POSTTRAUMATIC GROWTH AND RACE-BASED TRAUMA AMONG AFRICAN
AMERICANS

by

Ana I. Orejuela-Dávila

A dissertation submitted to the faculty of
The University of North Carolina at Charlotte
in partial fulfillment of the requirements
for the degree of Doctor of Philosophy in
Health Psychology

Charlotte

2020

Approved by:

_____
Dr. Richard G. Tedeschi

_____
Dr. Andrew Case

_____
Dr. Suzanne Boyd

_____
Dr. Erin Basinger

ABSTRACT

ANA I. OREJUELA-DAVILA. Posttraumatic Growth and Race-Based Trauma Among African Americans. (Under the direction of DR. RICHARD TEDESCHI)

Racism is a prevalent and chronic stressor that can cause profound physical and psychological consequences on its targets. Cultural models of stress posit that sociocultural factors (such as racial identity and racial socialization) influence the appraisal of racism as a stressor. These models also recognize that racism can be a traumatic experience for its targets. Although traumatic events have the potential to induce negative reactions in the individuals who experience them, these events also allow for the possibility of posttraumatic growth (PTG) to occur. Although the PTG model posits that sociocultural factors play a role in PTG processes, this has not been empirically tested within the context of race-based traumatic events, which is a line of inquiry that can potentially have profound implications for the healing of racial trauma. Thus, the present study examined how racial identity and racial socialization influence PTG among African American college students who have experienced race-based traumatic events. Results showed that participants experienced PTG to a small degree, especially in the area of personal strength. Participants also endorsed experiencing core belief disruption to small degree, which was significantly and positively associated with race-based traumatic stress (RBTS). Results also showed that RBTS contributed to intrusive rumination above and beyond the effect of core belief disruption. Surprisingly, aspects of racial identity and socialization were not significantly associated with deliberate rumination. Posthoc analyses revealed that nationalist ideology was significantly associated with core belief disruption, whereas public regard was significantly associated with PTG.

DEDICATION

Esta disertación está dedicada a mis padres, quienes hicieron posible mi sueño de mudarme a Carolina del Norte para completar un doctorado en psicología. Los sacrificios inmensurables que ustedes han hecho por mí me permitieron crear mi propio camino. Espero usar este privilegio para crear bien en el mundo. Esto nunca hubiese sido posible sin su apoyo y amor incondicional. Los amo.

ACKNOWLEDGMENTS

It is with an abundance of gratitude that I acknowledge the individuals who have contributed to my professional development throughout graduate school. I am deeply indebted to my advisor, Dr. Richard G. Tedeschi, whose mentorship has shaped me as a researcher and clinician. I am forever grateful for all of the support and time you have invested in me throughout the years. Thank you for providing me with ample opportunities to work in various research projects, while also fostering my autonomy by encouraging me to develop my own research ideas. I hope to continue infusing all of my work with the same sense of integrity, humility, and curiosity that you have displayed as a mentor. I am also extremely grateful for the other members of my dissertation committee: Dr. Andrew Case, Dr. Erin Basinger, and Dr. Suzanne Boyd. Thank you for each of your unique contributions to this project throughout its various stages.

I would also like to acknowledge the other members of the Posttraumatic Growth Research Group, with whom I have had the honor of working with over the years: Lawrence Calhoun, Arnie Cann, Amy Canavello, Cara Blevins, Paisley Lewis, and Olivia Riffle. I have been continuously inspired by your creativity and dedication to PTG research, and I appreciate all for your thoughtful input as I developed and implemented this project.

This research would not have been possible without the Health Psychology PhD Program, which funded a portion of this study. The program as a whole far exceeded my expectations of a graduate education, and I am grateful for all of the didactic, clinical, and research experiences it has afforded me with. As such, I would like to thank Dr. Virginia Gil-Rivas for her leadership, as well as Dr. Amy Peterman for her constant support and guidance in the clinical realm. I would also like to acknowledge the colleagues in my graduate program who

have supported me throughout this process in various ways. I consider myself extremely lucky

for also being able to call these colleagues true friends. In particular, I would like thank Nadia

Jafari for her unwavering support and friendship throughout graduate school, as well as Lydia

Roos for providing additional consultation with some of the statistical analyses of this project.

Lastly, this project would not exist without the willingness of participants to share their

own personal experiences with race-related events. I hope to honor them by continuing to

integrate the unique experiences of people of color into PTG research.

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LIST OF ABBREVIATIONS

PTG	Posttraumatic growth
RBTS	Race-based traumatic stress
IR	Intrusive rumination
DR	Deliberate rumination
MIBI	Multidimensional Inventory of Black Identity
MSM	Multicultural Stress Model
BMR	Biopsychosocial Model of Racism
MCRRS	Multidimensional Conceptualization of Racism-Related Stress

Chapter 1: Introduction and Literature Review

Introduction

Racism has been characterized as a system of racial group designations based on dominance, whereby minority groups are viewed as inferior and are oppressed at individual, institutional, and cultural levels (Harrell, 2000). Racism continues to be prevalent in the United States (Seaton, 2003), and it is a stressor that can cause a multitude of negative psychological and physiological effects on its targets (Brondolo et al., 2009; Carter, 2007). Traditional models of stress (Lazarus & Folkman, 1984) posit that when an individual encounters a stimulus, the stimulus is deemed a stressor if the individual perceives the stimulus as negative and if he or she does not have the resources to cope with it. Cultural models of stress (Clark et al., 1999; Harrell, 2000; Slavin et al., 1991) expand on this framework by positing that racial and cultural factors (as well as social political contexts) need to be taken into account when it comes to evaluating the stressful experiences of racial minority groups. In the case of racism, two factors that can influence the stress appraisal process are aspects of an individual's racial identity (Carter, 2005; Sellers et al., 2003) and racial socialization (Reynolds & Gonzales-Becken, 2017).

In addition to being a stressor, racism can also be considered traumatic (Carter, 2007). Traditionally, traumatic events have been conceptualized as events that involve actual or threatened physical harm to oneself or others (American Psychiatric Association, 2013). However, this definition has been criticized as restrictive because it does not capture the full range of stressful experiences that could potentially be considered traumatic (Butts, 2002), such as verbal abuse, poverty, neglect, and racism. Carter (2007) has argued that racism can be a potentially traumatic experience, which he outlines in his model of Race-Based Traumatic Stress.

While traumatic events have the potential to induce negative reactions in the individuals who experience them, these events also have the potential to allow positive transformations to take place. Specifically, posttraumatic growth (PTG; Tedeschi & Calhoun, 1996) is the experience of positive psychological change that could occur in the aftermath of a traumatic event. For PTG to occur, a traumatic event must challenge an individual's core beliefs and propel them to engage in deliberate rumination in order to extract meaning from the event and grow from it (Tedeschi & Calhoun, 2004). In the case of racist events, previous theoretical work (Comas-Díaz, 2007) has suggested that PTG can be an outcome of psychotherapy that is tailored towards promoting healing from racist events. Further, the PTG model posits that sociocultural factors play a crucial role in core belief disruption and rumination (Calhoun et al., 2010). Thus, the purpose of this study was to examine PTG within the context of race-based traumatic events among African American college students. Specifically, this study will examine how race-based traumatic stress symptoms, racial identity, and racial socialization influence core belief disruption, rumination, and PTG.

Definition of Race

Race has been described as a social construction that is used to identify people according to their skin color and other physical features, and to categorize them into distinct racial groups (Carter & Pierterse, 2005). These groups can be divided into two main categories: White and People of Color (POC), which are historically disenfranchised groups (Carter, 2007). POC include Black/African Americans, Asian/Pacific Islanders, Native Americans, and Hispanic/Latino. Omi and Winant (1986) have argued that race is determined not just by skin color, but that it is also shaped by politics and social relationships. Specifically, race is used as a basis for social organization at both micro and macro levels. Historically, racial group rankings

have been used in multiracial societies as a way to unevenly distribute economic and social

resources, resulting in a stratification system that enhances the opportunities of the dominant

racial group and limits those of marginalized racial groups (Carter & Pieterse, 2005; Marger,

2003).

Racism

Racism is a complex construct with various definitions that reflect different perspectives

on racism. For example, Jones (1997) found 18 definitions of racism from scholars across

disciplines, including psychology, sociology, and anthropology. Some definitions characterize

racism as negative attitudes and beliefs towards racial minority groups (Feagin & Vera, 1995),

whereas other definitions emphasize racial in-group membership and group-based self-interests

(Bulhan, 1985; Goldberg, 1990), and others emphasize racism's systemic and structural nature,

as well as its sociocultural context (Carter, 2007; Harrell, 2000; Williams & Williams-Morris,

2000). According to Harrell (2000), racism is:

> A system of dominance, power, and privilege based on racial group designations; rooted
>
> in the historical oppression of a group defined or perceived by dominant group members
>
> as inferior, deviant, or undesirable; and occurring in circumstances where members of the
>
> dominant group create or accept their societal privilege by maintaining structures,
>
> ideology, values, and behavior that have the intent or effect of leaving non-dominant
>
> group members relatively excluded from power, esteem, status, and/or equal access to
>
> societal resources (p.43).

Williams and Williams-Morris (2000) specified that the ranking of one racial group's

worth, relative to that of another group, leads to negative attitudes and beliefs toward the

"inferior" out-group that is deemed inferior. These negative attitudes and beliefs are then used to

justify differential treatment of the out-group at all levels of society, including individual, institutional, and cultural levels (Seaton, 2003). Here, it is important to make a distinction between racism and racial discrimination. According to Clark et al. (1999), racism refers to "beliefs, attitudes, and institutional arrangements that tend to denigrate individuals or groups because of phenotypic characteristics or ethnic group affiliation" (p. 805). Racial discrimination is the enactment of these beliefs, which consists of behaviors and practices that deny equitable treatment to individuals of a certain racial group (Fisher et al., 2000). Carter's (2007) definition of racism captures the connection between racist beliefs and racial discrimination:

> The transformation of racial prejudice into individual racism through the use of power directed against racial groups and their members, who are defined as inferior by individuals, institutional members, and leaders, which is reflected in policy and procedures with the intentional and unintentional support and participation of the entire race and dominant culture (p. 25).

Given that racism is pervasive across society (Seaton, 2003), it is critical to describe it according to the levels at which it occurs. Jones (1972) delineated three forms of racism: individual, institutional, and cultural. Individual racism is the belief in the superiority of one's in-group and the inferiority of outgroups (Carter, 2007), which can lead to discrimination directed towards an individual because of the perceived inferiority of their racial group. At the interpersonal level, this can be manifested through both direct and vicarious experiences of prejudice and discrimination (Harrell, 2000). Institutional (or structural) racism creates a system of social stratification that is reflected in unequal access to and outcomes in social systems, such as in education, health, economics, and politics (Carter, 2007), and it can lead to discrimination as a result of policies embedded in institutions and organizations (Seaton, 2003). Lastly, cultural

racism involves ethnocentrism and maintenance of the status-quo (Harrell, 2000), which includes images of the dominant group's superiority and the minority group's inferiority, as portrayed in different mediums of entertainment, art, and science. Cultural racism can also consist of diminishing and devaluing a minority group's cultural beliefs, values, and traditions (Seaton, 2003). Together, both cultural and institutional racism offer support at a macro-level for the propagation of individual racism in interpersonal contexts (Harrell, 2000).

Consequences of Racism

Previous research has firmly demonstrated that racism can have profound negative impacts on both the physical and mental health of its targets. For example, physical consequences of racism include hypertension (Brondolo et al., 2008; Clark, 2003; Davis et al., 2005; Dolezsar et al., 2014; Lee et al., 2016), elevated C-reactive protein (Lewis et al., 2010; Lucas et al., 2017; Stepanikova et al., 2017), decreased heart rate variability (Hill et al., 2017; Wagner et al., 2015; Williams et al., 2017), sleep difficulties (Dunbar et al., 2017; Fuller et al., 2017; Grandner et al., 2012; Slopen & William, 2014; Thomas et la., 2006), and lipid dysregulation (Mwendwa et al., 2011). Similarly, the impact of racism on mental health includes increased psychological distress (Chao et al., 2014), increased depressive symptoms (English et al., 2014; Kiecolt et al., 2016; Kogan et al., 2015; Mouzon et al., 2017), decreased life satisfaction (Barnes & Lightsey, 2005; Driscoll et al., 2015; Utsey, et al., 2000), and a wide variety of negative emotions, such as frustration, shame, anger, sadness, and anxiousness (Barksdale et al., 2009; Broudy et al., 2007; Carter & Forsyth, 2010; Carter & Reynolds, 2011; Peters, 2006). In addition, the literature on the detrimental health effects of racism is further supported by meta-analytic studies (Carter et al., 2017; Paradies et al., 2015; Pascoe & Richman,

2009; Pieterse et al., 2012; Schmitt et al., 2014) demonstrating that racial discrimination negatively and significantly impacts many aspects of physical and mental health.

Racism As A Stressor

To understand racism as a stressor, it is necessary to first review traditional theories of stress appraisals, as well as theories that take into stress appraisals within the context of racism. These theories include the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984), the Multicultural Model of the Stress Process (Slaving et al., 1991), the Biopsychosocial Model of Racism (Clark et al., 1999), and the Multidimensional Conceptualization of Racism-Related Stress (Harrell, 2000).

Lazarus & Folkman's (1984) Traditional Model of Stress and Coping

Lazarus and Folkman's (1984) Transactional Model of Stress and Coping is a theoretical framework that has been widely used to study the effects of stress. This model emphasizes the role of cognitive appraisal, which is how one assesses a situation to determine whether or not it is a stressor. According to Lazarus and Folkman (1984), there are two types of appraisals: primary and secondary. A primary appraisal occurs when a person evaluates an event as either positive or negative. If the appraisal is negative, then a second appraisal occurs in order to evaluate the resources that an individual has at his or her disposal in order to cope with the stressor. The individual then engages in coping efforts to manage the stressor, which then leads to adaptive or maladaptive outcomes in various domains (social functioning, physical health, etc.). If coping fails, then stress reactions increase. While a stress response is critical for survival (Lazarus & Folkman, 1984), chronic exposure to stressful situations can result in harmful health outcomes in both physical and psychological domains (Taylor, 1999).

Cultural Models of Stress and Racism-Related Stress

A critique of Lazarus and Folkman's (1984) model is that it does not consider culturally relevant aspects of the stress process, or the sociopolitical context in which it unfolds. Pearlin (1989) argued that it is crucial to consider the role of social and cultural structures when it comes to understanding reactions to stress, given that stressful experiences do not occur in a vacuum, but rather within the context of social structures such as race, gender, and socioeconomic status. To address this gap, Slavin et al. (1991) developed the Multicultural Stress Model (MSM), which takes into account the racial, cultural, and social embeddedness of POC's experiences of stressful events. The authors note that one's racial-cultural group membership can influence every aspect of the stress process, including the frequency of potentially stressful events, primary/secondary appraisals, evaluation and selection of coping choices, and the manifestation and expression of adaptational difficulties. When it comes to the occurrence of stressful events, the authors note that members of a minority group will be at increased risk for experiencing stressful events simply for being fewer in number, relative to the dominant group. In terms of the appraisal processes, the authors argue that in addition to regular stress appraisals, POC must also determine on a regular basis whether or not a stressful event is related to one's race (i.e., differentiating between regular life stress events and a racist event), which adds an additional layer of complexity to the traditional appraisal process (Slavin et al., 1991). One's racial group can also influence the evaluation and selection of coping resources; further, one's position in a social hierarchy also determines one's access to resources that can be useful for dealing with stress. And lastly, one's racial group membership can also influence the manifestation and expression of adaptational difficulties.

Two models other models that build on Lazarus and Folkman's (1984) stress and coping framework are Clark et al.'s (1999) Biopsychosocial Model of Racism (BMR) and Harrell's (2000) Multidimensional Conceptualization of Racism-Related Stress (MCRRS). The BMR is a contextual model that aims to better understand the perception and consequences of racism. The principal tenet of this model is that "the perception of an environmental stimulus as racist results in exaggerated psychological and physiological stress responses that are influenced by constitutional factors, sociodemographic factors, psychological and behavioral factors, and coping responses" (p.806). The model further posits that over time, these responses can influence various physical and mental health outcomes.

In the MCRRS, Harrell (2000) defines racism-related stress as "the race-related transactions between individuals or groups and their environment that emerge from the dynamics of racism, and that are perceived to tax or exceed existing individual and collective resources or threaten well-being" (p. 44). The model states that racism-related stress can occur in the following six contexts: life events, vicarious experiences, daily microstressors, chronic contextual stress, collective experiences, and transgenerational trauma (Harrell, 2000). Harrell's (2000) model also takes into account how antecedent variables (person factors, environmental contexts, and racial socialization) influence racism-related stress caused by the six types of events, and how various mediators (internal characteristics, sociocultural variables, and behavioral responses) influence the impact of racism-related stress on health outcomes in various domains (physical, psychological, social, functional, and spiritual).

In sum, by building on Lazarus and Folkman's (1984) stress and coping framework, the MSM (Slavin et al., 1991), BMR (Clark et al., 1999), and MCRRS (Harrell, 2000) highlight the importance of considering race and the effects of racism on the stress process.

Racism as Trauma

Together, the three models (MSM, BMR, MCRRS) discussed above conceptualize

racism as a stressor that can negatively impact psychological and physical health. However, in

addition to racist events being stressors, researchers have also argued that racist events can also

fall within the domain of trauma (Bryant-Davis & Ocampo, 2005; Carter, 2007; Scurfield &

Mackey, 2001). Historically, research on life events stress and research on traumatic stress have

comprised two distinct bodies of literature. This is because the key difference between these two

forms of stress is the level of severity of the event, as well as the type of reactions it induces.

Definition of Trauma

According to the Diagnostic Statistical Manual of Mental Disorders (5th ed; DSM-V;

American Psychiatric Association, 2013), the diagnosis of posttraumatic stress (PTSD) requires

"exposure to actual or threatened death, serious injury, or sexual violence… by directly

experiencing, or witnessing, (the) traumatic event" (p.271). However, some researchers (Butts,

2002; Carlson, 1997; Carter, 2007; Herman, 1992) have argued that the DSM-V's definition of

trauma can be considered restrictive given that it does not capture the full range of stressful life

experiences that can cause traumatic stress reactions, such as experiences without the presence of

threatened or actual physical harm (e.g., emotional and verbal abuse, poverty, neglect). Because

of this limitation, the current psychological and psychiatric diagnostic systems (as they are

presently written) do not recognize racism as a stressor that can produce traumatic reactions by

injuring its targets (Prilleltensky, 1995).

There have been many scholars who have argued that racist incidents are traumatic

events that can potentially induce posttraumatic stress symptoms (Bryant-Davis & Ocampo,

2005; Butts, 2002; Carter, 2007; Comas-Diaz & Jacobsen, 2001; Johnson, 1993). Butts (2002)

notes that for African Americans experience racial discrimination and who subsequently display

PTSD-like symptoms, the severity of these symptoms is often dismissed because the DSM-5

diagnostic criteria are not met (i.e., because the stressor did not involve threatened or actual

physical injury or death). In the case of racism, only physically violent racist acts would meet the

DSM-V criteria of a traumatic event. However, there are indirect and subtle instances of racism

that could still produce traumatic stress reactions (Bryant-Davis & Ocampo, 2005; Carter, 2007),

but these are not recognized under the current definition of trauma in the DSM-5.

Some scholars have offered broader definitions of trauma than that provided by the DSM-

V. For example, Norris (1992) argued that a traumatic event is any type of event that is perceived

by an individual to be shocking enough to produce symptoms of arousal and intrusion, and that

the event itself could involve psychological or emotional threat (and not just physical threat).

Similarly, Carlson's (1997) model of traumatic stress defines a traumatic event as any event that

is negative, sudden, and outside of one's control, and that results in the symptom clusters of

arousal, intrusion, and avoidance. Together, these definitions allow for the inclusion of a wider

range of traumatic events, given that they take into consideration events that are psychologically

and emotionally threatening (and not just physically threatening). Racist encounters can fall

under Carlson's (1997) extended definition of trauma, given that racist encounters and their

resulting consequences can be negative, uncontrollable, and sudden (Carter, 2007). One could

also argue that given that racism has been prevalent in society for centuries, some elements of

racism might be considered constant and in some cases, even predictable (Carter, 2007);

however, despite whatever predictability and constancy of these events may have, they still leave

individuals lacking a sense of control (Carter, 2007).

Carter (2007) argues that historically, the criteria in the various editions of the DSM have not been sufficient for recognizing, assessing, and understanding race-based experiences as potentially traumatic. Moreover, Carter (2007) argues that the mental health standards outlined in the DSM-V are often applied in a universal color-blind manner without taking race into consideration. This approach, whether intentionally or unintentionally, denies the validity of the mental health effects of racism and thus fails to take these effects into consideration, which is done at the detriment to patients of color (Johnson, 1993; Thompson & Neville, 1999). Thus, Carter (2007) and others have argued that race-specific standards are needed in the mental health field, so that the psychological services that are provided are culturally relevant and appropriate for POC, especially as they pertains to assessing and treating race-based stress reactions. To this end, Carter (2007) developed a model of Race-Based Traumatic Stress.

Race-Based Traumatic Stress

The model of Race-Based Traumatic Stress (RBTS; Carter, 2007) is a conceptual framework for understanding the traumatic stress reactions that POC may experience in response to racist events. This framework is not for diagnostic tool for PTSD, but instead conceptualizes RBTS as the product of psychological and emotional injury. Carter (2007) argues that a diagnosis of PTSD would imply that an individual who is a target of racism is somehow mentally disordered. To avoid this implication, Carter (2007) argues that it is more accurate to assess the effects of racism not as a mental health disorder, but as a psychological and emotional injury. The idea of psychological injury recognizes that the causes of racism-related distress are external, situational, and environmental (as opposed to being due to dispositional and individual pathological characteristics). Further, the notion of injury implies that someone who has

experienced racism has had his or her rights violated in some way, thus placing the onus on the perpetrator and not the victim (Carter, 2007).

According to Carter (2007), the racist encounters/events that cause these types of injuries can differ in four distinct ways. First, these events can vary in frequency: they can be sudden and discreet (i.e., a single event), or chronic (i.e., pervasive and prolonged exposure). Second, the form of these events can also vary: they can be intentional or unintentional; overt or covert; ambiguous or unambiguous. Third, the cause of these events can vary: they can be committed by a single person, an institution, or broader societal forces. And fourth, these events can vary in severity, ranging from life-threatening physical assaults to subtle microaggressions.

Regardless of the frequency, form, cause, and severity, all of these events have the potential to be considered traumatic. In line with Carlson's (1997) definition of trauma, Carter (2007) posits that for RBTS to be present, a target must perceive the racist event(s) to be negative (i.e., physically and/or emotionally painful), sudden, and uncontrollable. In addition, a target needs to show elements of the following reactions: intrusion (including flashbacks and nightmares), avoidance (including social withdrawal), and/or arousal (including physiological reactions and hypervigilance). Reactions can also be manifested in the forms of depression, anxiety, anger, shame, guilt, and difficulty concentrating.

Racial Identity

Brief History of Racial Identity Research

In order to further understand RBTS and its impacts, it is critical to take into consideration the concept of racial identity. Historically, there have been two approaches to studying racial identity (Gaines & Reed, 1994): the "mainstream" approach and the "underground" approach. The "mainstream" approach focuses on universal properties of racial

identities by delineating the common, underlying cognitive processes and structures of identity

across different racial groups (Cheek & Briggs, 1982; Gurin & Markus, 1988; Hogg, 1992;

Phinney, 1989, 1990; Turner & Oakes, 1989). By emphasizing the similarities across racial

groups, researchers have been able to develop and apply measures of identity that are applicable

to members of a variety of racial groups (Luhtanen & Crocker, 1992; Phinney, 1992). In terms of

African American racial identity specifically, the mainstream approach views it within the

context of its stigmatized status in U.S. culture (Clark & Clark, 1939; Cross, 1991; Kardiner &

Ovesey, 1951).

Unlike the general focus of the mainstream approach, the "underground" approach

emphasizes the specificity and uniqueness of a racial identity. In the case of the African

American racial identity, the underground approach focuses on the qualitative meaning of being

African American, with an emphasis on the historical and cultural factors associated with the

unique experiences of this group (Ajani ya Azibo, 1991; Baldwin, 1984; Cross, 1971; Kambon,

1992; Smith, 1991). Within the underground perspective, one of the most widely used models of

African American racial identity is Cross's (1971, 1991) Model of Nigrescence. This model

describes five stages that African Americans go through as they develop their racial identity.

First, the pre-encounter stage, in which one is unaware of his/her race and thus does not view it

as an important part of his/her identity (this stage can also include an idealization of the

dominant White society). Second, the encounter stage, which is an awakening to racial

consciousness. In this stage, individuals are faced with an experience or series of events that are

linked to race and that cause individuals to examine their own identities (these experiences can

be either positive or negative). Third, the immersion/emersion stage, where individuals become

more involved with members of their own racial group to the exclusion of those from other

groups (this stage is characterized by pro-Black and anti-White ideals). Fourth, the internalization stage, where individuals experiences a feeling of inner security about being Black., In this stage, a less idealized view of race coalesces and individuals are able to forge relationships with out-group members. And fifth, the internalization-commitment stage, which consists of the translation of internalized identities into actions that promote social equality and justice for their group members.

In summary, while the mainstream approach focuses on the common processes and structures across racial identities, the underground approach focuses on the cultural and historical influences on the qualitative experience of a specific racial group, which allows for the understanding of individual differences in the level of identification with a specific racial group. Sellers et al. (1998) have argued that these two approaches are not opposite, but rather complementary. Thus, these authors integrated the two approaches to offer a more comprehensive conceptualization of African American racial identity, and the final product of this integration is the Multidimensional Mode of Racial Identity (MMRI).

The Multidimensional Model of Racial Identity (MMRI)

The Multidimensional Model of Racial Identity (MMRI; Sellers et al., 1998) is a conceptual framework for studying the significance and manifestation of African American racial identity. This model defines racial identity as "the significance and qualitative meaning that individuals attribute to being Black in their conceptualization of self" (p. 1080; Sellers & Shelton, 2003). This definition of race takes into consideration a) how important race is in an individual's self-perception and b) what it means to be a member of a particular racial group (Sellers et al., 1998).

The MMRI has four assumptions. First, it posits that racial identity consists of stable properties that can be situationally and dynamically influenced by contextual cues. Thus, stable characteristics of racial identity may differentially influence behavior depending on specific events. The second assumption is that racial identity is only one of many identities that are hierarchically ordered within an individual (Markus & Sentis, 1982; McCall & Serpe, 1982; Stryker & Serpe, 1982); thus, the relative importance that individuals ascribe to race, relative to their other identities, has important implications for what it means to them to be African American. The third assumption is that the most valid indicator of racial identity is an individual's own subjective perception of his/her own self-concept (thus, the MMRI values self-report of racial identity over behavioral indicators of identity). And lastly, the fourth assumption is that the emphasis should be on the nature and significance of an individual's racial identity at a given point in time, as opposed to placing individuals at a particular stage of a developmental sequence. By having the focus be on specific points in time, the MMRI recognizes that the focus and importance that an individual places on race may vary across the lifespan. This approach, in turn, makes the MMRI unique and differentiates it from other developmental models of racial identity.

The MMRI describes four different dimensions of racial identity: racial salience, racial centrality, racial regard, and racial ideology. Racial salience refers to the extent to which one's race is an important part of one's self-concept in a particular situation (Sellers et al., 1998). As such, racial salience is a process variable that allows one to study racial identity at the level of specific events. Further, the model proposal that racial salience is a mechanism by which racial identity influences an individual's situational appraisal and behaviors at a specific point in time

and context. Thus, this dimension allows for the recognition that racial salience can vary not just across individuals, but also within individuals and across situations (Gurin & Markus, 1988).

The dimension of racial centrality refers to the extent to which individuals define themselves with regard to their own race. While racial salience varies across situations, racial centrality remains relatively stable across situations. However, racial centrality can vary across individuals, given that there are individual differences in the degree of importance that a person assigns to their racial identity (Sellers et al., 1998).

The dimension of racial regard consists of a person's evaluative judgment of his or her race in terms of valence (Sellers et al., 1998). In other words, this dimension consists of the extent to which an individual feels positively or negatively about their own race. This dimension has two components: private regard and public regard. Private regard refers to the extent to which an individual feels positively or negatively towards African Americans, as well as how they feel in terms of their own membership within this racial group. Public regard refers to how an individual thinks that members of other racial groups view African Americans (whether it be positively or negatively). This type of regard plays a key role in the way in which African Americans identify with their own group. For example, it is recognized that if the broader society devalues one's racial group, then this could increase the likelihood that individuals of that racial group will have a negative self-evaluation (Kardiner & Ovesey, 1951; Luthanen & Crocker, 1992).

The dimension of racial ideology consists of an individual's beliefs, opinions, and attitudes about the ways that African Americans should behave and interact with society. This dimension consists of four types of ideologies: nationalist, assimilation, minority, and humanist. A nationalist ideology stresses the uniqueness of being African American and posits that African

Americans should be in charge of their own destiny. Someone with a strong nationalist ideology

is more likely to participate in African American organizations that advocate for social justice

and equality. An oppressed minority ideology emphasizes the similarities between African

Americans and other minority groups. Someone with a strong minority ideology is likely to view

coalitions across minority group as a key ingredient for social change. An assimilation ideology

emphasizes the similarities between African Americans and mainstream American society. This

ideology does not diminish the experience of being African American, nor does it deny the

existence of racism; someone with a strong assimilation ideology strives to achieve social change

by working within the system and engaging in social interactions with Whites. Lastly, a humanist

ideology emphasizes the commonalities that all humans share, and does not think in terms of

different categories such as race, gender, age, or class. Instead, they are more likely to emphasize

the characteristics an individual person, while de-emphasizing their race (Sellers et al., 1998).

It is important to note that the MMRI does not consider one ideology to be superior to

another, nor does it consider racial identity to consists of just one dimension. Instead, the model

presents different ways in which racial identity may be manifested.

Racial Identity, Perceived Discrimination, and Distress

Racial identity has been consistently and significantly associated with the psychological

functioning of African Americans (Azibo, 1983; Baldwin, 1984; Cross et al., 1998; Sellers et al.,

2003; Sellers et al., 2006). In addition, research has extensively demonstrated that an individual's

racial identity can affect their perception and experiences of racism (Carter, 2005; Sellers et al.,

2003), which then further affects psychological functioning. Recall that one's racial identity can

help individuals make sense of and respond to their unique experiences as members of a

particular racial group (Cross & Strauss, 1998; Helms, 1990). Thus, racial identity influences

individuals they determine whether an action is directed towards them as an individual, or as the member of a particular racial group (Cross, 2005).

However, the research on how racial identity influences perceived racism and subsequent psychological distress has been mixed (Brondolo et al., 2009), with empirical studies demonstrating that different facets of racial identity can be both a risk factor for, and a protective factor against, the negative effects of racism. On one hand, studies have shown that greater racial centrality is positively associated with subsequent perceived racial discrimination (Sellers and Shelton, 2003; Sellers et al., 2003), thus suggesting that racial centrality can make individuals more vigilant and sensitive towards experiences of discrimination. Similarly, Sellers, Copeland-Linder, Martin, and Lewis (2006) found that low public regard (i.e., believing that other groups have more negative attitudes toward African Americans) was also associated with greater perceived discrimination, which makes intuitive sense.

While these studies suggest that racial identity can heighten the perception of discrimination, it has also been posited that racial identity can serve as a coping mechanism for managing race-based stress (Brondolo et al., 2009). Specifically, researchers have posited that aspects of racial identity can protect targeted individuals from distress or injuries to self-esteem when they are exposed to racial discrimination (Anderson, 1991; Cross et al., 1998; Sellers & Shelton, 2003; Terrell & Taylor, 1998). For example, Sellers et al. (2003) found a direct relationship between greater racial centrality and lower psychological distress. In addition, the authors also found that racial centrality moderated the relationship between perceived discrimination and psychological distress. For individuals with high racial centrality, greater experiences with discrimination were not related to higher levels of distress; however, greater experiences with discrimination were related to higher levels of distress for individuals with low

racial centrality. The authors posited that this moderating effect suggests that racial centrality can serve as a protective factor against the negative psychological effects of discrimination.

Similarly, Sellers and Shelton (2003) found that racial ideology buffered the relationship between perceived discrimination and subsequent distress: specifically, they found that individuals with a greater nationalist ideology (i.e., emphasizing the uniqueness of the African American experience) experienced less distress under higher levels of perceived discrimination. Similarly, studies have also shown that individuals with low public regard experience less stress under high levels of perceived discrimination (Sellers and Shelton, 2003; Sellers et al., 2003). In terms of low public regard, these authors explained that if one believes that other racial groups view African Americans negatively, then one is more likely to expect to experience discrimination. Further, if one is expecting a certain event to occur, then it is more likely that the event will be experienced as less stressful (Lazarus & Folkman, 1984).

In sum, previous studies on racial identity have shown that greater racial centrality and low public regard can increase perceptions of discrimination. However, studies have also shown that greater racial centrality, low public regard, and high nationalist ideology can buffer the relationship between perceived discrimination and subsequent psychological distress. Together, these findings suggest that different dimensions of racial identity can simultaneously heighten perceptions of discrimination, and also buffer the negative effects of discrimination on mental health. However, it should be noted that these studies examined "daily racial hassles" and microaggressions (Sellers and Shelton, 2003; Sellers et al., 2003) and that findings may be different within the context of more extreme racist events. In fact, researchers have cautioned that some racist events may be so intense that no dimensions of racial identity may effectively protect individuals from the negative impacts of these events (Sellers et al., 2003).

Racial Socialization

Prior to the development of racial identity, the process of racial socialization takes place. Hughes (2003) states that racial socialization consists of "the transmission of parents' world views about race and ethnicity to children by way of subtle, overt, deliberate, and unintended mechanisms" (p. 15). Through this process, parents teach children about the meaning and significance of their own race and also prepare them to cope with racial discrimination (Hughes, 2003; Hughes et al., 2006). Specifically, there are two types of messages that African American parents convey to their children via racial socialization: racial pride messages and preparation for bias messages (Neblett et al., 2009). Racial pride messages instill positive feelings towards the racial group by teaching about heritage and emphasizing unity (Neblett et al., 2009). Preparedness for bias messages create awareness of racial inequalities and prepare children to cope with racial discrimination (Neblett et al., 2009).

Racial Socialization as a Precursor to Racial Identity

Scholars have theorized that racial socialization is a process that shapes racial identity (Coard & Sellers, 2005; Demo & Hughes 1990; Hughes et al., 2006; Thornton et al., 1990), which is an idea that has been supported by empirical studies (Bennet, 2006; Branch & Newcombe, 1986). For example, in a longitudinal study, Neblett et al. (2013) found that greater racial pride messages lead to more positive private regard racial attitudes, which in turn results in fewer depressive symptoms. Similarly, Neblett et al. (2009) found that high levels of racial socialization (consisting of high racial pride messages and preparedness for bias messages) can lead African American youth to integrate race as a core part of their identity, resulting in greater racial centrality. In addition, individuals with high racial socialization also had decreased assimilationist ideology and increased nationalist ideology (i.e., they were more likely to possess

attitudes that emphasize the uniqueness of being African American). Together, these studies

suggest that racial socialization can have differential impacts on dimensions of racial identity.

Racial Socialization and Perceptions of Racism

The process of racial socialization in an individual's childhood can affect how they

perceive and react to racism later in life. This, in turn, can have a variety of consequences on

mental health. For example, Harris-Britt et al. (2007) found that racial socialization moderated

the relationship between discrimination and self-esteem among African American youth.

Specifically, they found that the effect of discrimination on self-esteem was mitigated for youth

who received a high amount of racial pride messages and a moderate amount of preparation for

bias messages. In contrast, the effect of discrimination on self-esteem was greater for youth who

received low racial pride messages, and both low and high preparation for bias messages.

A recent review by Reynolds and Gonzales-Becken (2017) concluded that racial

socialization can serve as an important protective factor that can buffer the relationship between

discrimination and negative outcomes. For example, Fischer and Shaw (1999) found that greater

discrimination was associated with poorer mental health among college students who reported

receiving a low level of preparation for bias messages; however, this relationship was mitigated

among college students who reported receiving a high level of preparation for bias messages. A

study by Bynum et al. (2007) has replicated similar results.

Posttraumatic Growth

Traumatic events (whether they be racially-motivated or not) have the potential to induce

adverse reactions and contribute to the development of substance abuse disorders, depression,

and/or PTSD (Hidalgo & Davidson, 2000). However, these events also have the potential to

cause constructive reactions that allow for positive transformations to take place. The idea of

growth and transformation following adversity has been present throughout history, but the systematic and scientific study of this phenomenon is a relatively new endeavor. Contemporary inquiry into this topic has resulted in the developmental of an empirical definition and model of posttraumatic growth (Calhoun & Tedeschi, 2004; Tedeschi & Calhoun, 1996). Posttraumatic growth (PTG) is defined as "positive psychological change experienced as a result of the struggle with highly challenging life circumstances" (Tedeschi & Calhoun, 2004, p. 1). PTG can be experienced across five domains: Personal Strength (i.e., the recognition of one's ability to handle whatever happens in life), Appreciation for Life, (i.e., changed priorities and increased sense in the value of one's life), New Possibilities (i.e., recognizing new opportunities and paths for one's life), Relating to Others (i.e., closer and more meaningful interpersonal relationships), and Spiritual Change (i.e., a stronger faith or increased spiritual understanding; Tedeschi & Calhoun, 2004).

For PTG to occur, the seismic nature of a traumatic event must be strong enough to disrupt an individual's core beliefs. The metaphor of an earthquake is often employed to explain this process (Tedeschi & Calhoun, 2004). A traumatic event can be psychologically seismic, whereby it shakes and potentially shatters an individual's core beliefs, which consist of fundamental beliefs about oneself, others, and the world (Janoff-Bulman, 1992). These beliefs are schematic structures the help individuals navigate and understand the world they live in (Tedeschi & Calhoun, 2004). When these beliefs are shaken or disrupted by a traumatic event, an individual is forced to re-examine and potentially rebuild them. The more central an event is to one's identity and the more "seismic" the event is, the more an individual is likely to question their fundamental assumptions regarding their own identity and safety, as well as their assumptions about the predictability and controllability of the world (Janoff-Bulman, 1992;

Tedeschi & Calhoun, 2004). During this questioning process, individuals can begin to rebuild their disrupted core beliefs. The psychological rebuilding of core beliefs is comparable to the physical rebuilding that occurs after an earthquake, and it is during this process that growth has the potential of occurring. Thus, higher disruption to core beliefs is thought to increase the potential for experiencing PTG (Cann et al., 2010; Tedeschi & Calhoun, 2004).

The rebuilding of core beliefs is facilitated by the process of rumination. Historically, the term rumination has had a negative connotation, due largely to its associations with various forms of clinical psychopathology, such as depression. In these contexts, rumination consists of excessive negative thinking or worry that impacts a person's functioning in various domains. Within the context of PTG, rumination refers to repetitive thinking about the traumatic event and its impact. This type of thinking consists of two distinct styles: intrusive rumination and deliberate rumination. Intrusive rumination consists of repetitive event-related thoughts that enter an individual's consciousness unexpectedly and without intent (Cann et al., 2011). On the other hand, deliberate rumination consists of event-related thoughts that are the product of purposeful reflection whereby an individual tries to understand or make sense of the traumatic event (Cann et al., 2011).

The PTG Model posits that following a disruption to core beliefs, both intrusive and deliberate rumination play distinct roles in the process of growth. Prior research has demonstrated that intrusive event-related rumination is positively associated with distress and a failure to cope (Cann et al., 2011), which is partly due to the invasive nature and uncontrollability of this type of repetitive thinking. On the other hand, deliberate event-related rumination has been positively associated with PTG and helps facilitate well-being in the aftermath of trauma (Cann et al., 2011), given that this type of purposeful thinking allows

individuals to reflect about the event in a constructive and meaningful way. Interestingly, higher

levels of intrusive rumination can predict higher levels of deliberate rumination (Cann et al.,

2011; Hanley et al., 2017). The PTG model posits that as individuals transition from intrusive to

more deliberate forms of rumination, they are better able to achieve growth. Specifically,

deliberate rumination may help transform intrusive thoughts into opportunities for meaningful

reflection, which can then give rise to growth.

Previous Empirical and Theoretical Work on PTG and Racism

Given that racist and discriminatory events can potentially be traumatic (Carter, 2007),

these events may disrupt individuals' core beliefs, thereby serving as a potential catalyst for

PTG. To this writer's knowledge, thus far there has only been one empirical study that has

examined PTG within the context of racist events. For her dissertation, Backstrom-Sieh (2013)

examined PTG in an African American college student sample. Participants were randomly

assigned to report on either the most traumatic racist event of their life, or the most traumatic

non-racist event of their life. Results showed that the racism-related stress group did not report as

much PTG or PTS symptoms as the non-racism-related stress group. When explaining these

results, Backstorm-Sieh (2013) theorized that racial socialization and positive support systems

may mitigate the negative effects of racism (however, those constructs were not measured in the

study). Recall that racial socialization is a process that includes preparing African American

youth for the experience of racism, assuring them that they are not to blame for its occurrence,

and informing them that this is a shared experience among African Americans (Burt et al., 2012).

This preparation then serves to mitigate the effects of racism. Backstrom-Sieh (2013) also notes

that the racial socialization process also teaches African American youth to conceal their anger

and frustration in response to racism as a way to avoid negative consequences, such as

incarceration or job loss (Brondolo et al., 2009). Therefore, it is possible that participants may have under-reported any posttraumatic stress symptoms that result from racist events. Backstrom-Sieh (2013) also noted that it is necessary to further investigate how the continuous nature of racism impacts the expression of PTG and PTS symptoms, as opposed to one single event. It should be noted that this study did not assess if race-based traumatic events caused a disruption to core beliefs, nor did it assess if either type of rumination (intrusive or deliberate) occurred in response to these events. It also did not directly measure dimensions of racial socialization.

There have also been empirical studies on PTG that have examined racial differences in PTG within the context of non-racist traumatic events. For example, previous studies have shown that nonwhite adolescent and young adult survivors of childhood cancer experience significantly greater PTG than White survivors (Bellizzi et al., 2009; Klosky et al., 2014; Zebrack et al., 2012; Yi et al., 2015). Similarly, greater PTG has been observed among racial/ethnic minorities, relative to Whites, who were victims of sexual assault (Ullman, 2014). Some researchers (Yi et al., 2015) have theorized that minority and underprivileged status may be related to unique responses to trauma that facilitate PTG. However, they also note that this idea requires further empirical examination.

Lastly, there is one theoretical model of clinical therapy that has incorporated PTG into its framework for racial trauma recovery. Comas-Díaz (2007) developed an ethnopolitical approach for treating RBTS that aims to decolonize POC, promote personal transformation, and develop critical consciousness. In addition, an explicit goal in this approach is to assist racial trauma survivors to develop PTG.

This approach consists of five phases: assessment, desensitization, reprocessing, decolonization, and social action (Comas-Díaz (2007). In the assessment phase, clients are empowered to voice their reality and share their stories in a safe holding environment, where the therapist also assesses the intensity of RBTS symptoms and the centrality of the racist event(s). The desensitization phase consists of teaching self-regulation skills for traumatic reactions, such as progressive muscle relaxation, body scans, and guided imagery. The reprocessing stage consists of an exploration of clients' racial socialization and cultural pride, as well as an enhancement of their awareness regarding oppressive forces and structural inequalities in society. This stage ultimately involves meaning-making processes that foster a critical analysis of racism. The decolonization stage assumes that racism is a form of colonization, whereby oppressors assign a mentality of inferiority and subordination to the oppressed. This stage challenges the colonized mentality, in part, by fostering resilient responses to racism and awakening a critical consciousness. This allows individuals to recognize and validate different narratives of transformation, and moves them from a position of powerlessness, to one of empowerment. It is in this stage that Comas-Díaz (2007) posits that PTG can occur. Lastly, the social action stage is where trauma survivors find healing by engaging in social action, such as advocacy, community involvement, giving testimonies, and consulting with social change agencies. It should be noted that while this approach for clinical treatment of race-based trauma makes theoretical sense, it has not been supported empirically with baseline and outcome measures, such as a quantitative measure of PTG.

The five phases described by Comas-Díaz (2007) also match with the five elements of PTG described by Tedeschi & McNally (2011), which are: a) understanding trauma responses as precursors to PTG, b) developing emotion regulation, c) constructive self-disclosure, d) creating

a trauma narrative that integrates the five domains of PTG, and e) developing life principles that are strong even against life's challenges. Both of these models empower survivors to utilize self-disclosure to voice their stories, employ emotion regulation skills to manage their traumatic reactions, reprocess the trauma to create a coherent narrative, and develop resilient responses for future challenges.

The Present Study

The purpose of the current study was to examine PTG within the context of race-based traumatic events among African Americans. Given the influence of cultural and sociopolitical factors in stress appraisals (Harell, 2000; Slavin et al., 1991) and that racist events have the potential to be traumatic in nature (Carter, 2007), it is critical to examine whether PTG occurs within this context. Further, the PTG model also states that sociocultural factors play an important role in rumination processes and core belief disruption (Calhoun et al., 2010). Therefore, it is important to examine how aspects of racial identity and socialization influence the perception of racist traumatic events.

Previous research has also demonstrated that race-related stress can have a greater negative impact on psychological functioning than general stressful life events (Utsey et al., 2008). Further, reactions to race-based traumatic events can be qualitatively different from those in response to nonracially-based traumatic events (Craig-Henderson & Sloan, 2003). Therefore, it is important to examine if the PTG that emerges from race-based traumatic stress is somehow qualitatively different from the PTG that emerges from "traditional" traumatic events as defined in the DSM-V. However, it is also possible that PTG may only emerge from race-based traumatic events that overlap with "traditional" traumatic events (i.e., a racially-motivated physical or sexual assault), and this possibility also warrants investigation.

In addition, as highlighted by Brondolo et al. (2009), it is important to investigate factors that mitigate the negative effects associated with racial discrimination, and it is possible that PTG may be one such factor. Previous research has demonstrated that PTG in other contexts is associated with positive outcomes such as increased life satisfaction (Triplett et al., 2012), psychological preparedness (Janoff-Bulman, 2004), self-efficacy (Mystakidou et al., 2015), and altruism (Tsai et al., 2016). PTG has also been associated decreased negative effects of trauma, such as decreased posttraumatic distress (Groleau et al., 2012) and lower risk for developing suicidal ideation (Bush et al., 2011). Therefore, it is also possible that if PTG emerges from race-based events, it might also be associated with other positive outcomes. However, before exploring this possibility, it is critical to first examine whether PTG can occur from these events, which is one of the questions that this study seeks to examine.

Lastly, this study will focus on African American college students for three reasons. First, research has suggested that Black Americans in the U.S. experience racial discrimination in its various forms at more frequent levels than do other POC (Hausmann et al., 2008; Pieterse et al., 2010). Second, the majority of prior work on race-related stress has focused on African Americans (Carter, 2007); thus, this is a larger literature base to draw from in order to inform the development of the present study. Third, previous research has demonstrated that African American college students do experience racism and that these experiences can cause various forms of psychological distress (Bynum et al., 2007; Henson et al., 2013; Johnson & Ardona, 2006; Pearson et al., 2014). Thus, African American college students are an appropriate sample for the purposes of the present study.

It should be noted that while it is important to study the ways in which people cope with and potentially grow from racism, this research does not intend to communicate the idea that the

burden should be placed on the targets of racism. The elimination of racism at all levels of society should continue to be a priority, especially when it comes to the development and implementation of institutional and governmental policies that address systemic racism. In addition, members of the dominant racial group should continue to develop awareness of their own biases, evaluate their White privilege, and actively work towards dismantling oppressive systems at institutional levels (Neville et al., 2012). While these efforts should continue to be a priority, it is also nonetheless necessary to examine ways in which people can cope with the racism that already exists (Brondolo et al., 2009).

Although PTG has been incorporated into theoretical models of therapeutic treatment for the healing of racial trauma (Comas-Dias, 2007), no empirical studies to date have examined how processes involved in PTG (i.e., core belief disruption and rumination) might arise from racial trauma. It is possible that PTG may assist with racial healing in therapeutic contexts, mitigate negative effects of racism, and produce other unexpected positive outcomes. However, before these possibilities can be explored, it is necessary to first explore whether PTG is occurring in the first place, and if it is occurring, it is critical to examine what factors might influence it. Thus, the research questions and hypotheses for this study are the following:

1) Does PTG occur from race-based traumatic events?

H1: Given that race-based stressful events can produce traumatic reactions (Carter, 2007) and that PTG can result from highly stressful events (Tedeschi & Calhoun, 1996), it is hypothesized that PTG does occur from race-based stressful events.

2) Does growth vary as depending on the amount of RBTS symptoms?

H2: Consistent with the idea that greater distress creates greater potential for the development of PTG (Tedeschi & Calhoun, 2004), it is hypothesized that greater RBTS symptoms will lead to greater PTG.

3) Do race-based traumatic events cause disruption to core beliefs?

H3: If a stressful event is expected to occur, then it will be perceived as less stressful (Lazarus & Folkman, 1984). Accordingly, if individuals expect racist events to occur and if they believe that African Americans are viewed negatively by other racial groups (i.e., low public regard), then these individuals will experience less stress when they encounter these events (Sellers & Shelton, 2003). Thus, it is hypothesized that high preparedness for bias and low public regard will result in low core belief disruption. Conversely, low preparedness for bias and high public regard will lead to greater core belief disruption.

4) Do race-based traumatic events cause individuals to engage in intrusive rumination?

H4: Given that race-based stressful events have the potential to cause intrusive thoughts (Carter, 2007), it is hypothesized that greater RBTS symptoms will increase intrusive rumination.

5) Do racist events cause individuals to engage in deliberate rumination?

H5: According to the PTG Model, cultural and societal themes can influence ruminative processes (Calhoun et al., 2010). Variables that highlight the uniqueness of the African American experience in a positive way might encourage individuals to make sense out of racist experience. Thus, it is hypothesized that greater racial centrality, private regard, nationalist ideology, and pride messages will promote greater deliberate rumination about the racist event.

Figure 1

Conceptual Representation of the Hypothesized Relationships Among Focal Variables
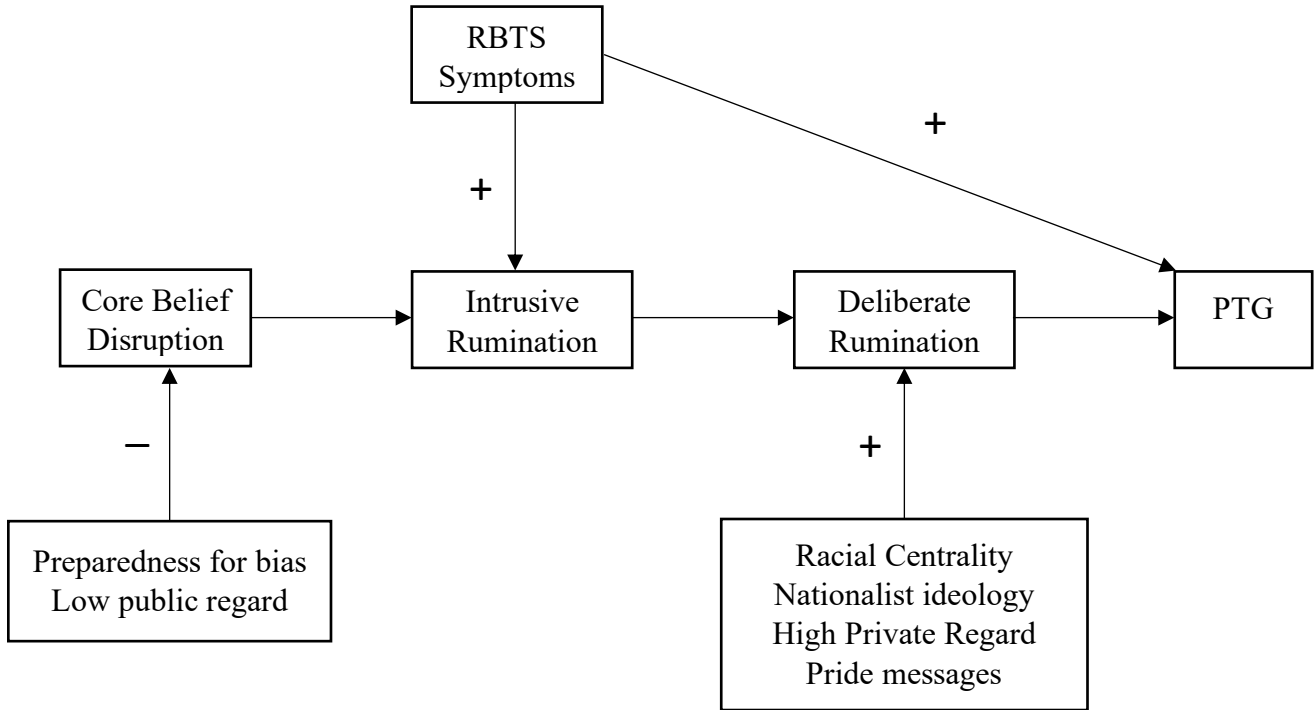
Chapter 2: Method

Procedure

After receiving approval from the University Review Board, a description of this study was posted on SONA, which is the online subject pool of the Department of Psychology at University of North Carolina-Charlotte (UNCC). SONA is a secure online research platform that allows undergraduate students taking psychology courses to participate in research studies in exchange for course credits. At the beginning of each semester, all students enrolled in SONA complete a series of screening questionnaires that let students know which studies they are eligible for. Participants who met the criteria of this study and were interested in participating clicked on the survey link for this study, which redirected them to Qualtrics. Participants were presented with a consent form and if they agreed to participate (via electronic signature), they then proceeded to the survey. The survey took approximately 30 minutes to complete, and participants were awarded their research credits upon completion of the survey.

Participants

SONA Sample

Participants (N=175) were recruited through SONA, which is the online subject pool of the Department of Psychology at University of North Carolina-Charlotte (UNCC). SONA is a secure online research platform that allows undergraduate students taking psychology courses to participate in research studies in exchange for course credits. A description of this study was posted in SONA, and eligible participants who were interested took the survey. To be eligible for this study, participants had to be current undergraduate students at UNCC, active participants of SONA, at least 18 years of age, fluent in English, identify as African American, and they must have experienced an event where they were treated negatively because of their race.

UNCC Sample

Participants were also recruited through the wider UNCC community, outside of the

Department of Psychology. A recruitment email was sent out through the office of Research and

Economic Development to undergraduate students at UNCC who identified as Black or African

American. The email contained a description of the study, as well as a link to the survey.

Participants who were interested clicked on the link, and those who met criteria were allowed to

take the survey. Subjects had to be currently enrolled undergraduate students at UNCC, at least

18 years of age, fluent in English, identify as African American, and they must have experienced

an event where they were treated negatively because of their race. Participants who had already

taken the survey through the SONA platform were not allowed to participate through this

recruitment method. Participants who completed the survey had the option of entering a

randomized drawing of 25 $20 Target gift cards in exchange for their participation. The gift

cards were emailed to randomly selected participants after data collection was complete.

Measures

Screening questionnaire

This questionnaire assessed whether participants were at least 18 years of age, African

American, and if they have ever been treated differently because of their race.

Demographics

Participants were asked to indicate their age, gender, education level, marital status, and

household income.

Racist Events

To assess racist events, a list was compiled using items from the Schedule of Racist

Events (SRE; Landrine & Klonoff, 1996) and the Inventory of Microaggressions against Black

Individuals (IMABI; Mercer et al., 2011). At least two faculty members (including a committee member) were consulted to ensure that the final list covered a wide range of racist events. For each item, participants indicated how often they had experienced that event during the past year, as well as during their life, using a scale ranging from 1 (*This has never happened to me*) to 6 (*This has happened to me almost all of the time*). For each item, participants also indicated how stressful this event was for them, using a scale ranging from 1 (*Not at all*) to 6 (*Extremely*).

Most Stressful Racist Event

From the list of Racist Events, participants were asked to indicate which one was the most stressful to them and when it occurred. They were also asked to provide a detailed description of this event. Participants were then asked to reflect on this event as they completed the Posttraumatic Growth Inventory X, Core Belief Disruption Inventory, Event-Related Rumination Inventory, and Race-Based Traumatic Stress Symptom Scale.

Posttraumatic Growth (PTG)

PTG was measured with the Posttraumatic Growth Inventory X (PTGI-X; Tedeschi et al., 2017). This is a 25-item scale that measures the extent to which individuals report positive change in the aftermath of a traumatic event. Participants were asked to answer the PTGI-X as they reflected on the most stressful race-based event that they have experienced. The items asses the degree to which individuals experience PTG in the following five domains: personal strength ("I have a greater feeling of self-reliance"), appreciation of life ("I have a greater appreciation for the value of my own life"), new possibilities ("New opportunities are available which wouldn't have been otherwise"), relating to others ("I have a greater sense of closeness with others"), and spiritual change ("I have a better understanding of spiritual matters"). The PTGI-X utilizes a 6-point Likert scale, with scores ranging from 0 (*I did not experience this change as a result of the*

event) to 5 (*I experienced this change to a very great degree as a result of the event*).

Intermediate scores consist of self-reported growth that occurred to a very small degree (1), a

small degree (2), a moderate degree (3), and a great degree (4). The PTGI-X has demonstrated

satisfactory internal reliability across samples from the United States, Japan, and Turkey

(Cronbach's α = .95-.97). The scale had good internal reliability in this sample (Cronbach's α =

.97).

Core Belief Disruption

Core belief disruption was measured with the Core Beliefs Inventory (CBI; Cann et al.,

2010). The CBI is a 9-item measure that assesses the degree to which a specific traumatic event

has disrupted an individual's beliefs about oneself, other people, and the world. The CBI uses 6-

point Likert scale, with scores ranging from 0 (*Not at all*) to 5 (*To a very great degree*). It

includes statements such as "Because of the event, I seriously examined my beliefs about the

meaning of my life" and "Because of the event, I seriously examined my beliefs about my own

value or worth as a person." Participants were asked to reflect on the most stressful race-based

event that they have experienced as they completed the CBI (this is the same event that they

reflected on when answering the PTGI-X). This measure had good internal reliability

(Cronbach's α = .86) in this sample.

Rumination

Deliberate and intrusive rumination in response to race-related events were measured

with the Event-Related Rumination Inventory (ERRI; Cann et al., 2011). The ERRI is a 20-item

measure that assesses the degree of repetitive thinking about highly stressful event. Specifically,

10 of the items examine intrusive thoughts related to the event, and the other 10 items examine

deliberate (or intentional) thinking about the event. The ERRI uses a 4-point scale, with scores

ranging from 0 (*Not at all*) to 3 (*Often*). It includes statements such as "I thought about the event when I did not mean to" (intrusive rumination) and "I forced myself to think about my feelings about my experience" (deliberate rumination). Just as with the PTGI-X and CBI, participants were asked to complete the ERRI as they reflected on the most stressful race-based event that they have experienced. In this sample, the ERRI has good internal reliability for both intrusive (Cronbach's α = .95) and deliberate (Cronbach's α = .92) items.

Race-Based Traumatic Stress

Race-based traumatic stress was measured with the Race-Based Traumatic Stress Symptom Scale (RBTSSS; Carter et al., 2018). Participants were asked to reflect on the racist event that they indicated as most stressful for them (the same one that they used to answer the PTGI-X, CBI, and ERRI). They were then asked to indicate how frequently they experienced race-based traumatic stress symptoms as a result of that event, using a scale ranging from 0 (*does not describe my reaction*) to 4 (*this reaction would not go away*). The questionnaire consists of 52 items divided into seven subscales: depression (e.g., "I couldn't experience any positive feelings at all;" Cronbach's α = .90), intrusion (e.g., "I feel emotionally upset when I am reminded of the event"), anger (e.g., "I became easily pissed off;" Cronbach's α = .88), hypervigilance ("I feel paranoid;" Cronbach's α = .89), physical reactions ("I feel as though my heart is beating hard and fast"; Cronbach's α = .91), low self-esteem (e.g., "I think I am no good at all;" Cronbach's α = .86), and avoidance (e.g., ("I often find myself denying that the event occurred;" Cronbach's α = .84). An overall sum score was computed for the analyses, such that higher scores indicate higher traumatic stress symptoms. The total scale had good internal reliability in this sample (Cronbach's α = .96).

Racial Identity

Racial identity was assessed with the Multidimensional Inventory of Black Identity (MIBI; Sellers et al., 1997). The MMBI is a 56-item inventory that assess three stable dimensions of racial identity (Centrality, Ideology, and Regard) as delineated in the MMRI for African Americans (Sellers et al., 1998). Items are rated on a 7-point scaled ranging from 1 (*strongly disagree)* to 7 (*strongly agree*). The Centrality scale consists of eight items measuring the extent to which individuals define themselves with regard to their own race (e.g., "Being Black is important to my self-image;" Cronbach's α = .81). The Regard scale consists of two subscales, Private Regard and Public Regard. The Private Regard subscale consists of six items measuring the extent to which individuals have positive feelings toward African Americans (e.g., "I feel good about Black people;" Cronbach's α = .88). The Public Regard subscales consists of six items that measuring the extent to which individuals think that other racial groups have positive feelings toward African Americans (e.g., "Overall, Blacks are considered good by others; Cronbach's α = .73). The Nationalist Ideology scale consists nine items measuring the extent to which individuals emphasize the uniqueness of being African American (e.g., "It is important for Black people to surround their children with Black art, music and literature.;" Cronbach's α = .80).

Preparedness For Bias

Preparedness for bias was assessed with the Reactive Messages Subscale from the Racial Bias Preparation Scale (RBPS; Fisher et al., 2000). This 10-item scale assesses the frequency with which individuals received from their primary caretakers messages that reflect racial prejudice awareness. It includes statements such as "Racism and discrimination will affect every aspect of your life" and "You may have hard times being accepted in society because of your

race." Items are rated in a 3-point Likert scale ranging from 1 (*never*) to 3 (*a lot*). This measure

had good internal reliability (Cronbach's α = .87) in this sample.

Racial Pride Messages

Racial pride messages were assessed with Proactive Messages Subscale from the RBPS

(Fisher et al., 2000). This scale assesses the frequency with which individuals received from their

primary caretakers messages that reinforced racial pride. It includes statements such as "You

should be proud to be of your race" and "You should participate in events involving your racial

background." Items are rated in a 3-point Likert scale ranging from 1 (*never*) to 3 (*a lot*). This

measure had good internal reliability (Cronbach's α = .86) in this sample.

Data Management

The data were collected via an online survey posted on www.qualtrics.com. Participants

from the SONA sample accessed it directly through a link in SONA, whereas participants in the

UNCC sample accessed it through a link in the recruitment email. The data were transferred to

IBM's SPSS Statistical Software, version 26 (IBM, 2019) in order to conduct statistical analyses.

Quality of the data was assessed by searching for missing data and outliers. Analyses indicated

that there was no missing data.

Statistical Analyses

The following analyses were conducted to address each research question (RQ).

RQ1: Mean scores for the PTGI-X were calculated. Higher scores (4-5) indicate a high degree of

growth, whereas the lowest scores (0-1) indicate zero to little growth.

RQ2: A multiple regression was conducted to regress PTGI-X scores onto RBTS scores.

RQ3: Two separate multiple regressions was conducted to regress CBI scores onto RBPS

(preparedness for bias) and MIBI (public regard) scores.

RQ4: A multiple regression was conducted to regress ERRI (Intrusive) scores onto RBTS scores.

RQ5: A multiple regression was conducted to regress ERRI (Deliberate) scores onto MIBI (racial centrality, private regard, nationalist ideology) scores and RBPS (racial pride messages) scores.

Chapter 3: Results

Participants

SONA Sample

One hundred and seventy three participants took the survey through SONA between March and December of 2019. Of those participants, there were 18 who exited the survey after beginning the first questionnaire. The final SONA sample consisted of 155 participants who completed the survey.

UNCC Sample

One hundred and ninety participants began the survey between December 2019 and January 2020. There were 41 potential participants who did not meet all four criteria for this sample. There were 149 potential participants who did meet criteria, but 43 of them chose to exit out of the survey after answering the screening questions. There were then 106 participants who began taking the survey. Of those 106 participants, 49 chose to exit out of the survey when asked to describe the race-related event that was most stressful for them. The final UNCC sample consisted of 57 participants who completed the survey.

Final Sample

Independent samples t-tests were run to examine if there were any significant mean differences between the SONA sample and the UNCC sample among focal variables. Analyses revealed that there were no significant differences among those following variables (see Table 1). Therefore, the SONA sample ($n = 155$) and UNCC sample ($n = 57$) were combined to create a final sample ($N = 212$).

Table 1

Independent Samples T-Test Comparing the SONA and UNCC Samples

	SONA (*N* = 155)	UNCC (*N* = 57)			
	M(SD)	*M*(SD)	*t*	df	Sig. (2-tailed)
RBTS	1.10 (.79)	1.04 (.83)	.43	210	.67
PTGI-X	2.07 (1.49)	1.52 (1.19)	1.78	210	.07
CBI	2.27 (1.12)	2.11 (1.17)	.88	210	.38
ERRI-I	1.05 (.81)	1.01 (.84)	.36	210	.74
ERRI-D	1.33 (.82)	1.43 (.85)	-.76	210	.45
MIBI-C	5.20 (1.10)	5.05 (1.10)	.85	210	.39
MIBI-N	4.09 (.97)	3.97 (.98)	.77	210	.44
MIBI-PU	3.15 (1.07)	2.92 (1.05)	1.42	210	.16
MIBI-PR	6.29 (1.11)	6.33 (.66)	-.27	210	.79
RBP-PRE	2.29 (.47)	2.27 (.51)	.20	210	.84
RBP-PRI	2.38 (.45)	2.35 (.45)	.30	210	.76

Note. *M* = Mean. *SD* = Standard deviation. PTGI-X= Posttraumatic Growth Inventory. CBI = Core Beliefs Inventory. ERRI = Event-Related Rumination Inventory (Deliberate and Intrusive). MIBI = Multidimensional Inventory of Black Identity. MIBI-C = Racial Centrality. MIBI-N = Nationality Ideology. MIBI-PU = Public Regard. MIBI-PR = Private Regard. RBP-PRE = Preparedness for Bias. RBP-PRI = Pride Messages.

Participant Demographics.

Detailed information on participant characteristics can be found in Table 2.

Table 2

Participant Demographics

		M/%	SD/n
Age		21.29	5.80
Gender	Man	32.5	69
	Woman	67.5	143
Year in College	Freshman	30.7	65
	Sophomore	31.6	67
	Junior	21.2	45
	Senior	15.6	33
	Other	0.9	2
Relationship Status	Married	2.8	6
	Never Married	93.9	199
	Divorced	2.4	5
	Separated	0.9	2
First Generation	Yes	33.0	70
	No	67.0	142
Household Income	<$10,000	15.1	32
	$10,000-$24,999	14.6	31
	$25,000-$39,999	11.3	24
	$40,000-$54,999	15.6	33
	$55,000-$69,999	10.8	23
	$70,000-$84,999	8.5	18
	$85,000-$99,999	8.0	17
	>$100,000	16.0	34

Note. N =212. *M* = Mean. *SD* = Standard deviation.

Table 3

Descriptive Statistics and Zero-order Correlations Among Focal Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. RBTS	1.08	.80	-										
2. PTGI	1.92	1.44	.45**	-									
3. CBI	2.22	1.13	.60**	.54**	-								
4. ERRI-I	1.04	.82	.66**	.38**	.47**	-							
5. ERRI-D	1.36	.82	.56**	.52**	.61**	.61*	-						
6. MIBI-C	5.16	1.10	.01	.05	.14*	.09	.15*	-					
7. MIBI-N	4.05	.97	.10	.16*	.20*	.20*	.16*	.33**	-				
8. MIBI-PU	3.09	1.07	-.02	.17*	-.06	.07	-.05	-.14	-.06	-			
9. MIBI-PR	6.31	1.00	-.09	.04	-.04	-.01	.07	.48**	.11	.01	-		
10. RBP-PRE	2.28	.48	.04	.22*	.09	.03	.04	.23*	.20*	-.08	.12	-	
11. RBP-PRI	2.37	.45	-.07	.19*	.01	-.08	.03	.23*	.15*	.14*	.25**	.68**	-

Note. PTGI = Posttraumatic Growth Inventory. CBI = Core Beliefs Inventory. ERRI = Event-Related Rumination Inventory (Deliberate and Intrusive). MIBI = Multidimensional Inventory of Black Identity (Racial Centrality, Nationality Ideology, Public and Private Regard). RBP-PRE = Preparedness for Bias. RBP-PRI = Pride Messages. $*p<.05.$ $**p<.001.$

Preliminary Analyses

Means, standard deviations, and zero-order correlations for all focal variables were calculated to describe the sample and are presented in Table 3.

Independent samples t-tests and one-way analyses of variance (ANOVAs) were conducted to determine if any of the demographic variables should be used as covariates in the regression analyses. For demographic categorical variables with only two categories (e.g., gender and first generation status), separate independent samples t-test were run to determine if the means of the continuous focal variables (e.g., PTGI, ERRI-D, ERRI-I, and CBI scores) were statistically different between categorical groups. Analyses of the t-tests showed that these differences were not statistically significant, so gender and first generation status were not utilized as covariates in the analyses.

For categorical demographic variables with more than two categories (e.g., marital status, year in college, household income), separate one-way between groups ANOVAs were conducted to examine if there were significant mean differences between the continuous focal measures study (e.g., PTGI, ERRI-D, ERRI-I, and CBI scores). None of the ANOVAs were statistically significant.

For continuous demographic variables (i.e., age), separate correlation coefficients were calculated with each of the continuous focal variables (e.g., (e.g., PTGI, ERRI-D, ERRI-I, and CBI scores). Results revealed that age was positively and significantly correlated with intrusive rumination (ERRI-I) scores ($r=.15$, $p<.05$). Therefore, age was used as a covariate in regression analyses that had intrusive rumination as the dependent variable.

Finally, scores for the RBTS subscales were the following: depression (*M*=1.10, *SD*=.99), intrusion (*M*=1.68, *SD*=1.02), anger (*M*=1.26, *SD*=1.03), hypervigilance (*M*=1.03, SD=.96), physical (*M*=.69. *SD*=.89), low self-esteem (*M*=.85, *SD*=1.02), avoidance (*M*=.57, *SD*=.75).

Characteristics of Lifetime Racist Events

Detailed information on the frequencies and stressfulness of various racist events can be found in Tables 4 and 5. Participants were asked to indicate whether or not they had experienced the events indicated on the SRE. The race-related events most endorsed by the majority of participants were as follows: a) watching or reading about shootings of unarmed Black individuals in the media (*n*=207), b) being treated unfairly by strangers due to being Black (*n*=204), c) being treated unfairly by people in service jobs (store clerks, waiters, bartenders, bank tellers and others) due to being Black (*n*=191), d) being treated unfairly by coworkers, fellow students and colleagues due to being Black (*n*=188), and e) having people misunderstand a Black individual's intentions and motives (*n*=188). For participants who indicated that they had experienced a certain event on the SRE, they were also asked to state how often they have experienced that type of event. Events with the highest frequency were the following: a) watching or reading about shootings of unarmed Black individuals in the media (*M*=5.01; "This has happened most of the time"), b) being perceived as aggressive due to being Black (*M*=3.48; "This has happened between 'sometimes' and 'a lot'"), c) being treated unfairly by strangers due to being Black (*M*=3.14; "This has happened sometimes"), d) being overly sexualized by others due to being Black (*M*=2.88; "This has happened sometimes"), and e) being treated unfairly by coworkers, fellow students and colleagues due to being Black (*M*=2.87; "this has happened sometimes").

Participants who endorsed experiencing events on the SRE were also asked to indicate how stressful each event has been for them. In terms of stressfulness, the race-related events that

were the most stressful were the following: a) watching or reading about shootings of unarmed

Black individuals in the media (*M*=5.17; "very stressful"), b) being accused of suspected

wrongdoing (*M*=4.70; "very stressful"), c) being verbally threatened with harm (*M*=4.70; "very

stressful"), d) people misunderstanding your intentions (*M*=4.40, "moderately stressful").

Table 4

Types of Racist Events

How many times have you been treated unfairly by…?	*n*	*M*	*SD*
Teachers and professors	167	2.28	.96
Employers, bosses, and supervisors	132	2.11	1.11
Coworkers, fellow students, colleagues	188	2.87	1.12
People in service jobs	191	2.85	1.13
Strangers	204	3.14	1.16
People in helping jobs	100	1.75	.96
Neighbors	115	1.96	1.22
Institutions	144	2.36	1.33
Friends	151	2.30	1.14
How many times have you been…? (because you are Black)	*n*	*M*	*SD*
Accused of suspected wrongdoing	175	2.62	1.23
People misunderstood your intentions	188	2.92	1.32
Been made fun of, picked on, called a racist name	185	2.85	1.24
Verbally threatened with harm	80	1.57	.92
Physically attacked	23	1.16	.55
Overly sexualized	156	2.88	1.65
Perceived as aggressive	182	3.48	1.61
Watched or read about shootings of unarmed Black individuals in the media	207	5.01	1.25

Note. M= Mean. *SD* = Standard deviation. *N*=Number of participants that endorsed experiencing the event at least once.

Table 5

Stressfulness of Racist Events

How stressful was this event for you?	M	SD
Teachers and professors	3.97	1.38
Employers, bosses, and supervisors	4.37	1.41
Coworkers, fellow students, colleagues	4.18	1.47
People in service jobs	4.05	1.44
Strangers	3.80	1.44
People in helping jobs	3.95	1.47
Neighbors	3.69	1.51
Institutions	4.29	1.47
Friends	4.29	1.41
Accused of suspected wrongdoing	4.70	1.42
People misunderstood your intentions	4.40	1.43
Been made fun of, picked on, called a racist name	4.34	1.54
Verbally threatened with harm	4.70	1.46
Physically attacked	3.96	1.99
Overly sexualized	4.01	1.74
Perceived as aggressive	4.26	1.62
Watched or read about shootings of unarmed Black individuals in the media	5.17	1.21

Note. M= Mean. *SD* = Standard deviation.

Characteristics of Index Race-Related Events

Participants were asked to provide a detailed description of the racist event that they have experienced that they found to be the most stressful (this will be referred to as the "index event"). To analyze and interpret these responses in a systematic manner, a conventional content analysis approach was used (Hsieh & Shannon, 2005). First, the principal investigator (PI) read participants' responses multiple times to become familiar with the data. Then, the PI used open coding to identify tentative labels/codes that represented main thoughts and/or concepts (Patton, 2002). These initial codes were then used to create a codebook consisting of the name of each theme, a description of what the theme consists of, and examples for each theme. The PI then applied the codebook to the data by going through responses and classifying each event into one of the codes. This process revealed that codes were readily grouped into 15 major themes, which are presented in Table 6.

Participants' responses included the following 13 themes: Verbal Bullying (n=75, 35.4%), Accused of Wrongdoing (n=31, 14.6%), Being Rejected (n=26, 12.3%), Being Monitored (n=22, 10.4%), Discrimination by Authority Figures (n=12, 5.7%), Watching the Media (n=10, 4.7%), Making Assumptions (n=7, 3.3%), Being Ignored (n=5, 2.4%), Threat of Physical Harm (n=5, 2.4%), Accused of Aggressiveness (n=5, 2.4%), Discouraged by Teachers (n=5, 2.4%), Racially Sexualized (n=2, 0.9%), and Representative of Black Race (n=2, 0.9%). Five of the participants stated that they preferred to not describe their index event.

The theme of Verbal Bullying included participants being called the "n" word, being bullied for the color of their skin and/or the texture of their hair, and being subjected to jokes about the Ku Klux Klan or the shootings of unarmed Black individuals. The following statement

is an example of this theme: "Once when I was working at Disney, an older, white male called me the n-word because he didn't get into the park fast enough. He started to yell at me."

The theme Accused of Wrongdoing included events in which participants where participants were accused of crimes they did not commit, such as stealing items at a store or cheating on a test. The following statement is an example of this theme: "I was accused of stealing a white woman's necklace at work because of my race."

The theme Being Rejected included events in which participants were denied services or entry at stores or restaurants; white individuals stated that they could not be friends with the Black participants; and participants were not hired for jobs due to their race. The following statement is an example of this theme: "At my previous school, I went to a white frat party. They would not allow me or my friends to get in because we were black."

The theme Being Monitored included events in which participants were watched and/or followed in stores, or they were the only student being closely watched while taking a test. The following statement is an example of this theme:

> I was in a Michael Kors store one time and the sales associates there (who were White) continuously asked if I needed help with anything and were basically following me around. They did not do this to the other white women that were in the store and I felt very targeted. I feel like they did this because I am a young African American women and they automatically assumed that I couldn't afford their products and would try to steal something.

The theme Watching the Media included watching videos of police killing unarmed Black individuals. An example of this theme is the following statement: "I think the most

stressful event was the very publicized death of Sandra Bland. Although I was not there physically, just seeing that degree of violence and derogation was extremely stress to watch."

The theme Making Assumptions included events in which assumptions were made about Black individuals based on stereotypes, such as assuming that they liked a particular type of music (e.g., rap music) or food (e.g., fried chicken). An example of this theme is the following statement:

> I have grown tired of situations where people assume things about me based off my skin complexion instead of who I am… I remember being asked by what appeared to be a Caucasian male late 40s/early 50s 'How do you know who AC/DC is?' That day I had been wearing an AC/DC shirt. The gentleman was grabbing the skin on his forearm as he asked this question.

The theme Being Ignored included events in which participants were completely ignored by White individuals at school or work settings. An example of this theme is the following statement:

> Most recently attending UNC-Charlotte with a major in Computer Engineering has been a stressful experience. Being black and a woman has put me in many scenarios where people believe I am not going to get my work done because of the way I look and personify myself. I was involved in a project where some of the people within my group (who are White) would get frustrated if I gave my input on what needed to be done. They would often ignore me and continue doing the work the way they wanted it done. Which was very frustrating for me.

The theme Threat of Physical Harm included events in which White individuals threatened to physically harm Black individuals without any provocation, either by punching them, or pointing loaded guns at them. The following statement is an example of this theme:

I was walking in a small town in Iowa with some fellow class mates all of which were Black… it was roughly 8 pm; early on in the semester so it was dusk. There was a man who ran out his home with a shot gun and called us all N*****. We initially was stunned and stood in the middle of the street unsure of what to say or how to react. This must have angered him further… As we did not make haste he raised his shot gun as to shoot. This caused us to take off. He then ran behind us.

The theme Accused of Aggressiveness included events in which participants were accused of being aggressive for no reason, or when they stood up for themselves in situations that warranted assertiveness. The following experience is an example of this theme:

As a 6 foot black female, I have been treated negatively in situations involving disputes. One example is that I moved into a new apartment near the University last year. The complex changed the parking policy to where expired tags are subject to tow. My vehicle was towed one day after the tag expired. I went to the office upset but not aggressive. By the time I went to the tow company to retrieve my vehicle the office told the tow company that I tried to hit one of the office girls. This was relayed to me by the white clerk which I, in anger, denied. The whole time I was about 3 feet away from any of the women in part due to office desks between the staff and myself. The women in the rent office was Hispanic and the tow company clerk was a white woman. Because of this lie and the embellishments of the rental staff, I was immediately treated negatively by the tow company and before getting my vehicle back, I had to call the police to facilitate the

exchange. I eventually wrote a detailed letter explaining the situation to the management company for documentation purposes.

The theme Discouraged by Teachers included events in which teachers explicitly told participants that they should not pursue higher education or a certain career simply because they are Black. The following experience is an example of this theme:

> I would visit our college advisor regarding scholarships and she would tell me that because of my background and the type of family that I come from, I should probably choose a different career choice (I want to become a lawyer) because that one is out of my reach. Hearing someone that is put in place to help you succeed no matter where you come from tell you that they don't think you will be successful because of your background (race) was an extremely hurtful experience.

The theme Discrimination by Authority Figures included events in which teachers overtly gave special treatment to White students and/or punished Black students for no particular reason or security guards allowed White individuals to do certain acts, but punished Black individuals for doing the same acts. The following experience is an example of this theme:

> My friends and I decided to go to the mall (they are all black) on a Saturday night. We were standing in a group near the food court just talking quietly amongst ourselves (there were six of us).We were standing there for about five minutes before two security guards approached us and told us that we needed to disperse because we were being disruptive. If we didn't disperse, we would have to be escorted out of the mall. What made this event so stressful is that 1. we were not loud or rowdy and 2. there was a group of white teenagers standing near us talking loudly and being disruptive. It felt as though we were being targeted even though we didn't do anything.

The theme Racially Sexualized included events in which participants were sexually objectified by White individuals due to the color of their skin. The following statement is an example of this theme:

> As a young and single Black female i encounter racism a lot in my dating life. Many times I encounter men who over sexualize me because of my dark skin tone. This can be really stressful and disheartening to me. It makes me feel like less of a woman and just an object. There is the underlying assumption that because I am dark skin and shaped a certain way that I must be promiscuous. Most recently I had a White man disrespect me and act as if I wasn't worth his time because I would not engage in sexual activities with him.

Lastly, the theme Representative of Black Race included events in which White individuals asked participants to speak for the entire Black race on a certain topic. The following statement is an example of this theme:

> In one of my classes (I was the only black girl), a white female student asked the teacher 'what's ebonics?' and the teacher looked at me and said '(my name) may be able to answer that question for you.' It's stressful having to advocate for the entire black race.

> In addition, 96.2% of participants considered their index event to be negative, 79.2% considered it to be sudden, and 81.1% considered it to be uncontrollable.

Hypothesis Testing

Hypothesis 1

It was hypothesized that PTG would occur from stressful race-based events. On average, participants experienced PTG to a small degree (*M*=1.92, *SD*=1.44) as a result of their endorsed race-related index event, with a range from "none at all" to "a moderate degree." Participants' growth in each of the domains was as follows: relating to others (*M*=1.72, *SD*=1.48), new possibilities (*M*=1.94, *SD*=1.60), personal strength (*M*=2.39, *SD*=1.55), spiritual change (*M*=1.63, *SD*=1.56), and appreciation of life (*M*=2.18, *SD*=1.59).

Hypothesis 2

It was hypothesized that RBTS symptoms would be positively associated with PTG. On average, participants in this study experienced RBTS symptoms infrequently (*M*=1.08, *SD*= .80). A multiple regression analysis was run to regress PTG onto RBTS (Table 6). Since core belief disruption and deliberate rumination typically explain variance in PTG, these variables were controlled for in step 1. RBTS was entered in step 2, and results showed that its main effect was not significant. Although the final model explained a significant percentage of the variance in PTG, it was not improved by the inclusion of RBTS.

Table 6

Regression of PTG on Core Belief Disruption, Deliberate Rumination, and RBTS

Variable	*b*	*S.E.*	*B*	R^2	ΔR^2
Model 1				.35**	
(Intercept)	.20	.19			
Core belief disruption	.46**	.90**	.36**		
Deliberate rumination	.53**	.12**	.30**		
Model 2				.35**	.00
(Intercept)	.20	.18			
Core belief disruption	.39**	.10**	.31**		
Deliberate rumination	.46**	.13**	.27**		
RBTS	.21	.13	.12		

Note. $N = 212$. * indicates $p < .05$. ** indicates $p < .001$. *b* = unstandardized beta weight; *S.E.*

= standard error. Dependent variable = PTGI-X Total Score.

Hypothesis 3

It was hypothesized that preparedness for bias would be negatively associated with core belief disruption, and that public regard would be positively associated with core belief disruption. A regression model was run to regress core belief disruption onto preparedness for bias and public regard (Table 7). Results revealed that neither preparedness for bias nor public regard were associated with core belief disruption.

Table 7

Regression of Core Belief Disruption on Preparedness For Bias and Public Regard

Variable	b	S.E.	<u>B</u>	R	R^2
Model				.11	.01
(Intercept)	1.97**	.46**			
Preparedness for Bias	-.07	.07	-.07		
Public Regard	.20	.16	.09		

Note. $N = 212$. * indicates $p < .05$. ** indicates $p < .001$. b = unstandardized beta weight; *S.E.*

= standard error. Dependent variable = CBI Total Score.

Hypothesis 4

It was hypothesized that RBTS would be positively associated with IR. A regression

analysis was run to regress IR onto RBTS (Table 8). Since core belief disruption is a known

predicted of IR, it was entered in step 1 as a control variable. Additionally, since age was found

to be positively and significantly correlated with IR in this sample, age was also included as a

control variable in the first step of model. Results revealed that RBTS was significantly and

positively associated with IR, above and beyond the effects of age and core belief disruption.

Table 8

Regression of Intrusive Rumination on Age, Core Belief Disruption, and RBTS.

Variable	b	S.E.	β	R^2	ΔR^2
Model 1				.24**	
(Intercept)	-.08	.22			
Age	.02*	.01*	.14*		
Core belief disruption	.33**	.05**	.47**		
Model 2				.45**	.21**
(Intercept)	-.03	.18			
Age	.01	.01	.09		
Core belief disruption	.09*	.05*	.13*		
RBTS	.58**	.07**	.58**		

Note. $N = 212$. * indicates $p < .05$. ** indicates $p < .001$. b = unstandardized beta weight; *S.E.*

= standard error. Dependent variable = ERRI-Intrusive Total Score.

Hypothesis 5

It was hypothesized that racial centrality, private regard, nationalist ideology, and pride

messages would be positively associated with deliberate rumination about the racist event. A

regression model was run to examine these associations (Table 9). Since core belief disruption is

significantly associated with deliberate rumination, it was included in the first step of the model

as a control variable. The final model accounted for a significant amount of variance in

deliberate rumination, but this was entirely due to the main effect of core belief disruption.

Results showed that racial centrality, nationalist ideology private regard, and pride messages

were not significantly associated with deliberate rumination.

Table 9

Regression of Deliberate Rumination on Core Belief Disruption, Racial Centrality, Nationalist Ideology, Private Regard, and Pride Messages.

Variable	b	*S.E.*	β	R^2	ΔR^2
Model 1				.38**	
(Intercept)	35*	.10*			
Core belief disruption	.45**	.04**	.62**		
Model 2				.39**	.01
(Intercept)	-.08	.37			
Core belief disruption	.45**	.04**	.62**		
Racial Centrality	.03	.05	.04		
Nationalist Ideology	-.01	.05	-.01		
Private Regard	.06	.05	.07		
Pride Messages	-.02	.10	-.01		

Note. $N = 212$. * indicates $p < .05$. ** indicates $p < .001$. b = unstandardized beta weight; *S.E.*

= standard error. Dependent variable = ERRI-Deliberate Total Score.

Post-Hoc Analyses

I had originally hypothesized that public regard is the dimension of racial identity that would impact core belief disruption. However, upon further study and reflection after the creation of the proposal for this dissertation, I realized that all aspects of racial identity could potentially influence core belief disruption. This is because racial identity as a whole can play a role in how one perceives the world and navigates it, as well as in how one appraises event in general (Sellers, Smith, Shelton, Rowley, & Chavous, 1998). Similarly, dimensions of racial centrality could also potentially influence perceptions of growth.

In addition, correlation analyses (Table 3) revealed significant associations between focal variables that were not initially included as part of this study's hypotheses (e.g., significant

correlation between nationalist ideology and core belief disruption, and between public regard

and PTG). Additional statistical analyses were conducted to further explore these correlations.

Nationalist Ideology and Core Belief Disruption

Correlation analyses revealed that CBI was correlated with nationalist ideology ($r=.20$, $p<.05$). A regression analysis was run to predict CBI from all MIBI subscales (Table 10). Results revealed that Nationalist Ideology significantly predicted CBI ($\beta= .17$, $p<.05$).

Table 10

Regression of Core Belief Disruption on Racial Centrality, Nationalist Ideology, Private Regard, and Public Regard.

Variable	b	$S.E.$	β	R	R^2
Model 1				.25*	.06*
(Intercept)	1.69*	.62*			
Racial Centrality	.14	.09	.14		
Nationalist Ideology	.20*	.09*	.17*		
Private Regard	-.14	.09	-.12		
Public Regard	-.04	.07	-.04		

Note. $N = 212$. * indicates $p < .05$. ** indicates $p < .001$. b = unstandardized beta weight; *S.E.* = standard error. Dependent variable = CBI Total Score.

Public Regard and PTG

Correlation analyses revealed that Public Regard ($r=.17$, $p<.05$) and Nationalist Ideology ($r=.16$, $p<.05$). were positively and significantly correlated with PTG. A multiple regression model was run to examine the effect of these two variables on PTG (Table 11). Since core belief disruption and deliberate rumination are known predictors of PTG, they were entered in step 1 as control variables. Results of the final model showed that public regard was significantly

associated with PTG above and beyond the effects of core belief disruption, deliberate

rumination.

Table 11

Regression of PTG on Core Belief Disruption, Deliberate Rumination, Nationalist Ideology,

and Public Regard.

Variable	b	S.E.	β	R^2	ΔR^2
Model 1				.35**	
(Intercept)	.21	.19			
Core belief disruption	.45**	.09**	.36**		
Deliberate Rumination	.52**	.12**	.30**		
Model 2				.39**	.04*
(Intercept)	-.99*	.43*			
Core Belief Disruption	.45**	.09**	.35**		
Deliberate Rumination	.53**	.12**	.30**		
Nationalist Ideology	.08	.08	.06		
Public Regard	.28**	.07	.21**		

Note. $N = 212$. * indicates $p < .05$. ** indicates $p < .001$. b = unstandardized beta weight; *S.E.*

= standard error. Dependent variable = PTGI-X Total Score.

Figure 2

Conceptual representation of the Relationships Among Focal Variables Based on Results
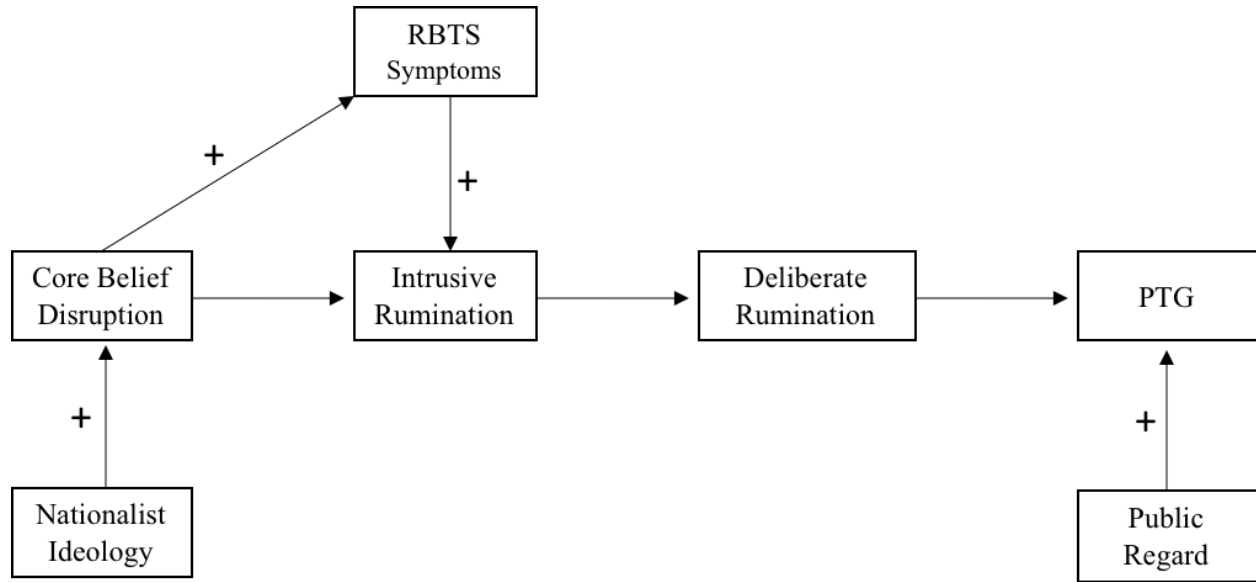
Chapter 4: Discussion

Racism is a prevalent and chronic stressor that can profoundly impact the mental health and psychological functioning of its targets. Cultural models of stress (MSM, BMR, MCRRS, RBTS) have posited that sociocultural factors influence the appraisal of racism as a stressor, while also recognizing that racism can be a traumatic experience for its targets (Carter, 2007). While traumatic experiences can undoubtedly induce negative reactions, they can also paradoxically provide fertile ground for psychological growth to flourish (Tedeschi & Calhoun, 1996). Although the PTG model states that sociocultural factors play a role in PTG, research in this area has been limited within the context of race-based traumatic events. Thus, the purpose of this study was to examine PTG and its associated processes within the context of RBTS among African American college students. Specifically, the present study utilized a cross-sectional design and survey data to examine how RBTS, racial identity (e.g., racial centrality, public and private regard, nationalist ideology), and racial socialization (e.g., preparation for bias and pride messages) impact PTG and related processes (e.g., core belief disruption, intrusive rumination, deliberate rumination).

The current chapter discusses implications of the results presented in Chapter 3. First, findings on the frequency and stressfulness of participants' overall experiences with racial discrimination are presented, including information regarding their most stressful racist event. Then, results for each hypothesis will be discussed by integrating them with existing literature, and providing possible explanations for each finding. The chapter will close with a discussion of this study's strengths and limitations, as well as ideas for future directions in research and clinical practice.

Characteristics of Lifetime Race-Related Events

Unsurprisingly, participants' responses on the SRE highlight that perceived racial discrimination is indeed still a common experience among African American college students that can lead to considerable distress. This finding is extensively supported by prior research that conceptualizes racism as a stressor that can have deeply negative impacts on a variety of domains, including psychological well-being, physical health, and academic performance (Garcia & Johnston-Guerrero, 2015; Pascoe & Richaman, 2009; Solórzano et al., 2000; Stevens et al., 2018; Schmitt et al., 2014; Swim et al., 2003).

Based on participants' responses on the SRE, the event that participants found to be the most stressful was media exposure to shootings of unarmed Black individuals. This finding supports prior research demonstrating that Black individuals can experience increased anxiety and PTS symptoms as a result of repeated media exposure to shootings of unarmed Black individuals (Klaz, 2018; Range et al., 2018). This type of chronic media exposure can be stressful not just due to the content of the shootings themselves, but because the exposure is a constant reminder of a very real and legitimate threat that Black individuals must contend with on a daily basis in the U.S.- which is the fact that they are more likely to be shot by police than their White counterparts (Buehler, 2017).

Characteristics of the Index Race-Related Events

Participants were asked to describe the most stressful race-related event that they have experienced in their lifetime. Although results of the SRE indicated that watching shootings of unarmed Black individuals in the media was the most stressful type of event that participants have experienced in their lifetime, the majority of participants did not describe this type of event for their index race-related event. Among this sample, the most stressful race-related index

events consisted of verbal bullying (e.g., explicit racial degradations consisting of racial slurs and

jokes intended to hurt the victim), accusations of wrong-doing (such as stealing items at a store

or heating on a test), being rejected (e.g., behaviors intended to exclude the victim), being

monitored, and racial discrimination by authority figures. This is consistent with prior research

demonstrating that these specific types of events are common among college students, both

within and outside the university setting (Harwood et al., 2012; Ogunyemi et al., 2020;

Solórzano et al., 2000). In addition, consistent with Carter's (2007) criteria for a traumatic race-

related events, the vast majority of participants classified their index events as negative, sudden,

and uncontrollable.

Preliminary Analyses

Results of the correlation analyses revealed the RBTS was positively and significantly

correlated with core belief disruption (Table 3). The PTG model posits that when core beliefs are

challenged, individuals may experience emotional distress (Tedeschi et al., 2018), which is a part

of the model has also been empirically supported by prior studies (Groleau et al., 2013; Orejuela-

Davila et al., 2017). Although causality cannot be established due to this study's cross-sectional

nature, prior research on the PTG model would suggest that core belief disruption may have

contributed to the RBTS that participants experienced in response to their index event.

Recall that core beliefs are sets of beliefs that help individuals navigate and understand

the world that they live in (Tedeschi & Calhoun, 2004). These beliefs include notions regarding

the fairness of the world, why other people behave the way that they do, the extent to which a

person has a control over what happens to them, the meaning of life, and one's worth as a person

(Cann et al., 2010). The PTG Model posits that potentially traumatic events can sometimes (but

not always) challenge and even shatter a person's core beliefs, similar to an earthquake. For core

beliefs to be challenged, an event usually tends to be abrupt and surprising (Cann et al., 2010). Similarly, the RBTS Model (Carter, 2007) posits that for RBTS to occur, an event must be perceived as sudden, negative, memorable, and uncontrollable. Although Carter (2007) does not explicitly mention core beliefs in the model, he does posit that various individual and social factors can influence how race-related events are appraised. The findings of this study suggest that the disruption of general core beliefs and their subsequent examination may be another aspect that can contribute to RBTS.

It should be noted that at least 79% of this study's sample considered their index event to be negative, sudden, and uncontrollable (which are the three indicators for traumatic race-based events highlighted in Carter's model). A limitation of this study was that it did not examine the extent to which an event was surprising, which is an important factor in the PTG Model to take into consideration when it comes to core belief disruption. However, given the low scores for core belief disruption (as well as the relatively high scores for preparedness for bias), it may be possible that participants in this sample did not find their events to be that surprising. In spite of this, the sample still reported that on average, their core beliefs were challenged to at least a small degree. Similarly, the amount of RBTS reported in this sample was also relatively small. Although the amount of core belief disruption and resulting RBTS symptoms were both relatively small in this sample, the relationship between the two was still statistically significant, highlighting that distress can still result from even a minor challenge to core beliefs. As Cann and colleagues (2010) have previously stated, "even tremors, lower on a 'psychological' Richter scale, could lead to an examination of one's core beliefs" (p. 31).

Hypothesis 1: PTG can occur from race-based stressful events.

On average, participants in this sample endorsed experiencing PTG (*M*=1.92) to a *small degree*, indicated that growth from race-related events is possible to a certain extent. Notably, the SD (=1.44) indicates that some participants did endorse PTG to a *moderate degree*. To date, PTG has been demonstrated to emerge from coping with a variety of highly stressful events, including witnessing or experiencing physical or sexual assault, life-threatening illnesses, and natural disasters (Tedeschi et al., 2018). To date, this is the second study to demonstrate that, for Black individuals, it is possible for PTG to emerge from coping with stressful race-related events- albeit to relatively small degrees. The relatively low PTG scores may be due, in part, to the fact that this sample experienced minimal core belief disruption (see discussion for Hypothesis 3). It should also be noted that the PTG scores of this sample were slightly lower than the ones in Backstrom-Sieh's (2013) study (*M*=2.69, *SD* = 1.31).

Participants reported experiencing growth in the following domains: spiritual change (M=1.63, *SD*=1.56), relating to others (M=1.72, *SD*=1.48), new possibilities (M=1.94, *SD*=1.60), appreciation of life (M=2.18, *SD*=1.59), and personal strength (M=2.39, *SD*=1.55). The distribution of scores indicates that participants experienced a variety of levels of growth across all five domains, ranging from "not experiencing any PTG" to experiencing PTG "to a great degree." As the results indicate, the greatest amount of PTG occurred in the domain of personal strength, whereas the least amount of growth occurred in the domain of spiritual change spiritual change. The domain of personal strength consists of greater feelings of self-reliance, the knowledge that one can handle difficulties, the ability to accept things as they turn out, and the realization that one is stronger than originally thought (Tedeschi & Calhoun, 1996). Although prior studies have not examined racial discrimination and personal strength within the context of

PTG, some have shown that it is possible to develop qualities that are associated with a greater

sense of personal strength within the context of RBTS. For example, some studies have

suggested that grappling with the impact of racial discrimination can lead to increased resilience,

reinforced racial pride, and the development of healthy coping strategies, such as engagement in

activism and increased dispositional optimism (Godsay & Brodsky, 2018; Baldwin et al., 2011).

Hypothesis 2: RBTS was significantly and positively correlated with PTG, but it was not associated with PTG once core belief disruption and deliberate rumination (DR) were accounted for.

Participants in this study endorsed experiencing relatively low RBTS and PTG as a result

of their endorsed index events. On average, participants endorsed experiencing RBTS (M=1.08,

SD=.08) symptoms "infrequently," and PTG (M=1.92, SD=1.44) "to a small degree."

As Backstrom-Sieh (2013) discussed in her study of PTG from race-related events, it is possible

that participants may be under-reporting RBTS symptoms due to socialization processes that

teach them to conceal their anger and frustration in response to racial discrimination. Likewise, it

is also possible that this sample truly did not experience RBTS symptoms in a frequent manner.

In spite of the low RBTS and PTG scores, preliminary analyses of this study

demonstrated that RBTS was positively and significantly correlated with PTG (Table 3).

Although this finding may appear counter-intuitive at first glance, it is actually in line with the

PTG model, which assumes a co-existing relationship between distress and growth, whereby

greater distress can create greater potential for the development of PTG (Tedeschi, Shakespeare-

Finch, Taku, & Calhoun, 2018). Moreover, previous studies have demonstrated positive and

significant relationships between distress and PTG (Cao et al., 2018; Choko et al., 2018;

Marziliano et al., 2020), which is a finding that has also been supported by a recent meta-

analysis (Liu et al., 2017).

Although RBTS and PTG were significantly and positively associated at the bivariate

level (Table 3), this relationship was no longer significant when core belief disruption and DR

were accounted for (Table 6). This result may have two explanations. First, the lack of a

significant relationship between RBTS and PTG in the regression model may be due to a floor

effect, which occurs when the scores of a dependent variables are so low, that the introduction of

a new independent variable may not have an effect on the dependent variable (Cramer & Howitt,

2005). In other words, in this sample there may not have been enough variance in PTG scores in

order to detect a relationship between PTG and RBTS. Second, it may be that it is not the

perceived stressfulness of the event that leads to growth, but rather the cognitive processes (e.g.,

intrusive rumination, followed byDR) initiated by the stressfulness of the event that are the key.

This suggests that ultimately, it is how one copes with the aftermath of the traumatic event (and

not the event itself, or its stressfulness) that promotes meaning-making and leads to PTG

(Tedeschi et al., 2018).

**Hypothesis 3: Preparedness for bias and public regard were not significantly associated
with core belief disruption.**

Findings of this study revealed that preparedness for bias and public regard were not

significantly associated with core belief disruption (Table 7). In fact, the two variables were not

even significantly correlated with core belief disruption at the bivariate level (Table 3). It should

be noted that participants in this sample, on average, had a relatively high level of preparedness

for bias (*M*=2.28), and relatively low levels of public regard (*M*=3.09). The public regard mean

score of this sample indicates that most participants "slightly disagreed" with statements such as

"Blacks are considered good by others" and "Others respect Black people." The preparedness for

bias mean score of this sample indicates that most participants heard preparatory statements in

their childhood (such as "Racism and discrimination will affect every aspect of your life" and "American society is unfair to people of our race") between a "few times" to "a lot."

To begin unpacking this finding, it is necessary to take into account prior research that has suggested that high levels of public regard can intensify the negative impact of discrimination on psychological functioning (Sellers, Copeland-Linder, Martin, and Lewis, 2006). Individuals with high public regard believe that others in society feel positively towards Black people and are less likely to think that others will treat them negatively because of their race (Sellers et al., 1997). When an individual believes that others in society feel positively towards Black people (i.e., high public regard) and they do not expect to encounter racial discrimination (i.e., low preparedness for bias), and that individual then experiences a negative race-related event, then the individual's initial expectations are not being met, which can lead to distress. For individuals with high public regard and low preparedness for bias, the experience of racial discrimination is inconsistent with their worldview. So when an individual with high public regard and/or low preparedness for bias is the target of racial discrimination, then that individual's expectations will be shattered and they will experiences distress. This is consistent with the work of Lazarus & Folkman (1984), who posited that unexpected negative experiences will be perceived as much more stressful than those that are expected. Individuals with high public regard and/or low preparedness for bias who experience racial discrimination will then have to engage in the arduous and psychologically-demanding task of reconciling the discrepancy between their worldview and their lived experience (Sellers & Shelton, 2003). This task is consistent with the process of deliberate rumination that leads to PTG, and although that task may be stressful, it is what can ultimately lead to growth.

Conversely, studies have also shown that low levels of public regard can buffer the negative impact of racial discrimination on psychological functioning (Sellers et al., 2006). To interpret this finding, consider the following: if a Black individual believes that others in society do not feel positively towards Black people (i.e., low public regard), and this individual then experiences a negative race-related event, then the individual's expectations will not be shattered. Similarly, when someone with high preparedness for bias experiences a race-related event, then their core beliefs will also not be shattered given that they are encountering something that they were expecting. These individuals will not suffer from the psychological distress that can result from shattered expectations, since they experienced something that is consistent with their worldview (e.g., they expect other people to treat Blacks negatively). Therefore, this may be why public regard and preparedness for bias in the present study were not significantly associated with core belief disruption, which would have also ultimately contributed to the low PTG scores. This finding is further supported by other research that has demonstrated that decreases in public regard over time are associated with decreases in overall psychological distress (Willis & Neblet, 2019), and it is also supported by the work on stress appraisals by Lazarus and Folkman (1984).

Lastly, in terms of why preparedness for bias may not be associated with core belief disruption, it is important to take into account that college is a time of transition where African American youth enter emerging adulthood. As such, some individuals may encounter new experiences with racial discrimination, or they may join Black student organizations that enhance or alter the way they view the view their own racial identity. Therefore, the messages that African American individuals received during childhood may not automatically be reflective of

the current views that they hold now. As such, an assessment of individuals' views at the time of

the events may be warranted in future studies.

Hypothesis 4: RBTS was positively and significantly associated with intrusive rumination (IR), even after controlling for age and core belief disruption.

Results of this study revealed that RBTS was positively and significantly associated with

IR following a race-related event, even after controlling for the effects of core belief disruption

and age (Table 8). Recall that IR is a cognitive process that includes having thoughts about the

event when one does not mean to be thinking about it, being unable to stop thinking about the

event, and being unable to concentrate due to thoughts about the event (Cann et al.. 2011). Prior

research has demonstrated that IR is positively associated with distress and a failure to cope

(Cann et al., 2011), which is partly due to the invasive nature and uncontrollability of this type of

repetitive thinking. Findings of this study also highlight that both the challenge to core beliefs,

and the emotional distress that results from it (Table 3) are positively associated with IR. This is

consistent with the PTG Model, which posits that both the challenges to core beliefs and

subsequent emotional distress can interactively initiate IR (Tedeschi et al., 2018).

In addition, it should also be noted that the relationship between RBTS and IR is likely to

be bidirectional, whereby RBTS can lead to IR, which can then exacerbate symptoms of RBTS.

For example, among Black Americans, rumination heightens the negative impact of perceived

discrimination on heart rate variability (Williams et al., 2019) and sleep quality (Hoggard & Hill,

2018)- both of which are symptoms that are part of RBTS (e.g., disrupted heart rate in the

physical category, and disrupted sleep in the hyperarousal category). It has also been suggested

that rumination partially mediates the relationship between perceived discrimination and

emotional distress (Borders & Liang, 2011). Although these studies examined generalized

rumination (and not IR in the context of PTG), they do suggest that a bidirectional relationship

exists between RBTS and IR; however, this is a possibility that would warrant further empirical

investigation.

Hypothesis 5: Racial centrality, private regard, nationalist ideology, and pride messages were not significantly associated with deliberate rumination (DR).

Contrary to the original hypothesis, findings of this study revealed that racial centrality,

private regard, nationalist ideology, and pride messages were not significantly associated with

DR. DR consists of purposeful reflections about the event, including thoughts regarding one's

feelings about the experience, how to derive meaning from the experience, what can be learned

from it, and how one was affected by it overall (Cann et al., 2010). The PTG Model posits that

sociocultural influences can have a direct effect on DR (Tedeschi et al., 2018), and it was

originally hypothesized that the variables mentioned would promote greater DR; however, this

was not the case.

While it may very well be the case that these variables have nothing to do with DR, there

are nonetheless several things to consider. First, the mean DR score for this sample (M=1.36)

indicates that participants, on average, "rarely" thought about their race-related event in a

deliberate way. Similar to Hypothesis 2, a significant relationship may not have been detected

due to floor effects, given that most participants overwhelmingly endorsed relatively low DR.

Therefore, there is still a possibility that aspects of racial identity and socialization may play a

role among individuals who experience a higher degree of DR.

Second, it is also possible that aspects of racial identity and socialization may be

impacting DR through a mediator- specifically, through self-disclosure. Self-disclosure is a

process of communication by which an individual reveals information about themselves to

another person (Pearce & Sharp, 1973). Self-disclosure about a traumatic event can take many

forms, such as talking about it with other people, or writing about it in a journal or on social

media (Tedeschi & Calhoun, 2004). The PTG Model posits that self-disclosure of one's thoughts and feelings about the traumatic event (through talking or writing) can foster cognitive processing in the form of DR, while simultaneously serving as a way to manage emotional distress associated with the event (Tedeschi et al., 2018). This conceptual part of the model has been empirically supported by previous studies that demonstrate how self-disclosure can promote DR, as well as overall PTG (Lindstrom et al., 2013; Taku et al., 2009).

In the context of trauma, self-disclosure is also tightly linked with social support, given that an aspect of social support is communicating with others about negative events that one has experienced. Previous studies have demonstrated that seeking social support is commonly used a strategy to cope with racial discrimination (Brondolo et al., 2009), especially among college students. For example, Swim et al. (2003) found that 68% of the Black college students in their sample discussed a racist incident with their family or friends, and found it to be helpful in making sense of the experience. Within the context of racial discrimination, it has been suggested that self-disclosure and social support can be helpful, in part, because it allows the individual to see that racial discrimination is a shared experience (Mushonga & Henneberger, 2020).

The PTG Model also posits that sociocultural influences can directly impact self-disclosure (Tedeschi et al., 2018). Therefore, it is possible that racial identity and socialization may affect self-disclosure and social support, which may then impact DR. For example, one study has demonstrated that private regard and racial centrality are significantly correlated with perceived social support, which includes talking to trusted others about stressful experiences (Mushonga & Henneberger, 2020). It is also possible that for Black individuals who engage in productive self-disclosure about their race-based stressful events, and who receive adequate

social support, their need for DR may decrease as a function of these two factors. The possibility that self-disclosure/social support may mediate the impact of racial identity and socialization on DR is a possibility that would warrant empirical investigation. Studies that investigate this line of research should take into account the type of disclosure (verbal or written), to whom the disclosure was made, and perceived responses to the disclosure.

Post-Hoc Finding 1: Nationalist ideology was positively and significantly associated with core belief disruption.

The present study found that nationalist ideology was positively and significantly associated with core belief disruption, even after controlling for other dimensions of racial identity (Table 10). Recall that a nationalist ideology emphasizes the unique experience of being Black, a preference for Black social environments, and support of Black organizations that advocate for social justice (Sellers et al., 1998). In line with the connection between nationalist ideology and support for social justice, a previous study found that nationalist ideology is associated with prosocial attitudes (White-Johnson, 2012). The author posited that individuals who endorse a nationalist ideology also support prosocial attitudes because they are part of an oppressed minority that faces unique challenges in society, and they want to use collective efforts to address these challenges (White-Johnson, 2012). Therefore, if an individual endorses a nationalist ideology (and they value social justice, racial equality, and prosocial attitudes), and they are then faced with an event involving racial discrimination, then this event could theoretically challenge their beliefs regarding racial equality and social justice, resulting in core belief disruption. Additionally, a previous study found that the more individuals endorsed a nationalist ideology, the more racial discrimination they reported experiencing (Sellers & Shelton, 2003). This would suggest that individuals with higher nationalist ideology are more

attuned to race-related events and the negative impacts they can induce, which could then set the stage for core belief disruption.

Post-Hoc Finding 2: Public regard was positively and significantly associated with PTG, even after controlling for core belief disruption and DR.

Although results from this study indicated that public regard was not associated with core belief disruption (Hypothesis 3), a posthoc analysis (Table 11) revealed that it is significantly associated with PTG above and beyond other known predictors (e.g., core belief disruption and DR). This finding suggests that the belief that society views Black people in a positive manner can somehow prime individuals to experience more growth. It is possible that someone with high public regard may continue assuming the best from others even in the face of adversity, and that mindset might allow them to make sense of race-related events in a way that is conducive to growth. Prior research has also linked public regard with other positive outcomes. For example, one study found that high public regard is associated with positive mental health outcomes among Black college students (Mushonga and Hennegerber, 2020). The authors of that study explained that if Black students perceive their racial group as being viewed positively by others, then they may feel more accepted by society, especially within a college setting. Overall, it seems that public regard is a variable that plays a critical role in promoting PTG among Black individuals who experience race-related events.

When examining the link between public regard and PTG, another concept that should be taken into consideration is that of prosocial attitudes. Prior research has indicated that public regard beliefs are related to prosocial attitudes (White-Johnson, 2012). It has also been suggested that endorsement of prosocial involvement can aid an individual's efforts to cope with racial discrimination (White-Johnson, 2012). Similarly, PTG has previously been positively and significantly associated with prosocial variables, such as empathy, volunteerism, and other forms

of altruistic behavior (El-Gabalawy et al., 2020; Greenberg et al., 2018; Tingey et al., 2019). Future studies should examine prosocial variables as potential mediators or moderators of the relationship between public regard and PTG within the context of race-related events.

Clinical Implications

There is prior work on promoting PTG in a therapeutic context (Tedeschi & Calhoun, 2013) and addressing RBTS among Black individuals through counseling (Comas-Diaz, 2007; Durham 2018; Tinsley-Jones, 2003). The findings of the present study have clinical implications that contribute to both of these literatures. The general approach for facilitating PTG has been described as expert companionship (Tedeschi & Calhoun, 2006), whereby the therapist serves as an expert companion that uses knowledge of PTG processes to guide their therapeutic approach. Tedeschi and Calhoun (2013) outlined five principles for the application of the expert companion approach, which are the following: psychoeducation of the trauma response, management of emotional distress, constructive self-disclosure (which allows for exploration of IR and facilitation of DR), development of a coherent narrative that integrates life pre- and post-trauma, and articulation of new or revised life principles and meanings (which are then used to benefit others or be of service).

These five principles are in line with counseling approaches to address RBTS among Black individuals, as well as other racial minorities. First, in the assessment phase (Comas-Diaz, 2007), the therapist assesses for exposure to microaggressions and experiences with racial discrimination through the use of open-ended questions and a curious, compassionate stance. If any of these incidents are identified, it is critical to explicitly label them as manifestations of racism (Durham, 2018; Tinsley-Jones, 2003). To be in line with the PTG concept of expert companion, this can also be accomplished through a process of Socratic questioning and guided

discovery. The findings of this study highlight how both RBTS and PTG-related processes can occur as a result of a variety of race-related events, and also provide examples of the types of events that therapists should pay attention to when clients are discussing their experiences. Depending on the client's knowledge, this assessment process may also include providing psychoeducation on concepts such as interpersonal and structural racism, internalized racism, microaggressions, and White privilege (Carlson et al., 2018), as well as general trauma responses (Tedeschi & Calhoun, 2013).

Next, it is critical to examine the race-related event(s) fully in terms of what happened, who was involved, what was said, how the client reacted, etc. (Durham, 2018)- which is consistent with the PTG principle of constructive self-disclosure. The findings of the present study suggest that during this process, therapists should assess the RBTS (both in terms of amount and types of symptoms) that a client has experienced in response to this event, as well as any IR that may be occurring. Then, it is important to examine the messages that the event(s) communicated to the client, and whether these messages are congruent with the client's view of themselves and the world (Durham, 2018). The findings of the present study lend support to this process, as they suggest that race-related event(s) have the potential to cause disruption to core beliefs. This is also in line with the PTG principle of exploring life pre- and post-trauma in order to develop a cohesive narrative.

As the clients continue processing their experiences, therapists should also engage them in an exploration of their own racial identity development, as this has been shown to enhance the counseling process and effectiveness of interventions with Black clients (Carlson et al., 2018; Franklin, 1999). This has been referred to as the reprocessing phase by Comas-Diaz (2007), and it is also consistent with the PTG principle of examining life pre-trauma. While all dimensions of

racial identity should be examined, the findings of the present study suggest that it is important

to pay particular attention to clients' endorsement of nationalist ideology and their levels of

public regard, given that these two dimensions are associated with core belief disruption and

PTG, respectively.

The next phase of therapy focuses on empowerment and fostering resilient responses to

racism. Comas-Diaz (2007) has referred to this as the decolonization stage, which allows clients

to validate their own narratives of transformation. This stage also parallels the PTG principle of

new or revised life meanings. An example of this is a recent RBTS intervention for Veterans that

includes a module on Resilience and Empowerment, which provides psychoeducation on

strengths-based approaches for coping with RBTS, which then led to enhanced self-esteem and

an overall sense of control among participants (Carlson et al., 2018). The findings of this study

are in line with this, given that participants endorsed the most growth in the domain of greater

sense of personal strength.

Limitations & Future Directions

The present study had several limitations that should be acknowledged and addressed in

future research. First, due to the cross-sectional in nature of this study, inferences of causality

cannot be made between variables. To address this, future studies could utilize longitudinal

design to examine how race-related sociocultural factors impact PTG constructs over time. This

is particularly important given that recent research has suggested that dimensions of racial

identity that were thought to be stable may actually change over time (Willis & Neblett, 2019).

Second, this study utilized a sample from a single southeastern university in the U.S.,

which may limit the generalizability of study findings. Future studies could strive to utilize

community samples (in different geographical locations, with wider age ranges) to further

examine how PTG unfolds in other segments of the population. Similarly, this study examined

RBTS and PTG only among African Americans. Future studies should include other racial and

ethnic minorities, given that these groups may experience RBTS and PTG in different ways.

Third, this study only examined PTG within the context of RBTS, without comparing it

to traditional traumatic events that fit DSM-V criteria. Future studies could examine traditional

trauma and RBTS among individuals who have experienced both types of events, in order to

compare the two and explore how the PTG process might differ. This is particularly important,

given that prior research has shown that reactions to race-based traumatic events can be

qualitatively different those in response to traditional DSM-V traumatic events (Craig-Henderson

& Sloan, 2003).

Fifth, did study did not examine other variables that may play a role in the PTG process,

such as self-disclosure and pro-social attitudes. Therefore, future studies should examine how

these variables may interact with racial identity and socialization to impact PTG.

Sixth, this study was unable to utilize the time of the index event as a control variable.

This survey made the mistake of asking "When did the event occur?" as an open-ended question,

where participants provided answers in a text box. This format yielded responses such as "when

I was in 8th grade" and "a few years ago." Therefore, it was not possible to condense these vague

responses into variables that could be controlled for in the analyses. Future studies should ask the

question "When did the event occur?" in a multiple choice format, with responses such as

"during the past 12 months," "over 5 years ago," "over 10 years ago," etc.

And lastly, this study only examined PTG resulting from one single event. Historically

(as well as currently), PTG has only been examined within the context of a single highly stressful

event. However, since experiences involving racial discrimination are pervasive and chronic, this

may necessitate measuring PTG resulting from the accumulation of these experiences as a whole. Therefore, future studies could strive to develop ways to measure PTG from an accumulation of highly stressful events.

Conclusions

The present study examined PTG within the context of RBTS among African American college students. Results revealed that participants, on average, experienced PTG to a small degree and RBTS symptoms infrequently as a result of stressful race-based events. RBTS and PTG were both positively correlated with each other, supporting the idea that stress and growth can both co-exist; however, this relationship became non-significant once core belief disruption and deliberate rumination were accounted for. Results also showed that participants experienced core belief disruption to a small degree as a result of these events, and that this disruption was significantly associated with RBTS symptoms. Results also showed that RBTS symptoms significantly predicted IR about the specific event that participants endorsed, above and beyond the effects of age and core belief disruption. Contrary to predictions, public regard and preparedness for bias were not associated with core belief disruption. Similarly, racial centrality, private regard, nationalist ideology, and pride messages were not associated with DR as originally predicted. Posthoc findings revealed that a nationalist ideology was significantly associated with core belief disruption, while public regard was significantly associated with greater PTG above and beyond other known predictors. Together, these findings highlight the importance of taking into account the unique lived experiences of people of color (including aspects of racial identity and socialization) when studying their responses to highly stressful race-based events.

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APPENDIX: MEASURES

Screening Questions for SONA:
Are you African American?
___ Yes   ___ No
Are you at least 18 years old?
___ Yes   ____No
Have you ever been treated negatively because of your race?
___ Yes   ___ No

Screening Questions for UNCC:
Are you African American?
___ Yes   ___ No
Are you at least 18 years old?
___ Yes   ____No
Have you ever been treated negatively because of your race?
___ Yes   ___ No
Have you already participated in the SONA study titled "IDENTITY, SOCIALIZATION, AND STRESS AMONG AFRICAN AMERICAN COLLEGE STUDENTS"
___Yes   ___No

Demographics:
Age: ____
Gender:
___ Male   ___ Female   ___ Non-binary
Education level (year in college): _____
Marital status: _____
Annual Income: _____
First Generation College student: ____ yes   _____no

List of Racial Events

For each item, participants answer the following 2 questions, using a 1-6 scale:

How many times in the past year?
How many times in your life?

1 = This has NEVER happened to you
2 = This has happened ONCE IN A WHILE (less than 10% of the time)
3 = This has happened SOMETIMES (10% - 25% of the time)
4 = This has happened A LOT (26% - 49% of the time)
5 = This has happened MOST OF 1HE TIME (50% - 70% of the time)
6 = This has happened ALMOST ALL OF 1HE TIME (more than 70% of the time)

For each item participants will also answer "How stressful was this for you?" using a 1 (=Not at all) to 6 (=Extremely) scale.

1. How many times have you been treated unfairly by *teachers and professors* because you are Black?

2. How many times have you been treated unfairly by your *employers, bosses and supervisors* because you are Black?

3. How many times have you been treated unfairly by *your coworkers, fellow students and colleagues* because you are Black?

4. How many times have you been treated unfairly by *people in service jobs* (store clerks, waiters, bartenders, bank tellers and others) because you are Black?

5. How many times have you been treated unfairly by *strangers* because you are Black?

6. How many times have you been treated unfairly by *people in helping jobs* (doctors, nurses, psychiatrists, case workers, dentists, school counselors, therapists, social workers and others) because you are Black?

7. How many times have you been treated unfairly by neighbors because you are Black?

8. How many times have you been treated unfairly by *institutions* (schools, universities, law firms, police, the courts, the Department of Social Services, the Unemployment Office and others) because you are Black?

9. How many times have you been treated unfairly by *people that you thought were your friends* because you are Black?

10. How many times have you been *accused or suspected of doing something wrong* (such as stealing, cheating, not doing your share of the work, or breaking the law) because you are Black?

11. How many times have people *misunderstood your intentions and motives* because you are Black?

12. How many times have you *been made fun of, picked on, or called a racist name because you are Black?*

13. How many times have you been verbally threatened with harm because you are Black?

14. How many times have you been physically attacked because you are Black?

15. How many times have you been overly sexualized (or deemed "exotic" in a sexual way) because you are Black?

16. How many times have other people assumed that you are aggressive because you are Black?

Racial event with the most impact

What event in your life that involved racial issues has been the most stressful for you? Please describe the characteristics of the event (where did it occur, who was involved, what was said and/or done) with as much details as possible.

When did this event occur?

Posttraumatic Growth Inventory-Expanded (PTGI-X)

Think about the stressful race-related event that you just described as you answer the following questions. Indicate for each of the statements below the degree to which this change occurred in your life as a result of the event you described, using the following scale.

0= I did not experience this change as a result of the event..
1= I experienced this change to a very small degree as a result of the event..
2= I experienced this change to a small degree as a result of the event..
3= I experienced this change to a moderate degree as a result of the event.
4= I experienced this change to a great degree as a result of the event..
5= I experienced this change to a very great degree as a result of the event..

1. I changed my priorities about what is important in life. (V)
2. I have a greater appreciation for the value of my own life. (V)
3. I developed new interests. (II)
4. I have a greater feeling of self-reliance. (III)
5. I have a better understanding of spiritual matters. (IV)
6. I more clearly see that I can count on people in times of trouble. (I)
7. I established a new path for my life. (II)
8. I have a greater sense of closeness with others. (I)
9. I am more willing to express my emotions. (I)
10. I know better that I can handle difficulties. (III)
11. I am able to do better things with my life. (II)
12. I am better able to accept the way things work out. (III)
13. I can better appreciate each day. (V)
14. New opportunities are available which wouldn't have been otherwise. (II)
15. I have more compassion for others. (I)
16. I put more effort into my relationships. (I)
17. I am more likely to try to change things which need changing. (II)
18. I have a stronger religious faith. (IV)
19. I discovered that I'm stronger than I thought I was. (III)
20. I learned a great deal about how wonderful people are. (I)
21. I better accept needing others. (I)
22. I have a greater sense of harmony with the world. (IV)
23. I feel more connected with all of existence. (IV)
24. I feel better able to face questions about life and death (IV)
25. I have greater clarity about life's meaning. (IV)

Note: Scale is scored by adding all responses. Factors are scored by adding responses to items on each factor. Items to which factors belong are not listed on form administered to participants.

PTGI Factors
Factor I: Relating to Others (6, 8, 9, 15, 16, 20, 21)
Factor II: New Possibilities (3, 7, 11, 14, 17)
Factor III: Personal Strength (4, 10, 12, 19)
Factor IV: Spiritual-Existential Change (5, 18, 22, 23, 24, 25)
Factor V: Appreciation of Life (1, 2, 13)

Core Beliefs Inventory

Some events that people experience are so powerful that they 'shake their world' and lead them to <u>seriously</u> examine core beliefs about the world, other people, themselves, and their future.

Please reflect upon the race-related event you had described and indicate **the extent to which it led you to** <u>seriously</u> **examine each of the following core beliefs using the following scale:**

0 = not at all
1 = to a very small degree
2 = to a small degree
3 = to a moderate degree
4 = to a great degree
5 = to a very great degree

1) Because of the event, I seriously examined the degree to which I believe things that happen to people are fair.
2) Because of the event, I seriously examined the degree to which I believe things that happen to people are controllable.
3) Because of the event, I seriously examined my assumptions concerning why other people think and behave the way that they do.
4) Because of the event, I seriously examined my beliefs about my relationships with other people.
5) Because of the event, I seriously examined my beliefs about my own abilities, strengths and weaknesses.
6) Because of the event, I seriously examined my beliefs about my expectations for my future.
7) Because of the event, I seriously examined my beliefs about the meaning of my life.
8) Because of the event, I seriously examined my spiritual or religious beliefs.
9) Because of the event, I seriously examined my beliefs about my own value or worth as a person.

Event Related Rumination Inventory (ERRI)

INTRUSIVE RUMINATION ITEMS

After an experience like the one you reported, people sometimes, but not always, find themselves having thoughts about their experience <u>even though they don't try to think about it</u>. Indicate for the following items how often, if at all, you had the experiences described during the weeks immediately after the event (or in the last few weeks).

0 = Not at all   1 = Rarely   2 = Sometimes   3 = Often

I thought about the event when I did not mean to.
Thoughts about the event came to mind and I could not stop thinking about them.
Thoughts about the event distracted me or kept me from being able to concentrate.
I could not keep images or thoughts about the event from entering my mind.
Thoughts, memories, or images of the event came to mind even when I did not want them.
Thoughts about the event caused me to relive my experience.
Reminders of the event brought back thoughts about my experience.
I found myself automatically thinking about what had happened.
Other things kept leading me to think about my experience.
I tried not to think about the event, but could not keep the thoughts from my mind.

DELIBERATE RUMINATION ITEMS

After an experience like the one you reported, people sometimes, but not always, deliberately and intentionally spend time thinking about their experience. Indicate for the following items how often, if at all, you <u>deliberately spent time thinking about</u> the issues indicated during the weeks immediately after the event (or in the last few weeks).

0 = Not at all   1 = Rarely   2 = Sometimes   3 = Often

I thought about whether I could find meaning from my experience.
I thought about whether changes in my life have come from dealing with my experience.
I forced myself to think about my feelings about my experience.
I thought about whether I have learned anything as a result of my experience.
I thought about whether the experience has changed my beliefs about the world.
I thought about what the experience might mean for my future.
I thought about whether my relationships with others have changed following my experience.
I forced myself to deal with my feelings about the event.
I deliberately thought about how the event had affected me.
I thought about the event and tried to understand what happened.

Race-Based Traumatic Stress Symptom Scale

Please continue reflecting on the event you described as you answer the following items. Please use the following scale for each one.

0= Does not describe my reaction
1= Infrequently
2= sometimes
3=Frequently
4=This reaction would not go away

As a consequence of the stressful event I had involving racial issues…

Depression
. . . I felt that I had nothing to look forward to.
. . . I felt that life was meaningless.
. . . I couldn't seem to experience any positive feelings at all.
. . . I experience tiredness and lack of energy.
. . . I found it difficult to work up the initiative to do things.
. . . I find myself spending a lot of time at home and away from family or friends.
. . . I experience feelings of hopelessness.
. . . I experience tearfulness.
. . . I feel a lack of initiative or a lessened desire to succeed since the event.
. . . I feel I can seldom do anything right.

Intrusion
. . . I can't seem to get the event out of my mind even when I try.
. . . I experience mental images of the event.
. . . I feel emotionally upset when I am reminded of the event.
. . . I find myself thinking about what happened even when I don't want to.
. . . I just can't believe the event really happened to me.
. . . I try not to think about, talk about, or have feelings about the event.
. . . I tend to stay away from people/places who remind me of the event.
. . . there are times when I feel and think as if the event is happening again.

Anger
. . . I become easily pissed-off (as if you can't control your temper during an otherwise normal conversation).
. . . I become easily upset or defensive (for example, when receiving feedback from a peer about a paper youwrote).
. . . I found myself getting agitated.
. . . I found myself getting upset rather easily.
. . . I found it hard to calm down after something upset me.
. . . I felt that I was rather touchy.
. . . I tended to overreact to situations.
. . . I found it difficult to relax.

Hypervigilance
. . . I become easily frightened (for example, when you hear subtle noises).
. . . I feel worried a lot (for example, walking down the street).
. . . I feel easily intimidated (as if someone is going to hurt you as they walk past you in the street).
. . . I feel nervous (for example, when others approach you).
. . . I feel hyperactive all the time (for example, feel like you can't relax).
. . . I feel paranoid (for example, when people look at you when you walk into a room).
. . . I experience trouble falling or staying asleep.
. . . I feel distressed and frustrated about things that used to not bother me.

Physical
. . . I experienced trembling (e.g., in the hands).
. . . I was aware of the action of my heart in the absence of physical exertion (e.g., racing heart).
. . . I experience physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminds me of the event.
. . . I experience poor appetite.
. . . I was aware of dryness of my mouth.
. . . I feel as though my heart is beating hard and fast, as if it might pop out of my chest.
. . . I was in a state of nervous tension.
. . . I experience more headaches and stomachaches since the event.

Low self-esteem
. . . I feel a sense of responsibility for the event.
. . . I certainly feel useless at times.
. . . I am inclined to feel that I am a failure.
. . . I think I am no good at all.
. . . I wish I could have more respect for myself.
. . . I was worried about situations in which I might panic and make a fool of myself.

Avoidance
. . . when I describe the event, I feel nothing, as if I'm not "really there."
. . . I feel like I am immune to pain.
. . . I have used alcohol or other drugs to help me sleep or to make me forget the event.
. . . I often find myself denying that the event occurred.

Multidimensional Inventory of Black Identity (MIBI)

Please indicate the extent to which you agree with the following items using this scale:

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

Centrality Scale
1. Overall, being Black has very little to do with how I feel about myself. (reverse scored)
2. In general, being Black is an important part of my self-image.
3. My destiny is tied to the destiny of other Black people.
4. Being Black is unimportant to my sense of what kind of person I am. (reverse scored)
5. I have a strong sense of belonging to Black people.
6. I have a strong attachment to other Black people.
7. Being Black is an important reflection of who I am.
8. Being Black is not a major factor in my social relationships. (reverse scored)

Regard Scale
Private Regard Subscale
1. I feel good about Black people.
2. I am happy that I am Black.
3. I feel that Blacks have made major accomplishments and advancements.
4. I often regret that I am Black. (reverse scored)
5. I am proud to be Black.
6. I feel that the Black community has made valuable contributions to this society.

Public Regard Subscale
1. Overall, Blacks are considered good by others.
2. In general, others respect Black people.
3. Most people consider Blacks, on the average, to be more ineffective than other racial groups. (reverse scored)
4. Blacks are not respected by the broader society. (reverse scored)
5. In general, other groups view Blacks in a positive manner.
6. Society views Black people as an asset.

Nationalist Subscale
1. It is important for Black people to surround their children with Black art, music and literature.
2. Black people should not marry interracially. (omit from analyses)
3. Blacks would be better off if they adopted Afrocentric values.
4. Black students are better off going to schools that are controlled and organized by Blacks.
5. Black people must organize themselves into a separate Black political force.
6. Whenever possible, Blacks should buy from other Black businesses.
7. A thorough knowledge of Black history is very important for Blacks today.
8. Blacks and Whites can never live in true harmony because of racial differences.
9. White people can never be trusted where Blacks are concerned.

Racial Bias Preparation Scale

Please indicate how often, if ever, any of your primary caregivers said any of the following statements to you now or when you were younger.

 1= Never   2= A few times   3= A lot

1. Our race is capable of succeeding in anything.
2. All races are equal.
3. Racism and discrimination will affect every aspect of your life.
4. If you work hard, you can overcome racism.
5. Racism and discrimination will be the hardest things for you to face.
6. You should be proud to be of your race.
7. You need to learn to get along with other races.
8. Other races can learn much from our race.
9. American society is fair to all races.
10. Learning about your race is an important part of your identity.
11. Your race will not really affect your success in life.
12. Going to school with children of our race, will make you feel good about yourself.
13. You can succeed just as easily as someone from another race.
14. Children of other races may exclude you from their social activities because of your race.
15. You have to work twice as hard as children of other races to get ahead in this world.
16. Your race will not affect your opportunities in jobs or education.
17. Racism and discrimination will not be the hardest things for you to face.
18. Going to school with children of other races will make you feel good about yourself.
19. You may have hard times being accepted in society because of your race.
20. Too much talk about racism will keep you from reaching your goals in life.
21. American society is unfair to people of our race.
22. You should participate in events involving your racial background.
23. Racism may hinder your success in life.
24. More job opportunities would be open to you if other people were not racist.
25. You may be harassed just because of your race.
26. Never be ashamed of your race.
27. You should remain true to your racial identity.
28. Our race is superior to other races.
29. You should encourage others from your racial group to be proud of their race.
30. You would be able to get a better education if other people weren't racist.

SCORING:
Reactive Messages: Sum of scores for items: 3+5+14+15+19+21+23+24+25+30/ Divided by 10.
Proactive Messages: Sum of scores for items: 1+6+8+10+12+22+26+27+28+29/Divided by 10
(items not listed in the scoring are omitted)