SOCIAL CONSTRAINTS AS A MEDIATOR OF THE RELATIONS OF DISCRIMINATION TO ANGER EXPRESSION IN A COMMUNITY SAMPLE

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SOCIAL CONSTRAINTS AS A MEDIATOR OF THE RELATIONS OF DISCRIMINATION TO ANGER EXPRESSION IN A COMMUNITY SAMPLE

A dissertation submitted in partial fulfillment of the requirements for the degree of

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Date Submitted _______________ Date Approved _______________

_________________________ _______________________
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Research has consistently demonstrated that anger is the dominant emotional response following experiences of racial discrimination. Studying anger itself may not be sufficient because anger can be expressed in a variety of ways, therefore it is necessary to examine different forms of anger expression. I hypothesized that social constraint would mediate the relations between discrimination and anger expression. Social constraint in the context of discrimination refer to an individual’s perception that communication about episodes of discrimination will be invalidated or minimized by others (either same race or other race individuals). Social constraint, in turn, may influence expression of anger during episodes of discrimination. Multiple mediation analyses tested the degree to which social constraints from members of one’s own group or members of other racial/ethnic groups served as mediators of the relationship of perceived discrimination to anger expression in the context of discriminatory experiences. Participants ranged in age from 18 to 85 (M = 39.27, SD = 12.89) and 103 (67%) were women. Overall, findings of this study support the hypothesis that social constraints mediate the relationship between perceived racial or ethnic discrimination and anger expression. Specifically, when participants reported experiences of lifetime discrimination, social exclusion, threat or harassment, and stigmatization social constraints from own race mediated anger
suppression accounting for between 46% and 60% of the variance. Social constraints from same race also mediated the relationship between discrimination and outward anger expression. Specifically, when participants reported experiences of lifetime discrimination and social exclusion, social constraints from own race facilitated the use of outward anger expression with variances between 29% and 35%. It is important for school psychologists to recognize the significance of race to their clients, the positive and negative judgments clients make about their race, and their attitudes, opinions, and beliefs about how they should act and their expectations of validation and support from others. Moreover, clinicians will need to be comfortable and conversant in engaging their clients around these topics, especially when encountering such issues in schools. As such, training and skills development in this regard should be ongoing.
DEDICATION

This dissertation is dedicated to my family. I never imagined that I would arrive at this juncture in my life. It took hard work, resilience, and love. Hard work is what I learned from my father, who came to this country a refugee with very little money and became the most successful person in our family history. Resilience is what I learned from my mother, who despite enduring decades of separation and loss continues to be the strongest person I know. Love is what I learned from my brothers who are my best friends and biggest supporters. Thank you for allowing me to be in a group that was crazier than the NWO and more fun than The Elite.
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I did not originally plan to pursue a doctorate in psychology. In fact, it was after a casual conversation with my advisor in undergrad that I even considered it a possibility for me. I doubt my advisor realized that she changed the course of my life. Thank you, Dr. Katherine Zaromatidis. I hope I get the chance to tell you so in person someday.

In order to apply to doctoral programs, I needed research experience. I owe it Dr. John Theodore for allowing me to be a part of his research which eventually led to our work being published. Not only was he a great researcher, he was one of my best advocates.

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INTRODUCTION

The demographics of the United States continue to change at a rapid pace. Although non-Hispanic Whites still comprise the bulk of the U.S. population (64%), the number of Blacks (12%), Latinos (16%), and Asian Americans (5%) is relatively high (U.S. Census Bureau, 2010). These shifts in population demographics have brought about conflicts in race relations and obvious discrepancies in well-being and aspects of daily life. According to one survey, 50% of respondents cited racism as a significant problem in the U.S. and more than half agreed that there is a considerable amount of work required in order to reach racial equality. Furthermore, when compared to Whites, Latinos and Blacks reported a higher prevalence of biased treatment in public places such as schools, stores, and restaurants (Pew Research Center, 2013).

There is evidence of significant gaps in treatment of racial or ethnic minorities when it relates to employment, the legal system, health care, and even housing (Pager & Shepherd, 2008; Bales & Piquero, 2012; Mouw & Kalleberg, 2010; Krivo & Kaufman, 2004). While these are frequently recognizable when comparing Whites versus Blacks and Latinos, Asian Americans also encounter bias which results in feelings of oppression and stigma. For example, Asian Americans are commonly seen as “model minorities” such that they are believed to possess great intellect and succeed academically. However, they are also viewed as foreigners regardless of their legal status in the U.S. (Kia, 2007). It is within this backdrop that instances of discrimination need to be studied.

In both field and experimental studies anger is the usual emotional response to discrimination, irrespective of its primary cause (i.e. racial vs. non-racial) or the race of the target (Williams et al., 2012). Anger is considered an approach-oriented emotion that
normally occurs from encounters of inequality, abuse, or barriers to preferred goals (Berkowitz, 1989). Consequently, it is not unexpected that anger has a strong connection with perceived discrimination since, in these situations, individuals encounter unfair treatment related to their social status, race, or ethnicity (Gibbons et al., 2012). For example, individuals who have been subjected to discrimination, either as targets or bystanders, react with more anger and take more time to physiologically recover from biased experiences compared to those who have not faced such stressors (Guyll, Matthews, & Bromberger, 2001; Mendes et al., 2008). What is unclear is whether and how discrimination affects the strategies an individual may employ to cope with anger. Anger coping is affected by power relations and interpersonal relations. Discrimination affects both peer relations and the quality of interpersonal relationships, therefore, discrimination may have an effect on anger coping.

The purpose of the current study is to examine the hypothesis that perceived discrimination is related to anger expression. Specifically, anger expression style is assessed as anger-in, anger-out, and anger-calm. Does perception that one has been validated or supported following perceived discrimination alter anger calm? Anger-in and anger-out reflect impulsive anger expression styles. Does discrimination, which is unfair, anger evoking, and unresolved predict more reflexive anger expression?

**Discrimination**

Racial discrimination is “any distinction, exclusion, restriction or preference based on race, color, descent or national or ethnic origin which has the purpose or effect of nullifying or impairing the recognition, enjoyment or exercise, on equal footing, of
human rights and fundamental freedoms in the political, economic, social, cultural or any other field of public life (Zilioli et al., 2017, p. 84).”

Many people associate racial discrimination with overt, direct forms of aggression by Whites towards individuals of a specific racial group. However, discrimination can also be implicit and unconscious which consists of nonverbal aggression in the form of one’s tone of voice or posture. A universal belief about an individual because of their association with a particular racial group is also a form of discrimination and has led to unfair profiling (Karlsen & Nazroo, 2002).

**Intentional and Explicit Discrimination**

The occurrence of causal slurs and disparaging statements while in or out of an individual’s presence is known as verbal antagonism. On their own, such remarks may not be considered significant enough to be criminal (allowing for freedom of speech), yet they are a clear form of aggression. When such actions are used in conjunction with nonverbal manifestations of hatred, the result is a hostile academic, work, or living environment (Feagin, 1991). For example, Darley and Fazio (1980) found that an interviewer’s original prejudice of someone based on their race was conveyed nonverbally by sitting at a distance or abruptly ending the interview. Both nonverbal and verbal aggression are significant aspects of the discrimination continuum. Verbal abuse and nonverbal rejection have been examined in laboratory tests due to their reliability in measuring the effects of discrimination. They also differ by the extent of harm done when applied to particular types of situations such as withholding opportunities for employment (Dovidio et al., 2002; Fiske, 1998).
Avoidance involves selecting the security of your own racial group (labeled as “in-group”) in lieu of a different racial group (labeled as “out-group”). In situations where interactions are optional, individuals may choose to avoid associating with the outgroup which may result in a racial group being isolated. It is common for people of color in social situations to self-segregate by race. Hong and Kacperczyk (2009) found that in work settings, out-group members may be forced into lower-status positions or even omitted from advancing further in the company.

Institutional segregation is one form of discrimination which happens when people of color are intentionally denied resources or access to organizations. The majority of Americans support laws that impose equal treatment in the areas of education, employment, health care, and housing (Pedriana & Stryker, 2017). Nevertheless, there is a portion of the population that does not favor equality for all races, and these are the people that will engage in intentional, overt forms of discrimination. According to Velez and Lavine (2017), these individuals tend to believe that the racial out-group is a threat to the prosperity of their group.

**Subtle, Unconscious, and Automatic Discrimination**

Despite the obvious notion that overt racial aggression is inappropriate, many continue to hold bias viewpoints, which may originate from the United States own history of extreme prejudice. The presence of discriminatory beliefs does not inevitably end in discriminatory behaviors but having such a perspective could result in prejudice that is not obvious but more indirect and subtle. The recurring gap in media portrayals of people of color versus their White counterparts is one form of subtle and unconscious bias (Leiber et al., 2017). The research on indirect forms of prejudice illustrates how recurrent
unconscious views impact the way Whites (in-group) feel about and behave toward people of color (out-group) (Dovidio, Gaertner, & Pearson, 2017). As a result, those in the in-group encounter an inner struggle which produces a division between the continuation of racist attitudes and society’s rejection toward racist behaviors (Ziegert & Hanges, 2005; Entman, 1990).

**Discrimination Evokes Anger**

Discrimination may elicit anger because it involves disrespectful treatment. The association between disrespect and anger has been examined extensively. Certainly, the awareness that one has been dealt with disrespectfully is generally recognized as the most common source of anger (Cohen et al., 1996). Folkman & Lazarus, (1988), for example, alleges that insults are a key factor in the provocation of anger. Whether the discernment of disrespect is an essential requirement for the arousal of anger is difficult to ascertain (Bettencourt & Miller, 1996), however, there is evidence to support the notion that the common catalyst to aggression and anger is disrespectful treatment (Cohen et al., 1996).

Racial discrimination is also unjust, and the perception of injustice is commonly attached to the emotion of anger (Keltner et al., 1993; Scher, 1997). Therefore, the relationship may be bidirectional. On the one hand, the awareness of inequality can result in anger. For example, people have reported that anger is their most common response to injustice (Diemer et al., 2006). In contrast, the perception of injustice can be a result of the incitement of anger. One reason for the latter is that people depend on anger to prompt them to the occurrence of injustices. As Wilkowski and Robinson (2008) remarked, anger functions as “an alarm system” that activates the perception of injustice.
The YES Health Study was a quantitative and qualitative cross-sectional exploratory investigation conducted in 4 neighborhoods which were grouped by race (majority White or majority Black) and socioeconomic status. The study focused on evaluating experiences of discrimination throughout these neighborhoods. Utilizing data from the YES Health Study, Williams et al., (2012) found that both Black and White participants recognized biased treatment as denoting injustice, signifying conventional understandings of discrimination. In addition, the most common emotional reactions to discrimination were found to be anger and frustration.

Laboratory-based studies have revealed that minority participants who encounter, see, or remember an incident of discrimination experience greater acute anger. The results are particularly interesting when considering the role of same race and another race discrimination. For example, Mendes et al., (2008) studied a variety of reactions (e.g., physiological, emotional, and behavioral) by Black and White participants to social disapproval or positive social feedback from assessors that were of the same race or other race. When participants in the in-group received social acceptance, they responded with better performance but performed poorly in response to social rejection. This was not the case in intergroup interactions where rejection from assessors of a different race stimulated Black participants to exhibit responses consistent with anger.

Jamieson et al., (2013) found that participants exhibited more anger behavior after cross-race rejection than after same-race rejection. In their study, Black and White participants encountered rejecting feedback from individuals who were either of a different race (out-group rejection, which could be taken as discrimination) or of their own race (in-group rejection). The factors that were assessed included biological
(cardiovascular and neuroendocrine) changes, emotion, cognition (memory and attentional bias), and risk-taking behavior. When comparing cross-race rejection to same-race rejection, the findings were that it was related to greater anger, more attentional bias, and increased risk-taking behavior. These results are in line with research on the influence of discrimination indicating that anger is the overriding emotional response to perceived or experienced racial bias and is embedded in a perception of potential disrespect and injustice.

However, there are also cultural variations in this effect. In their examination of adult Korean immigrants, Noh and colleagues (2007) found that, subtle, not explicit, forms of discrimination resulted in more emotional provocation, such as feeling angry, wanting to engage in physical aggression, and desire for retribution. Wang et al., (2011) also found that among Asian American college students there was a relationship between racial microaggressions and anger and frustration. Taken together, we can conclude that those who encounter numerous discriminatory occurrences may become more aggressive and angrier (Bailen, Green, & Thompson 2019; Simons et al., 2006).
Anger is a complex and multifaceted phenomenon. Emotion researchers have categorized several key aspects of anger episodes such as physiological reactions (e.g., increased heart rate) (Averill, 1983), cognitive concomitants (e.g., obsessive thinking about the event) (Covell & Miles, 1992), behavioral manifestations such as shouting or trying to regulate the expression of anger (Fitness & Fletcher, 1993), as well instigators (e.g., being treated unfairly or wrongly) (Russell & Fehr, 1994).

**Anger**

It is also possible that anger can be a result of having a negative evaluation of a situation or event (Pornari & Wood, 2010). Individuals with hostile attribution biases or those who judge that responses to their aggressive behaviors are prejudiced might become angry as a result of perceived unfair treatment. Although anger has been conceptualized as an intervening variable in the stress-delinquency relationship (Agnew, 1992), evidence again suggests a bidirectional relationship. Agnew et al., (2002) described angry adolescents as more prone to attribute exchanges to malicious intent and to have more severe emotional reactions to those events.

Spielberger’s state-trait theory of anger (Spielberger, et al., 1983) hypothesizes that the condition of feeling angry is a common temporary state that is comprised of subjective feelings of anger that fluctuate in intensity and duration. In addition, the physiological reactivity experienced by anger will also vary along with the intensity of subjective feelings. Trait anger is believed to be a fixed personality type so an individual high in this trait will experience more lasting episodes of anger than someone who is low in trait anger. Spielberger and his colleagues (1983) also suggested that despite
experiencing identical anger triggers to those low in trait anger, high trait anger individuals react with stronger and lengthier state anger.

Five central predictions originating from Spielberger’s state-trait theory of anger were empirically tested by Deffenbacher et al. (1996) using adult samples. One of the predictions surrounding the negative expression hypothesis is that compared to low trait anger individuals, those high in trait anger will exhibit maladaptive anger expression, such that there will be more anger suppression (anger-in) and anger explosion (anger-out). Studies examining various age groups have established that trait anger is formed in one’s personality in adulthood (Deffenbacher et al., 2003; Deffenbacher et al., 2005).

Anger Expression and Anger Coping

One important individual-difference variable that has been the focus of considerable research in recent years is anger expression. The expression of anger is a multidimensional phenomenon comprised of internalized anger (anger-in), externalized anger (anger-out), and anger control. Anger that is internalized represents the propensity to quell angry thoughts and feelings. In contrast, externalized anger refers to the tendency to participate in aggressive behaviors towards persons or objects in the environment. Finally, anger control refers to the tendency to monitor and block the occurrence or manifestation of anger (Roberton, Daffern, & Bucks, 2015).

Anger is an emotion that elicits an active approach response in order to manage a situation (Wilkowsk & Robinson, 2010). Therefore, it will function as a catalyst for action when someone encounters discrimination (Mackie et al., 2000; Yzerbyt et al., 2003). At the same time, however, among minority group members, pressures (i.e., disparities of power and fear of retaliation) may exist to restrain the expression of anger.
(Fidalgo, Tenenbaum, & Aznar, 2018; Keltner, Gruenfeld, & Anderson, 2003), which will reduce aggressive actions. In effect, even when group members recognize a situation as entailing discrimination, and especially if they are angered by their treatment, they might employ other coping strategies to manage the emotional and behavioral reactions that might otherwise accompany such an injustice (Thomas & Swim, 2006).

When ethnicity-related maltreatment is encountered the anger coping strategies employed may address two points. First, it includes using confrontation as a coping strategy in order to alter the outcome of the race-related encounter. For example, anger can be used to encourage others to take action or to cause the perpetrator to alter his or her behavior (van Zomeren et al., 2004). Another anger coping strategy may be to ease the emotional load created by the anger (Swim et al., 2003).

Mabry and Kiecolt (2005) used data from the 1996 General Social Survey as well as the 1973 Chicago Crowding Study to examine the hypotheses that having a sense of control will reduce anger while mistrust will increase it. In addition, they examined whether Blacks experience and display more anger than Whites. Despite reporting low sense of control and higher mistrust, Blacks did not feel nor demonstrate more anger than Whites. The authors concluded that for Blacks, sense of control diminishes feelings of anger as well as the expression of anger to a greater extent than in Whites.

Utilizing self-report measures with a community sample of Black and Latino adults Brondolo et al., (2005) tested the relationship of lifetime exposure to racism to appraisals and anger-coping responses. Their findings suggest that having prior exposure makes individuals more likely to interpret future events as threatening or harmful. Therefore, people do not eventually become accustomed to racism. Instead, individuals
are more likely to resort to quick and combative anger management styles since they interpret discriminatory interactions as a threat. The authors concluded that since both groups respond in a similar manner, the effects of discrimination on coping are comparable across Blacks and Latinos.

Along with its effects on mental states, anger coping strategies also impact physiological reactivity. One study examined the physiological impact of anger among Black and White participants who engaged in race and non-race-related debates with a White confederate (Dorr et al., 2007). Following the debates, participants were given opportunities to communicate or inhibit their anger. In both races, anger inhibition was linked to longer recovery of vascular responses. The blood pressure and heart rate recovery periods for Blacks were lengthier following expressions of anger which is in contrast to the inhibition of anger where physiological recovery was shorter. Whites also exhibited longer recovery periods after the expression of anger. Taken together, the results suggest that for both Blacks and Whites the suppression of anger intensifies physiological recovery from stress. In addition, the outward expression of anger, only worsens the physiological recovery period for Blacks. The authors interpreted these findings to mean that if a matter is not satisfactorily resolved, the suppression of anger will result in rumination of the incident. However, exhibiting direct expressions of anger can result in anxiety about seeking revenge or fear of being rejected from a social relationship. Following exposure to stress, both persistent anxiety and rumination may be connected with prolonged physiological activation (Brosschot et al., 2006).

For individuals residing in disadvantaged environments, an awareness of racism may act as a buffer since they are already equipped with coping mechanisms to manage
discriminatory situations (Sellers et al., 1998). Furthermore, any expression of anger that consists of direct aggression toward the perpetrator can be interpreted as an effective strategy in such environments. Blacks who use confrontation strategies such as actively speaking up have been found to report better health than those who avoid or keep to themselves (Thomas, Witherspoon, & Speight, 2008). It may be that the maladaptive health effects related to anger are compensated by the direct and more active form of anger reaction in response to discrimination (Utsey et al., 2000).

**Social Constraints**

A stressful life situation such as discrimination would best be approached with coping flexibility, wherein the individual could choose from a broad range of coping strategies for each stressor encountered. Social constraints make this type of flexibility difficult by limiting otherwise viable coping strategies. This contrast of opposing forces is labeled a “threshold-constraint” process, in which mistreatment past a specific subjective threshold is observed by the victims as discrimination and, at the same time, there exists some degree of constraint limiting the options available for coping with this stressor (Lepore & Revenson, 2007).

Plummer and Slane (1996) sought to improve their understanding of how individuals choose an anger coping strategy after experiencing mistreatment. They found that the social context of mistreatment may restrict which coping routes seem feasible. This phenomenon, sometimes referred to as social constraint (Lepore & Revenson, 2007) describes an individual’s perception that certain anger coping strategies (i.e., anger-in, anger-out, anger calm) would be inappropriate or risky in certain situations (Bonanno, Rennicke, & Dekel, 2005; Lepore et al., 1996; Schmidt & Andrykowski, 2004). Even
when social constraint pressures are recognized individuals may not normally employ those coping strategies that seem socially unacceptable or even dangerous. Two possible explanations for why coping strategies may seem risky or unacceptable include disparities in power or in social status.

**Power**

Keltner, Gruenfeld, and Anderson (2003) created the approach/inhibition theory of power which states that power is the factor that decides whether an individual will inhibit their response or act on it. They conducted two studies of decision-making dyads where control of resources and personality dominance was a measurement of power and found support for their theory. Specifically, individuals with active behavioral approach systems were higher in either personality dominance or control over resources. This meant that they were open about sharing their viewpoints and felt more positive emotions versus negative ones. In contrast, those with a more activated behavioral inhibition system were lower in personality dominance or control over resources. This implied that they were reserved in disclosing their beliefs and felt more negative emotions.

An active approach system, those with high power, is demonstrated by individuals such as leaders, majority group members, and the wealthy. While an active inhibition system, those low in power, is exhibited by individuals who are followers, minority group members, and of low socioeconomic status (Keltner et al., 1998). For example, a person of color who perceives racial discrimination in the workplace may not openly confront this mistreatment because it could lead to harsh consequences, such as the loss of employment. Anger suppression is the most prevalent response style when individuals perceive discrimination in the workplace. In contrast, outward expression of anger, which
is an assertive style of anger coping, is positively related to social exclusion. These outcomes are independent of personality and mood, so the use of a particular anger coping strategy depends on the qualities of the stressor (Brondolo et al., 2005). This social constraint phenomenon could help to explain previous findings that people of color are more likely to keep quiet about many experiences of mistreatment (Krieger, 1990; Krieger & Sidney, 1996). This interpretation of social constraint is also consistent with the Lazarus and Folkman (1984) model; social constraint may be one of the leading elements that is considered when selecting whether or not to engage in an active, problem-focused coping strategy.

Social Status

Prior research has suggested that affective experiences, and especially the experience of anger, varies considerably across individuals according to their social status (Keltner et al., 1998). Children and adults of low socio-economic status report more negative moods than persons with higher socio-economic status (Hecht, Inderbitzen, & Bukowski, 1998). It is only recently that the effect of social status on dynamic social interactions in the context of anger has begun to be explored. Pfeiler, Weber, and Kubiak (2018) examined the effect of the Big Five personality traits on the state anger experience after a provocation in a staged social interaction and investigated the ways status differences moderate personality effects. Specifically, participants had to work on a computerized problem-solving test under time pressure. While working on this anagram-tasks, the participants were continuously disturbed by the target of anger, who followed a standardized script of behaviors (such as thinking out loud, humming, and other noisy behaviors). Then, the participants were told that they had performed far below the
average and received a poor result for their performance. They found that status positions had affected how one reacts to anger: Having a lower status than the anger-target generally caused one to have fewer anger reactions (difference in anger from baseline to after provocation) and more anger inhibition; as well as more passive and submissive reactions to anger. Following provocation in both conditions, individuals who scored higher in neuroticism experienced greater state anger. The findings illustrate the importance of neuroticism in understanding how people react to provocations in social situations, while status had no impact on the anger experience. Taken these findings together, they argue that status positions might have no impact on how angry we feel after being angered but do affect how we react to anger.

Brondolo and colleagues (Brondolo et al., 2009) have speculated that, under some circumstances, speaking with others about race-based rejection may inadvertently increase distress among racial/ethnic minorities. Sometimes individuals may not use social supports to process and find closure concerning the racial incident, but may, in fact, that discussing anger-evoking events exacerbate their negative reactions by elaborating on them.

**Trauma and Seeking Social Support**

The Social-Cognitive Processing Model (SCPM; Lepore, 2001; Lepore & Revenson, 2007) indicates that open disclosure of important thoughts and feelings to meaningful members of one’s group is a vital way of dealing with stressful life events that aids psychological adjustment. Cognitive processing, through individual disclosure, may assist incorporation of hostile or unclear facets of a stressful life event into a comprehensible and nonthreatening conceptual framework. According to the SCPM,
individuals may come to understand the event in personally meaningful terms and reach a state of emotional acceptance. For example, positive interactions with a supportive spouse can aid cognitive processing by allowing the open expression of thoughts and feelings related to the stressful event. On the other hand, social constraints on disclosure from a spouse can discourage dialogue and hinder subsequent cognitive processing, thus negatively impacting psychological adjustment and satisfaction in relationships.

A compassionate social network encourages feelings of safety and connectedness, which helps individuals see discrimination as an experience shared by many. Members of a support network can provide feedback and direction on effective methods and responses to discrimination. Obtaining social support is the most common coping strategy utilized by individuals who have experienced a racist episode (Shorter-Goodeen, 2004; Krieger & Sidney 1996; Utsey et al. 2000). More than 60% of the Black college students in one study (Swim et al., 2003) reported that they sought the help of family, friends, and acquaintances after experiencing an incident of prejudice. Similarly, two separate studies also found that the majority of Black participants obtained support from others in response to encountering discrimination (Krieger 1990; Krieger & Sidney 1996).

The relationship of perceived discrimination on adverse mental health outcomes is related to how one experiences it and the resulting coping methods employed to manage it. It has been recommended by researchers that racial discrimination be interpreted as a race-based traumatic stressor rather than as a benign negative experience (Bryant-Davis & Ocampo, 2005; Carter, 2007). According to Carter (2007), experiences of discrimination are a threat to one’s integrity and well-being. Thus, racism is a possible cause for traumatic stress, which he views as race-based traumatic stress. Specifically, the
emotional and psychological damage that results from a race-based incident has a significant influence on mental health because it elicits traumatic stress. In particular, these incidents are usually recognized as sudden, harmful, out of the individual’s control, and recurrent. He also suggested that hypervigilance, emotional distress, and avoidance are specific strategies used in response to race-based traumatic stress. Experiences of racial discrimination are explicit presentations of biased treatment as a result of one’s race. This in contrast to racial microaggression, which is believed to be an advanced form of racial discrimination that is more indirect, covert and long-lasting in nature (Sue et al., 2007). While there continues to be an escalation in racial microaggressions, overt forms of racism continue to afflict communities of color. A stress response can be produced when an individual believes their sense of self is threatened which jeopardizes their feelings of security and safety (Bryant-Davis & Ocampo, 2005; Carter, 2007).

Utilizing self-report measures, Henson et al., (2013) examined the link between race-based rejection sensitivity (RS-race) and social constraints when disclosing incidents of racism with loved ones and the psychological reactions to a racist event. RS-race reflects a chronic hypervigilance and concern about being rejected based on race. Participants consisted of 551 Black undergraduates from either a historically Black university or a mostly White university. According to the results, high RS- Race individuals experience a more intense negative response to race-based rejection. In high compared to low RS-Race individuals, lower constraints in talking about racial discrimination with significant others were associated with lower positive affect about the discriminatory event and lower forgiveness for the perpetrator. They concluded that difficulty in talking about racial discrimination to significant others (associated with high
social constraints) increases distress over race-based rejection. This distress is a product of cognitive difficulty in processing experiences with racial discrimination as well as emotional difficulty forming “non-threatening associations” (Lepore et al., 2000, p. 501) to these events. Intrusions of thought (that may extend the memory of the prejudicial event) also mediated the results of RS-Race and social constraints on forgiveness and negative affect. These results document how individual differences are associated with reactions to being the target of racial discrimination in day-to-day interactions.

Historically, the relationship between trauma and social support has been interpreted against the background of the general stress-buffering model of Cohen and Wills (1985). This model suggests a supportive social environment to facilitate coping with stressful events. The protective role of social support has been extensively demonstrated to enable subjects to generate a more functional interpretation of the traumatic situation within interpersonal dialogues (Williams et al., 1999; Lepore, 2001). In their social-interpersonal framework model of trauma, Maercker, and Horn (2012) emphasize the influence of different aspects, especially interpersonal factors, of the social environment on the development and continuation of trauma symptoms. In this respect, Maercker and Horn (2012) highlight the individual’s disclosure pattern of the traumatic contents in the context of close relationships as “a phenomenon that deserves particular attention” (Maercker & Hecker, 2016, p. 4). Disclosure within this framework is defined as the “revelation of adverse life events” (Maercker & Müller, 2004, p. 161).

Disclosure as an interpersonal process must be understood in the context of the social environment (Maercker & Müller, 2004; Ullman & Filipas, 2001; Hoyt et al., 2010, Lueger-Schuster et al., 2015). On the one hand, the extent of disclosure as well as
its potentially beneficial effects depend substantially on the perceived social climate
(Maercker & Hecker, 2016) and the anticipated or actual received social reactions
(Ullman & Filipas, 2001; Ullman & Filipas, 2005; Dodson & Beck, 2017). On the other
hand, disclosure is considered a prerequisite for the expansion and preservation of close
relationships (Reis & Shaver, 1988; Hoyt et al., 2010). Hence, the notion of disclosure is
complex, and portrayed by a multifaceted interaction between intrapersonal and
interpersonal elements (Maercker & Hecker, 2016).

There is minimal support for the hypothesis that social support (having a
supportive network or either pursuing social support) protects the effect of racism on
psychological health. Social constraints may be one factor that explains why there is a
failure to find positive effects associated with social support. Lepore and Revenson
(2007) suggest that social constraints diminish the capacity to seek and use social support
interventions. Discussing an incident of racial discrimination while pursuing social
support will involve remembering and describing painful and stressful details. Hence,
when members of marginalized groups, disclose their experiences of prejudice it may
invoke memories that feel overwhelming and stressful. There may be reluctance by
members of a majority out-group to share race-related struggles, due to fear of coming
across as unsympathetic (Badr & Taylor, 2006). Both in-group and outgroup members
may experience anxiety which can inhibit valuable communication about race related
incidents. The pursuit of support may be useless and associated with more pain if
individuals receive messages that minimize or criticize their experience (Richeson &
Shelton, 2007).
Pennebaker and Beall (1986) have proposed that some of the reluctance to disclose negative events is due to the shame associated with it (e.g., stigma of being a victim), as well as other social constraints. People who believe that they are unable to share with others will have fewer opportunities to manage traumatic experiences. At an individual level, current literature particularly emphasizes the “individual’s subjective ability or inability to disclose” a traumatic experience (Maercker & Horn, 2012, p. 473) as essential for post-trauma adjustment (Jones, Müller & Maercker, 2006, Pielmaier & Maercker, 2011). According to Maercker and Hecker (2016), the individual’s perceived inability to disclose, the excessive need to disclose and the occurrence of negative physical (e.g., tension, heart palpitations, sweating, trembling) and emotional (e.g., feelings of helplessness, sadness, exhaustion) reactions when speaking about one’s traumatic experiences are understood as dysfunctional disclosure attitudes. In this context, the pronounced resistance and the pronounced need to tell others about the trauma are not mutually exclusive: On the one hand, trauma victims experience a strong need to talk; on the other hand, they often feel restricted in doing so due to, for example, fears of decompensating (i.e., losing mental and/or behavioral control) when dealing with the trauma-related contents or fears of negative social reactions in response to disclosure (Lutgendorf & Antoni, 1999).

Disclosing trauma can be extremely difficult and many people are reluctant to discuss these events with others. Social constraints may prevent people from sharing their traumatic experiences (Pennebaker & Harber, 1993). Having limited access to individuals who are able to offer comfort, support, and kind words is one example of a social constraint. In addition, there are some stressors such as divorce, loss of a loved one, or
serious illness that may be too challenging for one’s social support network. As a result, not only is there a disruption in social interactions but also in the perception of social support (Lepore, Evans, & Schneider, 1991; Lepore, Allen, & Evans, 1993). Another social constraint occurs for those whose support network consists of individuals that communicate or behave in ways that are perceived by the recipient as insensitive or apathetic (Kaniasty & Norris, 1993). For example, if those who provide support are not equipped to manage a victim’s distress, they may attempt to minimize the incident or even choose to rely on insincere comments (e.g., “it’s not a big deal”).

Individuals may hide their thoughts and feelings from others to escape hearing uncomfortable and distressing feedback. In addition, if they are on the receiving end of a strong negative reaction from others, individuals may feel forced into sharing their thoughts and feelings regarding the trauma. Some group members may abandon or avoid a person in need due to feelings of powerlessness or doubt about their ability to unravel the stressor experienced by the individual (Kaniasty & Norris, 1993). As a consequence of social constraints on disclosure, there is an obligation by victims of trauma to refrain from sharing their experiences.

**Internalized Racism**

Harper (2007) described several circumstances that may result in the oppression of individuals and groups. One such example is cultural imperialism which describes how oppression is internalized in subjugated groups. Cultural imperialism “involves the universalization of a dominant group’s experience and culture, and its establishment as the norm” (Harper, 2007, p. 59). The influence of the dominant group’s narrative as “representative of humanity,” undermines the experiences of the oppressed group. “The
culturally dominated undergo a paradoxical oppression, in that they are both marked out by stereotypes and at the same time rendered invisible” (Harper, 2007, p. 59). As a result of outside forces, biased views from the prevailing group become internalized by the minority group as they work on establishing their own identity.

The internalization of oppressive views is mostly recognized and accepted as part of the psychological dynamics at the core of oppression (Prilleltensky & Gonick, 1996; Guindon, Green, & Hanna, 2003). Once these ideas are internalized, it is a difficult adversary, demanding a “battle on two fronts: the oppressor within and the oppressor without” (Bulhan, 1985, p. 123). Therefore, internalized racism should be considered in all conversations surrounding the psychological impact of racism.

One possible explanation for why some people experience social constraints from members of their own race may be due to internalized racism. The acceptance of bias views about one’s intellect, ability, and status in society is an example of internalized racism or internalized oppression which impacts how they treat of others within their group (Jones, 2000; Pyke & Dang, 2003). In particular, the oppressed start to believe in or come to accept the views (i.e., stereotypes etc.) of their group held by the dominant group (Wang, 2003). As a result, others may mistakenly or intentionally repeat unsupportive views of the oppressor.

The earliest examinations of internalized racial oppression were conducted by Clark and Clark (1939) who used child preferences for White dolls to conclude that Black children possessed a sense of inferiority as a result of living in a discriminatory society. This fueled research that relied on measurable methods of identity formation, emotional
regulation, and position in the social hierarchy to demonstrate internalized racism (Katz & Zigler, 1967; Siegelman et al., 1970; Silber & Tippett, 1965).

DuBois (1989), created the term “double consciousness” to describe the internal unrest experienced by minority groups in an oppressed society. This issue emerges for Blacks as they attempt to tackle the dichotomy of what it means to be “Black” and “American.” (Banks & Hughes, 2013). In particular, members of the Black community are burdened with the need to conform in a predominantly White society while also trying to maintain their individuality (Dickens, 2014). The problem of integrating effects Black individuals’ “understanding of their race, class, and gender identities, all of which they navigate in the process of assimilation or resistance” (Dickens, 2014, p.20).

Internalized racism impacts social interactions among people of color in several ways, “including projecting one’s own sense of inferiority and inadequacy onto those of the same race” (Bivens, 2016, p.47). For example, in a situation where an individual has encountered racism, this outcome impedes the possibility of a Black individual seeking support from a same race peer due to “a lack of confidence in our ability or acceptance and support of each other’s leadership” (Bivens, 2016, p.47). Limited trust may lead to a shortage of support from members of one’s own race which results in an increase in feelings of shame, anger, and isolation.

To highlight this point, it is necessary to consider the phenomenon of “defensive othering,” which Ezzell (2009) defines as identity work employed by people of color so they can distance themselves from stereotypes associated with their group and instead be consistent with the dominant group. This is evident by the creation of negative identities within a racial of ethnic minority population. For example, Mexican Americans use slurs
such *wetback* and *pocho* to delineate individuals who have recently arrived in the U.S. and therefore have not assimilated (Pyke, 2010). By utilizing the same derogatory language and descriptors as the dominant group, members of the minority group can distance themselves from harmful labels. Moreover, this distancing from those in one’s racial group allows the oppressed to pose as members of the dominant group. This is the dilemma of oppressed identities since the subjugated cannot simply escape their “otherness” (Gilman, 1986).

**Language**

For decades, language scholars have lamented the damage to the racial and linguistic identities of Black students as a result of uncritical language education. *Anti-black linguistic racism* is a term used to describe the harassment and persecution that Black Language (BL) speakers encounter when communicating in their daily lives. Alim and Smitherman (2012) state that language scholars have neglected to identify the manner in which language as well as the norms of communication in our lives echo White Mainstream English (WME). Labels such as “academic language” are not challenged, but “the fact that White people consider themselves the ‘standard’ by which ‘Others’ are measured – has real and tangible effects on the lives of People of Color” (Alim & Smitherman, 2012, p. 171). Perhaps the most disturbing aspect of facing anti-black linguistic racism in schools is its internalization by Black students. When Black students begin to feel that BL is not an appropriate way of speaking, they will internalize anti-Black sentiment and acquire a negative outlook about themselves and their race (Baker-Bell, 2013). Similar to internalized racism, when Black students adapt negative ideologies about their native language the results may be a loss of “confidence in the
learning process, their own abilities, their educators, and school in general” (Charity Hudley & Mallinson, 2014, p. 33).

**Skin Color**

Across several disciplines’ researchers have looked at intergroup interactions in order to explore the potential for skin color biases (Hughes & Hertel, 1990; Gullickson, 2005; Wade & Bielitz, 2005). Studies have consistently found that individuals who have experienced more racial discrimination tend to have darker skin, are seen as unattractive (Eberhardt et al., 2006), and experience harsher legal punishment (Kaufman & Wiese, 2011; Watson, Thornton, & Engelland, 2010). Research utilizing anecdotal information to examine colorism within widespread media also provides insight into the colorist driven biased behavior and discriminatory evaluations of Blacks (Hannon, DeFina, & Bruch, 2013). In addition to its emotional and social consequences, the combination of race and skin color can yield vastly different life experiences for darker Blacks versus lighter Blacks (Boyd-Franklin, 2006). Franklin, Boyd-Franklin, and Kelly (2006) found that differences in skin color within a family prompted doubts about paternity, increased conflict among siblings, and was related to trauma.

Townsend, Thomas, Neilands, and Jackson (2010) examined the relationship between colorism and one’s support of disparaging characterizations of Black women such as the stereotype of the angry Black woman. They found a positive relationship between one’s preference for lighter skin and endorsement of negative stereotypes. These findings, however, do not mean that Blacks with lighter skin are immune to experiences of discrimination. Markus (2008) reported that lighter skinned Blacks may be accused of aspiring to be White and not being “Black enough.” Maxwell et al., (2015) found that
internalized racism is a strong predictor of discontent with one’s skin color. Their study provides further evidence to support the relationship between skin color preference and endorsement of negative stereotypes. Furthermore, when harmful stereotypes are internalized, they result in poorer health, diminished racial identity, as well as increased emotional and social stress (Maxwell et al., 2015; Milliones, 1980).

**Interpersonal Relationships**

As a result of repeated encounters with racism and white privilege, people of color have difficulty maintaining relationships with individuals they perceive to benefit from their White status. This may be exhibited by strong resentment of Whites for not acknowledging and/or being accountable for their privilege. However, it can also manifest in the form of idolizing Whites while believing one’s self to be inferior. When interacting with other people of color, they may reflect their own feelings of inferiority and inadequacy onto them which increases their social isolation (Harper, 2007).

Empirical research on the source of internalized racism is extremely sparse, resulting in several hypotheses which attempted to clarify why racism is internalized. One hypothesis states that internalized racism is more prevalent for those who live in environments where there is an increase in discrimination and limited cultural support (Taylor, 1990). While another suggests that the cognitive dissonance generated by residing in a discriminatory environment leads to employing internalized racism as a coping strategy (Asanti, 1996). Poupart (2003) hypothesized that the integration of people of color into Western culture will result in internalized racism. As of present, there is no research specifically investigating the exact features that influence the creation of internalized racism in people of color.
Social Constraints

Social constraints around disclosure are related to both objective and subjective factors that influence an individual’s ability to withhold or even revise their thoughts and feelings about the trauma. When social conditions such as blame, rejection, and isolation occur, there is an increased likelihood of the presence of social constraints. This may result in feelings of shame and isolation from one’s support (Mossakowski, 2003).

Social constraints emerge from a combination of the environment and the individual’s understanding of their environment. This is often ignored, since factors such as social behaviors of others and personal beliefs can veer in the direction of social constraints (Noh & Kaspar, 2003). For example, Badr and Taylor (2006) defined social constraints using only factual descriptors of the social environment: ‘Social constraints include limited or no access to supportive others, having a supportive network who does not know how to respond, and receiving negative reactions such as avoidance or criticism’ (p. S17).

When an individual experiences social constraint, they feel obligated to limit, alter, or withhold their thoughts, feelings, and behaviors. In particular, they occur when the thoughts, feelings, or behaviors of others influence one’s own thoughts, feelings, or behaviors. Internalized racism is not easily seen or measured because it does not consist of one offender and one victim; rather, it is rooted in the consciousness of the targets (Gaylord-Harden & Cunningham, 2009).

At its foundation, racism encapsulates both overt and overt means of social isolation that depersonalizes and dehumanizes (Ihederu, 2013). Therefore, racism serves as a tool to increase authority over a group by emphasizing its influence and power.
Internalized racism comes about when repeated encounters with discrimination lead to the eventual acceptance of negative stereotypes and bias about one’s group (Hipolito-Delgado, 2010). Furthermore, since one can only become part of the dominant group by rejecting his or her own identity, internalized racism will compel them to accept strategies of rejection (Watts-Jones, 2002). Additionally, having a negative self-worth due to one’s race will prevent people of color from connecting and confiding with others in their racial group (Gainor, 1992). As a result, individuals of color who have encountered discrimination may believe that they will not be supported by others from their own race.

In sum, research has overwhelmingly demonstrated that anger is the dominant emotional response following experiences of racial bias. However, an individual’s anger response can be influenced by such factors as power and one’s social status. Furthermore, racial discrimination may be better conceptualized as a traumatic stressor. Following a traumatic event, the ability to effectively cope with and adjust from the incident will depend greatly on the quality of one’s social relationships (Carter, 2007). This is especially true since social constraints will cause those with a social deficiency to limit discloser of trauma related incidents. Several factors such as one’s position in the social hierarchy and opinions about race can impact the strength of trauma and its link to group membership (Barreto & Ellemers, 2005). While all racial groups have experienced a reduction in social status as a result of bigotry and negative connotations there are several key differences that set them apart such as the cause of their historical trauma, the physical features that either increase or decrease their chances of blending into the dominant group, and the various intergroup relationships that guide social standards. For
people of color, the lack of awareness regarding internalized racism further promotes acceptance of negative views and overall inferiority (Watts-Jones, 2002). In addition, there are several constraints to seeking social support following discrimination including lack of available support, feelings of hopelessness that change is possible, and avoidance of traumatic experience.

Summary

Although prior research has consistently documented the association between perceived discrimination and anger, the effects of discriminatory experiences on anger coping are less well understood. The phenomenon of social constraint (Lepore & Revenson, 2007) describes an individual’s perception that certain anger coping strategies (i.e., anger-in, anger-out, anger calm) would be inappropriate or risky in certain situations (Bonanno, Rennicke, & Dekel, 2005; Lepore et al., 1996; Schmidt & Andrykowski, 2004). Social constraint could be one of the primary factors that is considered when choosing whether or not to pursue an active, problem-focused coping strategy (Krieger & Sidney, 1996). There appears to be limited data on the role of social constraints in the relationship of discrimination and anger expression. The purpose of the current study is to examine the hypothesis that perceived discrimination is positively related to reflexive anger expression. As secondary hypothesis is that social constraints – a lack of validation for the emotional costs of discrimination – predict anger expression style.
CHAPTER 3

Method

All data was collected in 2017 by Fellows in the Collaborative Health Integration Research Program (CHIRP). CHIRP is a collaboration of St. John’s University Department of Psychology and the Jamaica Hospital Medical Center (JHMC) Department of Family Medicine. CHIRP fellows include undergraduate and graduate students in psychology at St. John’s University and Family Medicine Residents and Attending Physicians at JHMC.

Measures

Discrimination. The Brief Perceived Ethnic Discrimination Scale-Community Version (PEDQ-CV; Brondolo et al., 2005) is a 17-item measure that evaluates lifetime experiences of ethnic discrimination within a social or interpersonal context. The items assess the everyday experiences of community dwelling adults. The scale is devised to be used with every ethnic group and has been proven for use with Black and Latino samples. On the initial page of the full and brief PEDQ-CV, participants specify their ethnicity or race. The remaining questions start with the statement: “Because of my ethnicity ...,” and are proceeded by an item detailing experience of some type of ill-treatment or struggle (e.g., “… a clerk or waiter ignored me”). Participants are asked to indicate how often they had ever had these experiences during their lifetime, and each item was rated on a five-point Likert-type scale; a response of 1 indicated that the event never happened, and a response of 5 indicated the event happened very often. The scale has 17-items and possesses good psychometric properties. The internal consistency in the current sample is .88, and there is robust initial evidence to support the construct validity of the lifetime
exposure scale (Brondolo et al., 2005). The scale is comprised of four subscales that have four items each to evaluate various facets of ethnic discrimination. These include social exclusion, discrimination at work, threat or harassment, and stigmatization. Reliability coefficients for the scales range from .70 to .78. Past week discrimination is obtained from 10 items inquiring about everyday experiences of stigmatization, threat, and exclusion or rejection in the past week (from the PEDQ-CV). The items were evaluated on a 4-point scale of 0 (never in the past week), 1 (once), 2 (twice), or 3 (3 or more times in the past week).

Control Variables. Perceived discrimination leads to anger, but angry affect can also cause a perceiver to attribute negative experiences to disrespect and injustice. As a result, there may be a bidirectional relationship of perceived discrimination and anger. But other factors can also contribute to chronic experiences of anger. Therefore, measures of hostility and social vigilance are used as control variables. Hostile attributions and cynicism were measured with subscales of the MMPI-based Cook and Medley hostility scale (Cook & Medley, 1954), as identified by Barefoot and colleagues (Barefoot et al., 1989). The hostile attributions subscale reflects a tendency to interpret the behavior of others as intended to harm the respondent and is shown in admissions of suspicion, paranoia, and fear of threat to the self (e.g., “I often what hidden reason another person may have for doing something nice for me”). The cynicism subscale assesses beliefs about the degree to which the respondent perceives himself or herself to be treated fairly in comparison to others (e.g., “It is safer to trust nobody”). Barefoot and colleagues (1989) were able to establish that the subsets had suitable construct validity (.75). In addition, the internal consistency of the scale is .74 with a reliability of .67.
The Social Vigilance Questionnaire (SVQ; Ruiz, 2017) is a 10-item scale that measures the extent to which a person participates in monitoring of the social environment or stress-related vigilance. The reliability of the scale is .89. Participants will be offered the stem, ‘In social situations…’ which is proceeded by items rated using a 4-point Likert scale ranging from 0 (almost never) to 4 (almost always). The subscales for attention to self and attention to others were derived from this measure.

*Social Constraint.* The Social Constraints Scale (SCS; Lepore, 1996) measures expectations of social constraints from one’s own group as well as other. Social constraints were evaluated using a 15-item social constraints scale. The SCS is designed to measure the frequency with which members of a group felt constrained from discussing their own race-related thoughts from those of the same race or a different race. Participants were asked to rate on a 5-point Likert scale ranging from 1 (almost never) to 5 (almost always) and the ratings were averaged. The alpha coefficient of the scale was .91. The subscales for same race and other race were derived from this measure.

*Outcome Measure.* Situation-specific anger-expression style was assessed with an adaptation of the Spielberger Anger-Expression scales (Spielberger, 1985) adapted to include the heading ‘‘When you are treated badly because of your race or ethnicity what do you usually do?’’ This is a self-report measure with three scales to assess anger coping. The Anger-Out scale comprises of items evaluating the propensity to actively and forcefully convey anger. The Anger-In scale involves items that assess the tendency to inhibit the outward manifestation of anger. The Anger-Calm scale consists of items measuring the ability to remain composed and think about anger-evoking experiences.
The Anger-In, Anger-Out, and Anger-Calm subscales have known and good internal consistency and validity with a reliability of .69.

Procedure

This is an archival study with 156 participants. Participants included patients and staff at the Jamaica Hospital Medical Center (JHMC). They are recruited from the waiting rooms and through flyers using procedures that have developed over the 8 years of collaboration between St. John’s and staff from JHMC in Jamaica, Queens. Participants were tested over the course of a 24-hour period. At the initial visit, which can take place the same day as recruitment, participants complete the initial tests. The initial tests included surveys assessing recent and lifetime exposure to discrimination, social coping schemas, and anger expression. This initial protocol took approximately one hour, and participants received $40 and a gift bag.

Results

Sample Characteristics

Detailed information about sociodemographic characteristics of the sample are presented in Table 1. The sample included 7 Asian (4%), 72 Black (45%), 27 Latino(a) (18%), 5 Native American (3%), 14 Other (9%), and 24 White (15%) participants over the age of 18. Participants ranged in age from 18 to 85 ($M = 39.27$, $SD = 12.89$) and 103 (67%) were women. Overall, 24% of the sample had completed college/graduate school ($n = 36$), 60% had finished high school/some college ($n = 90$), 11% completed some high school ($n = 18$), and 0.01% had less than a high school education ($n = 1$) (see Table 1). Furthermore, there were no differences among racial groups in gender ($F(6,154) = 1.63$, $p < .14$), age ($F(6,152) = 1.41$, $p < .21$), or education level ($F(6,151) = 1.74$, $p < .12$).
Table 1

Demographic characteristics, perceived discrimination, anger expression style, and psychological mediators for the full sample and by racial/ethnic group

<table>
<thead>
<tr>
<th>Variable</th>
<th>Full sample (n=156)</th>
<th>Black (n=72)</th>
<th>All Other Races Combined (n=84)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (women), n (%)</td>
<td>104 (67)</td>
<td>43 (60)</td>
<td>59 (68)</td>
</tr>
<tr>
<td>Mean age (SD)</td>
<td>39.27 (12.89)</td>
<td>39.78 (12.99)</td>
<td>38.89 (12.93)</td>
</tr>
<tr>
<td>Education Level, n (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than high school</td>
<td>1 (0.01)</td>
<td>0 (0)</td>
<td>1 (0.01)</td>
</tr>
<tr>
<td>High School</td>
<td>18 (11)</td>
<td>13 (19)</td>
<td>4 (5)</td>
</tr>
<tr>
<td>Completed high school/some college</td>
<td>90 (60)</td>
<td>39 (58)</td>
<td>53 (61)</td>
</tr>
<tr>
<td>Completed college/graduate school</td>
<td>36 (24)</td>
<td>15 (22)</td>
<td>22 (25)</td>
</tr>
<tr>
<td>Past Week Discrimination</td>
<td>0.56 (0.70)</td>
<td>0.67 (0.74)</td>
<td>0.47 (0.65)</td>
</tr>
<tr>
<td>Lifetime Discrimination</td>
<td>1.68 (0.60)</td>
<td>1.78 (0.53)</td>
<td>1.59 (0.64)</td>
</tr>
<tr>
<td>PEDQ subscales</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social exclusion</td>
<td>2.11 (0.87)</td>
<td>2.19 (0.82)</td>
<td>2.05 (0.91)</td>
</tr>
<tr>
<td>Workplace discrimination</td>
<td>1.82 (0.83)</td>
<td>1.99 (0.74)</td>
<td>1.68 (0.88)</td>
</tr>
<tr>
<td>Stigmatization</td>
<td>1.48 (0.59)</td>
<td>1.55 (0.55)</td>
<td>1.41 (0.61)</td>
</tr>
<tr>
<td>Threat/harassment</td>
<td>1.41 (0.63)</td>
<td>1.46 (0.66)</td>
<td>1.37 (0.60)</td>
</tr>
<tr>
<td>Anger Expression Style</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger Suppression</td>
<td>2.46 (0.97)</td>
<td>2.52 (0.91)</td>
<td>2.41 (1.02)</td>
</tr>
<tr>
<td>Outward Anger</td>
<td>2.44 (1.02)</td>
<td>2.63 (1.00)</td>
<td>2.28 (1.02)</td>
</tr>
<tr>
<td>Anger-Calm</td>
<td>2.96 (1.09)</td>
<td>2.78 (1.02)</td>
<td>3.11 (1.13)</td>
</tr>
<tr>
<td>Social Constraint</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same race</td>
<td>2.35 (0.94)</td>
<td>2.52 (1.00)</td>
<td>2.20 (0.86)</td>
</tr>
<tr>
<td>Other race</td>
<td>2.49 (1.01)</td>
<td>2.54 (1.06)</td>
<td>2.44 (0.97)</td>
</tr>
</tbody>
</table>
Sociodemographic Variations in Perceived Discrimination, Anger Expression Styles, and Social Constraints

Age. As shown in Table 2, Pearson correlational analyses were conducted to examine relations of age and to measures of discrimination, anger expression, and social constraints. The analysis found three significant, but weak, negative correlations for age to total lifetime experiences of discrimination ($r = -.201, p < .05$), social exclusion ($r = -.187, p < .05$), and discrimination at work ($r = -.205, p < .05$). There were no significant correlations of age to measures of anger expression or social constraints.

Table 2

Pearson correlations between age and the variables for discrimination, anger expression, and social constraints

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* $p < .05$

Gender. As shown in Table 3, there was no significant effect of gender for lifetime discrimination ($F(1,152) = .07, p < .79$). Three separate multivariate analyses of variance (MANOVA) were conducted to determine if there was an interaction of gender
by subscale for the Brief PEDQ subscales, the social constraint scales, and the anger
expression scales. There was a significant multivariate effect of gender on discrimination
subscales ($F(4,148) = 4.38, p < .00$, Wilk’s $\Lambda = 0.89$) and a significant gender x subscales
interaction ($F(3,149) = 5.32, p < 0.00$, Wilk’s $\Lambda = 0.90$). There were gender differences in
social exclusion, $F (1, 152) = 4.06, p < .05$. Specifically, women ($M = 2.20, SD = 0.91$)
reported more experiences of social exclusion than men ($M = 1.90, SD = 0.76$). There
were no significant gender differences in the remaining discrimination subscales and no
gender differences for anger expression or social constraints (see Table 3).
Table 3

*ANOVA with gender and the variables for discrimination, anger expression, and social constraints*

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* p > .05
Race. As shown in Table 4, there was a significant effect of race for lifetime discrimination ($F(5, 150) = 2.44, p<.05$), but post hoc comparisons using a Bonferroni correction did not yield any significant differences between pairs of race groups (all $ps > .11$). Three separate multivariate analyses of variance (MANOVA) were conducted to determine if there was an interaction of race by subscale for the Brief PEDQ subscales, the social constraint scales, and the anger expression scales. There was no significant multivariate effect of race on discrimination subscales ($F(15, 432) = 1.30, p < .158$, Wilk’s $\Lambda = 0.15$) nor was there race x subscale effects ($F(15, 432) = 1.35, p < .171$, Wilk’s $\Lambda = 0.89$). However, a MANOVA with race and the variables for anger expression did result in a significant main effect of race on anger calm ($F(5, 150) = 2.57, p<0.01$, Wilk’s $\Lambda = 0.80$). Specifically, Whites ($M = 3.17, SD = 1.04$) reported a greater capacity to control angry feelings by calming down than Asians ($M = 2.25, SD = 1.41$). Latinos ($M = 3.45, SD = 0.98$) also tended to be calmer than Asians ($M = 2.25, SD = 1.41$) and Blacks ($M = 2.77, SD = 1.03$) (see Table 4).
Table 4

**MANOVA with race and key variables**

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* p > .05  
* White vs Asian: p=.049  
* Asian vs Latino: p=.009  
* Black vs Latino: p=.005

Notes results of MANOVA on group differences.

*Education.* As shown in Table 5, there was no significant effect of education for lifetime discrimination ($F (3, 151) = 0.04, p<.99$). Three separate multivariate analyses of variance (MANOVA) were conducted to determine if there was an interaction of education by subscale for the Brief PEDQ subscales, the social constraint scales, and the
anger expression scales. There was no significant multivariate effects of education on discrimination subscales \((F (3, 150) = 1.31, p<0.21, \text{ Wilk's } \Lambda = 0.90)\), social constraints \((F (3, 145) = 0.83, p<0.55, \text{ Wilk's } \Lambda = 0.97)\), or anger expression scales \((F (3, 151) = 1.22, p<0.28, \text{ Wilk's } \Lambda = 0.93)\).

Table 5

ANOVA with education level and the variables for discrimination, anger expression, and social constraints

<table>
<thead>
<tr>
<th>Variable</th>
<th>(n)</th>
<th>(M)</th>
<th>SD</th>
<th>(F)</th>
<th>(p)</th>
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<tr>
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<td>Completed college/graduate</td>
<td>36</td>
<td>2.44</td>
<td>.96</td>
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</table>
Uncorrected Pearson correlation analyses were used to examine relations among key variables as shown in Table 6. Total lifetime discrimination was highly correlated (.70-90) with each of the PEDQ subscales and the subscales were only moderately correlated (.40-.69) to each other. Past week discrimination was also moderately correlated to the PEDQ subscales. All three anger expression styles were weakly correlated (.39-.10) to each of the PEDQ subscales and social constraints. Anger suppression, on the other hand, was moderately correlated with anger calm. In addition, social constraints from same race was moderately correlated with another race. There was a moderate correlation of total lifetime discrimination with social constraints and a weak correlation with anger suppression and outward anger.

### Correlation Matrix of Key Variables

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<tr>
<th>Variable</th>
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<th>SD</th>
<th>F</th>
<th>p</th>
</tr>
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* p > .05
### Table 6

*Pearson correlation matrix for key variables (n = 156)*

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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
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</tr>
<tr>
<td>Total</td>
<td></td>
<td>(.783)</td>
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<tr>
<td>2. Social exclusion</td>
<td>.881&lt;sup&gt;b&lt;/sup&gt;</td>
<td>(.783)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3. Threat/harassment</td>
<td>.697&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.514&lt;sup&gt;b&lt;/sup&gt;</td>
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<td></td>
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</tr>
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<td>4. Discrimination at Work</td>
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<td>.583&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>7. Social constraint: Same race</td>
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<td>.438&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.340&lt;sup&gt;b&lt;/sup&gt;</td>
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<tr>
<td>8. Social constraint: Other race</td>
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<td>.534&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.372&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.403&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.482&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>.598&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>9. Anger Suppression</td>
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<td>.359&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.316&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.178&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>10. Outward Anger</td>
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<td>.303&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>.207&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>.279&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>.396&lt;sup&gt;b&lt;/sup&gt;</td>
<td>(.870)</td>
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<td>11. Anger Calm</td>
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<td>.057</td>
<td>.064</td>
<td>.046</td>
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<td>.221&lt;sup&gt;b&lt;/sup&gt;</td>
<td>(.835)</td>
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<sup>a</sup>p < .05  
<sup>b</sup>p < .01

Cronbach’s alphas are shown in the diagonal.
Mediation Analyses

Overview: Multiple mediation analyses tested the degree to which social constraints from members of one’s own group or members of other racial/ethnic groups served as mediators of the relationship of perceived discrimination to anger expression in the context of discriminatory experiences. Path a is the effect of perceived discrimination on social constraints, whereas path b is the effect of social constraints on anger expression (i.e., suppression or outward manifestation). The total effect highlights the relationship of perceived discrimination to anger expression (i.e., suppression or outward manifestation) ignoring social constraints. The direct effect reflects the relationship of perceived discrimination on anger expression (i.e., suppression or outward manifestation) while adjusting for social constraints (Figure 1).
**General Mediational Model**

![Diagram of mediational model]

**Indirect (or mediation) effect** = \(a \times b\)

**Direct effect** = \(c'\)

**Total effect** = \(c = a \times b + c' = \text{indirect} + \text{direct}\)

Note: Mediation effects of interest. In the top diagram “c” is the total effect of exposure (X) on outcome (Y) ignoring the mediator (M). This is the usual treatment effect reported in clinical studies. In the top diagram, mediation of the effect of discrimination on anger expression through social constraints is shown, where “a” is the effect of exposure on mediator, and “b” is the effect of mediator on outcome. When both effects “a” and “b” are significant, mediation can be claimed. The mediation effect is estimated as the product a times b, or equivalently (for continuous outcome, mediator), as c (total effect) minus \(c'\). Effect \(c'\) (“c-primed”) is the direct effect of exposure on outcome while adjusting for mediator.

When conducting mediation analysis, significance testing is done by using either the Sobel test or bootstrapping. Because bootstrapping is strongly recommended, that is what was used in the present analysis. Bootstrapping is a method based on resampling with replacement which is done many times, e.g., 1000 times. From each of these samples the indirect effect is computed, and a sampling distribution can be empirically generated. Since the mean of the bootstrapped distribution will not exactly equal the indirect effect a correction for bias can be made. Very typically a confidence interval is
computed, and it is checked to determine if zero is in the interval. If zero is not in the interval, then we can be confident that the indirect effect is different from zero.

Mediational analyses were performed 5 times, once with Lifetime discrimination serving as the predictor and then four additional times with each of the subscales serving as the predictor.

In general, there were significant total effects of discrimination on both anger suppression and outward anger expression, but not anger calm (Figures 2-4, 6-8, 11, 18, 21). In subscale analyses, the total effects of the subscales on anger expression varies depending on the type of anger expression. Specifically, the total effects, the c path, of discrimination on anger suppression were significant for lifetime discrimination, social exclusion, threat or harassment, and stigmatization. The total effects of discrimination on outward anger expression were significant for lifetime discrimination, social exclusion, and stigmatization.

For all analyses, the a path was significant for both mediators, with discrimination and each of its subscales associated with social constraints from individuals of one’s own race and from members of another race. In contrast, the significance of the b path (i.e., mediators to anger expression) varied by the type of mediator and the type of anger expression. The b path effects were consistently significant for social constraint from others of the same race for anger suppression and outward anger expression. Lastly, when threat or harassment was the predictor and outward anger was the outcome, both social constraint from another race and same race were significant. This was the only case in the mediational analysis where both mediators were significant.
In analyses of the effects of lifetime discrimination on anger expression, social constraints from same race others had a significant indirect effect. In each case the $c'$ direct effect of discrimination was not significant (Figure 2 & 7). When analyses were repeated four times using each of the subscales as the predictor variable and anger suppression as the outcome variable, only the subscale for social exclusion (Figure 3) was significant. When analyses were repeated four times using each of the subscales as the predictor variable and outward anger expression as the outcome variable, none of the subscales yielded a significant effect (Figures 8-11).

For the relation of discrimination to anger suppression, mediator 2 (i.e., social constraint from same race) accounted for between 46% and 60% of the variance. In contrast, for analyses of discrimination to outward anger expression, mediator 2 accounted for between 29% and 35% of the variance.

Details of the analyses are presented in the next sections.

_Anger Suppression._ When controlling for age, gender, and race, the relations of lifetime discrimination to suppression of anger were largely mediated by social constraint from those of the same race (95% CI: 0.139-0.472). Social constraint from same race others accounted for 60% of the variance (See Figure 2). The indirect effect of social constraint from other race individuals was not significant (95% CI: -0.176-0.208). Analyses of subscales revealed similar effects for social exclusion, stigmatization, and threat subscales. Specifically, social constraint from same race individuals mediated the relations of the social exclusion subscale (95% CI: 0.077-0.276), accounting for 46% of the variance (see Figure 3), the threat or harassment subscale (95% CI: 0.089-0.414), accounting for 53% of the variance (see Figure 4), and the stigmatization subscale (95%
CI: 0.126-0.450), accounting for 86% of the variance (see Figure 6). Lastly, neither the total nor direct effects of work discrimination on anger suppression were significant; however, the indirect effect of social constraint from same race was significant (95% CI: 0.055-0.254) (see Figure 5). The indirect effect of social constraint from other race individuals was not significant in any analysis: social exclusion (95% CI: -0.145-0.105), threat or harassment (95% CI: -0.094-0.134), discrimination at work (95% CI: -0.088, 0.127), and stigmatization (95% CI: -0.141-0.194).

Figure 2

The mediating effect of social constraints in the relationship between lifetime discrimination and suppression of anger

Note: $N = 144$. Results based on 1000 bootstrapped samples controlling for age, gender and race. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between lifetime discrimination and suppression of anger when controlling for age, gender and race.

***$p<.001$; $a_n$ is effect of lifetime discrimination on social constraints; $b_n$ is effect of social constraints on suppression of anger; $c'$ is direct effect of lifetime discrimination on suppression of anger; $c$ is total effect of lifetime discrimination on suppression of anger.
Figure 3

The mediating effect of social constraints in the relationship between social exclusion and suppression of anger

Note: $N = 144$. Results based on 1000 bootstrapped samples controlling for age, gender, and race. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between social exclusion and suppression of anger when controlling for age, gender and race.

$p<.05$, $**p<.01$, $***p<.001$; $a_n$ is effect of social exclusion on social constraints; $b_n$ is effect of social constraints on suppression of anger; $c'$ is direct effect of social exclusion on suppression of anger; $c$ is total effect of social exclusion on suppression of anger.
Figure 4

The mediating effect of social constraints in the relationship between threat or harassment and suppression of anger

Note: \( N = 144 \). Results based on 1000 bootstrapped samples controlling for age, gender, and race. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between threat or harassment and suppression of anger when controlling for age, gender and race.

***\( p < .001 \); \( a \) is effect of threat or harassment on social constraints; \( b \) is effect of social constraints on suppression of anger; \( c' \) is direct effect of threat or harassment on suppression of anger; \( c \) is total effect of threat or harassment on suppression of anger.
Figure 5

The mediating effect of social constraints in the relationship between discrimination at work and suppression of anger

Note: \( N = 144 \). Results based on 1000 bootstrapped samples controlling for age, gender, and race. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between discrimination at work and suppression of anger when controlling for age, gender and race.

***\( p < .001 \); \( a_n \) is effect of discrimination at work on social constraints; \( b_n \) is effect of social constraints on suppression of anger; \( c' \) is direct effect of discrimination at work on suppression of anger; \( c \) is total effect of discrimination at work on suppression of anger.
Figure 6

The mediating effect of social constraints in the relationship between stigmatization and suppression of anger

Note: $N = 144$. Results based on 1000 bootstrapped samples controlling for age, gender, and race. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between stigmatization and suppression of anger when controlling for age, gender and race.

* $p<.05$, *** $p<.001$; $a_n$ is effect of stigmatization on social constraints; $b_n$ is effect of social constraints on suppression of anger; $c'$ is direct effect of stigmatization on suppression of anger; $c$ is total effect of stigmatization on suppression of anger.

Outward Anger Expression. When controlling for age, gender, and race, the relations of lifetime discrimination on direct expression of anger was largely mediated by the social constraint from those of the same race (95% CI: 0.015-0.353), accounting for 35% of the variance (see Figure 7). A similar effect was observed for the social exclusion subscale.

In particular, social constraint from same race individuals mediated the relations of the social exclusion subscale (95% CI: 0.006-0.226), accounting for 29% of the variance (see Figure 8). In addition, neither the total nor direct effects of work discrimination (see
Figure 9) and threat or harassment (see Figure 10) were significant; however, the indirect effect of social constraint from same race were significant for both subscales: discrimination at work (95% CI: 0.014-0.200) and threat or harassment (95% CI: 0.022-0.286). Furthermore, the indirect effect of social constraint from other race were also significant for both subscales: discrimination at work (95% CI: 0.001-0.242) and threat or harassment (95% CI: 0.010-0.285). Lastly, while the total effect of stigmatization was significant, the direct effect was not. Moreover, indirect effect of social constraint from same race was significant (95% CI: 0.003-0.336) (see Figure 11). The indirect effects of social constraint from other race individuals was not significant for lifetime discrimination (95% CI: -0.073-0.417), social exclusion (95% CI: -0.061-0.250), and stigmatization (95% CI: -0.059-0.341).
Figure 7

The mediating effect of social constraints in the relationship between discrimination and outward expression of anger

Note: \( N = 144 \). Results based on 1000 bootstrapped samples controlling for age, gender and race. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between discrimination and outward expression of anger when controlling for age, gender, and race.

\(*p < .05, **p < .01, ***p < .001; a_n\) is effect of discrimination on social constraints; \( b_n\) is effect of social constraints on outward expression of anger; \( c'\) is direct effect of discrimination on outward expression of anger; \( c\) is total effect of discrimination on outward expression of anger.
Figure 8

The mediating effect of social constraints in the relationship between social exclusion and outward expression of anger

Note: \( N = 144 \). Results based on 1000 bootstrapped samples controlling for age, gender, and race. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between social exclusion and outward expression of anger when controlling for age, gender, and race.

\*p<.05, \***p < .001; \( a_n \) is effect of social exclusion on social constraints; \( b_n \) is effect of social constraints on outward expression of anger; \( c' \) is direct effect of social exclusion on outward expression of anger; \( c \) is total effect of social exclusion on outward expression of anger.
The mediating effect of social constraints in the relationship between discrimination at work and outward expression of anger

Notes: $N = 144$. Results based on 1000 bootstrapped samples controlling for age, gender, and race. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between discrimination at work and outward expression of anger when controlling for age, gender, and race.

$p < .05$, ***$p < .001$; $a_n$ is effect of discrimination at work on social constraints; $b_n$ is effect of social constraints on outward expression of anger; $c'$ is direct effect of discrimination at work on outward expression of anger; $c$ is total effect of discrimination at work on outward expression of anger.
Figure 10

The mediating effect of social constraints in the relationship between threat or harassment and outward expression of anger

Note: $N = 144$. Results based on 1000 bootstrapped samples controlling for age, gender and race. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between threat or harassment and outward expression of anger when controlling for age, gender, and race.

*p < .05, **p < .01, ***p < .001; $a_n$ is effect of threat or harassment on social constraints; $b_n$ is effect of social constraints on outward expression of anger; $c'$ is direct effect of threat or harassment on outward expression of anger; $c$ is total effect of threat or harassment on outward expression of anger.
The mediating effect of social constraints in the relationship between stigmatization and outward expression of anger

Note: $N = 144$. Results based on 1000 bootstrapped samples controlling for age, gender, and race. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between stigmatization and outward expression of anger when controlling for age, gender, and race.

* $p<.05$, ** $p < .001$; $a_1$ is effect of stigmatization on social constraints; $b_1$ is effect of social constraints on outward expression of anger; $c'$ is direct effect of stigmatization on outward expression of anger; $c$ is total effect of stigmatization on outward expression of anger.

Anger Suppression - Black Sample: Mediation analyses was also conducted to test the degree to which social constraints from members of one’s own group or members of other racial/ethnic groups served as mediators of the relationship of perceived discrimination to anger expression styles in Black participants. When examining anger suppression, the total effects as well as direct effects of lifetime discrimination on anger suppression did not reach significance (see Figure 12). However, as was the case in the analyses of the full sample, the indirect effects of social constraints from same race others were significant (95% CI: 0.120-0.814) while another race was not (95% CI: -0.622-0.300). Similarly, this pattern continued for the social exclusion, discrimination at work,
threat or harassment, and stigmatization subscales (see Figures 13-16). Specifically, neither social constraint from same nor different race individuals mediated the effects of these subscales on anger suppression, but the indirect effects of social constraints from same race others were significant for each: social exclusion (95% CI: 0.054-0.482), discrimination at work (95% CI: 0.048-0.392), threat or harassment (95% CI: 0.065-0.672) and stigmatization (95% CI: 0.180-0.726). In addition, the indirect effects of social constraints from other race was not significant for each of these subscales: social exclusion (95% CI: -0.434-0.163), discrimination at work (95% CI: -0.336-0.152), threat or harassment (95% CI: -0.404-0.141), and stigmatization (95% CI: -0.329-0.292).

Figure 12

The mediating effect of social constraints in the relationship between lifetime discrimination and outward expression of anger in the black sample

Note: \(N = 64\). Results based on 1000 bootstrapped samples controlling for age and gender. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between lifetime discrimination and suppression of anger when controlling for age and gender.

***\(p<.001\); \(a_1\) is effect of lifetime discrimination on social constraints; \(b_1\) is effect of social constraints on suppression of anger; \(c'\) is direct effect of lifetime discrimination on suppression of anger; \(c\) is total effect of lifetime discrimination on suppression of anger.
Figure 13

The mediating effect of social constraints in the relationship social exclusion and outward expression of anger in the black sample

Note: \( N = 64 \). Results based on 1000 bootstrapped samples controlling for age and gender. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between social exclusion and suppression of anger when controlling for age and gender. *\( p < .05 \); **\( p < .01 \); ***\( p < .001 \); \( a_n \) is effect of social exclusion on social constraints; \( b_n \) is effect of social constraints on suppression of anger; \( c' \) is direct effect of social exclusion on suppression of anger; \( c \) is total effect of social exclusion on suppression of anger.
Figure 14

The mediating effect of social constraints in the relationship discrimination at work and outward expression of anger in the black sample

Note:  $N = 64$. Results based on 1000 bootstrapped samples controlling for age and gender. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between discrimination at work and suppression of anger when controlling for age and gender.

**$p<.01$, ***$p<.001$; $a_n$ is effect of discrimination at work on social constraints; $b_n$ is effect of social constraints on suppression of anger; $c'$ is direct effect of discrimination at work on suppression of anger; $c$ is total effect of discrimination at work on suppression of anger.
**Figure 15**

The mediating effect of social constraints in the threat or harassment and outward expression of anger in the black sample

Note: \( N = 64 \). Results based on 1000 bootstrapped samples controlling for age and gender. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between threat or harassment and suppression of anger when controlling for age and gender.

\[ **p<.01, ***p<.001; a_n \text{ is effect of threat or harassment on social constraints; } b_n \text{ is effect of social constraints on suppression of anger; } c' \text{ is direct effect of threat or harassment on suppression of anger; } c \text{ is total effect of threat or harassment on suppression of anger.} \]
The mediating effect of social constraints in the relationship between stigmatization and outward expression of anger in the black sample

Note: N = 64. Results based on 1000 bootstrapped samples controlling for age and gender. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between stigmatization and suppression of anger when controlling for age and gender. **p<.01, ***p<.001; a is effect of stigmatization on social constraints; b is effect of social constraints on suppression of anger; c’ is direct effect of stigmatization on suppression of anger; c is total effect of stigmatization on suppression of anger.

Outward Anger Expression - Black Sample. When examining outward anger expression, the total as well as direct effects of lifetime discrimination were not significant, and neither were the indirect effects of social constraints from same race (95% CI: -0.148-0.633) or another race (95% CI: -0.463-0.678) (see Figure 17). This configuration continued for the discrimination at work subscale. Specifically, the total and direct effects were not significant, and neither were the indirect effects of social constraints from same race (95% CI: -0.029-0.341) or another race (95% CI: -0.198-0.408) (see Figure 19). On the other hand, the social exclusion subscale had a significant total effect while the direct effect along with indirect effects of social constraints from same race (95% CI: -0.060-0.414) or another race (95% CI: -0.315-0.384) were not significant (see Figure 18).
Likewise, the stigmatization subscale had a significant total effect while the direct effect along with indirect effects of social constraints from same race (95% CI: -0.139-0.515) or another race (95% CI: -0.323-0.503) were not significant (see Figure 21). Finally, the total as well as direct effects for threat or harassment subscale did not yield significance but the indirect effect of social constraints from same race was (95% CI: 0.065-0.672) while another race (95% CI: -0.404-0.141) was not (see Figure 20).

Figure 17

The mediating effect of social constraints in the relationship between lifetime discrimination and outward expression of anger in the black sample

Note: \( N = 64 \). Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between lifetime discrimination and outward expression of anger when controlling for age and gender.

***\( p < .001; a_n \) is effect of lifetime discrimination on social constraints; \( b_n \) is effect of social constraints on outward expression of anger; \( c' \) is direct effect of lifetime discrimination on outward expression of anger; \( c \) is total effect of lifetime discrimination on outward expression of anger.
Figure 18

The mediating effect of social constraints in the relationship between social exclusion and outward expression of anger in the black sample

Note: $N = 64$. Results based on 1000 bootstrapped samples controlling for age and gender. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between social exclusion and outward expression of anger when controlling for age and gender.

***p < .001; $a_n$ is effect of social exclusion on social constraints; $b_n$ is effect of social constraints on outward expression of anger; $c'$ is direct effect of social exclusion on outward expression of anger; $c$ is total effect of social exclusion on outward expression of anger.
Figure 19

The mediating effect of social constraints in the relationship between discrimination at work and outward expression of anger in the black sample

Note: $N = 64$. Results based on 1000 bootstrapped samples controlling for age and gender. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between discrimination at work and outward expression of anger when controlling for age and gender.

*p<.05, **p<.01, ***p < .001; $a_n$ is effect of discrimination at work on social constraints; $b_n$ is effect of social constraints on outward expression of anger; $c'$ is direct effect of discrimination at work on outward expression of anger; $c$ is total effect of discrimination at work on outward expression of anger.
Figure 20

*The mediating effect of social constraints in the relationship between threat or harassment and outward expression of anger in the black sample*

Note: *N* = 64. Results based on 1000 bootstrapped samples controlling for age and gender. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between threat or harassment and outward expression of anger when controlling for age and gender.

*p<.05, **p<.01, ***p < .001; a<sub>n</sub> is effect of threat or harassment on social constraints; b<sub>n</sub> is effect of social constraints on outward expression of anger; c’ is direct effect of threat or harassment on outward expression of anger; c is total effect of threat or harassment on outward expression of anger.*
The mediating effect of social constraints in the relationship between stigmatization and outward expression of anger in the black sample

Note: $N = 64$. Results based on 1000 bootstrapped samples controlling for age and gender. Control variables were included in the estimation but omitted from the figure for ease of presentation. The mediating effect of social constraints in the relationship between stigmatization and outward expression of anger when controlling for age and gender.

$a_{1}=1.006^{***} \quad b_{1}=0.025$

$a_{2}=0.857^{***} \quad b_{2}=0.178$

$(c=0.511, SE=0.222, t=-2.295)^*$

$(c'=-0.333, SE=0.266, t=1.255)$

*a* is effect of stigmatization on social constraints; $b_{n}$ is effect of social constraints on outward expression of anger; $c'$ is direct effect of stigmatization on outward expression of anger; $c$ is total effect of stigmatization on outward expression of anger.
CHAPTER 4

Discussion

The aim of this study is to examine the relationship between perceived racial or ethnic discrimination and anger expression (i.e., anger suppression, outward anger, and anger calm). Participants indicated, in circumstances where they encountered racial discrimination, how much they felt that other people of the same race/ethnicity as well as another race would agree with the way they viewed the situation. These social constraints served as mediators of the relationship of racial discrimination within a social or interpersonal situation on situation-specific anger-expression style.

Overall, findings of this study support the hypothesis that social constraints mediate the relationship between discrimination and anger expression. Specifically, when participants reported experiences of lifetime discrimination, social exclusion, threat or harassment, and stigmatization social constraints from own race facilitated the use of anger suppression with variances between 46% and 60%. Social constraints from same race also mediated the relationship between discrimination and outward anger expression. Specifically, when participants reported experiences of lifetime discrimination and social exclusion, social constraints from own race facilitated the use of outward anger expression with variances between 29% and 35%. Mediators tackle the issue of “how” or “why” a specific variable predicts a resulting variable (Zakowski et al., 2004). Thus, the social constraint mediators explain the precise mechanisms by which discrimination may lead to anger suppression or outward anger expression. Specifically, when individuals encountered experiences of discrimination, they would either engage in anger
suppression or outward anger expression due to feeling social constraints from their same race peers.

Social constraints on disclosure are defined and measured by the negative behaviors of others including overt criticism, physical or emotional avoidance, acting in an unfriendly way, negativity, forced enthusiasm, and disapproval of emotional expression which can be conveyed either directly or indirectly (Manne & Glassman, 2000; Lepore & Helgeson, 1998). Social constraints do not occur just from repeated negative social interactions and are not merely the lack of effective social support. Instead, they are a result of disparities between the type of support an individual prefers and what is actually available such that interactions intended to be beneficial may be interpreted as damaging (Dakof & Taylor, 1990; Reynolds & Perrin, 2004). Hence, several different types of social interactions, positive or negative, have the possibility of generating social constraints on disclosure to the extent that thoughts and feelings surrounding discriminatory events will be amended or withheld. It may be that when individuals reached out to members of the same race, the social reactions from disclosures regarding experiences of perceived discrimination did not result in adequate support, relief, or resolution. In their social-cognitive processing model of adjustment to trauma, Lepore et al. (1996) contend that adverse and unsupportive social reactions toward trauma victims will lead victims to restrict and suppress trauma-related thoughts and hinder with cognitive processing.

In the analyses of the Black only sample, social constraint from the same race was consistently significant for lifetime discrimination and its subscales. In addition, while social constraint from same race was significant for anger suppression, this was not the
case for outward anger expression. This leads to the question of why Blacks feel constrained from same race peers? According to research, the impact of discrimination on health is influenced by social support which means that seeking social support is a coping mechanism (Brondolo et al., 2009). How effective a support may be can depend on which types are available when encountering perceived discrimination (Atri et al., 2007). Cohen and Wills (1985) proposed that social support can provide protection against the effects of trauma as along as the support is available in times of high stress. Their research indicates that when stress is high, a high support level will significantly minimize the impact of the stressor on the outcome variable (e.g., depression).

When stress is low, social support does not matter as much. On the other hand, social support can function in a straightforward manner, aiding individuals through periods of calm as well as stress.

Findings for whether social support safeguards Blacks from the negative effects of discrimination are mixed. There is some evidence that the damaging effects of discrimination are reduced by the presence of social support because it emboldens them to cope more effectively (Utsey et al., 2006). Conversely, social support has been evidenced to diminish depression and anxiety regardless of the degree of racial discrimination encountered by an individual (Black et al., 2005; Lincoln, Chatters, & Taylor, 2005). It is not apparent from the literature, if support that directly addresses coping with racial discrimination, versus generalized support, functions as a safeguard. It is possible that social support must be fitted to the situation to successfully address the specific outcomes of discrimination. For example, generalized support may not be as successful as personalized social support because it fails to attend to the root of an
individual’s distress. The optimal matching model proposes that social support is most effective when it directly tackles the issues manifested by the stressor (Cutrona & Russell, 1990).

Internalized racism can also explain social constraints from the identical race within the Black only sample. Carter (2007) contends that it's necessary to acknowledge how discrimination relates to internalized racism, specifically, how being discriminated against may result in self-blame and self-devaluation that might be internalized. Studies utilizing Black samples have found that experiences of discrimination have been consistently related to race-based oppression (Klonoff et al., 1999; Jackson et al., 1996), internalized racism (Parham & Helms, 1985; Vandiver et al., 2002; Szymanski & Gupta, 2009), and higher psychosocial distress. Szymanski & Obiri (2011) examined discriminatory events and internalized racism together and found them to be significant predictors of emotional distress. Their study emphasized the need to focus on both aspects of racism when addressing discrimination in Blacks.

There was also a significant effect of social constraints from other race on lifetime discrimination and its subscales in the overall sample as well as the Black only sample. According to research, there are certain stressors (i.e., traumatic events, neighborhood disfunction) to which social support does not produce a positive outcome (Lincoln et al., 2005) (Latkin & Curry 2003). It is not completely known how social constraints effect one’s ability to regulate emotions following a stressful life event. One explanation may be that they have a negative impact on both behavioral and cognitive coping mechanisms. For example, social constraints intensify avoidant behavior among people who have experienced discrimination, so they will not speak or think of the racist event. Attempts
to censor such thoughts could have the unintended result of extending psychological distress and intrusive thoughts. In addition, individuals who avoid the stressor will miss out on expanding their perspective from others or making sense of the experience. Anger suppression is an emotion-focused orientation since it consists of perseverating about or expressing one’s emotions or struggling to contain one’s emotions. Individuals with an emotion-focused orientation tend be more sensitive to emotion-relevant cues (Stanton et al., 2000), including potential threats to the self (Matheson & Cole, 2004). Therefore, an emotion-focused orientation could assist efforts to control or direct the distress related with specific emotions, rather than to challenge the situation. Avoidance represents some of the connection between psychological distress and social constraints. However, there is no obvious explanation as to why avoidance increases as a result of social constrains. A possible explanation may be that it is a combination of wanting to decrease tensions and preserve amicable relationships with those who send social constraint signals.

**Limitations**

There are some key limitations in this study that warrant attention. Contemporary understanding of the construct of social constraints is hindered by its measurement which is done solely by self-reports. As a result, we have a limited understanding of the components of social relations that relate to perceptions of social constraints, including how it is experienced on a personal and shared level with regard to discrimination. The study of social constraints on one’s ability to disclose is seldom represented in modern research because it shifts over time and arises from interactions between individuals. In this respect, social constraints are similar to relationships in that they are both dynamic and ever-changing. As such, social constraints are routinely considered within a dual
framework of stress and coping (Revenson, Kayser, & Bodenmann, 2005). Bodenmann (2005) defines this method: ‘One partner’s appraisal of a stress[or] is communicated to the other partner, who perceives, interprets, and decodes these signals and responds with some form of dyadic coping (which might involve either acting or ignoring the stress communication)’ (p. 36).

Although the present study provides a useful preliminary step in identifying social constraints as a mediator within the discrimination-anger expression link, causal interpretations are not possible due to the cross-sectional nature of the study. Future research should utilize experimental or longitudinal studies in order to determine the directional relations found in this study as well as to make inferences about them. It is also possible that the mediational relationships concluded in this study would have been as distinguishable in the presence of other variables (i.e., emotional distress, religious coping strategies, internalized racism). The study is also limited by the use of self-report measures which are prone to errors in accuracy and measurement due to recall bias. Lastly, the study utilized convenience sampling which have some drawbacks. For example, this method can get the views of a selected group of individuals but not the full population. Hence, if some groups are over-represented or under-represented, this will affect the standard of knowledge being gathered. Plus, since the selection process is already biased, it is possible to have sampling errors.

**Future Research**

Further research should examine whether lifelong experiences of discrimination change the dynamics of social support. Hence, the utilization of active support when there is a burden to cope may not be sufficient enough to break the discrimination and
distress association. This implies that more needs to be done besides providing just casual encouragement. Therefore, while social support is necessary, it is not enough to address all aspects of chronic stress. Further, inasmuch as discrimination may function as a stressor, individuals’ coping propensities might serve to moderate the impact of anger on behavioral responses to a discrimination event.

Discrimination likely elicits a complex set of emotions which will interact with coping processes to influence behavioral reactions. Although anger is clear under conditions of discrimination, other emotions may additionally be elicited that influence subsequent responses. As an example, in some situations of discrimination, fear was exhibited and was related to a lower likelihood of confrontational action (Woodzicka & LaFrance, 2001; Yzerbyt et al., 2003; Mackie et al., 2000). Moreover, anger was assessed as a general mood state within the present investigation, and it is possible that the target of this emotion may have varied depending on the basis for failure. In particular, anger at the self may have predominated when individuals experienced personal failure, whereas under discrimination, this emotion may have been targeted toward the outgroup (Mackie et al., 2000). This said, there is some indication that discrimination may produce both self-oriented and externally oriented anger (Hansen & Sassenberg, 2006).

The predominant emotion elicited by overt experiences of discrimination is that of anger. This is especially true when the dominant group has more power and the victim believes he or she has been treated unjustly (Mackie, Devos, & Smith, 2000; Swim et al., 2003). Feelings of anger can generally function as a facilitator for action, including confrontational strategies on behalf of the group (Yzerbyt, et al., 2003; Gill & Matheson, 2006; Mackie et al., 2000; van Zomeren et al., 2004). The connection among feelings of
anger when encountering discrimination and an individual’s readiness to act has many facets that need further clarification. This study provides initial insights into the way’s social constraints function within the relationship of discrimination and anger expression. While social support and internalized racism, particularly of a causal kind, have a significant impact on mollifying the negative impact of discrimination on emotional distress, they are not adequate enough to aid those facing extremely stressful situations.

The present study included Black, White, Asian, Latino, Native American, and Other racial groups in the full sample analysis but Blacks were the only group to also be analyzed separately. Research indicates that discrimination and anger expression impacts races differently. For example, a 3-wave longitudinal study was conducted by Park and colleagues (2018) on a sample of adolescent Mexican Americans. The goal was to examine anger regulation as a mediator in the discrimination–mental health link. Specifically, they administered perceived racial/ethnic discrimination and anger regulation self-report measures at baseline, 4 months, and 8 months. The study focused on three opposing anger regulation variables: anger suppression, outward anger expression, and anger control. According to the results, outward anger expression was a significant mediator in the relationship between perceived discrimination and anger regulation while anger suppression and anger control were not found to be significant mediators. In addition, outward anger expression was connected to greater racial/ethnic discrimination. Plus, those who reported higher anxiety and depression also experienced more frequent outward anger expression. This study was the first to use a longitudinal research design in order to establish the significant mediating function of anger expression as the primary means to describe the perceived racial/ethnic discrimination.
and mental health link. This was also one of the earliest longitudinal studies in the literature on discrimination and mental health that distinguished between-person effects from within-person effects. Noh and colleagues (2007) examined two population-based samples of Asian immigrants (i.e., composed largely of Chinese and Vietnamese), in order to study how individuals, use confrontation coping. Specifically, they utilized a measure containing items that evaluated direct opposition to the perpetrator. Their results found no connection between the impact of confrontation on the relationship of perceived discrimination and depression. In contrast, another study examined the impact of personal confrontation coping on a sample of Korean immigrants and found a moderating effect of discrimination on depression. The authors concluded that individuals who were more likely to confront the perpetrator reported less depression when encountering discrimination compared those who were less likely to face the perpetrator (Noh et al., 1999). Future studies should examine other racial groups individually to determine the relationship of discrimination on anger expression.

**Implications of the Results for Practice**

As evidence continues to grow that discrimination is a very important stressor for minorities, it is critical that we develop early responses to ameliorate its effects. For example, family-based programs where families are educated in ways to manage discrimination insistently instead of attempting to cope passively or to lash out. School based programs should do more than just focus on the existence of discrimination; they need to teach skills for coping with the associated anger and therefore the potential for acting on it. In addition, the impact of social norms is significant and changing the perception of outgroup members will only happen as long as they are reinforced by social
norm changes. Prejudice and discrimination thrive in settings where they are perceived as normal so they can fail when society rejects such attitudes. As such, how individuals think and behave toward members of minority groups will determine if prejudice and discrimination will grow or diminish. In our work with students, it is important for school psychologists to acknowledge the importance of race such as an individual’s attitudes, opinions, and beliefs surrounding their ethnic group. Moreover, clinicians will also have to acknowledge and become accustomed to their own thoughts, feelings, and behaviors regarding both their own race and of others. Therefore, it is crucial that we continue to educate and cultivate our understanding in this area. The link between how racial identity affects psychological responses to discrimination will establish the basis for including racial identity in future conversations about health (Brondolo et al., 2009). School psychologists can educate students, teachers, and staff on elucidating emotional distress from discrimination, with the eventual goal of recognizing possible ways to diminish the harmful effects of discrimination as well as ease the psychological distress of victims.
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