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Healing from Racism with Compassion Meditation: Effects of Coping on Mental Health

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Claremont McKenna College

Healing from Racism with Compassion Meditation: Effects of Coping on Mental Health

submitted to

Professor Wei-Chin Hwang

by

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for

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Healing from Racism with Compassion Meditation: Effects of Coping on Mental Health

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Abstract

This study examines whether Compassion Meditation (CM) can help ethnic minority college students heal from race-related stress. The present study hypothesized that through participation in a CM intervention, the augmentation of adaptive coping strategies (i.e., self-compassion) and the reduction of maladaptive coping strategies (i.e., internalization, defined as self-blame, and detachment, defined as social isolation) would reduce depression and PTSD. Participants ($N = 9$) participated in an 8-session weekly CM intervention and completed three questionnaires at the beginning, middle, and end of the intervention. Results demonstrated that increasing self-compassion predicted decreases in depression, and that reducing coping via detachment predicted decreases in PTSD. In addition, all nine participants met the clinical cutoff for major depression at pre-intervention, but only five remained above the cutoff point by post-intervention. Implications for future CM interventions, research, and prevention strategies are discussed.

Keywords: race-related stress, compassion meditation, coping, self-compassion, internalization, detachment, depression, PTSD, ethnic minority

Introduction

In the United States, racism and race-related stress plagues the lives of people of color. Whether real or perceived, racism and discrimination leads to the experience of race-related stress, which can have a considerable impact on the development of mental health problems and clinical disorders (e.g., depression and post-traumatic stress disorder (PTSD); Carter, 2007; Carter, Forsyth, Mazzula, & Williams, 2005; Clark, Anderson, Clark, & Williams, 1999; Harrell, 2000; Lee & Ahn, 2012; Pieterse, Todd, Neville, & Carter, 2012; Shavers et al., 2012; Sue & Sue, 2003). Race-related stress has been defined as “the race-related transactions between individuals or groups and their environment that emerge from the dynamics of racism, and that are perceived to tax or exceed existing individual and collective resources or threaten well-being” (Harrell, 2000, p. 44). Furthermore, race-related stress can be both acute and/or chronic.

According to Brondolo and colleagues (2009), one of the most serious challenges facing minorities is the need to develop a broad range of coping responses to deal with different types of race-related stressful situations. Previous research indicates that ethnic minorities have coped using a variety of strategies, including seeking social support, ignoring or reinterpreting a race-related event, educating racist perpetrators, blaming oneself for a racist incident, invoking racial or ethnic identity as a source of empowerment, isolating oneself from family and friends, and denying racial or ethnic identity for self-protection (Hughes et al., 2006; Mellor, 2004; Miller & Kaiser, 2001; Wei, Alvarez, Ku, Russell, & Bonett, 2010). However, additional research needs to be conducted to better understand how specific strategies can be used to help individuals cope from race-related stress.

One promising strategy that has yet to be fully studied is the use of mindfulness and meditation techniques, such as Compassion Meditation, to help individuals heal from race-related stress (CM; Hopkins, 2001). Compassion meditation is a meditative technique that helps individuals let go of anger and suffering through the development of compassion towards the self, close ones, neutral strangers, enemies, and humanity. Initial studies implementing CM as a clinical intervention have evidenced encouraging results with regard to mental health outcomes (Gilbert & Procter, 2006; Kuyken et al., 2010; Mayhew & Gilbert, 2008). Ethnic minorities may benefit greatly from the development and implementation of a compassion meditation intervention. When integrated with other common coping strategies (e.g., internalization through blaming oneself for a racist incident, or detachment through isolating oneself from social support), the CM intervention may help mitigate the deleterious effects of race-related stress and provide a mechanism with which ethnic minorities can more effectively cope.

Race-Related Stress Negatively Affects Ethnic Minority Health

The National Institutes of Health has designated several ethnic minority populations as being at risk for health disparities (i.e., Blacks/African Americans, Hispanics/Latinos, Native Americans, Alaskan Natives, Asian Americans, Native Hawaiians, and Pacific Islanders; NIH, 2006). However, often such groups that have been the targets of racial discrimination are unable to recognize and report those discriminatory experiences (Kaiser & Major, 2006), whether due to inaccessibility to such services or threat to their well-being. Racism, both real and perceived, has been identified as a distinct type of stress that increases risk factors for both mental and physical health problems (Carter, 2007; Carter et al., 2005; Clark et al., 1999; Harrell,

2000; Landrine & Klonoff, 1996; Lee & Ahn, 2012; Pieterse et al., 2012; Pieterse & Powell, 2016; Shavers et al., 2012; Slavin, Rainer, McCreary, & Gowda, 1991; Utsey, 1999; Utsey & Ellison, 2000).

Despite the breadth of literature examining race-related stress, there has not been a singular definition for this catchall phrase that may encompass physical, mental, psychological, and emotional factors. Harrell (2000) defines race-related stress as “the race-related transactions between individuals or groups and their environment that emerge from the dynamics of racism, and that are perceived to tax or exceed existing individual and collective resources or threaten well-being” (p. 44), whereas Essed (1990) describes it as living “with the threat of racism [which] means planning, almost every day of one's life, how to avoid or defend oneself against discrimination” (p. 260). As criteria for race-related stressors, the multicultural stress model devised by Slavin and colleagues (1991) includes life events that are stressful for ethnic minorities, but not for Whites or people who identify with White American culture. Alternatively, Utsey and Ponterotto (1996) construe race-related stress within the African American experience as the “stress associated with the experiences of racism and discrimination encountered by African Americans in their daily lives” (p. 491). Although these definitions are multifaceted and distinct, they share similar themes. This study will employ the definition conceptualized by Harrell (2000), as it is the most comprehensive and inclusive of individual, institutional, and interpersonal factors that influence the onset of race-related stress.

Distinguishing the frequency vs. severity of race-related stress. In pursuing an accurate and comprehensive approach to operationalizing and measuring race-related stress, researchers have explored a number of avenues. The majority of measures in the

literature examine race-related stress by assessing the frequency of racist incidents, including the General Experiences of Discrimination Scale (GED; Landrine, Klonoff, Corral, Fernandez, & Roesch, 2006), the Major Racist Events Scale (MRE; Williams, Yu, Jackson, & Anderson, 1997), the Racism and Life Experience Scale (RaLES; Harrell, 2000), the Race-Related Events Scale (Waelde, Pennington, Mahan, C., Mahan, R., Kabour, & Marquett, 2010), the Perceived Racism Scale (PRS; McNeilly et al., 1996), the Index of Race-Related Stress (IRRS; Utsey & Ponterotto, 1996), the Schedule of Racist Events (SRE; Landrine & Klonoff, 1996), and the Race-Based Traumatic Stress Symptom Scale (RBTSSS; Carter et al., 2013). Researchers then determine stressfulness by summing participant scaled responses toward various racial experiences. In doing this, researchers are able to determine the impact of stress as it relates to the chronicity or duration of the stressor(s) (Williams, 2016).

However, other studies have approached operationalizing race-related stress by measuring racist experiences by their severity instead of their frequency, as the general stress literature has uncovered stronger associations between stressful life events and mental health through this approach (Dohrenwend, 2006). One such measurement is the GED, which examines severity by asking participants to rate the stressfulness of the experience (Landrine et al., 2006). Other measurements include the Reactions to Race module of the Behavioral Risk Factor Surveys (Centers for Disease Control and Prevention, 2013), the discrimination module of the national Midlife in the United States study (MIDUS; Kessler et al., 1999), and a group of three questions capturing the burden of lifetime discrimination in the Jackson Heart Study (Sims et al., 2012). Williams (2016) suggests that the severity approach reveals the more insidious nature of racism, by

revealing not only the attributional source of the racism, but also the stressfulness evoked by that experience. In fact, subtle or ambiguous racist experiences, ones that are less likely to be assessed by frequency measurements, may evidence stronger and more negative effects than those resulting from blatant racist events (Bennett, Wolin, Robinson, Fowler, & Edwards, 2005). Thus, it is important for researchers to pay careful attention to how they choose to measure race-related stress.

Race-related stress presents as three pervasive types of stressors. Because racism is so pervasive in society, race-related stress can take on a number of different forms: episodic, chronic, and daily hassles. *Episodic race-related stressors* are ones in which a direct but time-limited racist experience occurs to the victim (Feagin, 1991). They can include major discriminatory life events, which capture acute, observable discriminatory experiences comparable to life events in the stress literature (Bastos, Celeste, Faerstein, & Barros, 2010; Williams, 2016). These stressors include police harassment and housing discrimination. At a greater extreme, episodic race-related stressors may also refer to *traumas*, which are life events that are overwhelming and have long-term adverse effects on health (Pearlin, Schieman, Fazio, & Meersman, 2005; Stam, 2007). Examples of traumas include life-threatening accidents, kidnappings, sexual assaults, and torture.

Chronic race-related stressors are experiences that are ongoing or recurrent (Williams, 2016), and may continually, though sometimes subversively, impact the victim's long-term quality of life. For example, many events can become chronic stressors if those events lead the individuals to be adversely affected across time (e.g., because of housing or workplace discrimination, they are unable to find a good job or

provide food and shelter for their families). Other types of chronic stressors include being employed in a racially hostile work environment, dealing with problems related to visas and residency, and experiencing transportation problems. At a systems level, racial stressors can include the deprivation of resources, outdated textbooks, and technology access at local public schools. Moreover, there have been a number of studies indicating that race plays a primary role in difficulties with accessing and utilizing healthcare (Alegría et al., 2008; McGuire & Miranda, 2008; Smedley, Stith, & Nelson, 2003; Wang, Berglund, Olfson, Pincus, Wells, & Kessler, 2005). They can also occur as experiences of racism on a regular basis from people in one's social network, such as a boss, classmates, and friends.

Finally, *daily race-related hassles*, which are a form of chronic race-related stressors, are unintentional degradations of a victim's psychological well-being based on their race (Essed, 1991; Guthrie, 1995; Taylor & Seeman, 1999). This kind of stressor provides persistent negative exposure to threat or excessive demand (Baum, Cohen, & Hall, 1993), and can include experiences such as shopping, running errands, or picking up children from school. Ethnic minorities in particular may experience stress as a result of these daily hassles because of difficulties with transportation, child care, or accessibility to stores. This stress may become exacerbated over a lifetime, resulting in the development of chronic stress and a subsequent loss of energy (Thompson-Miller & Feagin, 2007).

Additionally, daily race-related hassles can include *racial microaggressions*, which Sue and colleagues (2007) define as "brief, everyday exchanges that send denigrating messages to people of color because they belong to a racial minority group"

(p. 273). These experiences have been shown to predict general mental health problems (Nadal, Wong, Sriken, Griffin, & Fujii-Doe, 2015) and specifically depression, anxiety, and trauma (Sue, 2010). Examples include being treated unfairly by others, being profiled or accused of doing something wrong, being called a racial slur, being made the object of jokes, and being threatened or hurt by racially motivated violence (Landrine & Klonoff, 1996).

These different types of stressors occasionally interact, and can even develop into one another. For example, an individual may experience a daily race-related hassle at work, such as a microaggression. This individual may report the incident to a supervisor, who subsequently fires that individual, resulting in the onset of an episodic stressor. Subsequently, the individual may experience chronic stress for being unable to find a new job and pay the bills. Thus, race-related stressors affect ethnic minorities from multiple angles, and can lead to the development of both race-related and non-race-related stressors.

Disaggregating Race-Related Stress by Ethnic Group

Race-related stress in African Americans. The study of race-related stress began as an exploration into the African American experience (Essed, 1991; Lalonde & Cameron, 1994; Lazarus & Folkman, 1984). Being disproportionately exposed to environmental stimuli (i.e., substandard housing, lower wages, and lack of skilled labor/managerial jobs; Sigelman & Welch, 1991), African Americans are at increased risk for exposure to race-related chronic and episodic stressors (James, 1993; Outlaw, 1993; Sears, 1991; Thompson, 1996). When compared to their Asian and Latino/a American counterparts, African Americans have been shown to experience higher levels of race-

related stress (Utsey, Chae, Brown, & Kelly, 2002). Thus, it follows that studies have demonstrated a link between racism and negative mental health in African Americans (Franklin-Jackson & Carter, 2007; Greer, Laseter, & Asiamah, 2009; Pieterse & Carter, 2007; Thompson, 2006; Utsey & Constantine, 2008). Race-related stress has also been found to act as a moderator for the relationship between poverty-related risk factors and subjective well-being (Utsey & Constantine, 2008).

Race-related stress in Asians and Asian Americans. Despite the popularity of the model minority myth (Crystal, 1989), Asian Americans have been and continue to be affected by racism and race-related stress. Perceived racial discrimination in Asian Americans has been linked to negative mental health outcomes, such as psychological distress, suicidal ideation, state anxiety, trait anxiety, and depression (Gee, Spencer, Chen, Yip, & Takeuchi, 2007; Hwang & Goto, 2008). This racial discrimination can present as microaggressions, but may vary based on their geographic location, education, and age (Nadal et al., 2015). In spite of this influence, race-related stress has been reported to significantly predict mental health in Asian Americans above and beyond that of perceived general stress and perceived racial discrimination (Wei, Heppner, Ku, & Liao, 2010). Further studies on this population have evidenced associations negatively relating race-related stress with outcomes such as well-being (Iwamoto & Liu, 2010), self-esteem (Liang & Fassinger, 2008), and social connectedness (Wei, Wang, Heppner, & Du, 2012).

Race-related stress in Indigenous Peoples. Among Indigenous peoples in North America (i.e., people who identify as Alaskan Native, First Nations, Native Hawaiian, Native American, and/or Pacific Islander), much of what we conceptualize as race-related

stress among Indigenous individuals stems from the historical and ongoing impact of colonialism that has caused a detrimental effect across generations (Kirmayer, Boothroyd, Tanner, Adelson, & Robinson, 2000). This effect is also known as *historical trauma*, or the cumulative psychological impact of genocidal and violent history experienced because of colonizers on individuals and their groups (Williams, 2016). As a result of this historical trauma, Indigenous people are at a significantly higher risk for developing physical (Kaholokula et al., 2012) and mental health (Caron & Liu, 2010; Hawkins, Reading, & Barlow, 2009; Iwasaki, Bartlett, & O'Neil, 2004) concerns. Additionally, Native Hawaiian college students who evidence increased perceived discrimination may concomitantly enhance their substance use behavior as their awareness of historical trauma increases (Pokhrel & Herzog, 2014). In other words, historical trauma may beget the onset of race-related stress for Indigenous peoples in North America. Accordingly, race-related stress has been linked to negative mental health outcomes in Polynesian women (Allen, Conklin, & Kane, 2017), Native Americans (Hill, Kim, & Williams, 2010), and Indigenous women in Canada (Benoit et al., 2016).

Race-related stress in Latino/a Americans. There is a growing body of research indicating a relationship between race-related stress and negative mental health consequences for Latino/a Americans (Alamilla, Kim, & Lam, 2010; Huynh, Devos, & Dunbar, 2012; Moradi & Risco, 2006). Specifically, race-related stress in Latino/a Americans has been linked to clinical disorders, such as depression (Hwang & Goto, 2008; Lee & Ahn, 2012) and PTSD (Alcántara, Casement, & Lewis-Fernández, 2013; Chou, Asnaani, & Hofmann, 2012; Kaczurkin, Asnaani, Hall-Clark, Peterson, Yarvis, &

Foa, 2016). Other studies have investigated the role of moderators in the relationship between discrimination and mental health; namely, ethnic identity exploration has been found to exacerbate the relationship, whereas ethnic identity commitment buffered it (Torres & Ong, 2010; Torres, Yznaga, & Moore, 2011). Thus, for Latino/a Americans racism and race-related stress have been demonstrated to affect mental health in negative ways.

Race-Related Stress Increases Risk for Mental Health Problems

Racism increases risk for depression among multiple groups. A sizable body of research has investigated the presentation of depression in ethnic minorities. Even when considering that depression presents as the same underlying disorder across Whites and ethnic minority groups (Aneshensel, Clark, & Frerichs, 1983), it is notable that studies have evidenced the higher risk many of these ethnic groups face for developing depression in comparison to White populations (Okazaki, 1997; Lopez et al., 2016; Siegel, Aneshensel, Taub, Cantwell, & Driscoll, 1998). Experiences with racial discrimination have contributed to this development of depression among African Americans (Chou et al., 2012; Jones, Cross, & DeFour, 2007), Pacific Islanders (Allen, Conklin, & Kane, 2017), and Indigenous women (Benoit et al., 2016), as well as Latino/a Americans and Asian Americans (Araújo & Borrell, 2006; Chou et al., 2012; Lee & Ahn, 2012; Pieterse et al., 2012). The evidence linking racism to both depressive symptoms and diagnosis of MDD is consistent, with effects seen across ages and across racial and ethnic groups (Miehls, 2011; Paradies, 2006; Priest, Paradies, Trenerry, Truong, Karlsen, & Kelly, 2013). Furthermore, studies have confirmed that race-related stress can predict depression (Gaylord-Harden & Cunningham, 2009).

Racism increases risk for PTSD among multiple groups. Likewise, PTSD has been reported to be more prevalent in Latino/a Americans (Alcántara et al., 2013; Kaczurkin et al., 2016; Pole, Best, Metzler, & Marmar, 2005) and African Americans (Kaczurkin et al., 2016; Roberts, Gilman, Breslau, J., Breslau, N., & Koenen, 2011) than in their White counterparts. Although Asian Americans as a whole were reported to have lower rates of PTSD than Whites (Roberts et al., 2011), other studies cited Southeast Asian refugees as having high rates of meeting PTSD diagnostic criteria as a result of the trauma experienced in their home countries (Blair, 2000; Carlson & Rosser-Hogan, 1991; Kinzie, Boehnlein, Leung, Moore, Riley, & Smith, 1990; Moore & Boehnlein, 1991). Regardless, studies have shown that ethnic minorities are more likely to develop PTSD after experiencing a traditionally defined traumatic event (Perilla, Norris, & Lavizo, 2002) and to evince elevated PTSD levels that are not fully explained by a specified traumatic event or other factors (Norris, 1990). Furthermore, the presentation of trauma and trauma-like symptoms in ethnic minorities has been linked to racial discrimination (Miehls, 2011; Pieterse, Carter, Evans, & Walter, 2010; Watson, DeBlaere, Langrehr, Zelaya, & Flores, 2016) and race-related stress (Franklin, Boyd-Franklin, & Kelly, 2006; Khaylis, Waelde, & Bruce, 2007; Waelde et al., 2010).

Common Strategies Utilized by Ethnic Minorities to Cope with Race-Related Stress

Evidently, race-related stress takes a huge physical, emotional, and psychological toll on ethnic minorities who experience racism and racial discrimination. The extant body of literature has reported a wide variety of coping strategies that ethnic minorities have developed to cope with racism (Choi, Han, Paul, & Ayala, 2011; Noh, Beiser, Kaspar, Hou, & Rummens, 1999; Noh & Kaspar, 2003; Vera et al., 2011), which are

influenced by factors such as gender, generational status, identity centrality, acculturation, and educational or social capital (David & Knight, 2008; Noh & Kaspar, 2003). Some strategies may be considered positive or adaptive, as they are speculated to mitigate enduring stress responses, thus potentially reducing detrimental effects of racism on health (Burchfield, 1979). Negative or maladaptive coping strategies, on the other hand, are ones that do not mitigate stress responses and may negatively affect health as a result (Burchfield, 1985; Clark & Harrell, 1982). However, the utility of either approach is often dependent upon the situation for which it is being used, as studies have cited both approaches as being related to increased psychological distress, poorer well-being, and more chronic conditions (Williams et al., 1997). Nevertheless, for the sake of this study, it will be assumed that adaptive strategies strengthen ethnic minority mental health, whereas maladaptive strategies worsen it.

Adaptive coping strategies strengthen ethnic minority mental health. Because of both the physical and psychological impact that racism can have on ethnic minorities, a number of positive and adaptive coping strategies have been found to be beneficial. Such strategies include development of multicultural identity attitudes (or attitudes that accept and connect with others from diverse cultures and worldviews; Jones et al., 2007) and exposure to social support (Utsey, Giesbrecht, Hood, & Stanard, 2008). Social support or collective gathering appears to be an especially well-documented coping strategy for African Americans (Lewis-Coles & Constantine, 2006; Plummer & Shane, 1996; Utsey et al., 2008; Utsey, Lanier, Williams, Bolden, & Lee, 2006), Asian Americans (Wei et al., 2010; Wei et al., 2012; Yoo & Lee, 2005), Indigenous peoples (Billow, 2012) and Latino/a Americans (Finch & Vega, 2003; Lopez, 2005). Moreover,

Latino/as with lower levels of self-efficacy have been reported to evidence higher levels of emotion-focused coping (Lopez-Kinney, 2002). Self-compassion, which involves the easing of one's own suffering and introducing of greater kindness towards the self, is another recommended coping strategy, as it has been linked to improved mental health outcomes (Diedrich, Grant, Hofmann, Hiller, & Berking, 2014; Neff, 2003; MacBeth & Gumley, 2012).

Maladaptive coping strategies worsen ethnic minority mental health. Due to systemic, financial, and/or language barriers, ethnic minorities often have difficulty accessing and adopting adaptive strategies for coping with racism. As a result, they may turn to negative or maladaptive coping strategies, which include the following: avoidant coping, which protects the user by avoiding the stressors (Edwards & Romero, 2008); internalization, a type of avoidant coping that involves self-blaming or criticizing oneself (Wei et al., 2010; Pole et al., 2005); detachment, a type of avoidant coping that involves social isolation (Wei et al., 2010); and substance use, which involves the intake of illicit substances to mitigate the negative effects of the stressor (Pokhrel & Herzog, 2014). Internalization and detachment, in particular, are two of the more noteworthy strategies that researchers may wish to target. The central nature of the internalization construct involves a sense of self-blame for discriminatory incidents, and this self-blame is a common symptom for certain clinical disorders, such as depression and PTSD. Detachment, on the other hand, can be described as the inverse of seeking social support, which has been an empirically supported coping strategy in the adaptive coping literature. Thus, researchers may want to show the progression of such maladaptive coping strategies, as reducing the use of internalization and detachment may evidence beneficial

mental health outcomes.

The Development and Implementation of Compassion Meditation

Although the specific practice of Compassion Meditation (CM) has not been explored in the racial coping literature, its potential benefits may be promising (Hofmann, Grossman, & Hinton, 2011). Compassion meditation, also known as “*karuṇā*” meditation, originated as a part of the Theravāda school of Buddhism. *Karuṇā* (in Pali canon) is one of the four “divine abodes,” or *brahmavihāras*, and it is defined as the desire to remove harm and suffering (Davids & Stede, 1921). The other three mental states are loving kindness (*mettā*), sympathetic joy (*mudita*) and equanimity (*upekkha*). Developing all four virtuous mental states will enable the practitioner to purify one’s mind and achieve happiness in one’s present life (Gethin, 1998). In the psychological literature, CM is considered a specific form of Loving-Kindness Meditation (LKM), which is a branch of Kindness-Based Meditation (KBM); all three forms of meditation have been widely researched in the meditation literature.

KBM improves mental health through eliciting kindness. Kindness-based meditation (KBM) is a meditative technique developed to elicit kindness in a conscious manner. It is not a meditative form that originated in Buddhism; instead, it was developed as a Western categorization of meditations that were derived from Buddhism, such as compassion (*karuṇā*) meditation and loving-kindness (*mettā*) meditation. KBM involves techniques that are developed to more strongly evoke an understanding of others’ needs (Kristeller & Johnson, 2005), rather than evoking a desire to remove one’s suffering as in CM. It has also demonstrated moderate effectiveness at decreasing self-reported depression and increasing mindfulness, compassion, and self-compassion (Galante,

Galante, Bekkers, & Gallacher, 2014).

LKM improves mental health through cultivating loving acceptance. Loving-kindness meditation (LKM) consists of the inner cultivation of a loving acceptance feeling toward all sentient beings (Salzberg, 2000). The term *mettā* means benevolence, loving-kindness, friendliness, amity, friendship, good will, kindness, and active interest in others. Like *karuṇā*, this meditation is a *brahmavihara* or an immeasurable that leads to a meditative state by being a counter to ill-will (Harvey, 2012). However, it differs from *karuṇā* in that it is the desire to bring about the well-being and happiness of others, rather than a desire to remove their harm and suffering (Davids & Stede, 1921). The focus of LKM exercises is to engage a particular aspect of self, but in a mindful way, rather than analytical or judgmental (Kristeller & Johnson, 2005). It has been associated with increased positive emotions and reduced symptoms of depression (Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008), greater positive affect toward neutral strangers (Hutcherson, Seppala, & Gross, 2008), and increased self- and other-based compassion (Boellinghaus, Jones, & Hutton, 2012). Neurological studies have evidenced links between the practice of LKM and activation in brain areas controlling reward and motivation (i.e., the mesolimbic dopamine system, specifically the ventral tegmental area and orbitofrontal cortex; Kim et al., 2009; Klimecki et al., 2013). LKM has also been associated with longer telomeres in women compared to controls (Hoge et al., 2013).

CM improves mental health through removing suffering. Compassion meditation, as defined in the scientific literature, involves techniques to cultivate compassion, or deep, genuine sympathy for those stricken by misfortune, together with an earnest wish to ease this suffering (Grossman & Van Dam, 2011; Hopkins, 2001).

There are a number of programs that specifically train compassion through meditation, including a cognitively based compassion training program (Ozawa-de Silva, Dodson-Lavelle, Raison, & Negi, 2012), and a mindful self-compassion program (MSC; Neff & Germer, 2013). Initial studies testing a treatment called compassionate mind training found post-intervention improvements in depression and anxiety (Gilbert & Procter, 2006; Mayhew & Gilbert, 2008). CM has been associated with activation in brain areas controlling empathy and happiness (i.e., the left medial prefrontal cortex and the anterior cingulate gyrus; Engström & Söderfeldt, 2010), reward and motivation (i.e., the ventral striatum and the medial orbitofrontal cortex; Klimecki et al., 2014), and emotional and somatosensory brain representations of other people's emotions (Lutz, Brefczynski-Lewis, Johnstone, & Davidson, 2008; Lutz, Greischar, Periman, & Davidson, 2009; Lutz, Slagter, et al., 2008). Additionally, neuroendocrine studies suggest that CM may reduce stress-induced subjective distress and immune response (Pace et al., 2009, 2010). Thus, although the compassion meditation literature is scarce, mental health outcomes appear to be encouraging.

Conceptualizing Compassion Meditation as a Coping Mechanism for Racism

Mindfulness interventions lead to symptom improvement for depression and PTSD. The mindfulness literature has shown promise for mindfulness-based or compassion-based interventions to improve symptoms in depression and PTSD (Falsafi, 2016; Hilton et al., 2016; Kearney, 2015; Lang et al., 2012). Prior research has evidenced the link between compassion-based interventions and reduction of trauma symptoms (Au, Sauer-Zavala, King, Petrocchi, Barlow, & Litz, 2017). LKM in particular has been found to increase positive emotion (Garland et al., 2010; Zeng, Chiu, Wang, Oei, & Leung,

2015), reduce symptoms of depression and PTSD (Graser, Hofling, Weblau, Mendes, & Stangier, 2016; Kearney, 2015; Kearney, Malte, McManus, Martinez, Felleman, & Simpson, 2013), and improve psychological distress (Shonin, Van Gordon, Compare, Zangeneh, & Griffiths, 2015).

Mindfulness interventions hold potential for use among ethnic minorities.

Similarly, previous research on mindfulness interventions has demonstrated benefits for improving ethnic minority mental health. Such interventions have been implemented with underserved trauma populations (Dutton, 2015), Latino/a adolescents (Edwards, Adams, Waldo, Hadfield, & Biegel, 2014), African American men (Elligan & Utsey, 1999) and women (Woods- Giscombé & Black, 2010), and incarcerated Native Hawaiian/Pacific Islander youth (Le & Proulx, 2015). As for kindness-based meditations, LKM specifically has evidenced affective benefits for Southeast Asian and Latino/a immigrants (Hinton, Ojserkis, Jalal, Peou, & Hofmann, 2013), and CM has been demonstrated to decrease depressive symptoms in African American college students (Johnson, Goodnight, Zhang, Daboin, Patterson, & Kaslow, 2017). Furthermore, Helms and colleagues (2012) have recommended that clinical interventions be developed for the purpose of effectively addressing race-related stress in cultural settings in which the clients feel comfortable.

Conceiving Suitable Coping Strategies within the CM Framework

Given this recommendation, it is imperative that any intervention developed for the sake of reducing race-related stress be conscious of ethnic minorities, who may evidence mental health concerns such as depression and PTSD. Further, the strategies that participants would learn to cope with racism must not only help them successfully

reduce race-related stress, but the strategies must also be effective in ensuring that there is no re-traumatization or worsening of negative mental health outcomes. Augmenting the usage of adaptive coping strategies and mitigating the usage of maladaptive coping strategies may be one way of establishing the framework for a receptive and applicable compassion meditation intervention.

Self-compassion bolsters positive mental health. It has been suggested that people suffering from depression may benefit from participating in interventions fostering self-compassion (Kuyken et al., 2010). Indeed, the use of self-compassion has been found to reduce depression in first-year college students (Terry, Leary, & Mehta, 2013), community populations (Maheux & Price, 2016), and patients diagnosed with major depressive disorder (Diedrich et al., 2014). Furthermore, self-compassion may hold a more specific role related to depression, as it has been found to act as a mediator between depression and maladaptive perfectionism (Mehr & Adams, 2016), self-criticism (Joeng & Turner, 2015), and overdependency (Denckla, Consedine, & Bornstein, 2017). Self-compassion has also been negatively related to PTSD symptoms in at-risk youth (Zeller, Yuval, Nitzan-Assayag, & Bernstein, 2015), patients diagnosed with PTSD (Germer & Neff, 2015; Hoffart, Økstedalen, & Langkaas, 2015; Palgi, Klein, & Shamay-Tsoory, 2016), community populations (Maheux & Price, 2015, 2016), trauma survivors (Valdez & Lilly, 2016), college undergraduates (Seligowski, Miron, & Orcutt, 2014; Thompson & Waltz, 2008), and U.S. and Iraq and Afghanistan war veterans (Hiraoka, Meyer, Kimbrel, DeBeer, Gulliver, & Morissette, 2015). Thus, the literature connecting self-compassion to strengthened mental health outcomes supports the use of self-compassion as a strategy for coping with racism, specifically within the context of a

clinical intervention that heals with compassion meditation.

Coping with racism via internalization evidences improvements in mental health. Internalization is a maladaptive coping strategy defined as “the tendency to attribute the cause or responsibility of a discriminatory incident to oneself” (Wei et al., 2010, p. 331). The literature on this construct has revealed that using this coping strategy, which is avoidant in nature, can protect against psychological distress as a result of gendered racism for African American college-aged women (Szymanski & Lewis, 2016), sexist oppression for sexual minority women (Szymanski, Dunn, & Ikizler, 2014), and sexual objectification for heterosexual women (Szymanski & Feltman, 2014). Furthermore, coping via internalization has been shown to be positively related to depression in racial and ethnic minority (Carr, Szymanski, Taha, West, & Kaslow, 2014; Tomes, Brown, Semenya, & Simpson, 1990; Wei et al., 2010; Williams & Chung, 1999) and sexual minority populations (Ngamake, Walch, & Raveepatarakul, 2016). Similar results in the literature were reported for PTSD (Ullman, Filipas, Townsend, & Starzynski, 2007). Thus, the less one blames themselves for their situations, the less likely one will evidence symptoms of depression and PTSD, a trend that indicates an improvement in coping with racism.

Coping with racism via detachment evidences improvements in mental health. Detachment is a coping strategy defined as “distancing oneself from social support and having no idea how to deal with discrimination” (Wei et al., 2010, p. 331), though the literature on detachment as a coping strategy is more limited. Szymanski and colleagues (2014) found that coping with multiple minority stressors via detachment mediated a number of links between psychological distress and various forms of sexist

oppression. Among African American women, coping with discrimination via detachment was also demonstrated to mediate a link between gendered racism and psychological distress (Szymanski & Lewis, 2016). Additionally, qualitative interviews have revealed that multiracial Black individuals cope with racism by “limiting their social interactions to those in their small established circle” (Snyder, 2016, p. 269). Therefore, given the evidence in the extant literature, reducing the usage of detachment as a strategy for coping with racism may result in improved mental health outcomes in the compassion meditation intervention.

The Present Study

There is an explicit and urgent need to develop and implement a CM intervention specifically designed to help ethnic minority students heal from racism. Basic and clinical research has found that CM interventions can be beneficial for a multitude of problems. Therefore, CM interventions may also be a promising strategy for helping students heal from race-related stress. Developing and implementing such an intervention would enable researchers to test for effective coping strategies that successfully improve mental health outcomes. This intervention would also address the paucity of mental health services accessible to ethnic minorities. The goal of this study is to examine whether CM can help ethnic minority students heal from and cope with race-related stress and its consequent impact on mental health. Specifically, the study examines whether the augmentation of adaptive coping strategies (i.e., self-compassion) and the reduction of maladaptive coping strategies (i.e., internalization and detachment) significantly predicts a reduction in mental health symptoms (i.e., depression and PTSD).

Method

Participants

Participants were nine undergraduates attending a consortium of five small liberal arts colleges in Southern California (7 female, 2 male). Ages ranged from 19 to 22-years-old ($M = 20.3$, $SD = 1.1$). Five participants identified as Asian American, three as multiracial (Filipina: $n = 1$; Asian, Pacific Islander, and White: $n = 1$; Black, Japanese, and Indigenous: $n = 1$), and one as Latino/a American. Inclusion criteria included being an ethnic minority, attending college for at least one semester, and experiencing race-related stress. Participants received no compensation for participating in the study.

Procedure

Data collection. Participants were assigned confidential research identification numbers that leaders of the group were not privy to. They completed three questionnaires, one at each of three time-points throughout the intervention (Time 1: One week before the intervention start date, Time 2: Four weeks after the intervention start date, and Time 3: Eight weeks after the intervention start date). These questionnaires were hosted on an online survey platform called Qualtrics, and contained self-reported measures assessing clinical symptoms (depression and post-traumatic stress), self-compassion, and coping with discrimination.

Recruitment. Participants were recruited via flyers, campus-wide informs, emails to specific student organizations that serve ethnic minority populations, and word of mouth. They were directed to sign up through a Google Form. This form requested the following information: name, class year, school within the consortium, preferred email address, phone number, ethnic background (i.e., option to select multiple ethnicities among African/African American/Black, Asian/Asian American, Native

American/Alaskan Native, Native Hawaiian or Other Pacific Islander, Latino/a), whether the student could make the session at the indicated dates and times, as well as alternative time availabilities. All students who had filled out the form a week and a half before the intervention start date were contacted via email. A total of eighteen students initially filled out the form indicating their interest in the program. Nine students withdrew their participation, for reasons such as inability to commit to the full eight weeks, not meeting the prerequisite intervention criteria, and loss of interest in the program. The remaining nine students confirmed their participation and met the prerequisites for the intervention. A week before the intervention start date, participants received email invitations to complete the online Time 1 questionnaires before Session 1.

Intervention. Participants completed an 8-week compassion-based meditation program. Each session began at 6 PM and lasted approximately 75 minutes. The eight sessions took a total of nine weeks to complete because of a school-mandated Thanksgiving holiday break in November. Two undergraduate research assistants (one of whom was the author) co-led the program under the supervision of the principal research investigator, a licensed clinical psychologist who also co-led a few of the sessions. Group leaders met weekly to discuss and prepare for each session, and also debriefed with each other immediately after each session. Because this was the first implementation of the program, the meetings were used to discuss how to further revise and improve the curriculum. For example, participants conveyed to the group leaders that some meditations were more beneficial than others, so the group leaders made adjustments in the sessions to provide for the needs of the participants. The sessions varied in content, and included psychoeducation on race-related incidents, practice with guided

meditations, and practice with cognitive-behavioral coping techniques. Some sessions included worksheets for the participants to use during each session.

Before each session, the group leaders sent the participants a reminder email; after each session, they sent a session recap email and audio files of the guided meditations recorded during the session. Three weeks after the intervention end date, they held an additional “review” session for participants to review anonymous group average outcomes. Individual participant results were emailed to participants by a research assistant blind to the study after the intervention was completed.

Measures

Beck Depression Inventory-II (BDI-II). The Beck Depression Inventory-II was used to assess the participants’ depression symptom severity (BDI-II; Beck, Steer, & Brown, 1996). The BDI-II is a widely used 21-item inventory that assesses severity of self-reported depressive symptoms within the past two weeks, with each item being composed of a group of statements for each symptom. These statements are rated on a 4-point Likert-type scale ranging from 0 to 3, with scale responses varying by the item and with higher scores indicating higher levels of depression. For example, one item assesses the symptom of “past failure,” offering the following scale choices: 0 (*I do not feel like a failure*), 1 (*I have failed more than I should have*), 2 (*As I look back, I see a lot of failures*), and 3 (*I feel I am a total failure as a person*). The total score was calculated by summing all 21 items. Clinical cutoffs suggest that a score of 0 to 13 indicates no to minimal depression, 14 to 19 indicates mild depression, 20 to 28 indicates moderate depression, and 29 to 63 indicates severe depression. The BDI-II has demonstrated high internal consistency among psychiatric outpatients ($\alpha = .91$) and college students ($\alpha =$

.93) (Beck, Steer, Ball, & Ranieri, 1996; Dozois, Dobson, & Ahnberg, 1998), as well as with different ethnic groups ($\alpha = .92$, Carmody, 2005; $\alpha = .91$, Sashidharan, Pawlow, & Pettibone, 2012; $\alpha = .90$, Whisman, Judd, Whiteford, & Gelhorn, 2013; $\alpha = .91$, Whisman & Richardson, 2015). In this study, the BDI-II demonstrated strong internal consistency (Time 1: $\alpha = .63$; Time 2: $\alpha = .89$; Time 3: $\alpha = .86$) (see Appendix A).

PTSD Checklist for DSM-5 (PCL-5). The PTSD Checklist for DSM-5 is a 20-item scale that evaluates the degree to which an individual has been bothered in the past month by PTSD symptoms specified in the *DSM-5* (PCL-5; Weathers, Litz, Keane, Palmieri, Marx, & Schurr, 2013). The PCL-5 items reflect changes to existing symptoms and the addition of new symptoms in *DSM-5*. Participants were asked to indicate how much they have been bothered by a race-related incident in the past month. Each item was rated on a 5-point Likert-type scale ranging from 0 (*not at all*) to 4 (*extremely*). Sample items included “In the past month, how much were you bothered by repeated, disturbing, and unwanted memories of the stressful experience?” and “In the past month, how much were you bothered by feeling jumpy or easily startled?” The total score was calculated by summing all 20 items.

The PCL-5 can be used as a severity score or as a confirmation of PTSD diagnoses. There are two ways in which diagnoses can be confirmed. First, those who score 2 or higher on items within each of the following clusters met criteria for a PTSD diagnosis: At least 1 item from cluster B (questions 1-5), 1 item from cluster C (questions 6-7), 2 items from cluster D (questions 8-14), and 2 items from cluster E (questions 15-20). Second, a PTSD diagnosis can be made when an individual has a total score of 33 or higher. Change scores in the PCL 5 can also be used to indicate patient progress.

Specifically, a reduction of five points is the minimum threshold for treatment response and a score of 10 points indicates clinically meaningful change.

Among college students, the PCL-5 has demonstrated strong internal consistency ($\alpha = .94$), test-retest reliability ($r = .82$), and convergent ($r_s = .74$ to $.85$) and discriminant ($r_s = .31$ to $.60$) validity (Blevins, Weathers, Davis, Witte, & Domino, 2015). Among veterans, it has evidenced similar strength in internal consistency ($\alpha = .96$) and test-retest reliability ($r = .84$) (Bovin et al., 2016). Because the PCL-5 is a relatively new measure, it has not been tested specifically with ethnic minorities. However, studies that have evaluated PTSD using other measures in ethnic minority populations reveal similar Cronbach's alpha scores ($\alpha = .94$, Cheng & Mallinckrodt, 2015; $\alpha = .64$, Davis et al., 2012; $\alpha = .89$, Hoyt & Yeater, 2010; $\alpha = .69$; Lipsky, Kernic, Qiu, & Hasin, 2016) to those extrapolated from the PCL-5 in this study (Time 1: $\alpha = .93$; Time 2: $\alpha = .95$; Time 3: $\alpha = .90$) (see Appendix B).

Self-Compassion Scale (SCS). The Self-Compassion Scale is a 26-item self-report measure of the degree to which individuals exhibit a kind and accepting attitude toward themselves (SCS; Neff, 2003). Sample items include "I am disapproving and judgmental about my own flaws and inadequacies" and "I try to feel loving toward myself when I'm feeling emotional pain." Responses are given on a 5-point Likert-type scale ranging from 1 (*almost never*) to 5 (*almost always*), with higher scores indicating greater self-compassion. The final score can be calculated in one of two ways. The original scoring scheme calculated the total score by taking the average of all 26 items (Neff, 2003). However, the author of the measure released an update on her website, in which she provided a secondary method of calculating the scale score by taking the

average of the subscale scores (Neff, n.d.). Subscales of the SCS include self-kindness, self-judgment, isolation, common humanity, mindfulness, and over-identified. This study utilized the second method. The SCS has demonstrated good internal consistency ($\alpha = .92$), as well as good test-retest reliability ($\alpha = .93$; Neff, 2003) over a 3-week interval. Though it has not been tested with the intentional purpose of validation with ethnic minority groups, the SCS has demonstrated strong internal consistency among samples with at least 50% of the members identifying as ethnic minorities ($\alpha = .87-.90$, Jazaieri et al., 2012; $\alpha = .94$, Neff, Kirkpatrick, & Rude, 2007; $\alpha = .92$, Williams, 2004; $\alpha = .88$, Williams, 2013). In this study, the SCS demonstrated acceptable internal consistency (Time 1: $\alpha = .72$; Time 2: $\alpha = .44$; Time 3: $\alpha = .90$) (see Appendix C).

Coping with Discrimination Scale (CDS). The Coping with Discrimination Scale is a 25-item scale assessing how students cope with racial discrimination (CDS; Wei et al., 2010). The items were rated on a 6-point Likert-type scale from 1 (*never like me*) to 6 (*always like me*). Factor analyses identified five factors: *Education/Advocacy*, *Internalization*, *Drug and Alcohol Use*, *Resistance*, and *Detachment*, with internal consistency reliability estimates ranging from 0.72-0.90 (Wei et al., 2010). Subscale scores are calculated by taking the average of five items each. The original scoring scheme does not include an overall score; rather, it calculates separate scores for different subscales. This study utilized the Internalization and Detachment subscales.

Internalization is defined as “the tendency to attribute the cause or responsibility of a discriminatory incident to oneself,” and Detachment refers to “distancing oneself from social support and having no idea how to deal with discrimination” (Wei et al., 2010, p. 331-332). A sample item of the Internalization subscale is “I wonder if I did something to

offend others,” and a sample item of the Detachment subscale is “it’s hard for me to seek emotional support from other people.” In previous studies examining ethnic minority populations, the Internalization subscale has evidenced strong internal consistency ($\alpha = .77$, Carr et al., 2014; $\alpha = .89$, Szymanski et al., 2014; $\alpha = .83$, Szymanski & Lewis, 2016; $\alpha = .87-.91$, Wei et al., 2010), as did the Detachment subscale ($\alpha = .83$, Szymanski et al., 2014; $\alpha = .72$, Szymanski & Lewis, 2016; $\alpha = .63-.76$, Wei et al., 2010). In this study, internal consistency estimates for the Internalization subscale (Time 1: $\alpha = .83$; Time 2: $\alpha = .83$; Time 3: $\alpha = .17$) and the Detachment subscale (Time 1: $\alpha = .90$; Time 2: $\alpha = .40$; Time 3: $\alpha = .77$) were mostly adequate (see Appendix D).

Data Analysis

Handling of missing data. Because the sample was so small, determining the most appropriate protocol for handling missing data was essential. There were two types of missing data in this study: (1) a single item or set of items missing in a scale for a single participant, and (2) an entire scale missing for a single participant. The first type of missing data was present at all three time points (Time 1: missing one item for one participant; Time 2: missing one item for one participant; Time 3: missing twenty total items from two scales for one participant). Thus, 22 of 2484 cells among the nine participants, or 0.89% of the data, were categorized as missing. The second type of missing data was present at Time 3 (one scale missing for each of two participants). To replace both types of missing data, mean imputations were calculated by taking the group average for each individual item and substituting the missing data. This method allowed for the retention of the overall group average, while also reinforcing the limited sample size.

Measuring the effect of the intervention over time. Repeated ANOVA analyses were utilized to confirm that changes in the variables of interest from Time 1 to Time 3 of the intervention were significant. Time-point was the independent variable, with Times 1 to 3 as three different levels. The dependent variables were the five variables of interest: depression, PTSD, self-compassion, internalization coping, and detachment coping.

Determining relationships among the variables. Because the sample size was too small to meet the assumptions of a parametric Pearson's correlation, a series of fifteen non-parametric Spearman's rank-order correlations was calculated to analyze the relationships among the five variables of interest at all three time-points. A second series of five Spearman's correlations was calculated to analyze the relationships among the change scores for the study variables. The change scores were calculated by subtracting the Time 1 score from its corresponding Time 3 score.

Predicting mental health outcomes. Hierarchical multiple regression analyses were conducted to examine factors that predict change in clinical mental health scores between Times 1 and 3 of the intervention. The criterion variables were changes in clinical scores, of which there were two types: depression and PTSD. The predictor variables were changes in coping strategy scores, of which there were three types: self-compassion, internalization, and detachment. In each regression, Time 1 clinical scores were entered into Block 1 to control for their association with the criterion variables. The corresponding Time 1 clinical scores and change scores in coping strategies were entered into Block 2. Because there were two clinical variables and three predictor variables, a total of six analyses were conducted with this regression model structure.

Hypotheses. From Time 1 (pre-intervention) to Time 3 (post-intervention):

- (1) Hypothesis 1: Changes will occur between Time 1 and Time 3 regarding a number of variables, including:
 - a. Hypothesis 1a: Decreases in PTSD, Depression, Coping via Internalization, and Coping via Detachment
 - b. Hypothesis 1b: Increases in Self-Compassion
- (2) Hypothesis 2: Resulting clinical changes will occur due to increases and decreases in coping strategies.
 - a. Hypothesis 2a: Increases in Self-Compassion will predict decreases in PTSD
 - b. Hypothesis 2b: Decreases in Coping via Internalization will predict decreases in PTSD
 - c. Hypothesis 2c: Decreases in Coping via Detachment will predict decreases in PTSD
 - d. Hypothesis 3a: Increases in Self-Compassion will predict decreases in Depression
 - e. Hypothesis 3b: Decreases in Coping via Internalization will predict decreases in Depression
 - f. Hypothesis 3c: Decreases in Coping via Detachment will predict decreases in Depression

Results

Descriptive Statistics

Demographic variables for the sample are provided in Table 1 of Appendix E.

Means, standard deviations, skewness, and kurtosis statistics for participants' reported levels of depression, PTSD, self-compassion, coping via internalization, and coping via detachment are presented in Table 2. In Table 2, Times 1, 2, and 3 refer to the time-points at which each of the five aforementioned variables were recorded. Specifically, Time 1 refers to the pre-intervention score one week before the start date of the program, Time 2 refers to the mid-intervention score four weeks after the start date of the program, and Time 3 refers to the post-intervention score eight weeks after the start date of the program. The descriptive statistics for the change scores of the five variables (calculated by subtracting Time 3 scores from Time 1 scores) are also presented in Table 2.

Repeated Analysis of Variance Analyses

Five repeated analysis of variance (ANOVA) omnibus tests were conducted to examine the effects of the intervention across time on participants' scores for self-reported depression, PTSD, self-compassion, coping via internalization, and coping via detachment. An alpha level of .05 was used for all tests. The results are presented in Table 3.

Depression. The omnibus test of the main effect of time-point on depression level was statistically significant, $F(2, 16) = 5.70, p = 0.01$, partial $\eta^2 = 0.42$. Sphericity was not violated for depression level, as determined by Mauchly's test, $\chi^2(2) = 0.76, p = 0.69$. Bonferroni's test confirmed the prediction that participants' Time 3 depression ($M = 13.00, SD = 2.77$) was significantly lower than their Time 1 depression ($M = 21.56, SD = 1.94$), $p = 0.03$ (two-tailed). There were no significant differences between Time 1 and Time 2 depression ($M = 16.44, SD = 2.86$), $p = .14$, or between Time 2 and Time 3 depression, $p = .80$. Thus, the depression levels of participants significantly decreased

from pre- to post-intervention, with 41.6% of the variance in depression being explained by time.

PTSD. The repeated ANOVA analysis found that the main effect of time-point on PTSD level was marginally significant, $F(2, 16) = 3.37, p = .06$, partial $\eta^2 = 0.30$. Mauchly's test confirmed sphericity for PTSD level, $\chi^2(2) = 0.77, p = .68$. Bonferroni's test demonstrated that the difference between participants' Time 1 PTSD ($M = 22.00, SD = 16.43$) and Time 3 PTSD ($M = 10.89, SD = 9.03$) was marginally significant, $p = .06$ (two-tailed). There were no significant differences between Time 1 and Time 2 PTSD ($M = 19.67, SD = 13.23$), $p = 1.00$, or between Time 2 and Time 3 PTSD, $p = .25$. Thus, results revealed that the PTSD levels of participants decreased from pre- to post-intervention at a marginally significant level, $p = .06$, with 29.6% of the variance in PTSD being explained by time.

Self-Compassion. The omnibus test of the main effect of time-point on self-compassion level was statistically significant, $F(2, 16) = 7.93, p < 0.01$, partial $\eta^2 = 0.50$. Mauchly's test confirmed that sphericity was not violated for self-compassion level, $\chi^2(2) = 5.72, p = 0.06$. Bonferroni's test revealed that there were no significant differences between Time 1 ($M = 2.66, SD = 0.37$) and Time 2 self-compassion ($M = 2.44, SD = 0.24$), $p = .15$, or between Time 1 and Time 3 self-compassion ($M = 3.08, SD = 0.62$), $p = .11$. However, participants' Time 3 self-compassion was significantly higher than their Time 2 self-compassion, $p = .046$ (two-tailed), thus demonstrating that the intervention effect occurred later in the process. Thus, the self-compassion levels of participants increased significantly from the middle to the end of the intervention, and 49.8% of the overall variance in self-compassion was explained by time.

Coping with Discrimination - Internalization subscale. The repeated ANOVA showed that the main effect of time-point on internalization coping level was not significant, $F(2, 16) = 2.65, p = .10$, partial $\eta^2 = 0.25$. Sphericity was not violated for internalization level, as determined by Mauchly's test, $\chi^2(2) = 0.91, p = .64$. Bonferroni's test demonstrated that there were no significant differences between participants' Time 1 ($M = 3.23, SD = 1.12$) and Time 2 internalization ($M = 3.47, SD = 1.22$), $p = 1.00$, Time 1 and Time 3 internalization ($M = 2.63, SD = 0.51$), $p = .40$, or between Time 2 and Time 3 internalization, $p = .27$. Thus, the reduction of the internalization levels from the beginning to the end of the intervention was not significant.

Coping with Discrimination - Detachment subscale. The repeated ANOVA analysis found that the main effect of time-point on detachment coping level was not significant, $F(2, 16) = 0.75, p = .49$, partial $\eta^2 = 0.09$. Sphericity was not violated for detachment level, as determined by Mauchly's test, $\chi^2(2) = 4.48, p = .11$. Bonferroni's test demonstrated that there were no significant differences between participants' Time 1 ($M = 2.82, SD = 1.37$) and Time 2 detachment ($M = 2.71, SD = 0.68$), $p = 1.00$, Time 1 and Time 3 detachment ($M = 2.31, SD = 0.79$), $p = 1.00$, or between Time 2 and Time 3 detachment, $p = .67$. The reduction in participants' detachment levels from pre- to post-intervention was not significant.

Correlational Analyses

Because of the limited sample size, two series of non-parametric Spearman's rank-order correlational analyses were conducted. The first series is provided in Table 4, and presents the relationships among the five variables (i.e., depression, PTSD, self-compassion, internalization coping, and detachment coping) at each of the three time-

points. Among the clinical variables, depression was found to have strong positive correlations with PTSD at both Time 2 ($r(7) = .80, p = .009$) and Time 3 ($r(7) = .94, p < .001$). Time 1 depression was found to have a marginal positive correlation with Time 3 detachment ($r(7) = .65, p = .06$), as was Time 3 depression with Time 3 detachment ($r(7) = .83, p < .001$). PTSD was found to be significant and positively correlated with detachment, both at Time 1 ($r(7) = .78, p = .014$) and at Time 3 ($r(7) = .75, p = .02$). Among the independent variables, there was a positive, marginally significant correlation between Time 1 self-compassion and Time 3 self-compassion ($r(7) = .62, p = .08$), a strong positive correlation between Time 1 internalization and Time 2 internalization ($r(7) = .71, p = .03$), a strong positive correlation between Time 1 detachment and Time 3 internalization ($r(7) = .76, p = .018$), and a positive, marginally significant correlation between Time 1 detachment and Time 3 self-compassion ($r(7) = .60, p = .09$).

The second series of correlations is provided in Table 5, and presents the relationships among the Time 3 to Time 1 change scores for the five aforementioned variables. Change in depression was negatively correlated with change in self-compassion ($r(7) = -.73, p = .03$) and change in internalization ($r(7) = -.69, p = .04$). There was also a strong positive correlation between change in PTSD and change in detachment ($r(7) = .71, p = .03$).

Hierarchical Regression Analyses

A series of hierarchical multiple regression analyses was conducted to examine factors (i.e., self-compassion, coping via internalization, and coping via detachment) that predict clinical mental health outcomes (i.e., PTSD and depression) at Time 3 of the compassion meditation intervention. In doing so, baseline clinical scores were controlled

for in the first block, followed by the same baseline clinical score and the predictive factor entered in the second block. Tables 6 and 7 present the results of these regression analyses.

Hypotheses 2a, 2b, and 2c. Hierarchical multiple regression analysis indicated that after controlling for baseline PTSD, change in self-compassion scores between Times 1 and 3 did not significantly predict change in PTSD scores, $\beta = -.32, p = .20$. The overall regression model was found to be significant, $R^2 = .79, F(2, 6) = 11.19, p = .009$. Controlling for baseline PTSD, change in internalization coping score from Time 1 to Time 3 did not significantly predict change in PTSD score, $\beta = -.15, p = .49$. However, the overall regression model was significant, $R^2 = .74, F(2, 6) = 8.56, p = .017$. Controlling for baseline PTSD, change in detachment coping score was found to be a significant predictor of PTSD change, $\beta = .42, p = .03$. For every one-unit increase in detachment coping change, depression change increased by 2.90 units. The overall regression model also explained 87.4% of the variance in PTSD change, $F(2, 6) = 20.74, p = 0.02$. Thus, as the participants decreased their usage of detachment coping over time, their PTSD levels significantly decreased.

Hypotheses 3a, 3b, and 3c. Controlling for baseline depression, change in self-compassion scores between Times 1 and 3 was found to be a significant predictor of change in depression scores, $\beta = -.80, p = .011$. The overall regression model explained 71.3% of the variance in depression change, $F(2, 6) = 7.47, p = 0.02$. For every one-unit increase in self-compassion change, depression change decreased by 12.39 units. As the participants increased their self-compassion over time, their depression levels significantly decreased. Controlling for baseline depression, change scores in coping via

internalization from Time 1 to Time 3 did not significantly predict changes in depression scores, $\beta = -.40$, $p = .32$. Moreover, the overall model was not significant. Similarly, controlling for baseline depression, changes in depression scores between Times 1 and 3 were not significantly associated with change scores in coping via detachment scores, $\beta = .40$, $p = .31$. The overall model for that analysis was also found to be nonsignificant.

Discussion

The results of the present study provide preliminary evidence in support of the use of a compassion meditation intervention to help ethnic minority college students cope with racism. Although this is not the first compassion meditation intervention designed to improve mental health outcomes in ethnic minority college students (Johnson et al., 2017), it is the first to be developed with the expressed intention of addressing race-related stress. Specifically, the study demonstrated that participation in an 8-week peer-led compassion meditation program can lead to significant reductions in both depression and PTSD symptoms. This finding has important implications, as the intervention was both short-term and low-cost, making it an accessible and beneficial service to support ethnic minority mental health.

Next, the study used multivariate modeling to determine the reasons for changes in clinical levels. Results highlight the importance of developing healthy and effective coping strategies when faced with race-related stress. Specifically, when students trained to be more compassionate towards themselves, they evidenced decreases in depressive symptoms. Compassion towards oneself involves not only loving and taking care of oneself, but also letting go of suffering and pain. By practicing and developing their compassion, these students learned how to love themselves and to let go of their pain

caused by race-related stress.

Furthermore, this study underscores the importance of training participants to reduce their usage of maladaptive coping strategies such as detachment. Although detaching and socially isolating oneself can provide short-term relief when one is distressed, it can also create more problems such as avoiding people who may remind the victim of the racist incident, a problem that is similar to symptoms of avoidance in PTSD. Understanding the importance of developing and remaining connected to a broader community is a salient finding of this study. Recognizing this can alert universities to develop programs that will help provide this social support for students who are struggling with race-related stress. Specifically, ongoing group therapy, race-based discussion groups, and online support groups are options that have been developed to help ameliorate and buffer individuals from racism (Andrasik, Woods, & George, 2012; Chang & Yeh, 2003; Elligan & Utsey, 1999). This intervention utilizes a two-pronged approach, integrating a selective focus on improving adaptive coping strategies with the development of intervention programs targeting maladaptive coping strategies. This approach can provide the driving force that may facilitate the healing process for students suffering from race-related stress.

It is important to note that all nine participants of the study met the clinical cutoff for the diagnosis of major depression. Specifically, four participants ($n = 44.44\%$) were mildly depressed, four participants were moderately depressed ($n = 44.44\%$), and one participant was severely depressed ($n = 11.11\%$). By the end of the study, however, those numbers decreased to four participants with no to minimal depression ($n = 44.44\%$), three participants with mild depression ($n = 33.33\%$), two participants with moderate

depression ($n = 11.11\%$), and no participant with severe depression. Thus, the number of participants meeting the diagnostic criteria for depression dropped nearly in half, from nine participants to five participants. This reduction demonstrates that the intervention participants were able to begin healing from their depression, evidencing considerable pre-post intervention improvements. Regarding PTSD, two participants (22.22%) met diagnostic criteria at the beginning of the study. By the end of the study, this number decreased to zero, indicating that these participants had also begun to heal from their trauma. Thus, although all of the participants enrolled in the intervention met criteria for major depression, not all of them met criteria for PTSD. Nevertheless, the majority of participants evidenced PTSD symptoms, and the intervention was shown to help significantly reduce their overall trauma response.

Gaining the understanding of the participants' clinical profiles is another important contribution of the study. Specifically, this knowledge provides important information for those who are treating individuals suffering from race-related stress. That is, the treatment may need to be tailored for different clinical profiles. For example, among those who have PTSD and major depression, those who have depression as the primary disorder with PTSD symptoms, and those who may not meet criteria for either but may benefit from reductions in symptomatology, treatment options will look different in ways that will best work to reduce the symptoms presented by the individual. However, it is unclear whether the larger portion of ethnic minority students or individuals who have experienced race-related stress would have similar profiles.

It is also essential to note the individual's prior experiences with racist incidents. When developing a treatment plan, researchers should consider the frequency and

severity of these racial experiences, in addition to the temporal order in which they occur. The profile of these experiences with racism will assist researchers in understanding the development of race-related stress and/or clinical symptoms that may follow. In particular, researchers should note the types of stressors that may cause these symptoms and the processes the individual uses to deal with them. In particular, experiencing chronic stressors or daily hassles may put an individual at increased risk of developing depressive symptoms, as their mood, emotion regulation, and cognitive abilities may be impacted by the recurrent stressors. On the other hand, episodic stressors may be more closely linked to the onset of post-traumatic stress symptoms, as the stressors are more likely to indicate the occurrence of a traumatic event, one of the criteria for a PTSD diagnosis. Furthermore, if clinical symptoms did develop, researchers ought to understand whether those symptoms were a result of the race-related stress, or if there were other factors in the individual's life that precipitated them. Similarly, researchers should note which disorder presents first, or if they present concurrently.

In this study, depression may be considered the primary disorder, and PTSD the secondary disorder. With this in mind, the co-occurrence of symptoms from these two disorders may affect the likelihood of reducing one set over the other. For example, depression and PTSD conjointly exacerbate symptoms of pain (Åhman & Stålnacke, 2008; Poundja, Fikretoglu, & Brunet, 2006; Roth, Geisser, & Bates, 2008), which would greatly increase resistance to treatment for both conditions. The Committee on the Assessment of Ongoing Effects in the Treatment of Posttraumatic Stress Disorder recommends the use of concurrent treatment of both conditions, as that approach provides the greatest likelihood of symptom improvement (Galea et al., 2012, Ch. 8).

Thus, when considering how coping strategies interact with the comorbidity of these disorders, we can surmise that a coping strategy is likely to be more effective if it can target symptoms of both disorders rather than just one.

For that reason, reducing the usage of coping via internalization and detachment should reasonably evidence improvement, as self-blame and social isolation are two forms of avoidance that parallel diagnostic criteria for both depression and PTSD (American Psychiatric Association [APA], 2013). Self-compassion can also affect the mood and cognitive issues associated with both disorders, though it does not directly align with any of the depression or PTSD criteria. Given these suppositions, it appears that aiming to reduce the use of internalization and detachment may yield greater improvement than increasing the use of self-compassion. However, our results indicated that this was not always the case. Regarding which condition may evidence changes first, it may be that depression evidences changes before PTSD. The reason for this is that PTSD may be more resistant to treatment, as treatment would require addressing both cognitive-based emotional regulation and cognitive-based mechanisms of memory (Galea et al., 2012, Ch. 9).

Does Participation in CM Lead to Pre-Post Changes in Clinical and Coping Outcomes?

Consistent with the hypotheses of the study, results indicated that changes in clinical symptoms occurred in both depression and PTSD. Self-compassion was shown to have significant mid-post changes, though pre-post changes were nonsignificant. Similarly, coping via internalization and detachment did not evidence significant pre-post changes. With a larger sample size, it is possible that pre-post changes in these coping

measures would have been significant. These results indicate that the compassion meditation intervention used in this study can indeed be a promising strategy for improving mental health outcomes.

Do Clinical Variables Decrease as a Result of Improving Coping Strategies?

Self-compassion predicts depression. Consistent with the study's hypotheses, increased self-compassion was found to both significantly correlate to and predict reductions in depression. This finding is congruent with prior research demonstrating the negative association between self-compassion and depression (Krieger, Altemstein, Baettig, Doerig, & Holtforth, 2013; Raes, 2010; Raes, 2011; Terry et al., 2013; Wang, Lin, & Pan, 2015). It also provides empirical support for the use of active coping strategies to reduce depression.

Self-compassion entails taking the initiative to reduce one's own suffering through techniques similar to those used in cognitive reframing, such as acknowledging but not ruminating on negative thoughts and replacing self-criticism with understanding (Neff & Germer, 2012). Indeed, previous studies have demonstrated that self-compassion has negative associations with various symptoms of depression, such as rumination and thought suppression (Neff et al., 2005; Neff, Kirkpatrick, & Rude, 2007; Neff & Vonk, 2009; Raes, 2010; Thompson & Waltz, 2008). Thus, the results indicate that it is possible for self-compassion to mitigate the impact of depression.

Detachment predicts PTSD. Additionally, pre-post decreases in coping via detachment were found to both significantly correlate to and predict pre-post reductions in PTSD. This finding is consistent with prior research on sexual assault survivors, which indicated that utilization of avoidant coping techniques, such as detachment, is related to

greater PTSD symptom severity (Ullman et al., 2007). This finding also supports previous studies that have asserted the importance of coping via detachment as a mediator in the relationship between discrimination and mental health outcomes (Bandermann & Szymanski, 2014; Szymanski & Lewis, 2016), though other studies have reached different conclusions regarding this mediational role (Ngamake et al., 2016).

This significant result may have been due to the similarity of detachment (i.e., the distancing of oneself from social support) to the avoidance criterion of PTSD, which describes avoidance as “efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s)” (APA, 2013, p. 271). Within such a framework, detachment may be considered an effort to avoid people who may intend to provide social support for the victim, but arouse distressing feelings about the victim’s traumatic event instead. Thus, detachment may have been linked to PTSD through its parallels with the avoidance criterion.

Internalization and detachment fail to predict depression. However, results also demonstrated that after controlling for baseline depression scores, decreased coping via internalization and detachment did not significantly predict reductions in depression. These findings conflict with previous studies demonstrating that depression is associated with coping via internalization (Carr et al., 2014; Ngamake et al., 2016) and detachment (Szymanski & Lewis, 2016). These nonsignificant outcomes may have occurred because both internalization and detachment did not evidence significant pre-post changes, or because of the limited size of the sample.

Alternatively, it is possible in this sample that simply reducing their self-blaming

or socially-isolating tendencies was not enough to reduce their depressive symptoms. For example, if an ethnic minority student was exposed to different forms of racism, such as covert or overt, they may experience difficulties comprehending the racism or distinguishing its form. These difficulties may cause them to blame themselves for being unable to change their discriminatory situation, and therefore potentially even causing them. This self-blame could then lead the student to distance themselves from social support, as they would not know how to deal with the discrimination they faced and might not feel comfortable around their social support networks. Thus, even with a reduction of maladaptive coping strategies, the multifaceted and overlapping nature of these strategies may not necessarily prompt depression change.

Self-compassion and internalization fail to predict PTSD. Additionally, results found that after controlling for baseline PTSD scores, increased self-compassion and reduced coping via internalization did not significantly predict reductions in PTSD. These results conflict with prior research suggesting that self-compassion (Germer & Neff, 2015; Hoffart et al., 2015; Maheux & Price, 2015, 2016; Seligowski et al., 2014; Thompson & Waltz, 2008; Zeller et al., 2015) and coping via internalization (Bandermann & Szymanski, 2014; Wei et al., 2010) are related to lower levels of PTSD. In addition to the limited sample size, one possible reason for the nonsignificance in the analysis predicting PTSD from self-compassion is that change in self-compassion was only significant from mid- to post-intervention, not from pre- to post-intervention. Similarly, pre-post changes in coping via internalization were nonsignificant. Thus, it could have been that the lack of pre-post significance in both measures precluded the regression model from evidencing significance.

Another alternative explanation is that the effects of disengaging from social isolation—in other words, engaging in social support—were more salient than those of becoming more self-compassionate or disengaging from blaming oneself for discriminatory incidents. Indeed, social support, which is the converse of detachment as defined by Wei and colleagues (2010), has been corroborated as a successful strategy for improving PTSD symptoms in ethnic minorities (Lopez, 2005; Maheux & Price, 2016; Plummer & Shane, 1996; Utsey et al., 2006; Utsey et al., 2008; Wei et al., 2010). Thus, it might be inaccurate to assume that PTSD was not associated with self-compassion and with coping via internalization, especially given the variability of the small sample size. Rather, it could be that when controlling for baseline PTSD levels, the strength of the relationships was weakened between PTSD and each of the two constructs of self-compassion and coping via internalization.

Lastly, it is also possible that despite the benefits of training self-compassion, participants were unable to utilize that training to reduce their post-traumatic stress symptoms. When racist incidents occur, oftentimes victims have no control over the situation; thus, regardless of how they cope with it, they still feel a sense of helplessness, a key PTSD symptom. Because they feel that they cannot change the situation they are in, they might then blame themselves for that inability to enact change, causing deeper internalization and feelings of self-blame. This would explain the lack of predictive power of self-compassion and internalization on PTSD.

Strengths and Limitations

This study was among the first to incorporate compassion meditation into a clinical intervention that was designed to help ethnic minority students heal from racism.

One clinically relevant strength of the study was the significant reduction of clinical symptoms, which provides strong initial evidence in support of the effectiveness of the study's intervention. Thus, beyond the research-based implications, clinically the intervention on average improved the mental health of the participants, who were suffering from race-related stress. Additionally, CM evidenced significant predictive relationships between coping strategies and clinical outcomes. Given the small sample size, the significant regression results further reflect the effectiveness of the intervention. This study also provides empirical support for the development of interventions that address and respond to the mental health of ethnic minority college students affected by racism.

However, these results should be interpreted with caution, as several limitations need to be highlighted. First, the sample size of the study was extremely small. This affected the ability to reliably test and find significance of the results. Specifically, a larger sample size would allow for a more confident assertion that the estimates of their scores on each measure are accurate and representative, as a larger sample size would reduce the variability among the participant data and increase the statistical power of the analyses. In addition, the small sample size means that researchers should caution generalizing these results to those of all ethnic minority college students, as the results of these nine participants may not represent those of the overall population. Furthermore, eight of the nine participants identified an Asian ethnicity in their ethnic background.

Second, the participants may have exhibited a self-selection bias, in that individuals who would elect to enter a program for healing from race-related stress are also more likely to want to improve their mental health outcomes. Moreover, all nine

participants entered the intervention with clinically significant levels of depression. This may have impacted the results by overestimating the effect of the intervention on the reductions in depression and PTSD.

Third, a randomized controlled trial design that utilized a control group was not employed, and all students who were interested in participating in the program and who met inclusion criteria were included. Unfortunately, because of the serious need on campus to support clinically suffering individuals, it was deemed a more urgent and ethical matter to address the treatment condition before integrating a randomized control trial. This means that the improvements evidenced in the intervention may not necessarily be due to the intervention itself. These improvements may have occurred as a result of the treatment, but they also might have occurred because of additional support networks, external life circumstances, or a combined effect of both treatment and external factors.

Furthermore, a true control group for this intervention would have been composed of a group of individuals who sat in each session of the intervention, but did not actively participate in any part of the sessions, including the meditations, discussions, or activities practicing the use of coping strategies. As such, the implementation of that control group may not have been a viable option for the purposes of healing the participants, as ethnic minorities already mistrust the practice and establishment of research in general (Alvidrez & Areán, 2002; Roberson, 1994). Thus, maintaining group trust is imperative for participants who are already in a compromised and wary position, as it would establish for participants that the intervention is a safe and supportive space for them to share their experiences and heal together. However, if group trust was disintegrated, participants would likely close themselves off from the program, either by not paying

attention during sessions, not speaking in group discussions, or not attending sessions at all. This could result in a snowball effect of participants losing trust in one another, making them feel like the intervention group was unsafe and uncomfortable.

Finally, due to the limited sample size, we were unable to control for other variables aside from baseline clinical variables. If any additional variables were added into the regression model, the power would have decreased to a point where there would be little ability to detect significance at all. However, it is important to control for possible confounding variables, such as demographic background, coursework, and attendance.

Future Directions

Future studies should be conducted to further explore the utility of compassion meditation to heal ethnic minority college students from racism. Given the increasingly volatile political and social climate in the United States, it is more important than ever to ensure that ethnic minorities are equipped to cope with and heal from race-related stress. Thus, future research could focus on conducting additional groups of the intervention developed in this study at other college campuses, particularly those outside of Southern California. This would not only expand the overall sample size of the study, but it would also provide accessible treatment to ethnic minority college students who are in need of culturally responsive mental health services. Future research could also explore the use of this intervention in broader community populations, particularly those that have less access to mental health care services. The results may differ in that there could be a higher number of participants meeting clinically diagnostic criteria, as community populations tend to be composed of older individuals who may have had more time to

develop a clinical disorder. Relatedly, researchers could explore the use of a randomized controlled trial design. This would increase the external validity of the study and provide further empirical evidence supporting the effectiveness of the intervention.

Future studies could also consider conducting intervention groups with multiple ethnicities, like the one presented in this study, or with single ethnicities. Conducting multi-ethnicity groups would allow participants to see that their experiences are shared among a variety of backgrounds, and from that experience, they might feel more supported overall. However, it may also cause conflict within the group, as different ethnicities experience distinctive forms of racism that cause differential impact on the victim. For example, African Americans may experience more direct and violent racism, while Asian Americans may experience more passive and microaggressive racism. On the other hand, conducting single-ethnicity groups would improve group cohesion, as the participants would generally have a shared understanding of the experiences that a fellow member of their shared identity has. However, conducting a single-ethnic group also means that the number of people who can access the service, and correspondingly contribute to the data set, becomes more restricted. In the end, the decision would fall on the researchers and their decisions for what is more important to the populations they are serving with the intervention.

Finally, researchers could explore the effects of controlling for variables other than baseline clinical variables, such as gender, ethnic background, socioeconomic status, citizenship status, attendance, general stress levels, experiences with racism, and sense of belonging. Conducting these analyses would allow for further investigation into the constructs of coping and for an exploration of how certain life experiences influence

one's ability to respond to and heal from racism.

Implications for Clinical Interventions and Prevention

This study has a number of implications for clinical interventions and for prevention strategies. First, this study provides an empirical foundation for future clinical interventions that may address racism and race-related stress through compassion meditation. Specifically, other colleges or universities that wish to address the mental health of their ethnic minority students may consider utilizing the intervention in this study to provide accessible treatment for them. Thus, the manualization and dissemination of this intervention is crucial for increasing both the sample size of the study and the access to race-specific mental health services for ethnic minority students across the country.

Second, the present study suggests that practitioners who are unable to arrange for group interventions, whether due to lack of time or resources, can take the practice individually to each of their clients. Though the efficacy of CM implemented for individuals was not tested, it is possible that its effects would parallel those of the group intervention. Utilizing CM in this way could allow practitioners to give their clients an additional tool to cope with their race-related stress. Similarly, this approach may be especially effective for clients who are suffering from race-related stress, but have social anxiety or other clinical conditions that would preclude them from participating in a group intervention.

Third, it is important that the peer group leaders for the program be well versed in multicultural issues and have a strong awareness of their own cultural self (Merta, 1995). This means understanding the social, historical, and political context that influences

ethnic minority individuals. They must be aware of their own biases and the effects of those biases on their interactions with members of the same or different ethnic groups. Similarly, the leader-participant ethnicity match is an important facet of the intervention for which leaders should take measures to ensure it does not interfere with group process. By including all of these considerations in their implementation of the intervention, group leaders can better ensure that they are creating a sense of trust and safety within the group (Chang & Yeh, 2003).

In terms of prevention strategies, college administrators and other interested parties should consider the causes of race-related stress and strive to eliminate them for the sake of their ethnic minority students. This study outlines a number of causes, in addition to various forms of race-related stressors, and prevention can begin with addressing each of them before they materialize on a college campus. In particular, efforts can be made to educate campus communities as a whole—including students, staff, faculty, and administrators—on racism and the kinds of actions that can cause stress, which may have the effect of reducing chronic or daily hassle stressors. In being proactive with prevention of race-related incidents and race-related stress, colleges may be able to improve the mental health of their ethnic minority students overall.

Conclusion

The results of the present study provide evidence for the debilitating influence that racism has on ethnic minority mental health (Carter, 2007; Carter et al., 2005; Clark et al., 1999; Harrell, 2000; Lee & Ahn, 2012; Pieterse et al., 2012; Shavers et al., 2012), and thus for the growing need to develop psychological interventions to treat this race-related stress (Helms et al., 2012). This study examined the effects of coping strategies on

mental health outcomes in ethnic minority college students participating in a Compassion Meditation intervention. Results demonstrated that increased self-compassion predicts depression, whereas decreased coping via detachment predicts PTSD. Thus, the initial success of the study's CM intervention suggests that similar interventions with a focus on healing from race-related stress can evidence improvements in mental health, particularly through the development of positive, adaptive coping strategies and the disengagement of negative, maladaptive coping strategies. Perhaps most importantly, this study reveals the incredible resilience that ethnic minorities, even in a disadvantaged position in society, can build to heal from the scars of racism.

References

- Åhman, S., & Stålnacke, B. (2008). Post-traumatic stress, depression, and anxiety in patients with injury-related chronic pain: A pilot study. *Neuropsychiatric Disease And Treatment*, 4(6), 1245-1249.
- Alamilla, S. G., Kim, B. K., & Lam, N. A. (2010). Acculturation, enculturation, perceived racism, minority status stressors, and psychological symptomatology among Latino/as. *Hispanic Journal Of Behavioral Sciences*, 32(1), 55-76.
doi:10.1177/0739986309352770
- Alcántara, C., Casement, M. D., & Lewis-Fernández, R. (2013). Conditional risk for PTSD among Latinos: A systematic review of racial/ethnic differences and sociocultural explanations. *Clinical Psychology Review*, 33(1), 107-119.
doi:10.1016/j.cpr.2012.10.005
- Alegría, M., Chatterji, P., Wells, K., Cao, Z., Chen, C., Takeuchi, D., & ... Meng, X. (2008). Disparity in depression treatment among racial and ethnic minority populations in the United States. *Psychiatric Services*, 59(11), 1264-1272.
doi:10.1176/appi.ps.59.11.1264
- Allen, G. K., Conklin, H., & Kane, D. K. (2017). Racial discrimination and psychological health among Polynesians in the U.S. *Cultural Diversity And Ethnic Minority Psychology*, doi:10.1037/cdp0000133
- Alvidrez, J., & Areán, P. A. (2002). Psychosocial treatment research with ethnic minority populations: Ethical considerations in conducting clinical trials. *Ethics & Behavior*, 12(1), 103-116. doi:10.1207/S15327019EB1201_7
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental*

disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.

Andrasik, M. P., Woods, B. A., & George, W. H. (2012). The need for culturally competent harm reduction and relapse prevention interventions for African Americans. In G. A. Marlatt, M. E. Larimer, K. Witkiewitz, G. A. Marlatt, M. E. Larimer, K. Witkiewitz (Eds.), *Harm reduction: Pragmatic strategies for managing high-risk behaviors, 2nd ed* (pp. 247-271). New York, NY, US: Guilford Press.

Aneshensel, C. S., Clark, V. A., & Frerichs, R. R. (1983). Race, ethnicity, and depression: A confirmatory analysis. *Journal Of Personality And Social Psychology, 44*(2), 385-398. doi:10.1037/0022-3514.44.2.385

Araújo, B. Y., & Borrell, L. N. (2006). Understanding the link between discrimination, mental health outcomes, and life chances among Latinos. *Hispanic Journal Of Behavioral Sciences, 28*(2), 245-266. doi:10.1177/0739986305285825

Au, T. M., Sauer-Zavala, S., King, M. W., Petrocchi, N., Barlow, D. H., & Litz, B. T. (2017). Compassion-based therapy for trauma-related shame and posttraumatic stress: Initial evaluation using a multiple baseline design. *Behavior Therapy, 48*(2), 207-221. doi:10.1016/j.beth.2016.11.012

Bandermann, K. M., & Szymanski, D. M. (2014). Exploring coping mediators between heterosexist oppression and posttraumatic stress symptoms among lesbian, gay, and bisexual persons. *Psychology Of Sexual Orientation And Gender Diversity, 1*(3), 213-224. doi:10.1037/sgd0000044

Bastos, J. L., Celeste, R. K., Faerstein, E., & Barros, A. D. (2010). Racial discrimination and health: A systematic review of scales with a focus on their psychometric

properties. *Social Science & Medicine*, 70(7), 1091-1099.

doi:10.1016/j.socscimed.2009.12.020

Baum, A., Cohen, L., & Hall, M. (1993). Control and intrusive memories as possible determinants of chronic stress. *Psychosomatic Medicine*, 55(3), 274-286.

doi:10.1097/00006842-199305000-00005

Beck, A. T., Steer, R. A., Ball, R., & Ranieri, W. F. (1996). Comparison of Beck Depression Inventories–IA and –II in psychiatric outpatients. *Journal Of Personality Assessment*, 67(3), 588-597. doi:10.1207/s15327752jpa6703_13

Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Beck depression inventory-II*. San Antonio, TX, 78204-2498.

Bennett, G. G., Wolin, K. Y., Robinson, E. L., Fowler, S., & Edwards, C. L. (2005). Perceived racial/ethnic harassment and tobacco use among African American young adults. *American Journal Of Public Health*, 95(2), 238-240.

doi:10.2105/AJPH.2004.037812

Benoit, A. C., Cotnam, J., Raboud, J., Greene, S., Beaver, K., Zoccole, A., & ... Loutfy, M. (2016). Experiences of chronic stress and mental health concerns among urban indigenous women. *Archives Of Women's Mental Health*, doi:10.1007/s00737-016-0622-8

Billow, R. H. (2012). A qualitative investigation of the strategies used by a sample of native American older adults to cope with race-related stressors. *Dissertation Abstracts International*, 73, 3997.

Blair, R. G. (2000). Risk factors associated with PTSD and major depression among Cambodian refugees in Utah. *Health & Social Work*, 25(1), 23-30.

doi:10.1093/hsw/25.1.23

Blevins, C. A., Weathers, F. W., Davis, M. T., Witte, T. K., & Domino, J. L. (2015). The posttraumatic stress disorder checklist for DSM-5 (PCL-5): Development and initial psychometric evaluation. *Journal Of Traumatic Stress, 28*(6), 489-498.

doi:10.1002/jts.22059

Boellinghaus, I., Jones, F. W., & Hutton, J. (2014). The role of mindfulness and loving-kindness meditation in cultivating self-compassion and other-focused concern in health care professionals. *Mindfulness, 5*(2), 129-138. doi:10.1007/s12671-012-

0158-6

Bovin, M. J., Marx, B. P., Weathers, F. W., Gallagher, M. W., Rodriguez, P., Schnurr, P. P., & Keane, T. M. (2016). Psychometric properties of the PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders–Fifth Edition (PCL-5) in veterans. *Psychological Assessment, 28*(11), 1379-1391. doi:10.1037/pas0000254

Brondolo, E., ver Halen, N. B., Pencille, M., Beatty, D., & Contrada, R. J. (2009). Coping with racism: A selective review of the literature and a theoretical and methodological critique. *Journal Of Behavioral Medicine, 32*(1), 64-88.

doi:10.1007/s10865-008-9193-0

Burchfield, S. R. (1979). The stress response: A new perspective. *Psychosomatic Medicine, 41*(8), 661-672. doi:10.1097/00006842-197912000-00008

Burchfield, S. R. (1985). *Stress: Psychological and physiological interactions*. Old TFI Soc Sci.

Carlson, E. B., & Rosser-Hogan, R. (1991). Trauma experiences, posttraumatic stress, dissociation, and depression in Cambodian refugees. *The American Journal Of*

Psychiatry, 148(11), 1548-1551. doi:10.1176/ajp.148.11.1548

Carmody, D. P. (2005). Psychometric characteristics of the Beck Depression Inventory-II with college students of diverse ethnicity. *International Journal Of Psychiatry In Clinical Practice*, 9(1), 22-28. doi:10.1080/13651500510014800

Caron, J., & Liu, A. (2011). Factors associated with psychological distress in the Canadian population: A comparison of low-income and non low-income sub-groups. *Community Mental Health Journal*, 47(3), 318-330. doi:10.1007/s10597-010-9306-4

Carr, E. R., Szymanski, D. M., Taha, F., West, L. M., & Kaslow, N. J. (2014).

Understanding the link between multiple oppressions and depression among African American women: The role of internalization. *Psychology Of Women Quarterly*, 38(2), 233-245. doi:10.1177/0361684313499900

Carter, R. T. (2007). Racism and psychological and emotional injury: Recognizing and assessing race-based traumatic stress. *The Counseling Psychologist*, 35(1), 13-105. doi:10.1177/0011000006292033

Carter, R. T., Forsyth, J. M., Mazzula, S. L., & Williams, B. (2005). Racial discrimination and race-based traumatic stress: An exploratory investigation. In R. T. Carter, R. T. Carter (Eds.), *Handbook of racial-cultural psychology and counseling*, Vol 2: Training and practice (pp. 447-476). Hoboken, NJ, US: John Wiley & Sons Inc.

Carter, R. T., Mazzula, S., Victoria, R., Vazquez, R., Hall, S., Smith, S., & ... Williams, B. (2013). Initial development of the Race-Based Traumatic Stress Symptom Scale: Assessing the emotional impact of racism. *Psychological Trauma: Theory*,

Research, Practice, And Policy, 5(1), 1-9. doi:10.1037/a0025911

Centers for Disease Control and Prevention. (2013). *Behavioral risk factor surveillance system survey questionnaire*. Retrieved from

http://www.cdc.gov/brfss/questionnaires/pdf-ques/2013%20brfss_english.pdf

Chang, T., & Yeh, C. J. (2003). Using online groups to provide support to Asian American men: Racial, cultural, gender, and treatment issues. *Professional Psychology: Research And Practice*, 34(6), 634-643. doi:10.1037/0735-7028.34.6.634

Cheng, H., & Mallinckrodt, B. (2015). Racial/ethnic discrimination, posttraumatic stress symptoms, and alcohol problems in a longitudinal study of Hispanic/Latino college students. *Journal Of Counseling Psychology*, 62(1), 38-49. doi:10.1037/cou0000052

Choi, K., Han, C., Paul, J., & Ayala, G. (2011). Strategies for managing racism and homophobia among U.S. ethnic and racial minority men who have sex with men. *AIDS Education And Prevention*, 23(2), 145-158. doi:10.1521/aeap.2011.23.2.145

Chou, T., Asnaani, A., & Hofmann, S. G. (2012). Perception of racial discrimination and psychopathology across three U.S. ethnic minority groups. *Cultural Diversity And Ethnic Minority Psychology*, 18(1), 74-81. doi:10.1037/a0025432

Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans: A biopsychosocial model. *American Psychologist*, 54(10), 805-816. doi:10.1037/0003-066X.54.10.805

Clark, V. R., & Harrell, J. P. (1982). The relationship among Type A behavior, styles used in coping with racism, and blood pressure. *Journal Of Black Psychology*,

8(2), 89-99. doi:10.1177/009579848200800203

- Crystal, D. (1989). Asian Americans and the myth of the model minority. *Social Casework, 70*(7), 405-413.
- David, S., & Knight, B. G. (2008). Stress and coping among gay men: Age and ethnic differences. *Psychology And Aging, 23*(1), 62-69. doi:10.1037/0882-7974.23.1.62
- Dauids, T. W. R., & Stede, W. (1921). *Pali-english dictionary*. London, UK: Motilal Banarsidass Publications Private Limited.
- Davis, T. D., Sullivan, G., Vasterling, J. J., Tharp, A. T., Han, X., Deitch, E. A., & Constans, J. I. (2012). Racial variations in postdisaster PTSD among veteran survivors of Hurricane Katrina. *Psychological Trauma: Theory, Research, Practice, And Policy, 4*(5), 447-456. doi:10.1037/a0025501
- Denckla, C. A., Consedine, N. S., & Bornstein, R. F. (2017). Self-compassion mediates the link between dependency and depressive symptomatology in college students. *Self And Identity, 16*(4), 373-383. doi:10.1080/15298868.2016.1264464
- Diedrich, A., Grant, M., Hofmann, S. G., Hiller, W., & Berking, M. (2014). Self-compassion as an emotion regulation strategy in major depressive disorder. *Behaviour Research And Therapy, 58*43-51. doi:10.1016/j.brat.2014.05.006
- Dohrenwend, B. P. (2006). Inventorying stressful life events as risk factors for psychopathology: Toward resolution of the problem of intracategory variability. *Psychological Bulletin, 132*(3), 477-495. doi:10.1037/0033-2909.132.3.477
- Dozois, D. A., Dobson, K. S., & Ahnberg, J. L. (1998). A psychometric evaluation of the Beck Depression Inventory–II. *Psychological Assessment, 10*(2), 83-89. doi:10.1037/1040-3590.10.2.83

- Dutton, M. A. (2015). Mindfulness-based stress reduction for underserved trauma populations. In V. M. Follette, J. Briere, D. Rozelle, J. W. Hopper, D. I. Rome, V. M. Follette, ... D. I. Rome (Eds.), *Mindfulness-oriented interventions for trauma: Integrating contemplative practices* (pp. 243-256). New York, NY, US: Guilford Press.
- Edwards, M., Adams, E. M., Waldo, M., Hadfield, O. D., & Biegel, G. M. (2014). Effects of a mindfulness group on Latino adolescent students: Examining levels of perceived stress, mindfulness, self-compassion, and psychological symptoms. *Journal For Specialists In Group Work, 39*(2), 145-163.
doi:10.1080/01933922.2014.891683
- Edwards, L. M., & Romero, A. J. (2008). Coping with discrimination among Mexican descent adolescents. *Hispanic Journal Of Behavioral Sciences, 30*(1), 24-39.
doi:10.1177/0739986307311431
- Elligan, D., & Utsey, S. (1999). Utility of an African-centered support group for African American men confronting societal racism and oppression. *Cultural Diversity And Ethnic Minority Psychology, 5*(2), 156-165. doi:10.1037/1099-9809.5.2.156
- Engström, M., & Söderfeldt, B. (2010). Brain activation during compassion meditation: A case study. *The Journal Of Alternative And Complementary Medicine, 16*(5), 597-599. doi:10.1089/acm.2009.0309
- Essed, P. (1990). *Everyday racism: Reports from women of two cultures*. Hunter House Publishers.
- Essed, P. (1991). *Understanding everyday racism: An interdisciplinary theory* (Vol. 2). Sage.

- Falsafi, N. (2016). A randomized controlled trial of mindfulness versus yoga: Effects on depression and/or anxiety in college students. *Journal Of The American Psychiatric Nurses Association*, 22(6), 483-497. doi:10.1177/1078390316663307
- Feagin, J. R. (1991). The continuing significance of race: AntiBlack discrimination in public places. *American Sociological Review*, 56(1), 101-116.
doi:10.2307/2095676
- Finch, B. K., & Vega, W. A. (2003). Acculturation stress, social support, and self-rated health among Latinos in California. *Journal Of Immigrant Health*, 5(3), 109-117.
doi:10.1023/A:1023987717921
- Franklin, A. J., Boyd-Franklin, N., & Kelly, S. (2006). Racism and invisibility: Race-related stress, emotional abuse and psychological trauma for people of color. *Journal Of Emotional Abuse*, 6(2-3), 9-30. doi:10.1300/J135v06n02_02
- Franklin-Jackson, D., & Carter, R. T. (2007). The relationships between race-related stress, racial identity, and mental health for Black Americans. *Journal Of Black Psychology*, 33(1), 5-26. doi:10.1177/0095798406295092
- Fredrickson, B. L., Cohn, M. A., Coffey, K. A., Pek, J., & Finkel, S. M. (2008). Open hearts build lives: Positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal Of Personality And Social Psychology*, 95(5), 1045-1062. doi:10.1037/a0013262
- Galante, J., Galante, I., Bekkers, M., & Gallacher, J. (2014). Effect of kindness-based meditation on health and well-being: A systematic review and meta-analysis. *Journal Of Consulting And Clinical Psychology*, 82(6), 1101-1114.
doi:10.1037/a0037249

- Galea, S., Basham, K., Culpepper, L., Davidson, J., Foa, E., Kizer, K., ... & Milad, M. (2012). *Treatment for posttraumatic stress disorder in military and veteran populations: Initial assessment*. Washington, DC: The National Academies.
- Garland, E. L., Fredrickson, B., Kring, A. M., Johnson, D. P., Meyer, P. S., & Penn, D. L. (2010). Upward spirals of positive emotions counter downward spirals of negativity: Insights from the broaden-and-build theory and affective neuroscience on the treatment of emotion dysfunctions and deficits in psychopathology. *Clinical Psychology Review, 30*(7), 849-864.
doi:10.1016/j.cpr.2010.03.002
- Gaylord-Harden, N. K., & Cunningham, J. A. (2009). The impact of racial discrimination and coping strategies on internalizing symptoms in African American youth. *Journal Of Youth And Adolescence, 38*(4), 532-543. doi:10.1007/s10964-008-9377-5
- Gee, G. C., Spencer, M., Chen, J., Yip, T., & Takeuchi, D. T. (2007). The association between self-reported racial discrimination and 12-month DSM-IV mental disorders among Asian Americans nationwide. *Social Science & Medicine, 64*(10), 1984-1996. doi:10.1016/j.socscimed.2007.02.013
- Germer, C. K., & Neff, K. D. (2015). Cultivating self-compassion in trauma survivors. In V. M. Follette, J. Briere, D. Rozelle, J. W. Hopper, D. I. Rome, V. M. Follette, ... D. I. Rome (Eds.), *Mindfulness-oriented interventions for trauma: Integrating contemplative practices* (pp. 43-58). New York, NY, US: Guilford Press.
- Gethin, R. (1998). *The foundations of Buddhism*. Oxford, UK: Oxford University Press.
- Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high

- shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology & Psychotherapy*, 13(6), 353-379. doi:10.1002/cpp.507
- Graser, J., Höfling, V., Weßlau, C., Mendes, A., & Stangier, U. (2016). Effects of a 12-week mindfulness, compassion, and loving kindness program on chronic depression: A pilot within-subjects wait-list controlled trial. *Journal Of Cognitive Psychotherapy*, 30(1), 35-49. doi:10.1891/0889-8391.30.1.35
- Greer, T. M., Laseter, A., & Asiamah, D. (2009). Gender as a moderator of the relation between race-related stress and mental health symptoms for African Americans. *Psychology Of Women Quarterly*, 33(3), 295-307. doi:10.1111/j.1471-6402.2009.01502.x
- Grossman, P., & Van Dam, N. T. (2011). Mindfulness, by any other name...: Trials and tribulations of sati in western psychology and science. *Contemporary Buddhism*, 12(01), 219-239.
- Guthrie, P. (1995). Racism in academia: A case study. *Racism in the lives of women: Testimony, theory, and guides to antiracist practice*, 45-53.
- Harrell, S. P. (2000). A multidimensional conceptualization of racism-related stress: Implications for the well-being of people of color. *The American Journal of Orthopsychiatry*, 70(1), 42– 57. doi:10.1037/h0087722.
- Harvey, P. (2012). *An introduction to Buddhism: Teachings, history and practices*. Cambridge, UK: Cambridge University Press.
- Hawkins, K., Reading, L., & Barlow, K. (2009). *Our search for safe spaces: A qualitative study of the role of sexual violence in the lives of Aboriginal women living with HIV/AIDS*. Canadian Aboriginal AIDS Network.

- Helms, J. E., Nicolas, G., & Green, C. E. (2012). Racism and ethnoviolence as trauma: Enhancing professional and research training. *Traumatology*, *18*(1), 65-74.
doi:10.1177/1534765610396728
- Hill, J. S., Kim, S., & Williams, C. D. (2010). The context of racial microaggressions against indigenous peoples: Same old racism or something new?. In D. W. Sue, D. W. Sue (Eds.), *Microaggressions and marginality: Manifestation, dynamics, and impact* (pp. 105-122). Hoboken, NJ, US: John Wiley & Sons Inc.
- Hilton, L., Maher, A. R., Colaiaco, B., Apaydin, E., Sorbero, M. E., Booth, M., & ... Hempel, S. (2016). Meditation for posttraumatic stress: Systematic review and meta-analysis. *Psychological Trauma: Theory, Research, Practice, And Policy*, doi:10.1037/tra0000180
- Hinton, D. E., Ojserkis, R. A., Jalal, B., Peou, S., & Hofmann, S. G. (2013). Loving-kindness in the treatment of traumatized refugees and minority groups: A typology of mindfulness and the Nodal Network Model of affect and affect regulation. *Journal Of Clinical Psychology*, *69*(8), 817-828.
doi:10.1002/jclp.22017
- Hiraoka, R., Meyer, E. C., Kimbrel, N. A., DeBeer, B. B., Gulliver, S. B., & Morissette, S. B. (2015). Self-compassion as a prospective predictor of PTSD symptom severity among trauma-exposed U.S. Iraq and Afghanistan war veterans. *Journal Of Traumatic Stress*, *28*(2), 127-133. doi:10.1002/jts.21995
- Hoffart, A., Øktedalen, T., & Langkaas, T. F. (2015). Self-compassion influences PTSD symptoms in the process of change in trauma-focused cognitive-behavioral therapies: A study of within-person processes. *Frontiers In Psychology*,

6doi:10.3389/fpsyg.2015.01273

- Hofmann, S. G., Grossman, P., & Hinton, D. E. (2011). Loving-kindness and compassion meditation: Potential for psychological interventions. *Clinical Psychology Review, 31*(7), 1126-1132. doi:10.1016/j.cpr.2011.07.003
- Hoge, E. A., Chen, M. M., Orr, E., Metcalf, C. A., Fischer, L. E., Pollack, M. H., & ... Simon, N. M. (2013). Loving-Kindness Meditation practice associated with longer telomeres in women. *Brain, Behavior, And Immunity, 32*, 159-163. doi:10.1016/j.bbi.2013.04.005
- Hopkins, J. (2001). *Cultivating compassion: A Buddhist perspective*. Harmony.
- Hoyt, T., & Yeater, E. A. (2010). Comparison of posttraumatic stress disorder symptom structure models in Hispanic and White college students. *Psychological Trauma: Theory, Research, Practice, And Policy, 2*(1), 19-30. doi:10.1037/a0018745
- Hughes, D., Rodriguez, J., Smith, E. P., Johnson, D. J., Stevenson, H. C., & Spicer, P. (2006). Parents' ethnic-racial socialization practices: A review of research and directions for future study. *Developmental Psychology, 42*(5), 747-770. doi:10.1037/0012-1649.42.5.747
- Hutcherson, C. A., Seppala, E. M., & Gross, J. J. (2008). Loving-kindness meditation increases social connectedness. *Emotion, 8*(5), 720-724. doi:10.1037/a0013237
- Huynh, Q., Devos, T., & Dunbar, C. M. (2012). The psychological costs of painless but recurring experiences of racial discrimination. *Cultural Diversity And Ethnic Minority Psychology, 18*(1), 26-34. doi:10.1037/a0026601
- Hwang, W., & Goto, S. (2008). The impact of perceived racial discrimination on the mental health of Asian American and Latino college students. *Cultural Diversity*

And Ethnic Minority Psychology, 14(4), 326-335. doi:10.1037/1099-

9809.14.4.326Iwamoto & Liu, 2010

Iwamoto, D. K., & Liu, W. M. (2010). The impact of racial identity, ethnic identity, Asian values, and race-related stress on Asian Americans and Asian international college students' psychological well-being. *Journal Of Counseling Psychology*, 57(1), 79-91. doi:10.1037/a0017393

Iwasaki, Y., Bartlett, J., & O'Neil, J. (2003). An examination of stress among Aboriginal women and men with diabetes in Manitoba, Canada. *Ethnicity & Health*, 9(2), 189-212. doi:10.1080/1355785042000222888

James, S. A. (1993). Racial and ethnic differences in infant mortality and low birth weight: A psychosocial critique. *Annals of Epidemiology*, 3(2), 130-136.

Jazaieri, H., Goldin, P. R., Werner, K., Ziv, M., & Gross, J. J. (2012). A randomized trial of MBSR versus aerobic exercise for social anxiety disorder. *Journal Of Clinical Psychology*, 68(7), 715-731. doi:10.1002/jclp.21863

Joeng, J. R., & Turner, S. L. (2015). Mediators between self-criticism and depression: Fear of compassion, self-compassion, and importance to others. *Journal Of Counseling Psychology*, 62(3), 453-463. doi:10.1037/cou0000071

Johnson, S. B., Goodnight, B. L., Zhang, H., Daboin, I., Patterson, B., & Kaslow, N. J. (2017). Compassion-based meditation in African Americans: Self-criticism mediates changes in depression. *Suicide And Life-Threatening Behavior*, doi:10.1111/sltb.12347

Jones, H. L., Cross, W. J., & DeFour, D. C. (2007). Race-related stress, racial identity attitudes, and mental health among Black women. *Journal Of Black Psychology*,

33(2), 208-231. doi:10.1177/0095798407299517

Kaczurkin, A. N., Asnaani, A., Hall-Clark, B., Peterson, A. L., Yarvis, J. S., & Foa, E.

B. (2016). Ethnic and racial differences in clinically relevant symptoms in active duty military personnel with posttraumatic stress disorder. *Journal Of Anxiety Disorders*, 4390-98. doi:10.1016/j.janxdis.2016.09.004

Kaholokula, J. K., Grandinetti, A., Keller, S., Nacapoy, A. H., Kingi, T. K., & Mau, M.

K. (2012). Association between perceived racism and physiological stress indices in Native Hawaiians. *Journal Of Behavioral Medicine*, 35(1), 27-37.

doi:10.1007/s10865-011-9330-z]

Kaiser, C. R., & Major, B. (2006). A social psychological perspective on perceiving and reporting discrimination. *Law & Social Inquiry*, 31(4), 801-830.

Kearney, D. J. (2015). Mindfulness-based stress reduction and loving-kindness meditation for traumatized veterans. In V. M. Follette, J. Briere, D. Rozelle, J. W. Hopper, D. I. Rome, V. M. Follette, ... D. I. Rome (Eds.), *Mindfulness-oriented interventions for trauma: Integrating contemplative practices* (pp. 273-283). New York, NY, US: Guilford Press.

Kearney, D. J., Malte, C. A., McManus, C., Martinez, M. E., Felleman, B., & Simpson,

T. L. (2013). Loving-kindness meditation for posttraumatic stress disorder: A pilot study. *Journal of Traumatic Stress*, 26(4), 426-434.

Kessler, R. C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States.

Journal Of Health And Social Behavior, 40(3), 208-230. doi:10.2307/2676349

Khaylis, A., Waelde, L., & Bruce, E. (2007). The role of ethnic identity in the

relationship of race-related stress to PTSD symptoms among young adults.

Journal Of Trauma & Dissociation, 8(4), 91-105. doi:10.1300/J229v08n04_06

Kim, J., Kim, S., Kim, J., Jeong, B., Park, C., Son, A. R., & ... Ki, S. W. (2009).

Compassionate attitude towards others' suffering activates the mesolimbic neural system. *Neuropsychologia*, 47(10), 2073-2081.

doi:10.1016/j.neuropsychologia.2009.03.017

Kinzie, J. D., Boehnlein, J. K., Leung, P. K., Moore, L. J., Riley, C., & Smith, D. (1990).

The prevalence of posttraumatic stress disorder and its clinical significance among Southeast Asian refugees. *The American Journal Of Psychiatry*, 147(7),

913-917. doi:10.1176/ajp.147.7.913

Kirmayer, L. J., Boothroyd, L. J., Tanner, A., Adelson, N., & Robinson, E. (2000).

Psychological distress among The Cree of James Bay. *Transcultural Psychiatry*, 37(2), 288.

Klimecki, O. M., Leiberg, S., Lamm, C., & Singer, T. (2013). Functional neural plasticity

and associated changes in positive affect after compassion training. *Cerebral Cortex*, 23(7), 1552-1561. doi:10.1093/cercor/bhs142

Klimecki, O. M., Leiberg, S., Ricard, M., & Singer, T. (2014). Differential pattern of

functional brain plasticity after compassion and empathy training. *Social Cognitive And Affective Neuroscience*, 9(6), 873-879.

Krieger, T., Altenstein, D., Baettig, I., Doerig, N., & Holtforth, M. G. (2013). Self-

compassion in depression: Associations with depressive symptoms, rumination, and avoidance in depressed outpatients. *Behavior Therapy*, 44(3), 501-513.

doi:10.1016/j.beth.2013.04.004

- Kristeller, J. L., & Johnson, T. (2005). Cultivating loving kindness: A two-stage model of the effects of meditation on empathy, compassion, and altruism. *Zygon®*, *40*(2), 391-408. doi:10.1111/j.1467-9744.2005.00671.x
- Kuyken, W., Watkins, E., Holden, E., White, K., Taylor, R. S., Byford, S., & ... Dalgleish, T. (2010). How does mindfulness-based cognitive therapy work?. *Behaviour Research And Therapy*, *48*(11), 1105-1112. doi:10.1016/j.brat.2010.08.003
- Lalonde, R. N., & Cameron, J. E. (1994). Behavioral responses to discrimination: A focus on action. In M. P. Zanna, J. M. Olson, M. P. Zanna, J. M. Olson (Eds.), *The psychology of prejudice: The Ontario symposium, Vol. 7* (pp. 257-288). Hillsdale, NJ, US: Lawrence Erlbaum Associates, Inc.
- Landrine, H., & Klonoff, E. A. (1996). The schedule of racist events: A measure of racial discrimination and a study of its negative physical and mental health consequences. *Journal Of Black Psychology*, *22*(2), 144-168. doi:10.1177/00957984960222002
- Landrine, H., Klonoff, E. A., Corral, I., Fernandez, S., & Roesch, S. (2006). Conceptualizing and measuring ethnic discrimination in health research. *Journal Of Behavioral Medicine*, *29*(1), 79-94. doi:10.1007/s10865-005-9029-0
- Lang, A. J., Strauss, J. L., Bomyea, J., Bormann, J. E., Hickman, S. D., Good, R. C., & Essex, M. (2012). The theoretical and empirical basis for meditation as an intervention for PTSD. *Behavior Modification*, *36*(6), 759-786. doi:10.1177/0145445512441200
- Lazarus, R. S., & Folkman, S. (1984). Coping and adaptation. *The handbook of*

behavioral medicine, 282-325.

- Le, T. N., & Proulx, J. (2015). Feasibility of mindfulness-based intervention for incarcerated mixed-ethnic Native Hawaiian/Pacific Islander youth. *Asian American Journal Of Psychology*, 6(2), 181-189. doi:10.1037/aap0000019
- Lee, D. L., & Ahn, S. (2013). The relation of racial identity, ethnic identity, and racial socialization to discrimination–distress: A meta-analysis of Black Americans. *Journal Of Counseling Psychology*, 60(1), 1-14. doi:10.1037/a0031275
- Lewis-Coles, M. L., & Constantine, M. G. (2006). Racism-related stress, Africultural coping, and religious problem-solving among African Americans. *Cultural Diversity And Ethnic Minority Psychology*, 12(3), 433-443. doi:10.1037/1099-9809.12.3.433
- Liang, C. H., & Fassinger, R. E. (2008). The role of collective self-esteem for Asian Americans experiencing racism-related stress: A test of moderator and mediator hypotheses. *Cultural Diversity And Ethnic Minority Psychology*, 14(1), 19-28. doi:10.1037/1099-9809.14.1.19
- Lipsky, S., Kernic, M. A., Qiu, Q., & Hasin, D. S. (2016). Traumatic events associated with posttraumatic stress disorder: The role of race/ethnicity and depression. *Violence Against Women*, 22(9), 1055-1074. doi:10.1177/1077801215617553
- López, C. M., Andrews, A. I., Chisolm, A. M., de Arellano, M. A., Saunders, B., & Kilpatrick, D. G. (2016). Racial/ethnic differences in trauma exposure and mental health disorders in adolescents. *Cultural Diversity And Ethnic Minority Psychology*, doi:10.1037/cdp0000126
- Lopez, J. D. (2005). Race-related stress and sociocultural orientation among Latino

students during their transition into a predominately White, highly selective institution. *Journal Of Hispanic Higher Education*, 4(4), 354-365.

doi:10.1177/1538192705279594

Lopez-Kinney, D. I. (2002). Racism-related stress, appraisal, and coping among Latinos/as. *Dissertation Abstracts International*, 62, 3383.

Lutz, A., Brefczynski-Lewis, J., Johnstone, T., & Davidson, R. J. (2008). Regulation of the neural circuitry of emotion by compassion meditation: Effects of meditative expertise. *PloS one*, 3(3), e1897.

Lutz, A., Greischar, L. L., Perlman, D. M., & Davidson, R. J. (2009). BOLD signal in insula is differentially related to cardiac function during compassion meditation in experts vs. novices. *Neuroimage*, 47(3), 1038-1046.

doi:10.1016/j.neuroimage.2009.04.081

Lutz, A., Slagter, H. A., Dunne, J. D., & Davidson, R. J. (2008). Attention regulation and monitoring in meditation. *Trends In Cognitive Sciences*, 12(4), 163-169.

doi:10.1016/j.tics.2008.01.005

MacBeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical Psychology Review*, 32(6), 545-552. doi:10.1016/j.cpr.2012.06.003

Maheux, A., & Price, M. (2015). Investigation of the relation between PTSD symptoms and self-compassion: Comparison across DSM IV and DSM 5 PTSD symptom clusters. *Self And Identity*, 14(6), 627-637. doi:10.1080/15298868.2015.1037791

Maheux, A., & Price, M. (2016). The indirect effect of social support on post-trauma psychopathology via self-compassion. *Personality And Individual Differences*,

88102-107. doi:10.1016/j.paid.2015.08.051

- Mayhew, S. L., & Gilbert, P. (2008). Compassionate mind training with people who hear malevolent voices: A case series report. *Clinical Psychology & Psychotherapy*, *15*(2), 113-138. doi:10.1002/cpp.566
- McGuire, T. G., & Miranda, J. (2008). Racial and ethnic disparities in mental health care: Evidence and policy implications. *Health Affairs (Project Hope)*, *27*(2), 393–403. doi:10.1377/hlthaff.27.2.393
- McNeilly, M., Musick, M., Efland, J. R., Baughman, J. T., Toth, P. S., Saulter, T. D., & ... Anderson, N. B. (2000). Minority populations and psychophysiological research: Challenges in trust building and recruitment. *Journal Of Mental Health And Aging*, *6*(1), 91-102.
- Mehr, K. E., & Adams, A. C. (2016). Self-compassion as a mediator of maladaptive perfectionism and depressive symptoms in college students. *Journal Of College Student Psychotherapy*, *30*(2), 132-145. doi:10.1080/87568225.2016.1140991
- Mellor, D. (2004). Responses to racism: A taxonomy of coping styles used by Aboriginal Australians. *American Journal Of Orthopsychiatry*, *74*(1), 56-71. doi:10.1037/0002-9432.74.1.56
- Merta, R. J. (1995). Group work: Multicultural perspectives. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, C. M. Alexander, J. G. Ponterotto, J. M. Casas, ... C. M. Alexander (Eds.), *Handbook of multicultural counseling* (pp. 567-585). Thousand Oaks, CA, US: Sage Publications, Inc.
- Miehls, D. (2011). Racism and its effects. In N. R. Heller, A. Gitterman, N. R. Heller, A. Gitterman (Eds.), *Mental health and social problems: A social work perspective*

(pp. 62-85). New York, NY, US: Routledge/Taylor & Francis Group.

Miller, C. T., & Kaiser, C. R. (2001). A theoretical perspective on coping with stigma.

Journal Of Social Issues, 57(1), 73-92. doi:10.1111/0022-4537.00202

Moore, L. J., & Boehnlein, J. K. (1991). Posttraumatic stress disorder, depression, and somatic symptoms in U.S. Mien patients. *Journal Of Nervous And Mental*

Disease, 179(12), 728-733. doi:10.1097/00005053-199112000-00003

Moradi, B., & Risco, C. (2006). Perceived discrimination experiences and mental health

of Latina/o American persons. *Journal Of Counseling Psychology*, 53(4), 411-

421. doi:10.1037/0022-0167.53.4.411

Nadal, K. L., Wong, Y., Sriken, J., Griffin, K., & Fujii-Doe, W. (2015). Racial

microaggressions and Asian Americans: An exploratory study on within-group

differences and mental health. *Asian American Journal Of Psychology*, 6(2), 136-

144. doi:10.1037/a0038058

Neff, K. D. (2003). The development and validation of a scale to measure self-

compassion. *Self And Identity*, 2(3), 223-250. doi:10.1080/15298860309027

Neff, K. D. (n.d.) "Self Compassion Scale for Researchers." Retrieved from [http://self-](http://self-compassion.org/wp-content/uploads/2015/06/Self_Compassion_Scale_for_researchers.pdf)

[\[content/uploads/2015/06/Self_Compassion_Scale_for_researchers.pdf\]\(http://self-compassion.org/wp-content/uploads/2015/06/Self_Compassion_Scale_for_researchers.pdf\)](http://self-compassion.org/wp-</p></div><div data-bbox=)

Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the

mindful self-compassion program. *Journal Of Clinical Psychology*, 69(1), 28-44.

doi:10.1002/jclp.21923

Neff, K. D., Hsieh, Y., & Dejitterat, K. (2005). Self-compassion, achievement goals, and

coping with academic failure. *Self And Identity*, 4(3), 263-287.

doi:10.1080/13576500444000317

Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal Of Research In Personality, 41*(1), 139-154.

doi:10.1016/j.jrp.2006.03.004

Neff, K. D., & Vonk, R. (2009). Self-compassion versus global self-esteem: Two different ways of relating to oneself. *Journal Of Personality, 77*(1), 23-50.

doi:10.1111/j.1467-6494.2008.00537.x

Ngamake, S. T., Walch, S. E., & Raveepatarakul, J. (2016). Discrimination and sexual minority mental health: Mediation and moderation effects of coping. *Psychology Of Sexual Orientation And Gender Diversity, 3*(2), 213-226.

doi:10.1037/sgd0000163

National Institutes of Health. (2006). *Fact sheet: Health disparities*. Retrieved from <http://www.nih.gov/aboutresearchresultsforthepublic/HealthDisparities.pdf>

Noh, S., Beiser, M., Kaspar, V., Hou, F., & Rummens, J. (1999). Perceived racial discrimination, depression, and coping: A study of Southeast Asian refugees in Canada. *Journal Of Health And Social Behavior, 40*(3), 193-207.

doi:10.2307/2676348

Noh, S., & Kaspar, V. (2003). Perceived discrimination and depression: Moderating effects of coping, acculturation, and ethnic support. *American Journal Of Public Health, 93*(2), 232-238. doi:10.2105/AJPH.93.2.232

Norris, F. H. (1990). Screening for traumatic stress: A scale for use in the general population. *Journal Of Applied Social Psychology, 20*(20, Pt 2), 1704-1718.

doi:10.1111/j.1559-1816.1990.tb01505.x

- Okazaki, S. (1997). Sources of ethnic differences between Asian American and White American college students on measures of depression and social anxiety. *Journal Of Abnormal Psychology, 106*(1), 52-60. doi:10.1037/0021-843X.106.1.52
- Outlaw, F. H. (1993). Stress and coping: The influence of racism of the cognitive appraisal processing of African Americans. *Issues In Mental Health Nursing, 14*(4), 399-409. doi:10.3109/01612849309006902
- Ozawa-de Silva, B. R., Dodson-Lavelle, B., Raison, C. L., Negi, L. T., Silva, B. R. O., & Phil, D. (2012). Compassion and ethics: Scientific and practical approaches to the cultivation of compassion as a foundation for ethical subjectivity and well-being. *Journal of Healthcare, Science and the Humanities, 2*(1), 145-161.
- Pace, T. W., Negi, L. T., Adame, D. D., Cole, S. P., Sivilli, T. I., Brown, T. D., & ... Raison, C. L. (2009). Effect of compassion meditation on neuroendocrine, innate immune and behavioral responses to psychosocial stress. *Psychoneuroendocrinology, 34*(1), 87-98. doi:10.1016/j.psyneuen.2008.08.011
- Pace, T. W., Negi, L. T., Sivilli, T. I., Issa, M. J., Cole, S. P., Adame, D. D., & Raison, C. L. (2010). Innate immune, neuroendocrine and behavioral responses to psychosocial stress do not predict subsequent compassion meditation practice time. *Psychoneuroendocrinology, 35*(2), 310-315. doi:10.1016/j.psyneuen.2009.06.008
- Palgi, S., Klein, E., & Shamay-Tsoory, S. G. (2016). Oxytocin improves compassion toward women among patients with PTSD. *Psychoneuroendocrinology, 64*, 143-149. doi:10.1016/j.psyneuen.2015.11.008
- Paradies, Y. C. (2006). Defining, conceptualizing and characterizing racism in health

research. *Critical Public Health*, 16(2), 143-157.

doi:10.1080/09581590600828881

Pearlin, L. I., Schieman, S., Fazio, E. M., & Meersman, S. C. (2005). Stress, health, and the life course: Some conceptual perspectives. *Journal Of Health And Social Behavior*, 46(2), 205-219. doi:10.1177/002214650504600206

Perilla, J. L., Norris, F. H., & Lavizzo, E. A. (2002). Ethnicity, culture, and disaster response: Identifying and explaining ethnic differences in PTSD six months after Hurricane Andrew. *Journal Of Social And Clinical Psychology*, 21(1), 20-45.

doi:10.1521/jscp.21.1.20.22404

Pieterse, A. L., & Carter, R. T. (2007). An examination of the relationship between general life stress, racism-related stress, and psychological health among Black men. *Journal Of Counseling Psychology*, 54(1), 101-109. doi:10.1037/0022-0167.54.1.101

Pieterse, A. L., Carter, R. T., Evans, S. A., & Walter, R. A. (2010). An exploratory examination of the associations among racial and ethnic discrimination, racial climate, and trauma-related symptoms in a college student population. *Journal Of Counseling Psychology*, 57(3), 255-263. doi:10.1037/a0020040

Pieterse, A., & Powell, S. (2016). A theoretical overview of the impact of racism on people of color. In A. N. Alvarez, C. H. Liang, H. A. Neville, A. N. Alvarez, C. H. Liang, H. A. Neville (Eds.), *The cost of racism for people of color: Contextualizing experiences of discrimination* (pp. 11-30). Washington, DC, US: American Psychological Association. doi:10.1037/14852-002

Pieterse, A. L., Todd, N. R., Neville, H. A., & Carter, R. T. (2012). Perceived racism and

- mental health among Black American adults: A meta-analytic review. *Journal Of Counseling Psychology*, 59(1), 1-9. doi:10.1037/a0026208
- Plummer, D. L., & Slane, S. (1996). Patterns of coping in racially stressful situations. *The Journal of Black Psychology*, 22(3), 302–315. doi:10.1177/00957984960223002.
- Pokhrel, P., & Herzog, T. A. (2014). Historical trauma and substance use among Native Hawaiian college students. *American Journal Of Health Behavior*, 38(3), 420-429. doi:10.5993/AJHB.38.3.11
- Pole, N., Best, S. R., Metzler, T., & Marmar, C. R. (2005). Why Are Hispanics at greater risk for PTSD?. *Cultural Diversity And Ethnic Minority Psychology*, 11(2), 144-161. doi:10.1037/1099-9809.11.2.144
- Poundja, J., Fikretoglu, D., & Brunet, A. (2006). The co-occurrence of posttraumatic stress disorder symptoms and pain: Is depression a mediator?. *Journal Of Traumatic Stress*, 19(5), 747-751. doi:10.1002/jts.20151
- Priest, N., Paradies, Y., Trener, B., Truong, M., Karlsen, S., & Kelly, Y. (2013). A systematic review of studies examining the relationship between reported racism and health and wellbeing for children and young people. *Social Science & Medicine*, 95115-127. doi:10.1016/j.socscimed.2012.11.031
- Raes, F. (2010). Rumination and worry as mediators of the relationship between self-compassion and depression and anxiety. *Personality And Individual Differences*, 48(6), 757-761. doi:10.1016/j.paid.2010.01.023
- Raes, F. (2011). The effect of self-compassion on the development of depression symptoms in a non-clinical sample. *Mindfulness*, 2(1), 33-36. doi:10.1007/s12671-011-0040-y

- Roberson, N. L. (1994). Clinical trial participation: viewpoints from racial/ethnic groups. *Cancer, 74*(S9), 2687-2691.
- Roberts, A. L., Gilman, S. E., Breslau, J., Breslau, N., & Koenen, K. C. (2011). Race/ethnic differences in exposure to traumatic events, development of post-traumatic stress disorder, and treatment-seeking for post-traumatic stress disorder in the United States. *Psychological Medicine, 41*(1), 71-83.
doi:10.1017/S0033291710000401
- Roth, R. S., Geisser, M. E., & Bates, R. (2008). The relation of post-traumatic stress symptoms to depression and pain in patients with accident-related chronic pain. *The Journal Of Pain, 9*(7), 588-596. doi:10.1016/j.jpain.2008.01.333
- Salzberg, S. (2002). *Lovingkindness: The revolutionary art of happiness*. Boston, MA: Shambhala Publications.
- Sashidharan, T., Pawlow, L. A., & Pettibone, J. C. (2012). An examination of racial bias in the Beck Depression Inventory-II. *Cultural Diversity And Ethnic Minority Psychology, 18*(2), 203-209. doi:10.1037/a0027689
- Sears, D. O. (1991). Symbolic racism. In P. A. Katz & D. A. Taylor (Eds.), *Eliminating racism: Profiles in controversy* (pp. 53-84). New York: Plenum.
- Seligowski, A. V., Miron, L. R., & Orcutt, H. K. (2015). Relations among self-compassion, PTSD symptoms, and psychological health in a trauma-exposed sample. *Mindfulness, 6*(5), 1033-1041. doi:10.1007/s12671-014-0351-x
- Shavers, V. L., Fagan, P., Jones, D., Klein, W. P., Boyington, J., Moten, C., & Rorie, E. (2012). The state of research on racial/ethnic discrimination in the receipt of health care. *American Journal Of Public Health, 102*(5), 953-966.

doi:10.2105/AJPH.2012.300773

Shonin, E., Van Gordon, W., Compare, A., Zangeneh, M., & Griffiths, M. D. (2015).

Buddhist-derived loving-kindness and compassion meditation for the treatment of psychopathology: A systematic review. *Mindfulness*, 6(5), 1161-1180.

doi:10.1007/s12671-014-0368-1

Siegel, J. M., Aneshensel, C. S., Taub, B., Cantwell, D. P., & Driscoll, A. K. (1998).

Adolescent depressed mood in a multiethnic sample. *Journal Of Youth And Adolescence*, 27(4), 413-427. doi:10.1023/A:1022873601030

Sigelman, L., & Welch, S. (1994). *Black Americans' views of racial inequality: The dream deferred*. New York: Cambridge University Press.

Sims, M., Diez-Roux, A. V., Dudley, A., Gebreab, S., Wyatt, S. B., Bruce, M. A., & ...

Taylor, H. A. (2012). Perceived discrimination and hypertension among African Americans in the Jackson Heart Study. *American Journal Of Public Health*, 102(Suppl 2), S258-S265. doi:10.2105/AJPH.2011.300523

Slavin, L. A., Rainer, K. L., McCreary, M. L., & Gowda, K. K. (1991). Toward a multicultural model of the stress process. *Journal Of Counseling & Development*, 70(1), 156-163. doi:10.1002/j.1556-6676.1991.tb01578.x

Smedley, B. D., Stith, A. Y., & Nelson, A. R. (2003). *Unequal treatment: Confronting racial and ethnic disparities in health care*. Washington, DC, US: National Academies Press.

Snyder, C. R. (2016). Navigating in murky waters: How multiracial Black individuals cope with racism. *American Journal Of Orthopsychiatry*, 86(3), 265-276.

doi:10.1037/ort0000148

- Stam, R. (2007). PTSD and stress sensitisation: A tale of brain and body part 1: Human studies. *Neuroscience And Biobehavioral Reviews*, *31*(4), 530-557.
doi:10.1016/j.neubiorev.2006.11.010
- Sue, D. W. (2010). *Microaggressions in everyday life: Race, gender, and sexual orientation*. John Wiley & Sons.
- Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A. B., Nadal, K. L., & Esquilin, M. (2007). Racial microaggressions in everyday life: Implications for clinical practice. *American Psychologist*, *62*(4), 271-286. doi:10.1037/0003-066X.62.4.271Sue, 2010
- Sue, D. W., & Sue, D. (2003). *Counseling the culturally diverse: Theory and practice*. New York: J. Wiley.
- Szymanski, D. M., Dunn, T. L., & Ikizler, A. S. (2014). Multiple minority stressors and psychological distress among sexual minority women: The roles of rumination and maladaptive coping. *Psychology Of Sexual Orientation And Gender Diversity*, *1*(4), 412-421. doi:10.1037/sgd0000066
- Szymanski, D. M., & Feltman, C. E. (2014). Experiencing and coping with sexually objectifying treatment: Internalization and resilience. *Sex Roles*, *71*(3-4), 159-170. doi:10.1007/s11199-014-0392-6
- Szymanski, D. M., & Lewis, J. A. (2016). Gendered racism, coping, identity centrality, and African American college women's psychological distress. *Psychology Of Women Quarterly*, *40*(2), 229-243. doi:10.1177/0361684315616113
- Taylor, S. E., & Seeman, T. E. (1999). Psychosocial resources and the SES–health relationship. In N. E. Adler, M. Marmot, B. S. McEwen, J. Stewart, N. E. Adler,

- M. Marmot, ... J. Stewart (Eds.) , *Socioeconomic status and health in industrial nations: Social, psychological, and biological pathways* (pp. 210-225). New York, NY, US: New York Academy of Sciences.
- Terry, M. L., Leary, M. R., & Mehta, S. (2013). Self-compassion as a buffer against homesickness, depression, and dissatisfaction in the transition to college. *Self And Identity, 12*(3), 278-290. doi:10.1080/15298868.2012.667913
- Thompson, B. L., & Waltz, J. (2008). Self-compassion and PTSD symptom severity. *Journal Of Traumatic Stress, 21*(6), 556-558. doi:10.1002/jts.20374
- Thompson, V. S. (1996). Perceived experiences of racism as stressful life events. *Community Mental Health Journal, 32*(3), 223-233. doi:10.1007/BF02249424
- Thompson, V. S. (2006). Coping Responses and the Experience of Discrimination. *Journal Of Applied Social Psychology, 36*(5), 1198-1214. doi:10.1111/j.0021-9029.2006.00038.x
- Thompson-Miller, R., & Feagin, J. R. (2007). Continuing Injuries of Racism: Counseling in a Racist Context. *The Counseling Psychologist, 35*(1), 106-115. doi:10.1177/0011000006294664
- Tomes, E. K., Brown, A., Semanya, K., & Simpson, J. (1989). Depression in black women of low socioeconomic status: psychosocial factors and nursing diagnosis. *Journal of National Black Nurses' Association: JNBNA, 4*(2), 37-46.
- Torres, L., & Ong, A. D. (2010). A daily diary investigation of latino ethnic identity, discrimination, and depression. *Cultural Diversity And Ethnic Minority Psychology, 16*(4), 561-568. doi:10.1037/a0020652
- Torres, L., Yznaga, S. D., & Moore, K. M. (2011). Discrimination and Latino

psychological distress: The moderating role of ethnic identity exploration and commitment. *American Journal Of Orthopsychiatry*, 81(4), 526-534.

doi:10.1111/j.1939-0025.2011.01117.x

Ullman, S. E., Filipas, H. H., Townsend, S. M., & Starzynski, L. L. (2007). Psychosocial correlates of PTSD symptom severity in sexual assault survivors. *Journal Of Traumatic Stress*, 20(5), 821-831. doi:10.1002/jts.20290

Utsey, S. O. (1999). Development and validation of a short form of the Index of Race-Related Stress (IRRS)–Brief Version. *Measurement And Evaluation In Counseling And Development*, 32(3), 149-167.

Utsey, S. O., Chae, M. H., Brown, C. F., & Kelly, D. (2002). Effect of ethnic group membership on ethnic identity, race-related stress and quality of life. *Cultural Diversity And Ethnic Minority Psychology*, 8(4), 366-377. doi:10.1037/1099-9809.8.4.367

Utsey, S. O., & Constantine, M. G. (2008). Mediating and moderating effects of racism-related stress on the relation between poverty-related risk factors and subjective well-being in a community sample of African Americans. *Journal Of Loss And Trauma*, 13(2-3), 186-204. doi:10.1080/15325020701769204

Utsey, S. O., & Ellison, C. M. (2000). Utility of an African-centered support group for African American men confronting societal racism and oppression. *Cultural Diversity and Ethnic Minority Psychology*, 5(2), 156-165. doi:10.1037/1099-9809.5.2.156

Utsey, S. O., Giesbrecht, N., Hook, J., & Stanard, P. M. (2008). Cultural, sociofamilial, and psychological resources that inhibit psychological distress in African

- Americans exposed to stressful life events and race-related stress. *Journal Of Counseling Psychology*, 55(1), 49-62. doi:10.1037/0022-0167.55.1.49
- Utsey, S. O., Lanier, Y., Williams, O. I., Bolden, M., & Lee, A. (2006). Moderator effects of cognitive ability and social support on the relation between race-related stress and quality of life in a community sample of black Americans. *Cultural Diversity And Ethnic Minority Psychology*, 12(2), 334-346. doi:10.1037/1099-9809.12.2.334
- Utsey, S. O., & Ponterotto, J. G. (1996). Development and validation of the Index of Race-Related Stress (IRRS). *Journal Of Counseling Psychology*, 43(4), 490-501. doi:10.1037/0022-0167.43.4.490
- Valdez, C. E., & Lilly, M. M. (2016). Self-compassion and trauma processing outcomes among victims of violence. *Mindfulness*, 7(2), 329-339. doi:10.1007/s12671-015-0442-3
- Vera, E. M., Vacek, K., Coyle, L. D., Stinson, J., Mull, M., Doud, K., & ... Langrehr, K. J. (2011). An examination of culturally relevant stressors, coping, ethnic identity, and subjective well-being in urban, ethnic minority adolescents. *Professional School Counseling*, 15(2), 55-66. doi:10.5330/PSC.n.2011-15.55
- Waelde, L. C., Pennington, D., Mahan, C., Mahan, R., Kabour, M., & Marquett, R. (2010). Psychometric properties of the Race-Related Events Scale. *Psychological Trauma: Theory, Research, Practice, And Policy*, 2(1), 4-11. doi:10.1037/a0019018
- Wang, P. S., Berglund, P., Olfson, M., Pincus, H. A., Wells, K. B., & Kessler, R. C. (2005). Failure and Delay in Initial Treatment Contact After First Onset of Mental

- Disorders in the National Comorbidity Survey Replication. *Archives Of General Psychiatry*, 62(6), 603-613. doi:10.1001/archpsyc.62.6.603
- Wang, Y., Lin, J., & Pan, J. (2015). The relationships among self-compassion, perfectionism, rumination and depression. *Chinese Journal Of Clinical Psychology*, 23(1), 120-123.
- Watson, L. B., DeBlaere, C., Langrehr, K. J., Zelaya, D. G., & Flores, M. J. (2016). The influence of multiple oppressions on women of color's experiences with insidious trauma. *Journal Of Counseling Psychology*, 63(6), 656-667.
doi:10.1037/cou0000165
- Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). The ptsd checklist for dsm-5 (pcl-5). Scale available from the National Center for PTSD at www.ptsd.va.gov.
- Wei, M., Alvarez, A. N., Ku, T., Russell, D. W., & Bonett, D. G. (2010). Development and validation of a Coping with Discrimination Scale: Factor structure, reliability, and validity. *Journal Of Counseling Psychology*, 57(3), 328-344.
doi:10.1037/a0019969
- Wei, M., Heppner, P. P., Ku, T., & Liao, K. Y. (2010). Racial discrimination stress, coping, and depressive symptoms among Asian Americans: A moderation analysis. *Asian American Journal Of Psychology*, 1(2), 136-150.
doi:10.1037/a0020157
- Wei, M., Wang, K. T., Heppner, P. P., & Du, Y. (2012). Ethnic and mainstream social connectedness, perceived racial discrimination, and posttraumatic stress symptoms. *Journal Of Counseling Psychology*, 59(3), 486-493.

doi:10.1037/a0028000

Whisman, M. A., Judd, C. M., Whiteford, N. T., & Gelhorn, H. L. (2013). Measurement invariance of the Beck Depression Inventory–Second Edition (BDI-II) across gender, race, and ethnicity in college students. *Assessment, 20*(4), 419-428.

doi:10.1177/1073191112460273

Whisman, M. A., & Richardson, E. D. (2015). Normative data on the Beck Depression Inventory—Second edition (BDI-II) in college students. *Journal Of Clinical Psychology, 71*(9), 898-907. doi:10.1002/jclp.22188

Williams, D. R. (2016). Improving the measurement of self-reported racial discrimination: Challenges and opportunities. In A. N. Alvarez, C. H. Liang, H. A. Neville, A. N. Alvarez, C. H. Liang, H. A. Neville (Eds.), *The cost of racism for people of color: Contextualizing experiences of discrimination* (pp. 55-83). Washington, DC, US: American Psychological Association. doi:10.1037/14852-004

Williams, D. R., & Chung, A. M. (1999). Racism and health. In R. C. Gibson, J. S. Jackson (Eds.), *Health in Black America*. Newbury Park: Sage Publications.

Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial Differences in Physical and Mental Health: Socio-economic Status, Stress and Discrimination. *Journal Of Health Psychology, 2*(3), 335-351. doi:10.1177/135910539700200305

Williams, J. G. (2004). Forewarning: A tool to disrupt stereotype threat effects. *Dissertation Abstracts International Section A, 65*, 2901.

Williams, J. L. (2013). *Examining the Moderating Effects of Adolescent Self-Compassion on the Relationship Between Social Rank and Depression* (Doctoral dissertation,

University of Alberta).

- Woods-Giscombé, C. L., & Black, A. R. (2010). Mind-body interventions to reduce risk for health disparities related to stress and strength among African American women: The potential of mindfulness-based stress reduction, loving-kindness, and the NTU therapeutic framework. *Complementary Health Practice Review, 15*(3), 115-131. doi:10.1177/1533210110386776
- Yoo, H. C., & Lee, R. M. (2005). Ethnic identity and approach-type coping as moderators of the racial discrimination/well-being relation in Asian Americans. *Journal Of Counseling Psychology, 52*(4), 497-506. doi:10.1037/0022-0167.52.4.497
- Zeller, M., Yuval, K., Nitzan-Assayag, Y., & Bernstein, A. (2015). Self-compassion in recovery following potentially traumatic stress: Longitudinal study of at-risk youth. *Journal Of Abnormal Child Psychology, 43*(4), 645-653. doi:10.1007/s10802-014-9937-y
- Zeng, X., Chiu, C. K., Wang, R., Oei, T. S., & Leung, F. K. (2015). The effect of loving-kindness meditation on positive emotions: A meta-analytic review. *Frontiers In Psychology, 6*, 1693. doi:10.3389/fpsyg.2015.01693.

Appendix A

The Beck Depression Inventory-II (BDI-II)

This questionnaire consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the one statement in each group that best describes the way you have been feeling during the past two weeks, including today. Indicate the number beside the statement you have picked. If several statements in the group seem to apply equally well, select the highest number for that group. Be sure that you do not choose more than one statement for any group, including Item 16 (Changes in Sleeping Pattern) or Item 18 (Changes in Appetite).

1. Sadness
2. Pessimism
3. Past failure
4. Loss of pleasure
5. Guilty feelings
6. Punishment feelings
7. Self-dislike
8. Self-criticalness
9. Suicidal thoughts or wishes
10. Crying
11. Agitation
12. Loss of interest
13. Indecisiveness
14. Worthlessness

15. Loss of energy
16. Changes in sleeping pattern
17. Irritability
18. Changes in appetite
19. Concentration difficulty
20. Tiredness or fatigue
21. Loss of interest in sex

Appendix B

The PTSD Checklist for DSM-5 (PCL-5)

Below is a list of problems that people sometimes have in response to a very stressful experience (e.g., a race-related incident). Please read each problem carefully and then circle one of the options to the right to indicate how much you have been bothered by that race-related incident in the past month.

Not At All	A Little Bit	Moderately	Quite a Bit	Extremely
0	1	2	3	4

In the past month, how much were you bothered by:

1. Repeated, disturbing, and unwanted memories of the stressful experience?
2. Repeated, disturbing dreams of the stressful experience?
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?
4. Feeling very upset when something reminded you of the stressful experience?
5. Having strong physical reactions when something reminded you of the stressful experience (e.g., heart pounding, trouble breathing, sweating)?
6. Avoiding memories, thoughts, or feelings related to the stressful experiences?
7. Avoiding external reminders of the stressful experience (e.g., people, places, conversations, activities, objects, or situations)?
8. Trouble remembering important parts of the stressful experience?
9. Having strong negative beliefs about yourself, other people, or the world (e.g., having thoughts such as: I am bad, there is something seriously wrong with me,

no one can be trusted, the world is completely dangerous)?

10. Blaming yourself or someone else for the stressful experience or what happened after it?
11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?
12. Loss of interest in activities that you used to enjoy?
13. Feeling distant or cut off from other people?
14. Trouble experiencing positive feelings (e.g., being unable to feel happiness or have loving feelings for people close to you)?
15. Irritable behavior, angry outbursts, or acting aggressively?
16. Taking too many risks or doing things that could cause you harm?
17. Being "superalert" or watchful or on guard?
18. Feeling jumpy or easily startled?
19. Having difficulty concentrating?
20. Trouble falling or staying asleep?

Appendix C

The Self-Compassion Scale (SCS)

Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner:

Almost Never				Almost Always
1	2	3	4	5

1. I'm disapproving and judgmental about my own flaws and inadequacies. (SJ)*
2. When I'm feeling down I tend to obsess and fixate on everything that's wrong.
(OI)*
3. When things are going badly for me, I see the difficulties as part of life that everyone goes through. (CH)
4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world. (I)*
5. I try to be loving towards myself when I'm feeling emotional pain. (SK)
6. When I fail at something important to me I become consumed by feelings of inadequacy. (OI)*
7. When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am. (CH)
8. When times are really difficult, I tend to be tough on myself. (SJ)*
9. When something upsets me I try to keep my emotions in balance. (M)
10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people. (CH)

11. I'm intolerant and impatient towards those aspects of my personality I don't like.
(SJ)*
12. When I'm going through a very hard time, I give myself the caring and tenderness I need. (SK)
13. When I'm feeling down, I tend to feel like most other people are probably happier than I am. (I)*
14. When something painful happens I try to take a balanced view of the situation.
(M)
15. I try to see my failings as part of the human condition. (CH)
16. When I see aspects of myself that I don't like, I get down on myself. (SJ)*
17. When I fail at something important to me I try to keep things in perspective. (M)
18. When I'm really struggling, I tend to feel like other people must be having an easier time of it. (I)*
19. I'm kind to myself when I'm experiencing suffering. (SK)
20. When something upsets me I get carried away with my feelings. (OI)*
21. I can be a bit cold-hearted towards myself when I'm experiencing suffering. (SJ)*
22. When I'm feeling down I try to approach my feelings with curiosity and openness.
(M)
23. I'm tolerant of my own flaws and inadequacies. (SK)
24. When something painful happens I tend to blow the incident out of proportion.
(OI)*
25. When I fail at something that's important to me, I tend to feel alone in my failure.
(I)*

26. I try to be understanding and patient towards those aspects of my personality I don't like. (SK)

(SK) = Self-Kindness

(SJ) = Self-Judgment

(CH) = Common Humanity

(I) = Isolation

(M) = Mindfulness

(OI) = Over-identification

* = reverse coded

Appendix D

The Coping with Discrimination Scale (CDS)

This is a list of strategies that some people use to deal with their experiences of discrimination. Please respond to the following items as honestly as possible to reflect how much each strategy best describes the ways you cope with discrimination. There are no right or wrong answers.

Never Like Me	A Little Like Me	Sometimes Like Me	Often Like Me	Usually Like Me	Always Like Me
1	2	3	4	5	6

1. I try to educate people so that they are aware of discrimination. (EA)
2. I do not talk with others about my feelings. (D)
3. I try to stop thinking about it by taking alcohol or drugs. (DA)
4. I respond by attacking others' ignorant beliefs. (R)
5. I wonder if I did something to provoke this incident. (I)
6. I educate myself to be better prepared to deal with discrimination. (EA)
7. I've stopped trying to do anything. (D)
8. I use drugs or alcohol to take my mind off things. (DA)
9. I get into an argument with the person. (R)
10. I wonder if I did something to offend others. (I)
11. I try to stop discrimination at the societal level. (EA)
12. It's hard for me to seek emotional support from other people. (D)
13. I do not use drugs or alcohol to help me forget about discrimination. (DA)*

14. I do not directly challenge the person. (R)*
15. I wonder if I did something wrong. (I)
16. I help people to be better prepared to deal with discrimination. (EA)
17. I do not have anyone to turn to for support. (D)
18. I do not use alcohol or drugs to help me deal with it. (DA)*
19. I try not to fight with the person who offended me. (R)*
20. I believe I may have triggered the incident. (I)
21. I educate others about the negative impact of discrimination. (EA)
22. I have no idea what to do. (D)
23. I use drugs or alcohol to numb my feelings. (DA)
24. I directly challenge the person who offended me. (R)
25. I do not think that I caused this event to happen. (I)*

(EA) = Education/Advocacy

(I) = Internalization

(DA) = Drug and Alcohol Use

(R) = Resistance

(D) = Detachment

* = reverse coded

Appendix E

Table 1
Demographic Characteristics of Intervention Participants (N = 9)

Characteristic	<i>n</i>	%
Class Standing		
Sophomore	1	11.1
Junior	4	44.4
Senior	4	44.4
Age		
19	3	33.3
20	1	11.1
21	4	44.4
22	1	11.1
Race		
Asian American	5	55.6
Latino/a	1	11.1
Mixed	3	33.3
Gender		
Female	6	66.7
Male	2	22.2
Other	1	11.1
Currently Diagnosed with a Psychiatric Disorder		
Yes	5	55.6
No	1	11.1
Prefer not to say	3	33.3
Previous Experience with Mindfulness Practice		
Not experienced at all	6	66.7
Not very experienced	1	11.1
Somewhat experienced	2	22.2
Previous Experience with Meditation Practice		
Not experienced at all	5	55.6
Not very experienced	2	22.2
Somewhat experienced	2	22.2
Previous Experience with Compassion-Based Meditation		
Not experienced at all	9	100
Frequency of Race-Related Incidents with Faculty on Campus		
Not often at all	2	22.2
Slightly often	5	55.6
Moderately often	2	22.2
Frequency of Race-Related Incidents with Students on Campus		
Not often at all	2	22.2
Slightly often	3	33.3
Moderately often	2	22.2
Very often	2	22.2

Table 2
Descriptive Statistics for Time Point and Change Score Variables (N = 9)

Variable	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
Time 1 Scores				
Depression	21.56	5.81	0.67	-0.42
PTSD	22.00	16.43	0.82	-0.44
Self-Compassion	2.66	0.37	0.53	-0.96
Internalization	3.23	1.12	-0.25	0.06
Detachment	2.82	1.37	0.77	0.02
Time 2 Scores				
Depression	16.44	8.59	0.82	1.15
PTSD	19.67	13.23	1.47	2.40
Self-Compassion	2.44	0.24	1.84	4.05
Internalization	3.47	1.22	-0.92	1.15
Detachment	2.71	0.68	-0.15	-1.40
Time 3 Scores				
Depression	13.00	8.32	0.57	-0.52
PTSD	10.89	9.03	0.56	-0.93
Self-Compassion	3.08	0.62	-1.57	3.49
Internalization	2.63	0.51	-0.21	-0.38
Detachment	2.31	0.79	0.49	-0.50
Change Scores				
Change in Depression	-8.56	7.72	2.04	4.74
Change in PTSD	-11.11	11.63	0.94	0.87
Change in Self-Compassion	0.42	0.50	-0.26	1.25
Change in Internalization	-0.60	1.07	-0.30	-1.36
Change in Detachment	-0.51	1.68	-1.10	3.04

Table 3

Repeated Analysis of Variance for Differences in Clinical and Coping Variables (N = 9)

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Partial η^2
Depression					.416
Time	333.56	2	166.78	5.70*	
Error	468.44	16	29.28		
Total	802.00	18	196.06		
PTSD					.296
Time	617.58	2	308.93	4.83†	
Error	1467.48	16	91.72		
Total	2085.06	18	400.65		
Self-Compassion					.547
Time	1.91	2	0.95	7.93**	
Error	1.92	16	0.12		
Total	3.83	18	1.07		
Internalization					.249
Time	3.36	2	1.68	2.65	
Error	10.12	16	0.63		
Total	13.48	18	2.31		
Detachment					.085
Time	1.28	2	0.64	0.75	
Error	13.75	16	0.86		
Total	15.03	18	1.50		

* $p < .05$, two-tailed.** $p < .01$, two-tailed.† $p < .10$, two-tailed.

Table 4

Spearman's Rank Order Correlation Matrix for Clinical and Coping Time-Point Variables (N = 9)

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Depression Time 1	--														
2. PTSD Time 1	.28	--													
3. Self-Compassion Time 1	.37	.12	--												
4. Internalization Time 1	-.03	.05	.41	--											
5. Detachment Time 1	.31	.78*	.35	.08	--										
6. Depression Time 2	.5	.52	.21	-.12	.42	--									
7. PTSD Time 2	.29	.26	.18	-.06	-.04	.80**	--								
8. Self-Compassion Time 2	-.38	.01	.47	.11	.01	-.17	-.26	--							
9. Internalization Time 2	-.26	.11	.24	.71*	.35	-.25	-.01	-.14	--						
10. Detachment Time 2	.42	.34	.46	.45	.54	.04	.31	-.2	.52	--					
11. Depression Time 3	.5	.4	-.06	.4	-.03	.49	.24	-.28	-.12	.17	--				
12. PTSD Time 3	.56	.5	-.03	.42	.17	.48	.21	-.33	-.01	.29	.94**	--			
13. Self-Compassion Time 3	.14	.05	.62†	.04	.55	-.19	.03	.25	.31	.60†	-.54	-.34	--		
14. Internalization Time 3	.5	.48	.4	.26	.76*	-.04	-.41	.05	.19	.32	.19	.39	.36	--	
15. Detachment Time 3	.65†	.12	.31	.53	-.04	.30	.01	-.14	-.05	.20	.83**	.75*	-.34	.39	--

* $p < .05$, two-tailed.** $p < .01$, two-tailed.† $p < .10$, two-tailed.

Table 5

Spearman's Rank Order Correlation Matrix for Clinical and Coping Change Score Variables (N = 9)

Measure	1	2	3	4	5
1. Change in Depression	--				
2. Change in PTSD	.03	--			
3. Change in Self-Compassion	-.73*	.34	--		
4. Change in Internalization	-.69*	.13	.37	--	
5. Change in Detachment	.44	.71*	-.09	-.14	--

* $p < .05$, two-tailed.** $p < .01$, two-tailed.† $p < .10$, two-tailed.

Table 6

*Hierarchical Regression Model for Coping Variables Predicting Depression Change**Score from Time 1 to Time 3 (N = 9)*

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>R</i> ²	ΔR^2
Self-Compassion						
Block 1					0.072	0.072
Depression Time 1	-0.356	0.483	-0.268	-0.737		
Block 2					0.713	0.641**
Depression Time 1	-0.376	0.290	-0.283	-1.295		
Change in Self-Compassion	-12.389	3.381	-0.801	-3.665*		
Internalization						
Block 1					0.072	0.072
Depression Time 1	-0.356	0.483	-0.268	-0.737		
Block 2					0.222	0.150
Depression Time 1	-0.247	0.489	-0.186	-0.505		
Change in Internalization	-2.850	2.653	-0.396	-1.074		
Detachment						
Block 1					0.072	0.072
Depression Time 1	-0.356	0.483	-0.268	-0.737		
Block 2					0.228	0.156
Depression Time 1	-0.369	0.476	-0.278	-0.775		
Change in Detachment	1.810	1.646	0.395	1.099		

* $p < .05$, two-tailed.** $p < .02$, two-tailed.† $p < .10$, two-tailed.

Table 7

*Hierarchical Regression Model for Coping Variables Predicting PTSD Change Score
from Time 1 to Time 3 (N = 9)*

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>R</i> ²	ΔR^2
Self-Compassion						
Block 1					0.717	0.717**
PTSD Time 1	-0.600	0.142	-0.847	-4.211**		
Block 2					0.789	0.072
PTSD Time 1	-0.720	0.158	-1.017	-4.570**		
Change in Self-Compassion	-7.402	5.192	-0.317	-1.426		
Internalization						
Block 1					0.717	0.717**
PTSD Time 1	-0.600	0.142	-0.847	-4.211**		
Block 2					0.740	0.024
PTSD Time 1	-0.604	0.147	-0.852	-4.096**		
Change in Internalization	-1.667	2.261	-0.153	-0.738		
Detachment						
Block 1					0.717	0.717**
PTSD Time 1	-0.600	0.142	-0.847	-4.211**		
Block 2					0.874	0.157*
PTSD Time 1	-0.501	0.109	-0.708	-4.603**		
Change in Detachment	2.900	1.064	0.419	2.727*		

* $p < .05$, two-tailed.** $p < .01$, two-tailed.