonstrates that she has a perspective and opinion on how the situation played out, because it did not go as she had planned or hoped. Furthermore, the participant demonstrates an ability to theorize her partner's point of view and motivations. She says, "I guess he thought that I was, not as cognizant, or, you know, that I was malleable, but he didn't really know who I really was." Her statement that he didn't know "who she really was" communicates that she *does* know who she is, establishing a sense of self. She has strong emotional intelligence. This narrative includes high levels of detail, reflection, and processing. However, at the end of the narrative when she is asked whether or not she has experienced other traumas in adulthood, the participant states that "me and my husband had a few altercations, but um, it wasn't as traumatic for me as that one because this was a person that I really felt would hurt me." Although she worked to get out of her previous abusive relationship, she is in a current relationship still characterized by occasional violence. Interestingly, she does not describe a sense of relief of getting out of the previous relationship, nor a sense of confusion regarding the violence in her current marriage. This supports a theme of the normalization of violence in this narrative.

Non-Verbal Body Language During Narrative:

The participant makes frequent eye contact with the interviewer, and speaks with an engaged, relatively upbeat tone of voice. She is engaged in the story she is telling, but discusses it in a straightforward manner while still maintaining perspective on her own sense of self. The participant lowers voice when talking about her ex-partner moving into her house and taking over her life, but laughs when she discusses that his taking over her life was "bullshit." Further, she laughs about having mace and a knife in her shoes, as if to imply it was an amusing past memory. The laughter at serious situations could suggest multiple things: a lack of processing, an

ability to see humor in a serious situation, or a general emotional distancing. At the end of the narrative, the participant becomes a little more serious and less casual in her speaking pattern and tone. This demonstrates higher emotional connection and less blunting. Throughout the narrative, the participant sits sideways to the camera while still keeping her body open to the interviewer, sometimes leaning her hand against the desk and resting her head on it.

Self-Report Measure Scores:

Beck Depression Inventory (II): 32

Anxiety Sensitivity Index: 43

Connor-Davidson Resilience Scale: 39

PTSD Diagnosis: Yes

Participant 3

Summary:

The participant describes a fight she got into with the father of her child while she was pregnant. At the time of the fight, they were separated and he was dating another girl. The participant's ex- partner accused her of "playin on" his current girlfriend's phone. When the participant denied it, the ex-partner "got all hostile," put his hand in her face, and then she kicked him. He responded by punching her in the face and giving her a black eye.

Analysis:

At the beginning of the narrative, the participant provides background on her relationship to the father of her child, and his current relationship with another woman. She states, "at that time, we were separated, and um he was dating another girl," providing a framework for the narrative and placing it in context. Throughout her narration, the participant communicates that this event is not a big deal to her. She communicates this by not providing any analysis of the

broader meaning of the event, or how it has impacted her life since its occurrence. Instead, she provides the listener with an explanation for why he "got all hostile" and put his hand in her face, (because he thought she was "playin on [his girlfriend's] phone"), and then gives a clear description of why she fought back (because she "told him to get his hand out [her] face" and then she kicked him). The participant's straightforward and relatively casual perspective on the event is further emphasized by a lack of use of affective language and value statements in her narrative. Using quotes from her conversation with her ex-partner to create a chronological account of the event, she places no emotional weight on the situation. The participant's use of direct quotes in her narrative emphasizes that she does not see herself as a victim in this situation, because they serve to provide evidence of the fight and legitimize the reality of her experience to the listener. For example, when her ex-partner accuses her of playing on his current girlfriend's phone, she responds, "and I was like, 'why would I play on her phone when I leave my phone here.'" The participant's use of direct quotes from their conversation rather than simply describing what happened acts to assert her opinion in the situation, suggesting that she views her opinion as legitimate and meaningful to the unfolding of the events. Her narrative further suggests that the participant does not view herself as a victim, because she stands up for herself both verbally and physically against her ex-partner. She asks him to take his hands out of her face, and then kicks him when he does not listen to her. Her actions and willingness to fight back suggest a lack of fear or hesitancy in asserting herself in a violent situation where she is being threatened, and demonstrate agency. Significantly, despite providing an initial context for the event at the onset of her narrative, the participant does not place the event into the larger framework of how she sees her life today. Her narrative ends abruptly as she states, "when I kicked him he punched me in the face. And I had little cuts, and a black eye," without any

reflection on the meaning of the experience or if anything was learned from it. Emotional distancing and a lack of emotional processing from this event are significant throughout this narrative. The lack of emotional elaboration and the participant's seemingly casual attitude about the event further imply a sense of normalcy in this trauma. She describes it as if it was an everyday occurrence, despite it being her most traumatic experience in adulthood. Additionally, there is no generativity demonstrated in this narrative.

Non-Verbal Body Language During Narrative:

The participant sits with her hands in her pockets, maintain a casual stance throughout the interview. Her legs are splayed out wide, and she uses big hand gestures during her narrative. The participant describes it with little emotionality. At one point, she portrays a sense of slight anger or annoyance, and that she "couldn't believe he did it," but speaks with no high levels of emotion. The participant does not speak in monotone; her speaking voice is dynamic, but it does not reflect the gravity or seriousness of her story. She describes it in a casual, almost upbeat way that contrasts with the severity of the violence she endured.

Self-Report Measure Scores:

Beck Depression Inventory (II): 40

Anxiety Sensitivity Index: 31

Connor-Davidson Resilience Scale: 17

PTSD Diagnosis: No

Participant 4

Summary:

In this narrative, the participant describes an event in which her boyfriend at the time (now ex-boyfriend) attacked her in a public park. She states that "physically, emotionally, sexually, in every sense of the word [the relationship] was abusive." At the time of the trauma, the participant and her ex-boyfriend were at a cookout with a group of people when her ex-boyfriend "just showed out on" her and beat her up. She expresses frustration that "now errybody and their mama know" about the abusive nature of their relationship, and that this event marked a turning point in their relationship as the beginning of the end. The participant describes that she does not know for sure why he stopped beating her up in the park. By the time he stopped, they had gotten in the car together. He was a 6'3" and 300-pound man, and the participant describes that she attempted to fight back but that his size and gender as a man made it difficult. Although she does not explicitly mention the ending of their relationship, she does refer to him as her ex-boyfriend, implying that they broke off their relationship some time after this incident occurred.

Analysis:

When asked by the interviewer to explain what happened, the participant immediately states, "I was in a relationship that was abusive." The participant is clear that the relationship was abusive in many ways, saying, "in every sense of the word it was abusive." She describes how she had a complete lack of control in the relationship, and that "part of his thing was that I wasn't allowed to go anywhere." She was limited to only doing what he told her to do; her life was not her own. The participant's use of the phrase "his thing" demonstrates her understanding of his actions and an overarching understanding of their relationship dynamics, because she is able to

connect his actions to how he maintained control over her. This is further exemplified when the participant describes her ex-boyfriend's emotion states, saying, "we didn't have fun if it didn't include him" and that when the trauma at the park occurred, he was "mad because [she] was there." The participant is able to see how her ex-boyfriend's emotions were formed in relation to her, and to hypothesize why he did things. She demonstrates a nuanced understanding of his emotions toward her, and how his abuse reflected his emotion states. Furthermore, she demonstrates an ability to reflect on the situation and her ex-boyfriend's motivations. However, this insight into their relationship is not as clear later in the narrative. When the participant describes how they got into the car after her ex-boyfriend beat her up, she states, "I really can't say what made him stop." She hypothesizes that it was either because he got tired and felt that "he had shown off enough," or that people in the area made him stop, but is ultimately unsure of what happened and why. This emphasizes her lack of physical and emotional control in the situation. Interestingly, the theme of public versus private emerges as particularly salient for this participant in her narrative. She describes that when he beat her up in the park, "that stood out because of it was in the public, it was no longer private." She discusses the stress of having a large group of people now aware of their abusive relationship. Despite acknowledging that the relationship was abusive, she does not express gratitude or relief that the abuse was revealed to the public at the park. Rather, she expresses irritation that "now errybody and their mama know, thank you so much." Additionally, the participant never describes feelings in relation to being out of the relationship. Although she uses the word "abusive," the participant never explicitly states that her ex-boyfriend's actions were wrong or that she is glad to be away from him now. The participant's discussion of the public versus private sphere in relation to her experiences of

domestic violence connects to a larger, historically grounded conversation regarding violence against women being hidden in the confines of the home.

Despite discussing the emotional motivations behind her ex-boyfriend's actions, the participant does not provide any emotional insight on her own experience during the trauma. There is significant emotional blunting throughout the narrative, with no reflection on how this experience felt, or what it meant or means to her. The ending of the narrative stands in contrast with the rest, because the participant demonstrates (for the first time in the narrative) a sense of agentic behavior and empowerment in the situation. She states that despite her ex-boyfriend's advantages as 6'3" and 300 lb. man, she did not passively endure his abuse: "no that ain't really how it happened." She acknowledges the power imbalance between them, that "of course he's the man in the situation so he go the better half, but" she did fight back. She even expresses excitement when the interviewer asked, "you fought back" and the participant responds with "oh yeah! (xxx) show let's go, you know like, so yeah." She demonstrates personal agency and ability to fight back, despite physical and gender disparities.

There is no meaning making or generativity present in this narrative. Although the participant is no longer in this relationship, she expresses no regret or frustration regarding the event itself, except for her anger that her ex-boyfriend abused her in public. The participant's narrative suggests that this is the way the world works for her, and that this is a normal lived experience. She does not indicate that the experience was unacceptable, and does not express relief that the relationship has ended.

Non-Verbal Body Language During Narrative:

The participant sighs at the beginning of the narrative, looks up, and has several pauses in her speech. The participant's tone is serious overall, but she laughs a little when describing that

everyone knew about her abuse and she didn't want everyone to know. She looks into the distance as she describes what her ex-partner did to her and how he abused her. Later in the narrative, when discussing how she fought back against her ex-boyfriend, the participant's excitement levels rise a bit. She places her hands in her pockets at this point. Generally, her narrative has the normative vocal inflections of a casual story being told, but in certain moments expresses more emotionality toward the memory. The participant's affect at the beginning of the narrative is relatively serious and is more appropriately reflective of the situation's severity, while at the end displays more emotional blunting of the experience.

Self-Report Measure Scores:

Beck Depression Inventory (II): 10

Anxiety Sensitivity Index: 23

Connor-Davidson Resilience Scale: 40

PTSD Diagnosis: No

Participant 5

Summary:

The participant describes how she was home with her two children and their father when her cousin forgot to lock the door to their house after leaving. Several men came into their house, and one held a gun to her daughter's head. The father of the participant's children had some money, and after paying off the men, they left.

Analysis:

High levels of emotional blunting characterize this narrative. When the interviewer asked the participant if she was afraid for her own life in this situation, she answered, "not my life, I was concerned about my daughter's." This response suggests emotional blunting and distancing,

because the participant's use of the word "concerned" when the life of her daughter was at risk seems significantly inappropriate for the severity of the situation. The threat of one's child being killed is often expressed as a parent's worst fear, and the participant's choice of language is indicative of high levels of emotional blunting in response to the trauma. Additionally, the interviewer asks the participant if she was afraid that the man holding the gun up might kill her daughter, and the participant answers, "yeah, because he looked like he was high or something." This response further exemplifies the participant's emotional blunting, particularly in regard to fear expression, because she states that the man being high was of more concern than his holding a gun to her daughter's head. The participant's global lack of affective elaboration throughout the narrative suggests that the event was not completely shocking to her, and that in some sense this may be seen as normal. Her language reflects a normalization of the event and a passive position in relation to the trauma. In addition, the participant does not describe any actions or intended actions she wanted to take during the event. Rather, she describes how her ex-partner paid the men off and that's why they left. Agency is absent, which is particularly striking given her own child was almost killed in front of her.

The participant minimizes the significance of this event in her narrative. She states that when the man with the gun was paid off, "he just glad he just at least he got something and he's left, that that was it (xxx)." The participant does not elaborate on feelings of relief or happiness that the men with guns had left her home, but instead simply states that they left and "that was that." She assigns no emotions or affective descriptors to the event, and does not express fear in a situation of significant trauma where her life and the lives of her family members were threatened. Additionally, she later describes the trauma as an "incident," further downplaying the severity of the situation. This reflects a general lack of reflection on the event, because the

participant shows no insight into the larger meaning of the event or how it felt to experience it. Emotional blunting and lack of any form of reflection are further exemplified through the participant's response to the interviewer's question, "how did you respond emotionally after [this event]?" The participant's does not discuss her emotions at all. Instead, she describes that the door should have been locked, and that the men "wouldn't have got been able to get in if my cousin had locked the door." This is significant, because even when she is asked specifically to describe her emotional experience, the participant answers with further description of what happened. The narrative ends with the participant stating, "I tell my daughter all the time you lucky to be here because umm something that happened when you three could've killed you but didn't." Although she does not exhibit any emotional response to the event throughout the narrative, this suggests that the event was still meaningful to the participant because she often brings it up with her daughter. The event is still salient for the participant, and is used as a way to connect with her daughter through purposeful dialogue and to provide some amount of perspective to both of their lives. One could see this as a small form of meaning-making, in that the event became meaningful from a mother to her daughter, and served as a story or lesson passed down intergenerationally.

Non-Verbal Body Language During Narrative:

The participant speaks in a relatively monotone voice, but shows a small amount of heightened emotionality when she describes how the man put a gun to her daughter's head. During this part of the story, her voice slows and she inflects up to emphasize the significance of the event. However, the participant generally shows low level of affective expression throughout the narrative. She discusses the event it as if discussing every day matters, not the almost-killing of her daughter. The participant sits sideways to the camera and rests her arm casually against

the desk. At times, she leans her head in her hand. Overall, she demonstrates moments of emotionality but the narrative is relatively void of emotional expression.

Self-Report Measure Scores:

Beck Depression Inventory (II): 13

Anxiety Sensitivity Index: 12

Connor-Davidson Resilience Scale: 37

PTSD Diagnosis: No

Participant 6

Summary:

In this narrative, the participant and her niece were walking to the "candy lady" when a group of both men and boys came up with guns and starting shooting at the house behind them. The participant saw one of them shoot, and not sure where it was aimed, stepped in front of her niece to protect her. The participant was shot two inches away from her heart, on the left side of her chest. After being shot, she ran to a nearby old woman's house, and kicked the door in when she did not answer. The participant then lay on her floor, and called herself an ambulance.

Analysis:

This narrative is shaped by an emotional momentum, forming an overarching climax in the storyline. The narrative begins with a chronological description of the events, with no information or discussion of the participant's emotional experience of the trauma. After the participant describes the experience and discusses her nerve pain resulting from the gunshot, the interviewer asks her how she responded emotionally to being shot. The participant's response does not reference her emotions at all, and instead delves into a detailed account of her experience running to an old woman's house and kicking down the door when the old woman

didn't answer to call an ambulance. However, when prompted again by the interviewer to explain how she responded emotionally during the trauma, the participant describes her fear: "yes, I was very scared 'til they told me not to panic…I was scared cuz they told me if I panic I wasn't gon make it." The participant shows an understanding of her emotional experience during the event that was not present earlier in her narrative, demonstrating emotional processing of the event. Further, her ability to acknowledge the emotional gravity of the event is prominent, and the trauma is not normalized. Although the participant does not describe cognitions that reflect resilience or agency in her narrative, her described actions throughout the trauma narrative demonstrate high levels of both. The participant jumped in front of a bullet to protect her niece, using her body as a shield. Significantly, she describes this action as "took the bullet for her," suggesting that she sees herself in a protective role. The use of the word "took" communicates that she views this as a purposeful action, rather than being passively shot *at*. The participant assumes responsibility for ensuring her niece's safety, and further emphasizes her niece's vulnerability and youth by referring to her as her "lil" niece. The participant's relationship with her niece is central to this event, because the participant's desire to protect her was so meaningful that she took a bullet for her. Her agency and resilience are further demonstrated through her ability to run to a woman's house after having just been shot, and call herself an ambulance. The participant's actions speak to her strength and ability to find help in a highly traumatic situation. Although there is little reflection on the event, this narrative is highly generative. At the end of the narrative, the participant describes that when she got shot and was waiting for the ambulance, "that's all I was thinking, like I got a baby and I gotta be here for him, cuz I ain't had him—I was pregnant with my uh eight year old…I was very scared." The thought of her future child provided her with the strength and motivation to stay alive, and her

narrative of this moment reflects a frantic need to be there for her son. In stark contrast with the beginning of the narrative, this demonstrates emotional awareness. Furthermore, by thinking about her pregnancy, the participant places the experience within a larger context and gives meaning to her survival.

Non-Verbal Body Language During Narrative:

The participant speaks in a monotone voice throughout the narrative. She shows low levels of emotional expression, and she looks down several times. The participant sits sideways to the camera but is sitting up straight. When complimented by the interviewer on her ability to overcome difficult challenges, the participant smiles a bit and seems to reflect a feeling of pride. At the end of the narrative, the participant's vocal inflection and heightened emotionality emphasizes how scared she was during this experience of trauma.

Self-Report Measure Scores:

Beck Depression Inventory (II): 32

Anxiety Sensitivity Index: Unavailable

Connor-Davidson Resilience Scale: Unavailable

PTSD Diagnosis: Yes

Summary of Narrative Analyses

Qualitative Narrative Analysis and Self-Report Measure Results

	Age at the time of Interview	Age at the time of trauma	Emotional Blunting in Narrative	Agentic Behavior in Narrative	Agentic Cognition in Narrative	Reflection in Narrative	Normalization in Narrative	Generativity in Narrative	BDI (II) Score	ASI Score	CD-RISC Score	PTSD Diagnosis
Participant 1	35	26	Yes	Yes	No	No	Yes	Yes	13	50	38	Yes
Participant 2	44	21	Yes	Yes	Yes	Yes	Yes	Yes	32	43	39	Yes
Participant 3	29	18	Yes	Yes	No	No	Yes	No	40	31	17	No
Participant 4	30	28	Yes	Yes	No	Yes	Yes	No	10	23	40	No
Participant 5	29	21	Yes	No	No	No	Yes	No	13	12	37	No
Participant 6	26	18	No	Yes	No	No	No	Yes	32	X	X	Yes

Table 1. Qualitative narrative results and self-report measure scores for the six narrative participants

Emotional Blunting:

Five out of the six women (Participants 1, 2, 3, 4, and 5) demonstrated significant emotional blunting in their narratives. Emotional blunting is defined as a lack of appropriate emotional expression in a given situation, in which the affect is flattened and little to no emotion words are used to describe an objectively emotional event. To provide an example, when Participant 5 was asked if she was afraid for her own life in a situation in which a gun was held to her daughter's head, she answered, "not my life, I was concerned about my daughter's." This response suggests emotional blunting and distancing, because the participant's use of the word "concerned" when the life of her daughter was at risk is significantly inappropriate given the severity of the situation. Additionally, Participant 5 describes the trauma of her 3-year-old

daughter having a gun held to her head as an "incident." Again, this displays significant emotional blunting.

Agentic Behavior:

Five out of six of the participants (Participants 1, 2, 3, 4, and 6) demonstrated agentic behavior. Agentic behavior is defined as taking physical, proactive action to make a change. In these narratives, this was assessed as any action taken as a result of the participant's decision-making with the goal of changing a situation or circumstances. This included actions such as networking with community members to get out of an abusive relationship, preparing mace and a knife to fight against a romantic partner, and physically jumping in front of a bullet to save a family member.

Agentic Cognition:

Only one participant, Participant 2, demonstrated agentic cognition. We define Agentic Cognition as an individual's ability to discuss and describe cognitions that demonstrate agency, and to be able to reflect on their ability to act agentically. Rather than simply describing actions that show agency (i.e. "I got out of the situation and left my romantic partner"), the participant includes or describes the thoughts associated with that experience (i.e. "I was thinking at that time, 'I'm gonna get away from that guy'").

Reflection:

Two narratives demonstrated active reflection by the participants (Participants 2 and 4). Through our analyses, we viewed reflection as any discussion by the participants of the meaning of the trauma, how it impacted them in later life, thinking through the significance of the experience, and the ability to think about motivations behind the perpetrators of the event. For example, Participant 2 demonstrates high levels of reflection in her narrative in her ability to

hypothesize her partner's abusive actions: she states, "I guess he thought that I was, not as cognizant, or, you know, that I was malleable, but he didn't really know who I really was." Furthermore, she uses the phrase "I realized," establishing an ability to see how her own thoughts developed in this situation, and reflecting on her own cognitions.

Normalization:

Participants 1, 2, 3, 4, and 5 all showed significant normalization of the traumas discussed in their narratives. Normalization is defined as the perception of an event as normal and part of everyday life. This was demonstrated through lack of emotionality, low levels of reflection, and no weight given to the gravity of the trauma. This was one of the most remarkable findings of the study, because traumas are inherently understood as a situation in which death or threat of death to oneself or others is present, and two of these five participants were diagnosed with clinical current PTSD for their trauma. This demonstrates that despite showing significant maladaptive physiological and psychological symptomatology of trauma, these events were portrayed as normal, every day occurrences in their narratives. Many of these women communicated that this was not an out of the ordinary experience for them, and mentioned further experiences of violence later in life.

Generativity:

Generativity was present in three of the narratives, and only in one significantly (Participants 1 and 2 showed a present but small amount of generativity, and Participant 6 was the only participant with a significantly generative narrative). In their narratives, all three participants found generative meaning from their traumas because of their children. The women expressed the ways in which their children gave them a reason to find meaning in life and to gain

perspective on their experience. For example, when Participant 6 was shot, she describes holding on to the image of her unborn son to help her stay alive in that moment.

Discussion

The current study uniquely combines quantitative and qualitative methodologies in order to gain a more holistic understanding of the trauma of interpersonal violence, telling a story of each participant's unique experience of trauma. In particular, this study provides insight into the psychophysiological impact of trauma and the manner in which individuals conceptualize their trauma. This is achieved through quantitative analyses of fear potentiated startle and qualitative analyses of the trauma narratives of a sample of low-income, highly traumatized Black women. The sample was recruited through the Grady Trauma Project, which is the largest urban study of trauma and its consequences in the U.S. Through these two complementary methods of analysis, the distinction between interpersonal and non-interpersonal violence emerges as a potentially salient factor for how trauma impacts an individual in this population.

Psychophysiological

The Narrative Sample group and the larger Grady Trauma Project community sample both demonstrated a significant difference in acoustic startle responses when samples were divided according to the absence or presence of a history of interpersonal or non-interpersonal violence in adulthood. This finding suggests that trauma type matters, and that not all traumas impact individuals in the same way. After controlling for the number of lifetime traumas experienced, participants who experienced traumas of interpersonal violence still had significantly higher startle scores than those who experienced traumas of non-interpersonal violence.

Our findings confirm and extend previous findings in the literature that there are substantial differences between the biobehavioral impact of interpersonal and non-interpersonally violent traumas. Research has shown that interpersonal violence typically results in significantly higher severity of PTSD symptoms, particularly in symptoms within the fear profile, along with a generally higher likelihood of developing a PTSD diagnosis later in life (Forbes et al., 2011; Forbes et al., 2013). Additionally, survivors of assaultive or interpersonal violence are found to have more severe emotional symptomatology than survivors of non-assaultive or non-interpersonal violence (Chung & Breslau, 2008). To our knowledge, no study has yet examined the difference in fear potentiated startle responses based on the type of trauma experienced.

Our finding that women who have experienced interpersonal violence show a higher fear potentiated startle response than women who have not experienced an interpersonal trauma is important in several ways. First, it suggests that for both samples examined, the nature of the violence is important in how the traumatic experience might influence psychophysiologically derived expressions of fear and anxiety. Higher startle responses may reflect a heightened impact of the trauma on an individual, suggesting severity of the violence or amount of trauma experienced are not the only predictors of post-trauma symptomatology. Interpersonal violence may be particularly influential, because it directly challenges assumptions of how the world works: it involves an intentional effort to hurt another person, while non-interpersonal violence can be rationalized as bad luck, an accident, or simply “the way the world works.” Non-interpersonal traumas such as natural disasters and motor vehicle accidents can be extremely distressing and may result in high levels of post-traumatic symptoms, but may not contradict commonly held beliefs of the world as a predictable, safe place.

Narrative

Qualitative Findings.

Most of the existing literature on narratives of trauma reflects Janoff-Bulman's (1992) theory of the shattered world, in which she argues that individuals generally hold three core beliefs: belief in a benevolent world, a meaningful world, and a sense of self-worth. The theory states that trauma challenges an individual's previous understanding of the world and themselves, therefore creating dissonance between prior assumptions of a good, just world and their unexplainable trauma. Janoff-Bulman's theory is reflected across the trauma narrative literature: trauma is unexpected, abnormal, and defies an individual's view of the world. Trauma is a shattering of what is normal, and requires a creation of a new sense of self in order to come to terms with the trauma. Given the extant trauma narrative literature and the severity of the traumas reported, we expected the narratives of the current study to demonstrate high levels of emotionality, cognitive dissonance, and a shattering of the self and world assumptions. Narratives of interpersonal violence were chosen as the subject of analysis primarily because interpersonal violence is theorized to directly contradict a "normal" life in a "benevolent world." Given the trauma narrative literature and the highly emotional nature of interpersonal violence, focusing the analysis on this type of trauma was a purposeful choice.

The qualitative findings that emerged from the grounded theory analysis challenge the current trauma narrative literature and contradict the physiological findings in interesting and provocative ways. Participants 1, 2, 3, 4, and 5 demonstrated significant emotional blunting and normalization of the trauma in their narratives. This qualitative result provided support for Chung and Breslau's (2008) finding that individuals with "pervasive disturbance" or high symptom severity after experiencing trauma were distinctive in their heightened emotional

numbing. Further, only Participants 2 and 4 demonstrated an ability to reflect on the trauma and its meaning in their narratives. For these six women, many of whom have experienced chronic trauma throughout their lives beginning in childhood, the traumas are largely portrayed as ordinary, expected and strikingly normal. Yet, their physiological response of exaggerated startle and hyperarousal suggests a dissociation between the two findings: there is a normalization of the trauma in the narratives, but heightened psychophysiological response expressed in their bodies, suggesting the trauma is impacting these women on a psychophysiological level.

Additionally, a distinction between agentic cognition and agentic behavior emerged from the grounded theory analysis. Five of the participants demonstrated agentic behavior, but only one participant (Participant 2) showed agentic cognition. This mirrors the pattern of low levels of reflection throughout the six narratives, with only two participants actively reflecting on their experiences (Participants 2 and 4). The presented low levels of agentic cognition and reflection, despite high levels of expressed agentic action, point to several possible interpretations. This may suggest that the emotional blunting present across the narratives impacts the participants' ability to reflect on the meaning of the agentic actions. Alternatively, perhaps agentic action does not necessitate an explanation or discussion for these women. It may be that agentic action is expected and normalized within their lives.

The divergence of our findings from the current body of trauma narrative literature suggests several important conclusions. First, this may indicate that the traumatic experiences of this population of low-income, highly traumatized urban Black women differ significantly than those most widely represented in the literature (i.e. middle class, white women). There is no shattering of the self or discussion of challenged belief systems. Each of the six women

experienced multiple traumas across their lifetime, and perhaps there is an aspect to chronic trauma that allows it to feel normal and expected. Furthermore, this finding brings to light the importance of considering race and socioeconomic background in experiences of trauma. What does it mean that this sample of women seems to describe these traumas as a normal part of life? How might this finding help shift the way we study and approach future treatments of trauma for individuals with different backgrounds and experiences than those most widely represented in the extant literature?

When considering PTSD diagnosis, an interesting pattern emerged from the narrative analyses. All three of the women who demonstrated generativity in their narratives are also the only three participants who met clinical criteria for PTSD diagnosis. This could be because generativity is being used to find meaning in especially difficult symptoms. This finding reflects the concept of "posttraumatic growth," defined by Tedeschi and Calhoun (2004) as "the experience of positive change that occurs as a result of the struggle with highly challenging life crises" and is manifested in "interpersonal relationships, an increased sense of personal strength, changed priorities, and a richer existential and spiritual life" (p. 1). Posttraumatic growth is a robust finding in the extant literature, and supports the interpretation that for these women, generativity may be used to cope with the difficult symptoms of trauma present in PTSD (Jayawickreme & Blackie, 2014).

Self-Report Measures

The collected self-report measures provide insight into how diagnosis and severity of PTSD, Major Depressive Disorder, Anxiety Sensitivity and Resilience enhance our understanding of trauma in relation to other psychopathologies and traits. Results show that three out of the six participants (Participants 2, 3, and 6) scored above 30 points on Beck Depression

Inventory-II, scores consistent with severe depression. In addition, four participants (Participants 1, 2, 3, and 4 [6 unknown]) show highly elevated levels of anxiety sensitivity. Five of the participants have at least one diagnosable psychological disorder.

The self-report measures demonstrate frequent comorbidity between PTSD, Major Depressive Disorder and anxiety sensitivity: four of the six participants had at least two comorbid disorders (Participants 1, 2, 3, and 6), with Participant 2 experiencing clinically significant symptoms for depression, anxiety sensitivity and PTSD diagnosis. In addition, the three participants diagnosed with PTSD also demonstrate a comorbid disorder of Major Depressive Disorder (Participants 2, 6), Anxiety Sensitivity (Participants 1, 2), or both (Participant 2).

Yet, paradoxically, responses on the Connor-Davidson Resilience Scale showed high levels of resilience in the majority of participants (Participants 1, 2, 4, and 5 [6 unknown]). Given the high levels of emotional blunting and lack of reflection present in the narratives, this finding can be interpreted in multiple ways. First, perhaps this pattern reflects the finding that for some individuals, particularly those with challenging life histories, talking about trauma or ruminating over past events can be maladaptive to coping. In particular, for certain individuals, attempts at meaning making may result in lowered psychological health (Sales, Merrill, & Fivush, 2013). This might explain why emotional blunting and lack of processing of the traumas in the narratives are still present given the same participants' high levels of resilience. However, given the heightened fear-potentiated startle scores for these participants, there are clearly present maladaptive psychophysiological symptoms of trauma. Further research is needed to understand the potential relationship between self-reported understandings of resilience and psychophysiological symptoms of trauma.

Among the six women whose narratives were analyzed, Participants 2 and 3 are the only two participants with clinically significant levels of depression and anxiety sensitivity as reported on the BDI-II and ASI. Interestingly, Participant 2 is diagnosed with PTSD and has high reported resilience (P2 CD-RSIC =39) whereas participant 3 has no PTSD diagnosis and comparatively low resilience (P3 CD-RSIC = 17). This finding may suggest that participants diagnosed with PTSD report higher levels of resilience than participants without a PTSD diagnosis. This finding further supports Tedeschi and Calhoun's (2004) theory of posttraumatic growth, which states that experiences of hardship foster positive growth and heightened resilience.

When considering the narrative, fear potentiated startle and self-report measure results, a complex picture of trauma emerges: the largely emotionally blunted and normalized narratives, contrast with exaggerated startle levels. Further, the relation between PTSD diagnosis and generativity and the generally high resilience scores despite high symptoms of trauma suggest a complicated picture of both struggling with and coping with challenging lives. This finding echoes Patricia Hill Collins' (1990) argument that individuals can maintain agency and resilience within disempowering, vulnerable life experiences.

Narrative Conclusions

The narrative findings of the current study challenge the ability to make general statements about experiences of trauma, and demand a more nuanced examination of how different communities, populations, and individuals experience trauma. The qualitative analysis of these narratives allowed for a deeper, more nuanced understanding of the narratives to emerge. The Grady Trauma Project sample of largely low-income, urban, highly traumatized Black women represents a vastly under-researched population. Qualitative analysis allowed for

the experiences of these women to speak for themselves, rather than placing potentially unsuited research frameworks and methods onto their lived experiences.

The qualitative findings of this study add to the extant literature by demonstrating that conceptualizations of traumatic experiences can differ greatly depending on the population, particularly that of populations facing continued racial, socioeconomic and gendered oppressions. Although no definitive conclusions can be drawn from analysis of six narratives (a small sample), these findings suggest a need for further exploration of traumatic experiences in Black women and other marginalized populations to better understand the high levels of normalization, emotional blunting and lack of reflection in their trauma narratives. If the lived experiences of these women lead to a significantly different understanding of trauma than what is reflected in the largely white, middle-class literature, further work needs to be done.

More specifically, when aiming to increase representation of marginalized populations in psychology literature, narratives are important in two ways. First, it is argued that storytelling and the sharing of personal narratives increases empathy in listeners (Gamson, 2002). This is important when working toward understanding experiences of marginalized and oppressed groups, and creating a space for previously silenced voices to be heard. Furthermore, the historic silencing of individual experiences within collective, cultural traumas can be combated through narrative expression and storytelling as well (Gamson, 2002). The ability for narrative and qualitative forms of knowledge to cultivate a deeper sense of empathy in listeners is critical when working toward a more equitable society and inciting means of social change, because it allows for others to gain insight and understanding into the traumatic or painful experiences of others (Chase, 2005).

Potential Relationships Between Quantitative and Qualitative Findings

The results of the narrative analysis and fear potentiated startle inform each other in several ways. The narratives demonstrate emotional blunting and normalization of the trauma, while high levels of startle in the same participants show that the effects trauma may still be quite psychophysiologically robust. This suggests that there may be a mechanism linking cognitive understandings of trauma with how they are expressed in the body—in this case as measured specifically through an established fear potentiated startle paradigm. In fact, research conducted by Pennebaker and Susman (1988), and Shedler, Mayman and Manis (1993) investigated potential associations between personal disclosure and physiological reactivity, concluding that defense mechanisms or inhibition of thoughts and feelings over time cause increased physiological arousal via the autonomic nervous system. Given this finding, the emotional blunting and lack of reflection present in the narratives may, in fact, be contributing to the exaggerated participant startle responses by way of inhibition or defense mechanisms. The findings of the current study point to an interesting contradiction between the seemingly low levels of emotionality and reflection in the narratives (suggesting low saliency of the traumas), and the heightened startle scores (suggesting high saliency of the traumas). This presents a paradox between how the traumas are cognitively expressed through narrative and how they are presenting in the body psychophysiologically.

Previous research shows that participants with PTSD often exhibit increased physiological arousal symptoms without reporting conscious awareness of them, showing that trauma symptoms can operate outside of cognitive control (Jovanovic et al., 2012). Given the high levels of emotional blunting and normalization of the event in the trauma narratives, it may be that startle levels are higher because the effects of the trauma are observed only at a

psychobiological level that is sensitive to the type of assessment employed in the current study and previously in the literature (see: Briscione et al., 2014)

The significant difference between the effects of interpersonal and non-interpersonal violence points to a potential connection between the cognitive understandings of the trauma and the reflexive nature of the fear potentiated startle response. Otherwise, simply the number of traumas experienced or general severity of the trauma would be the only factor moderating the development of post-trauma symptoms. These findings suggest a need for further exploration of meaning-making after experiencing a trauma in order to better understand how individuals make sense of different types of trauma, and to better understand why interpersonal violence so profoundly impacts psychophysiological expressions of trauma. Although the current study is exploratory in nature, it raises three important questions regarding how trauma impacts this population of low-income Black women. First, it highlights how cognitive conceptualizations of interpersonal violence may impact how the trauma symptoms are expressed. Second, the current study addresses how normalization of chronic violence and interpersonal trauma within a particularly vulnerable population may contribute to emotional blunting within the narratives. Third, these findings raise the question: how does the type of trauma and potential normalization of trauma within this sample possibly lead to heightened psychophysiological symptoms of trauma as expressed through fear potentiated startle response?

Broader Considerations

Grady Trauma Project Population

The marginalized status of Black women in American society places them at heightened risk for exposure to violence. The "Matrix of Domination," a Black Feminist theory coined by Patricia Hill Collins (2008), is helpful in contextualizing the importance of this study in its aim

to understand the specific traumatic experiences of Black women. The theory conceptualizes different systems of oppression as interlocking, rather than additive, allowing for the complexities of identity politics to be viewed holistically. In particular, Collins argues that placing Black women's experiences at the center of analysis allows for a "both/and conceptual stance, one in which all groups possess varying amounts of penalty and privilege in one historically created system…depending on the context, an individual may be an oppressor, a member of an oppressed group, or simultaneously oppressor and oppressed" (Collins, 2008, p. 225). This study also aims to place Black women's experiences at the center of critical analysis by examining the traumas of women from Grady Trauma Project. Furthermore, through the use of both qualitative and quantitative analysis, a more holistic level of analysis was achieved. Rather than reducing the lived experiences of the six women, the methodology allowed for deeper understanding of the complexities of each individual's life, and room for possible cultural differences in trauma conceptualization to be captured.

Collins (2008) describes the matrix of domination as a form of analysis that both acknowledges the multiple forms of oppression Black women face while also leaving space for personal agency and collective empowerment. Collins argues for the importance of allowing for black women's vulnerability and agency to coexist as part of Black women's lived experiences, rather than placing them in a category of either the "oppressed" or "agentic and 'strong Black woman'" trope. Black women are historically and currently underrepresented in the trauma literature, and this study challenges this by placing their experiences at the center of inquiry. This research also allows for their narratives of trauma to be voiced and heard, while also demonstrating how the participants can have agency in positions of seemingly no control or

power. The matrix of domination allows a space for the complexity of the lived experiences of Black women and an appreciation for the multiplicity of experiences of trauma.

Given the multiple systems of oppression Black women face, it is important to study how their experiences of trauma may differ from the population typically represented in research studies. In fact, researchers Henrich, Heine and Norenzayan (2010) identified this pattern of psychology research participants as "WEIRD": from Western, Educated, Industrialized, Rich and Democratic (WEIRD) societies. They argue that the majority of psychological studies that employ WEIRD subjects are not representative of the general population, and that there is significant variation in the human experience that is not captured due to an overreliance on college student participant samples. Moreover, Triffleman and Pole (2010) further articulate this criticism of psychological research in their review of the absence of ethnoracial and sexual minority samples in studies of trauma. Given the high levels of trauma experienced by the participants in the current study, the ways in which their experiences differ from the extant literature as low-income Black women requires further research with the intention of gaining a more nuanced understanding of how trauma impacts a diversity of individuals.

Limitations and Future Directions

This study contains multiple limitations. First, it is unclear how much personal disclosure was impacted during the narrative interview based on the participant's level of comfort and openness with the interviewer. Although the interviewed participants actively chose to return to the project to be interviewed and to continue with the study, demonstrating an interest and willingness to share their experiences, it is possible that certain details or emotional expressions were withheld in a discussion of intimate trauma with a stranger. Second, the labor-intensive nature of qualitative analysis did not allow for a comparison group of non-interpersonal trauma

narratives to be analyzed within the time frame of this study. Third, the time elapsed between when the trauma occurred and when the narrative was collected varied greatly between the six narrative participants, which may have had an unknown impact on the presentation or expression of the memory and could not be controlled for in the current sample. Fourth, the method of narrative analysis involves a general limitation of an inability to assess for accuracy or completeness of memory; the method only allows for a specific memory to be recalled within a particular moment in time. Lastly, the Anxiety Sensitivity Index and Connor-Davison Resilience Scale responses were unavailable for Participant 6, leaving the Participant 6 profile incomplete. This was an unanticipated obstacle, but ultimately does not detract from the current findings.

An important direction for future research could include a comparison group of analyzed non-interpersonal trauma narratives. This would allow for a stronger understanding of how qualitative narratives may differ based on trauma type. Additionally, an increased number of narratives analyzed would provide a more comprehensive understanding of the patterns observed in the current study. Further, a possible next step might include an examination of both childhood and adulthood trauma narratives for each participant. This could provide insight into how different traumas experienced over time are conceptualized, and a point of investigation for potential relationships between them. This study is exploratory, and has the potential to be expanded to allow for an increased understanding of the relationship between qualitative, cognitive conceptualizations of interpersonal and non-interpersonal violence, and psychophysiological expression of fear potentiated startle. In summary, further research is needed to explore the specific experiences of trauma in low-income, minority community samples in order to develop effective treatments for these underrepresented and underserved populations.

References

Agger, I., Igreja, V., Kiehle, R., & Polatin, P. (2012). Testimony ceremonies in Asia: Integrating spirituality in testimonial therapy for torture survivors in India, Sri Lanka, Cambodia, and the Philippines. *Transcultural Psychiatry*, *49*(3–4), 568–589. https://doi.org/10.1177/1363461512447138

Alegría, M., Fortuna, L. R., Lin, J. Y., Norris, L. F., Gao, S., Takeuchi, D. T., … Valentine, A. (2013). Prevalence, Risk, and Correlates of Posttraumatic Stress Disorder across Ethnic and Racial Minority Groups in the U.S. *Medical Care*, *51*(12), 1114–1123. https://doi.org/10.1097/MLR.0000000000000007

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

Arslan, G. (2015). Relationship between Childhood Psychological Maltreatment, Resilience, Depression, and Negative Selfconcept. *Çocukluk Dönemi Psikolojik İstismar, Psikolojik Sağlamlık, Depresyon ve Olumsuz Benlik Algısı Arasındaki İlişki.*, *53*(4), 3–10. https://doi.org/10.5455/NYS.20151221025259

Becker, G., Beyene, Y., & Ken, P. (2000). Health, Welfare Reform, and Narratives of Uncertainty Among Cambodian Refugees. *Culture, Medicine and Psychiatry*, *24*(2), 139–163. https://doi.org/10.1023/A:1005674428261

Brady, K. T. (1997). Posttraumatic stress disorder and comorbidity: recognizing the many faces of PTSD. *The Journal of Clinical Psychiatry*, *58 Suppl 9*, 12–15.

Brady, K. T., Killeen, T. K., Brewerton, T., & Lucerini, S. (2000). Comorbidity of psychiatric disorders and posttraumatic stress disorder. *The Journal of Clinical Psychiatry*, *61 Suppl 7*, 22–32.

Breslau, N. (2009). The Epidemiology of Trauma, PTSD, and Other Posttrauma Disorders.

Briscione, M. A., Jovanovic, T., & Norrholm, S. D. (2014). Conditioned Fear Associated Phenotypes as Robust, Translational Indices of Trauma-, Stressor-, and Anxiety-Related Behaviors. *Frontiers in Psychiatry*, *5*. https://doi.org/10.3389/fpsyt.2014.00088

Caetano, R., Cunradi, C. B., Schafer, J., & Clark, C. L. (2000). Intimate Partner Violence and Drinking Patterns Among White, Black, and Hispanic Couples in the U.S. *Journal of Substance Abuse*, *11*(2), 123–138. https://doi.org/10.1016/S0899-3289(00)00015-8

Cahill, S. P., & Foa, E. B. (2007). Psychological theories of PTSD. In M. J. Friedman, T. M. Keane, & P. A. Resick (Eds.), *Handbook of PTSD: Science and practice* (pp. 55–77). New York, NY, US: Guilford Press.

Careaga, M. B. L., Girardi, C. E. N., & Suchecki, D. (2016). Understanding posttraumatic stress disorder through fear conditioning, extinction and reconsolidation. *Neuroscience and Biobehavioral Reviews*, *71*, 48–57. https://doi.org/10.1016/j.neubiorev.2016.08.023

Chase, S. E. (2005). Narrative Inquiry: *Multiple Lenses, Approaches, Voices.* In Denzin, N. K., & Lincoln, Y. S., *The SAGE handbook of qualitative research* (3rd edition). (pp. 651-679). Thousand Oaks: Sage Publications.

Chung, H., & Breslau, N. (2008). The latent structure of post-traumatic stress disorder: tests of invariance by gender and trauma type. *Psychological Medicine; Cambridge*, *38*(4), 563–73. https://doi.org/http://dx.doi.org/10.1017/S0033291707002589

Crenshaw, K. (1991). Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color. *Stanford Law Review*, *43*(6), 1241–1299. https://doi.org/10.2307/1229039

Collins, P. H. (2008). *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment* (1 edition). New York: Routledge

Dahlberg, L. L., & Krug, E. G. (2006). Violence: a global public health problem. *Ciência & Saúde Coletiva*, *11*, 1163–1178. https://doi.org/10.1590/S1413-81232006000500007

Flory, J. D., & Yehuda, R. (2015). Comorbidity between post-traumatic stress disorder and major depressive disorder: alternative explanations and treatment considerations. *Dialogues in Clinical Neuroscience*, *17*(2), 141–150.

Forbes, D., Fletcher, S., Parslow, R., Phelps, A., O'Donnell, M., Bryant, R. A., … Creamer, M. (2011). Trauma at the Hands of Another: Longitudinal Study of Differences in the Posttraumatic Stress Disorder Symptom Profile Following Interpersonal Compared With Noninterpersonal Trauma. *The Journal of Clinical Psychiatry*, *73*(3), 372–376. https://doi.org/10.4088/JCP.10m06640

Forbes, D., Lockwood, E., Phelps, A., Wade, D., Creamer, M., Bryant, R. A., … Chapman, C. (2013). Trauma at the Hands of Another: Distinguishing PTSD Patterns Following Intimate and Nonintimate Interpersonal and Noninterpersonal Trauma in a Nationally Representative Sample. *The Journal of Clinical Psychiatry*, *75*(2), 147–153. https://doi.org/10.4088/JCP.13m08374

Franklin, A. J., Boyd-Franklin, N., & Kelly, S. (2006). Racism and Invisibility: Race-Related Stress, Emotional Abuse and Psychological Trauma for People of Color. *Journal of Emotional Abuse*, *6*(2/3), 9–30. https://doi.org/10.1300/J135v06n02-02

Frattaroli, J. (2006). Experimental Disclosure and Its Moderators: A Meta-Analysis. *Psychological Bulletin*, *132*(6), 823–865. https://doi.org/10.1037/0033-2909.132.6.823

Friedman, M. J., Keane, T. M., & Resick, P. A. (2007). *Handbook of PTSD, First Edition: Science and Practice*. Guilford Press.

Gamson, W. A. (2002). How storytelling can be empowering. In Cerulo, K. A. (2013). *Culture in Mind: Toward a Sociology of Culture and Cognition* (pp. 187-198). Routledge.

Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Transaction Publishers.

Gough, B., & Lyons, A. (2016). The Future of Qualitative Research in Psychology: Accentuating the Positive. *Integrative Psychological and Behavioral Science*, *50*(2), 234–243. https://doi.org/10.1007/s12124-015-9320-8

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *The Behavioral and Brain Sciences*, *33*(2–3), 61-83-135. https://doi.org/10.1017/S0140525X0999152X

Herman, J. L. (1992). *Trauma and Recovery*. Basic Books.

Hien, D., & Ruglass, L. (2009). Interpersonal partner violence and women in the United States: An overview of prevalence rates, psychiatric correlates and consequences and barriers to help seeking. *International Journal of Law and Psychiatry*, *32*(1), 48–55. https://doi.org/10.1016/j.ijlp.2008.11.003

Higginbottom, G., & Lauridsen, E. I. (2014). The roots and development of constructivist grounded theory. *Nurse Researcher*, *21*(5), 8–13.

Horowitz, M. J. (Ed.). (1991). *Person schemas and maladaptive interpersonal patterns*. Chicago: University of Chicago Press.

Janoff-Bulman, R. (1992). *Shattered Assumptions*. New York: Free Press.

Jenkins, E. J. (2002). Black Women and Community Violence. *Women & Therapy*, *25*(3–4), 29–44. https://doi.org/10.1300/J015v25n03_03

Jayawickreme, E., & Blackie, L. E. R. (2014). Post-traumatic Growth as Positive Personality Change: Evidence, Controversies and Future Directions. *European Journal of Personality*, *28*(4), 312–331. https://doi.org/10.1002/per.1963

Jovanovic, T., Sakoman, A. J., Kozarić-Kovačić, D., Meštrović, A. H., Duncan, E. J., Davis, M., & Norrholm, S. D. (2013). Acute Stress Disorder Versus Chronic Posttraumatic Stress Disorder: Inhibition of Fear as a Function of Time Since Trauma. *Depression & Anxiety (1091-4269)*, *30*(3), 217–224. https://doi.org/10.1002/da.21991

Jovanovic, T., Norrholm, S. D., Fennell, J. E., Keyes, M., Fiallos, A. M., Myers, K. M., … Duncan, E. J. (2009). Posttraumatic stress disorder may be associated with impaired fear inhibition: Relation to symptom severity. *Psychiatry Research*, *167*(1–2), 151–160. https://doi.org/10.1016/j.psychres.2007.12.014

Keogh, E., Ayers, S., & Francis, H. (2002). Does Anxiety Sensitivity Predict Post-Traumatic Stress Symptoms Following Childbirth? A Preliminary Report. *Cognitive Behaviour Therapy*, *31*(4), 145–155. https://doi.org/10.1080/165060702321138546

Kılıç, E. Z., Kılıç, C., & Yılmaz, S. (2008). Is anxiety sensitivity a predictor of PTSD in children and adolescents? *Journal of Psychosomatic Research*, *65*(1), 81–86. https://doi.org/10.1016/j.jpsychores.2008.02.013

MacCurdy, M. M. (2007). *The Mind's Eye: Image and Memory in Writing about Trauma*. Univ of Massachusetts Press.

Marshall, G. N., Miles, J. N. V., & Stewart, S. H. (2010). Anxiety Sensitivity and PTSD Symptom Severity Are Reciprocally Related: Evidence From a Longitudinal Study of Physical Trauma Survivors. *Journal of Abnormal Psychology*, *119*(1), 143–150. https://doi.org/10.1037/a0018009

McAdams, D. P., & McLean, K. C. (2013). Narrative Identity. *Current Directions in Psychological Science*, *22*(3), 233–238. https://doi.org/10.1177/0963721413475622

Mucci, C. (2013). *Beyond Individual and Collective Trauma: Intergenerational Transmission, Psychoanalytic Treatment, and the Dynamics of Forgiveness*. London: Karnac Books.

Norrholm, S. D., Jovanovic, T., Vervliet, B., Myers, K. M., Davis, M., Rothbaum, B. O., & Duncan, E. J. (2006). Conditioned fear extinction and reinstatement in a human fear-potentiated startle paradigm. *Learning & Memory*, *13*(6), 681–685. https://doi.org/10.1101/lm.393906

Norrholm, S. D., Jovanovic, T., Olin, I. W., Sands, L. A., Karapanou, I., Bradley, B., & Ressler, K. J. (2011). Fear extinction in traumatized civilians with posttraumatic stress disorder: relation to symptom severity. *Biological Psychiatry*, *69*(6), 556–563. https://doi.org/10.1016/j.biopsych.2010.09.013

Norris, F. H & Sloane, L. B. (2013). Understanding Research on the Epidemiology of Trauma and PTSD. *PTSD Resarch Quarterly, 24*(2-3), 1-13.

Norrholm, S. D., Glover, E. M., Stevens, J. S., Fani, N., Galatzer-Levy, I. R., Bradley, B., … Jovanovic, T. (2015). Fear load: The psychophysiological over-expression of fear as an intermediate phenotype associated with trauma reactions. *International Journal of Psychophysiology*, *98*(2), 270–275. https://doi.org/10.1016/j.ijpsycho.2014.11.005

Oikkonen, V. (2013). Narrative analysis as a feminist method: The case of genetic ancestry tests. *European Journal of Women's Studies*, *20*(3), 295–308. https://doi.org/10.1177/1350506812471026

Peterson, R. A., & Heilbronner, R. L. (1987). The anxiety sensitivity index: *Journal of Anxiety Disorders*, *1*(2), 117–121. https://doi.org/10.1016/0887-6185(87)90002-8

Ponds, K. T. (2013). The Trauma of Racism: America's Original Sin. *Reclaiming Children & Youth*, *22*(2), 22–24.

Proctor, B.D., Semega, J. L., & Kollar, M.A. (2016). Income and Poverty in the United States: 2015. *United States Census Bureau, U.S. Department of Commerce,* Current Population Reports, P60-256(RV). U.S. Government Printing Office, Washington, DC, 2016.

PTSD Statistics | PTSD United. (2013). Retrieved January 5, 2017, from http://www.ptsdunited.org/ptsd-statistics-2/

PTSD, N. C. for, & Affairs, U. S. D. of V. (n.d.). DSM-5 Criteria for PTSD | BrainLine Military. Retrieved January 8, 2017, from http://www.brainlinemilitary.org/content/2014/06/dsm-v-tr-criteria-for-ptsd.html

Roberts, L. (2016). *Research Methods Pedagogy: Engaging Psychology Students in Research Methods and Statistics*. Frontiers Media SA.

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

Rytwinski, N. K., Scur, M. D., Feeny, N. C., & Youngstrom, E. A. (2013). The co-occurrence of major depressive disorder among individuals with posttraumatic stress disorder: a meta-analysis. *Journal of Traumatic Stress*, *26*(3), 299–309. https://doi.org/10.1002/jts.21814

Sales, J. M., Merrill, N. A., & Fivush, R. (2013). Does making meaning make it better? Narrative meaning-making and well-being in at-risk African-American adolescent females. *Memory (Hove, England)*, *21*(1), 97–110. https://doi.org/10.1080/09658211.2012.706614

Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic Growth: Conceptual Foundations and Empirical Evidence. *Psychological Inquiry*, *15*(1), 1–18.

van der Kolk, B. A., McFarlane, A. C., & Weisaeth, L. (1996). *Traumatic Stress. New York:* Guilford Press.

Waters, T. E. A., & Fivush, R. (2015). Relations Between Narrative Coherence, Identity, and Psychological Well-Being in Emerging Adulthood. *Journal of Personality*, *83*(4), 441–451. https://doi.org/10.1111/jopy.12120

Wangelin, B. C., & Tuerk, P. W. (2015). Taking the Pulse of Prolonged Exposure Therapy: Psychophysiological Reactivity to Trauma Imagery as an Objective Measure of Treatment Response. *Depression & Anxiety (1091-4269)*, *32*(12), 927–934. https://doi.org/10.1002/da.22449

West, C. M. (2002). Battered, Black, and Blue. *Women & Therapy*, *25*(3–4), 5–27. https://doi.org/10.1300/J015v25n03_02

West, C. M. (2004). Black Women and Intimate Partner Violence: New Directions for Research. *Journal of Interpersonal Violence*, *19*(12), 1487–1493. https://doi.org/10.1177/0886260504269700

Wiseman, H., Metzl, E., & Barber, J. P. (2006). Anger, guilt, and intergenerational communication of trauma in the interpersonal narratives of second generation Holocaust survivors. *American Journal of Orthopsychiatry*, *76*(2), 176–184. https://doi.org/10.1037/0002-9432.76.2.176

Women, Trauma and PTSD - PTSD: National Center for PTSD. (2015). [General Information]. Retrieved January 5, 2017, from http://www.ptsd.va.gov/public/PTSD-overview/women/women-trauma-and-ptsd.asp