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Understanding Racial Experiences and the Influence of Family on Stress and Familism Attitudes

Jaqueline Miranda

UNDERSTANDING RACIAL EXPERIENCES AND THE INFLUENCE OF FAMILY ON STRESS AND FAMILISM ATTITUDES

by

JAQUELINE A MIRANDA

(Under the Direction of Jessica Brooks)

ABSTRACT

Sixty-five percent of undergraduates reported family as their most important in-group and 79% reported family as being in their top three in-groups (McConnell, 2019). Familial bonds are vital for racial ethnic minorities because of their unique experiences as minorities such as experienced racism, acculturative stress, and other forms of adversity. The current study examined the effects of a racially-based stress induction and imaginal exercise on state stress levels and familial attitudes, and the relationship between racial-ethnic socialization and racial battle fatigue including kinship social support as a moderator. The study used an experimental design, manipulating stress induction through a script construction and stress reduction through an imaginal exercise to examine changes in state stress levels and familial attitudes. Additionally, a series of questionnaires was administered to participants to examine associations between racial-ethnic socialization, kinship support, and racial battle fatigue. A 2 (Stress induction) x 2 (Imaginal Exercise) x 3 (Time) mixed methods ANOVA with repeated measures on the last factor examined the effect of these tasks on state stress levels and found no changes in state stress levels indicating both tasks were not effective in the current study. A second 2 (Stress induction) x 2 (Imaginal Exercise) x 2 (Time) mixed methods ANOVA with repeated measures on the last factor was used to examine changes in familial attitudes, yet the results also failed to demonstrate significant changes based on assigned condition. Last, the PROCESS macro moderation analysis for kinship support was found to be insignificant such that kinship support did not moderate the relationship between racial-ethnic socialization and racial battle fatigue. Based on the results of the present study, manipulation of the stress induction and familism failed to alter stress and familism attitudes. Although the current study's findings were non-

significant, examining the causal relationship between racial microaggressions and protective cultural mechanisms seen in racial-ethnic minorities on well-being is warranted further to inform interventions on the well-being of racial-ethnic minorities.

INDEX WORDS: Racial microaggression, Familism, Racial-ethnic socialization, Kinship support, Racial-ethnic minority college students, Stress

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by

JAQUELINE A MIRANDA

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JAQUELINE MIRANDA

Major Professor:	Jessica Brooks
Committee:	Amy Hackney
	Jeffrey Klibert

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DEDICATION

This thesis is first dedicated to all the individuals who partook in this study and allowed me to glimpse into difficult personal experiences. You all have been heard and have demonstrated incredible perseverance in the face of discrimination. I would also like to dedicate this thesis to my family; you were all in my mind as I formulated my ideas for this thesis. The many, many phone calls and text messages reminded me that I was doing this for you. I would not be where I am nor who I am today without y'all.

Lastly, I am dedicating this thesis to myself. Jack, you have constantly battled with yourself and your ability. This here is proof that you are capable of anything during difficult times and that this is only the beginning. Remember, look how far you have come and that you are never alone in your journey.

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TABLE OF CONTENTS

Page

LIST OF TABLES

Page

LIST OF FIGURES

Page

CHAPTER 1

INTRODUCTION

Purpose of Current Study

The examination of familism values and racial-ethnic socialization together and their protective properties against experiencing racism and discrimination has been a growing area of interest in the literature. However, researchers have been slow to examine the causal relationships between these variables and their adverse outcomes. Due to this, the development of interventions and treatments for reducing adverse health effects or the use of maladaptive coping behaviors seen in individuals of color could be unsatisfactory and require further development (Kawachi & Berkman, 2001; Okazaki, 2009). Racial socialization is an important mechanism that protects and promotes resilience and self-worth. Equally as important is the familial component of kinship support in racial socialization. In addition to the role the family can have in developing children's identity and beliefs, families can be seen to assist one another and children to succeed in the society and support each other through the unique challenges racial/ethnic minorities face.

Further exploration is imperative as socialization practices continue past childhood and can demonstrate significant benefits to well-being. Thus, the purpose of this study is twofold: to provide evidence of a causal relationship between socialization practices and experienced stress due to experienced racial microaggressions in a sample of racially and ethnically diverse college students, and to evaluate a proposed moderation model of kinship support on the relationship between racial-ethnic socialization practices and racial battle fatigue. The current study aims to provide further insight into the intricacies of cultural values and behaviors and how they may be implemented across clinical and institutional levels, and beyond.

CHAPTER 2

UNDERSTANDING RACIAL-ETHNIC EXPERIENCES AND THE INFLUENCE OF FAMILY ON STRESS AND FAMILISM ATTITUDES

Family—the first established in-group—is seen to have an impact on a number of aspects in the development of identities, beliefs, and behaviors; but as individuals age, social groups expand, and family is no longer central. This change in focus may differ for racial and ethnic minorities, as family is still viewed as a pivotal social group due to a few factors, such as communal lived experiences. Waites (2009) identified similarity in history, as well as shared future, as a key factor in understanding the importance of family in racial and ethnic minorities. To date, research has focused on compiling evidence of these experiences and exploring the relationships between these several outcomes (e.g., physical, and mental well-being, academic achievement).

The purpose of this study is to investigate the effects of a familial intervention on stress levels following a racially-based stress induction task. Additionally, to further the understanding of this effect, examination of the potential moderating effects of kinship support on the relationship between racial socialization practices and racial battle fatigue were investigated. The current study will contribute to the literature through further examination of the established associations between family, racially-based stress, and well-being to determine causality using experimental manipulation to inform interventions aimed at improving psychological well-being in students of color.

Theoretical Underpinnings of Racism, Familism, and Racial Socialization

In this section, a thorough review of relevant conceptual models and theories are presented as it relates to racism and its outcomes to lay the groundwork for the current study's methodology and hypotheses.

Conceptualization of the Effect of Racism

The lived experiences of racial and ethnic minorities in America can vastly differ from the White majority as well as at times among the different minority groups. While blatant acts of racism are widely considered unacceptable in the current social climate, racism and racist beliefs have not been eradicated—they have morphed. Instead, people engage in acts of *racial microaggressions*, as defined by Pierce et al. (1977) as "subtle, stunning, often automatic, and non-verbal exchanges which are put-downs" (p. 65).

Adding to this definition, Davis (1989) explained microaggressions to be automatic acts that disregard Black individuals stemming from unconscious attitudes of White superiority. Not as clear as the obvious and gross acts of racism, the ambiguity or invisibleness of racial microaggression make it incredibly easy for perpetrators to explain away their behavior. This can be seen as invalidating to people of color as they are not being heard when voicing their concerns or feelings regarding the treatment or actions made by others (Sue et al., 2007). Sue et al. (2007), operationalized three forms of microaggressions to conceptualize these seemingly unharmful and invisible acts: microassaults (e.g., verbal, or nonverbal attacks that are derogatory in nature meant to hurt the victim), microinsults (e.g., rude, insensitive, and demeaning comments meant to demean the racial heritage or identity of the victim), and microinvalidation (e.g., comments that negate the experience, thoughts, or emotions of the victim). Smith et al. (2011) defined racial microaggressions in three parts as well: (1) subtle verbal and nonverbal acts, specifically insults, towards people of color; (2) insults based on outgroup characteristics that can be layered on top of the other, and (3) cumulative insults. Additionally, Huynh (2012) explained ethnic microaggressions as constant interactions with others that include subtle messages emphasizing their racial/ethnic groups as an outgroup along with devaluing the individual.

In sum, the occurrence of racial and ethnic microaggressions can be seen in all settings and presents itself in a variety of forms. Additionally, the experience of racial-ethnic microaggressions can differ in presentation across racial-ethnic minority groups, thus conceptualization of microaggressions is critical to include the unique experiences of all people of color.

Biopsychosocial Models of Racism.

The biopsychosocial model was born out of the criticism of Engel (1980), a medical doctor who characterized practices at that time as dehumanizing and encouraged the use of a more holistic approach to health whereby clinicians see the entire person, not just a diagnosis. This new model examined not only the biology of an individual but the psychological and social factors in an individual's life as it interacted with health and disease. Two decades later, Clark et al. (1999) extended the model to include the effects of racism, particularly as it relates African Americans in the United States. This modified version of the biopsychosocial model purported that the perception of a stimulus as racist would result in increases in psychological and physiological stress responses, which would be further influenced by a number of social factors (e.g., gender, SES, life events) that would have compounding detrimental effects on one's health over time.

In agreement with Clark et al. (1999), Suls and Rothman (2004) critiqued the field of health psychology and biopsychosocial research to construct theoretical models that consider sociodemographic factors such as race or ethnicity to understand the unique behaviors and health outcomes of certain social groups. In contrast to Suls and Rothman's multidimensional understanding of the biopsychosocial model, Borrell-Carrio et al. (2004) argues this approach to be constrictive in understanding causality. Specifically, the authors proposed the examination of

biological, psychological, and sociological components to be circular and complex factors followed by a linear examination for the construction of treatment plans or interventions. Regarding racism and its effects, a number of influences impact well-being and the behaviors of people of color. These views highlight the complexities of the effects of racism and are a crucial theoretical framework for the current study.

Racial Battle Fatigue.

The effects of racial-ethnic microaggressions are grave and have piqued the interest of many researchers, educators, and health professionals. Building off literature related to stress and combat exhaustion (i.e., the accumulation of facing dangerous and violent experiences by soldiers resulting in a number of effects such as fatigue and fear; Bartemeire, 1946), *racial battle fatigue* is a model similar to the biopsychosocial framework in that it takes into account the compounding effects racial microaggressions on stress responses across three areas: psychology, physiology, and behavior (Smith et al., 2007). These responses can be demonstrated in a number of ways, including maladaptive coping strategies (e.g., frustration, physical avoidance, emotional or psychological withdrawal, acceptance of racist attributes, physically fighting back) as well as adaptive coping strategies (e.g., seeking emotional support, religion/spirituality, reinterpretation, taking action). As outlined by Smith (2004), these behaviors are a natural response to the constant stressful mental and emotional work experienced in a "no safe place" environment by individuals of color.

It should be noted that the experience of microaggressions varies across racial and ethnic groups and, as a result, racial battle fatigue across people of color have been examined for similarities as well as differences in the type of stress responses. A considerable amount of evidence on the examination of racial battle fatigue in African Americans (e.g., Quaye et al.,

2020; Solorzano et al., 2000; Smith et al., 2016.), Asian Americans (e. g., Ong et al., 2013; Sue et al., 2007) and Latina/os (e.g., Franklin et al., 2014; Moradi & Risco, 2006; Yosso et al., 2009) have all led to similar conclusions: minority groups experience physiological distress, negative mental health outcomes, as well as engagement in a number of descriptive maladaptive behaviors as a result of these experiences.

Conceptualization of Familism

Family is a central concept which warrants a thorough examination of its influences on the well-being of an individual, specifically racial and ethnic minorities. *Familism*, a cultural value system among Hispanic families, is defined by the prioritization of the family over the individual, in addition to a number of characteristics such as honoring family members, self-identity rooted in one's relationship with their family, and understanding one's obligations to the family including parents, siblings, and extended family members (Burgess & Locke, 1945; Heller, 1970; Sabolgal et al., 1987). Similarly, *communalism,* a cultural value system mostly seen in groups of African descent, emphasizes social relationships, specifically relationships between friends and family as an integral part of daily life (Boykin et al., 1997; Jagers & Mock, 1995). A third and closely related cultural value system often seen in Asian American families is *filial piety*, which is characterized as bringing honor to one's family, caring for one's parents, and following the wishes and desires of the parents (Yeh & Bedford, 2003; Yeh & Bedford, 2004). Historically these value systems have been understood as separate constructs and have been examined as such; however, researchers have come to appreciate the commonalities in racial and ethnic minorities' values towards their families and the value of examining these constructs simultaneously.

In an examination of all three value systems, Schwartz et al. (2010) argued that although specific to different ethnic groups, these concepts all shared a commonality in the importance of the social relationships and prioritization of family over oneself related to the construct of family/relationship primacy. In support of this position, Chiang et al. (2019) examined youth's values towards families and found that, compared to their White peers, African American and Latino youths reported higher endorsement of familism values with no significant differences between the two minority groups. Due to the overlap across the three value systems, for the remainder of this paper, the concept of family/relationship primacy will be referred to as *familism*.

Social Support and Familism.

Social support is known to have a number of benefits both psychologically and physically. The values of familism can be understood as an aspect of social support through its emphasis on strong relationships with family and interdependence. A growing body of literature has begun to examine the relationship between familism and social support, and the potential implications of familism as a protective factor similar to social support.

An important model to consider when examining the role of social support as a protective factor is the Stress-Buffering model (Cohen & Wills, 1985). Social ties are viewed as beneficial to an individual's well-being when experiencing a stressful event, and this model claims those who have high social support are less likely to be affected by a stressful event. Factors such as perceived availability of social support have been found to be important aspects of lowering emotional or physiological reactions in response to a stressful event (Kawachi & Berkman, 2001). A robust body of literature can be found on the mediating effects of social support on

stress levels and well-being (e.g., Campos et al., 2018; Cohen & Hoberman, 1983; Corona et al., 2017).

From a stress-buffering perspective, the cultural value of familism, with its emphasis on values pertaining to interdependence and strong relationships between family members and extended kin, can assist in buffering, protecting, and providing several resources that benefit the individual in an environment that may not support them.

Conceptualization of Racial-Ethnic Socialization

Experiences with racial microaggressions and discrimination can be seen across the lifespan for people of color. When considering the characteristics of parenthood for these individuals, such as personal experiences with microaggressions, discrimination, and lack of resources, parents communicate messages that teach their children skills required to protect themselves and allow them to succeed in the real world as racial-ethnic minorities. This process of conveying information from parent to child, conceptualized as *racial-ethnic socialization*, has been well-documented over decades of research.

Early on, research examined messages from African American parents and found children received messages around central themes. Boykin and Toms (1985), for instance, described three subjects—cultural experiences, mainstream experiences, and minority experiences—in which parents relayed their messages to their children. Cultural experience messages include communications regarding specific cultural values of a given social group. Mainstream experiences include messages that are given to all members of society. Lastly, messages defined as minority experiences highlight the social, economic, and political oppression shared by most oppressed individuals in a given society. Additionally, Thornton et al. (1990) identified messages predominantly on self-identity, group relations, and social hierarchy,

as well as spiritual and religious coping, extended family caring, cultural pride reinforcement, and racism awareness training (e.g., Stevenson & Renard, 1993; Stevenson, 1994). The way in which parents engage in racial socialization is important, as evidence suggests differential effects on psychological well-being or other outcomes based on type of messaging (Stevenson et al., 1997).

Similarities and differences among racial and ethnic minority groups have begun to appear as this topic gains traction in the literature, and continued examination of racial-ethnic socialization practices is needed in order to better understand the long-term implications. As stated by McCreary et al. (2006), parent socialization practices have been seen as effective, and any intervention developed to combat adversity or promote well-being should utilize these cultural messages or techniques to prove useful. While messages used in socialization practices vary widely in reality, a useful place to begin understanding the utility of a given type of messaging is to focus on one type and broaden the knowledge base from there.

Racial-Ethnic Socialization and Extended Family.

The extended family, as defined by Wilson (1989), can be illustrated as a family structure that goes beyond the nuclear family unit. In racial and ethnic minorities, such as African Americans and Latina/os, extended family can include grandparents, aunts and uncles, cousins, as well as nonrelative members that are viewed as kin (Harrison et al., 1990). In an anthropological study, Stack (1974) was one of the first to examine the daily lives of African Americans and their struggle to manage limited resources. Through her observations, Stack became sensitive to the inner workings of social networks, which included friends and family, and documented how these social networks aided in the survival and coping with harsh living. Additionally, Harrison et al. (1990) described the use of extended family as a method for

problem-solving and stress-coping that uses available family resources to assist with crises or emergencies and is highly valued in ethnic minorities.

It has been understood that in addition to fostering the successful development of young minority children, the use of such socialization has also been seen to assist in providing resources as well as combatting the experience of discrimination and racism in these individuals. The use of racial-ethnic socialization messages, particularly in regard to extended family as a resource, is an important aspect to consider because this differs from the majority culture. As such, the current study proposes a special focus be placed on group relations and extended family messaging and its particular impact on buffering against racially-based stress in a sample of emerging adults.

Review of the Relevant Literature

An in-depth examination of the current literature and empirical findings is needed to support the theoretical frameworks used for the current study. The following sections will provide an overview of relevant findings on the effects of racial-ethnic microaggressions, racial-ethnic socialization practices, and familism values on college students of color.

Racial-Ethnic Microaggressions and Racial Battle Fatigue among Students of Color

Researchers have recognized students of color have a unique experience in school, including higher education, as well as in other settings. By quantitative and qualitative methods across disciplines, the experiences of racial microaggressions and racial battle fatigue have not only been observed but also linked to negative ramifications across a number of life areas.

The occurrence of racial microaggressions and its effects on development have been examined as early as adolescence (e.g., Greene et al., 2006; Huynh, 2012; Nyborg & Curry, 2003; Simons et al., 2002). In a study by Simons et al. (2002), 67% of African American

children reported experiencing being insulted by someone because of their race, a form of microassault. In a three-year longitudinal study examining the changes in experienced discrimination and psychological outcomes in African American, Asian American, and Latina/o adolescents, increases in discrimination by peers and adults across time were found to be highly associated with increases in depressive symptoms as well as decreases in self-esteem (Greene et al., 2006). Specifically, African American adolescents reported more discrimination from adults over the span of the study, and non-Puerto Rican Latino adolescents were found to report more discrimination over time from their peers. Additionally, Huynh (2012), examined the frequency of microaggressions among Asian Americans and Latina/o adolescents and found differences in the frequency of experienced microaggressions with Latina/o adolescents reporting more microaggressions, specifically negative treatment. Although differences were found between the two groups' reported frequency of microaggressions, Huynh (2012) found microaggressions to be predictive of depressive and somatic symptoms overall. Nadal et al. (2014), in examining microaggressions' impact on college students of color, found microaggressions suggesting inferiority to be significantly reported by Black and Latina/o participants. A second finding demonstrating differences in the type of messages received demonstrated Black participants to significantly report microaggressions suggesting criminality and second-class citizenship. In sum, racial-ethnic discrimination is a lifetime experience with negative implications for one’s mental and physical health.

Research on racial-ethnic microaggressions in college students has revealed that students of color continue to experience discrimination despite the proclamations of inclusivity from many universities, and ultimately efforts must be made to construct and apply interventions to ensure the health and safety of these students. In a study using focus groups with African

American college students, participants described their experiences with microaggressions in the classroom setting, outside the classroom setting, and within social spaces on campus which all lead to similar feelings of self-doubt, frustration, and isolation (Solorzano et al., 2000). Some participants explicitly described feeling “drained” from the heavy scrutiny they experienced every day being minority students. Likewise, 78% of Asian Americans reported experiencing at least one racial microaggression across the span of 14 days, with microinvalidations being most experienced (Ong et al., 2013). In addition to this, Ong et al. (2013) found the experience of microaggressions predicted an increase in somatic symptoms as well as a negative affect (e.g., sadness, anger, disgust, hostility) similar to those found in Huynh’s (2012) younger sample. Feelings of inferiority were a specific type of microaggression found to be experienced more frequently in African American and Latina/o students than their White counterparts (Nadal et al., 2014). Additionally, it was found that African American students reported feeling more like second-class citizens and criminals than White, Asian, and Latina/o participants.

In conjunction with racial-ethnic microaggressions, researchers have examined racial battle fatigue consequently and its saliency in the lives of students of color. Racial battle fatigue can be expressed psychologically, physiologically, and behaviorally. Numerous studies have examined the psychological responses of racial battle fatigue and have understood them to manifest in various ways, including elevated levels of self-reported anxiety, depression, and frustration, and low levels of self-esteem. Examining racial battle fatigue in Latina/o students, Franklin et al. (2014) found these students to report more psychological stress responses (e.g., irritability, mood changes, disappointment) as a reaction to racial-ethnic microaggressions. In a qualitative study examining the effects of racial battle fatigue in African American student affairs educators, Quaye et al. (2020) reported these individuals to express suppressed rage,

hyper alertness, and a sense of "dragging" or "heaviness" as a result of experiencing racial battle fatigue. In sum, the college experience for both students and faculty of color is one that carries psychological weight.

In addition to psychological stress, physiological responses of racial battle fatigue have been examined robustly. Many researchers and health professionals found the experience of racism and discrimination to result in high blood pressure, elevated cortisol levels, and decreased immune functioning. Using an experimental design, Blascovich et al. (2001) demonstrated that the presence of stereotype threat (e.g., fear of conforming to a negative stereotype one's particular group may have resulted in poor performance or ability) resulted in an increase in blood pressure. Specifically, blood pressure levels were significantly elevated in African American participants when a White professional stated possible bias towards one subcultural group on the standardized exam they were about to complete. Furthermore, blood pressure was found to remain significantly elevated even during a break in the task demonstrating carry over effects of the threat. In a longitudinal study by Ong et al. (2013) using a sample of Asian Americans, as the experience of more microaggressions increased, more somatic symptoms (e.g., headaches, runny nose, and allergies) were reported by participants. Taken together, not only are psychological stress responses something to consider as having a profound impact on daily life, but physiological responses should also be of great concern.

The experience of racism also has been shown to impact behavioral responses in students of color. Regarding the college experience, behavioral responses may manifest as procrastination or lack of motivation, participating in risky behaviors, as well as declining academic performance (e.g., Borders & Hennebry, 2015; Gonzales et al., 2002; Reynolds et al., 2010). Examining the influence of angry rumination on perceived ethnic discrimination and engagement

in risky behaviors (e.g., unsafe sex, substance use, and illegal behaviors), Borders and Hennebry (2015) found high tendencies to ruminate significantly moderated this relation. Additionally, Gonzales et al. (2002) conducted an experimental study to explore the effects of stereotype-type threats on test performance. The manipulation of test diagnostics (i.e., assessing ability related to personal factors or no statement made on personal ability) was found to significantly affect the test performance in Latinos compared to their White counterparts.

To summarize, the magnitude in which racial-ethnic microaggressions impact racial and ethnic minorities is overwhelming, however much of this research has been correlational. A modest number of experimental studies in this area have provided the ability to draw conclusions pertaining to causality but continued experimental designs should be used to further the understanding of this complex relationship in order to better inform possible interventions.

The Role of Familism on Well-being

Familism as a value has been understood to have significant implications for well-being due to its contributions to promoting closeness and social support (Campos et al., 2014). In their study, Campos et al. (2014) found significant indirect effects of familism on psychological health mediated by perceived social support and closeness to family. Surprisingly, no significant ethnic group differences between the associations were found, rather gender was found to moderate the association between familism and social support on psychological health. Across racial and ethnic groups, Corona et al. (2017) found familism values to be negatively associated with loneliness, depression, and somatic symptoms. Additionally, high levels of familism were found to buffer against high-stress levels and were found to be associated with high self-esteem and good subjective health. Notably, although familism values were found to generally benefit

participants, Asian American and Latino participants endorsed these values more compared to their White counterparts.

Protective factors such as communalism values, family cohesion, and family support have been examined to determine their association with negative mental health effects. Harris and Molock (2000) detected group differences in well-being between participants reporting high or low familial properties. Specifically, the researchers found a negative association between family cohesion and suicide ideation and depression, with individuals endorsing high levels of family cohesion also reporting low levels of suicide ideation and depression. McConnell et al. (2019) explored not only the predictiveness of familial properties such as group value, family entitativity, and family identification on well-being, but also this social resource's ability to improve well-being. Through experimental manipulation of participants' perception of these familial properties, well-being was found to improve when participant's perception of the familial properties was enhanced.

A few studies have examined the psychological benefits of familism values, but researchers have begun to also examine the influence these beliefs have on behavior and physiological responses. In a study examining adolescents' attitudes towards familism and its role in academic outcomes, it was found that more positive attitudes towards familism predicted fewer absences, greater effort in their classes, and better academic performance (Esparza & Sánchez, 2008). Mulvaney-Day et al. (2007) examined differences between type of social connection (i.e., community or family/friend), such as social support and social cohesion, as it relates to health in a sample of Latinos and found social connections and the individual-level were significantly associated with physical and mental health.

Familism values have been also shown to be influential on physiological processes. Studies have recently explored the protective effects of familism on cortisol levels and inflammatory processes. Using the Trier Social Stress Test (TSST) to examine cortisol levels, Campos et al. (2018) found in Latino participants a significant indirect effect of familism on cortisol levels through perceived social support such that mean cortisol levels were lower following the TSST. Surprisingly, the authors found an opposite effect of familism in non-Latino participants such that mean cortisol levels were higher for these participants. Fuligni et al. (2009) examined in a sample of Latina/o and White adolescents the impact of family assistance on inflammation and found that adolescents who reported greater role fulfillment from family assistance demonstrated lower levels of inflammation. Although no ethnic differences were found, characteristics of familism, such as one's obligation to the family and caring for the family, were linked to familial assistance. Additionally, Chiang et al. (2019) found African American and Latino youth to be more sensitive to IL-10 regulation (immune response to pathogens) when holding higher levels of familism values. More specifically, differences between the two minority groups were found with African American youths demonstrating significantly lower overactive inflammatory processes with higher familism values.

While many studies have produced evidence on the positive influences of familism, negative outcomes have also been discovered and warrant consideration. Harris and Molock (2000) found strong communalism values to be positively correlated with suicide ideation and depression which the authors argued could be explained by the polarity of the majority of Euro-American values of independence and individualism. In their study examining Latin American cultural values specific to females, Sanchez et al. (2018) found endorsement of self-silencing or sub-ordination by Latinas was related to disengagement coping strategies as well as poor mental

health. Dressler (1985) found African American women who reported greater levels of extended kin social support also reported more depressive symptoms compared to their male counterparts. These gender differences are of great importance as the experience between genders is equally as important as racial and ethnic differences.

Overall, endorsing familism values has been found to promote well-being and encourage behaviors that protect against the racial encounter experienced by people of color. Continued examination of these cultural values across racial and ethnic minorities is warranted to uncover similarities and discrepancies to further understand the unique experiences as well as encourage the construction of trainings or interventions.

The Influence of Racial-Ethnic Socialization on Well-being.

A well-explored form of protection from the negative consequences of racial and ethnic microaggressions is the use of racial-ethnic socialization practices by families of color. Several studies have provided empirical support for the protection these messages have on individuals of color. An understanding of the saliency and the effects of racial socialization messages in parent-child communications is crucial for the construction of interventions, thus a review of the literature is imperative.

The use of socialization practices by parents has been long studied, and its prevalence in parenting styles by racial and ethnic minority parents is well established in the literature. For instance, Phinney and Chavira (1995) found that Mexican American parents focused on cultural pride more than any other group, and Japanese Americans stressed personal achievement and adaptation to society. Hughes (2003) found cultural socialization messages were reported as the highest socialization message among an ethnically diverse sample of parents, with 95% prevalence in Puerto Rican parents, 91% prevalence in Dominican parents, and 100% in African

American parents. Coard et al. (2004) found a high percentage of African American mothers used racial socialization messages, specifically 73% of parents relayed messages in preparation for bias, and 93% communicated messages related to racial pride. Similarly, Hughes (2003) found 88% of African American parents to deliver socialization messages regarding preparation for bias compared to Dominican (68%) and Puerto Rican (62%) parents.

Although general prevalence is of great importance, the literature has examined the use of these messages on well-being. For example, using in-depth qualitative reviews, Ayón (2016) found Latino parents engaged in practices like racial socialization to protect their children from the effects of discrimination as well as to promote well-being. When looking at the influences of racial socialization, Fisher and Shaw (1999) found that African American college students who reported receiving fewer racial socialization messages from parents coupled with greater frequency of racist experiences also reported poorer mental health. Similarly, Liu and Lau (2013) found that ethnic minority college students who reported higher use of socialization practices by their family also reported fewer depressive symptoms compared to participants who indicated their family practiced racial-ethnic socialization less. Message type is an important factor to consider as the impact of these messages on well-being and other psychological factors may differ. Specifically, socialization practices such as the promotion of mistrust and bias were found to be positively associated with depressive symptoms. Additionally, a negative association between promotion of mistrust and family cohesion was found (Liu & Lau, 2013). In a study using American Indian families, Yasui et al. (2015) found higher levels of observed cultural and coping with discrimination socialization practices were found to be negatively associated with youths' self-reported depression following a year after the initial report.

Consideration of message type should also be examined as differences in psychological well-being, particular behaviors and coping styles have been identified by researchers. Identifying and understanding socialization messages that have been defined as proactive is imperative when constructing interventions to effectively reduce stress. Neblett et al. (2006) found socialization messages focused on self-worth were related to higher levels of academic curiosity and persistence. In 2008, Neblett and colleagues examined racial-ethnic socialization messages and psychological adjustment and found differences between the message types. For example, negative correlations were found between the socialization messages of racial pride, racial socialization behaviors (e.g., buying toys depicting one's' race, having books about ones' culture), self-worth, and perceived stress and problem behaviors (e.g., getting into fights, damaging property, and skipping class without excuse). Similarly, Bynum et al. (2007) found messages communicating cultural pride were associated with less psychological distress (. Further, socialization messages focused on the use of cultural resources (i.e., cultural pride, spirituality, reliance on extended kin, and knowledge of Black history and culture) were found to moderate the association between experienced racism and psychological stress in African American college students. Surprisingly, these messages were also found to predict greater psychological distress. A possible explanation for these findings is explained by Chavez and French (2007) who argued contradicting results are due to acculturative stress further explained by conformity pressures to one's own group.

In terms of racial-ethnic socialization and coping, greater use of self-reliance and problem-solving strategies to combat perceived discriminatory experiences have been found in African American adolescents who receive frequent messages pertaining to racism by parents or family members (Scott, 2003). Additionally, Sanchez et al. (2018) found preparation for racial

bias to partially mediate the positive association between the amount of perceived discrimination and use of engagement coping strategies (i.e., the use of methods such as problem solving, positive cognitive reframing, or emotional support seeking to manage stress responses) which was partially explained by the parental use of socialization messages discussing preparation for bias. This finding highlights the complexities of racial socialization and the importance of examining the many areas these messages speak on.

Extended Familial Support.

In their review of family ecologies of ethnic minority children, Harrison et al. (1990) recognized that, through the socialization process, children are instructed to view themselves as a crucial part of the family thus instilling the value of interdependence, a significant factor in establishing social support networks. These unique extensive social networks have been linked to positive outcomes, such as decreases in psychiatric symptoms, increased resilience, and greater life satisfaction.

African American extended kin and non-kin support networks have been found to be associated with less depressive symptoms (Dressler, 1985). Extended kin support networks were found to be predictive of depressive symptoms with higher levels of extended kin support predicting lower levels of depressive symptoms. Additionally, age and sex were found to moderate the relationship between extended kin and depressive symptoms, specifically, African American males were found to benefit most from large extended kin networks compared to young African American females (ages 17-35) in the study. An important aspect to this line of research is examining and understanding racial and ethnic members across intersecting demographic factors as it pertains to their lived experiences with social factors as well as well-being.

Brown (2008) found support for a relationship between family, special persons, and resilience in African American college students. The use of special persons was to quantify others outside of the immediate family, such as extended kin and those in the community (i.e., church members). In addition to general support, these networks allow for supplemental resources families may not be able to provide such as emotional support, advice/information, and tangible aid (Taylor et al., 2001). Family closeness and receiving assistance from extended family members were found to be related to life satisfaction. Interestingly, higher self-reliance was also associated with higher levels of happiness and life satisfaction. Conceptualization of receiving assistance from others should be a goal for future research as there may be variations in the effects of forms of assistance.

The endorsement of families' use of extensive social networks has been seen as a critical resource as well as a protective factor for well-being and as a buffer against racial battle fatigue. Thus, in addition to examining the effects of extended family support on well-being, it is important to examine the moderating effect of kinship support on socialization practices and racial-battle fatigue.

Familial Interventions Influence on Socialization Processes and Familial Attitudes

A growing body of literature has focused on the development of culturally specific and family-centered interventions for racial and ethnic minorities. Several studies have developed effective familial interventions using socialization processes to understand and reduce drug use, impulsivity, antisocial behavior, and violence. For instance, Robbins et al. (2007) examined the efficiency of a family-based intervention—Structural Ecosystems Therapy—on a sample of African American youth in drug treatment. This specific type of intervention focuses on strengthening family relationships, thus impacting socialization processes, and was found to

effectively improve both. The implications of these findings address the role of family connections in influencing behaviors. Additionally, interventions such as Multidimensional Family Therapy (MDFT), Brief Strategic Family Therapy (BSFT), and Family Effectiveness Training (FET) have been found to have significantly reduced harmful behaviors such as substance abuse and delinquency (e.g., Henderson et al., 2010; Liddle et al., 2001; Szapocznik et al., 1989; Valdez et al., 2013).

The Family Effectiveness Training (FET) clinical treatment is an intervention used to reduce drug use in at-risk adolescents through therapy sessions meant to target maladaptive family interactions and develop strategic plans to address intergenerational and intercultural conflicts seen typically with Hispanic families. This use of this treatment in Szapocznik et al., (1989) found the FET to be significantly effective in improving family functioning, adolescent self-concept, and reducing adolescent problem behaviors compared to the control treatment. Additionally, participants in this treatment group were found to maintain these behavioral changes at a 6-month follow-up. Similarly, the Brief Strategic Family Therapy (BSFT) is a clinical treatment reducing problem behaviors through addressing family function in racial and ethnic minorities as understood by cultural values such as strong interdependence with family and extended family. In a sample of gang-affiliated Mexican American adolescents, BSFT was found to reduce parental reports conduct problems such as conduct, impulsivity, and hyperactivity as well as the frequency of alcohol use in a 30-day period at a 6-month follow-up (Valdez et al., 2013). The Multidimensional Family Therapy (MDFT) intervention is a clinical treatment aimed at reducing drug use and behavioral problems through the examination of not simply individual characteristics but family interactions that are found to typically be associated with the development of these negative outcomes. Henderson et al. (2010) demonstrated the

effectiveness of MDFT in two samples of ethnic minorities, an urban sample of adolescents and incarcerated juveniles. In the first sample, significant treatment effects for participants labeled high drug use severity were found with participants in the MDFT treatment demonstrating significant decrease in substance use compared to the control group. Similar results were found with the incarcerated sample. Specifically, participants labeled as high frequency stable in substance use were significantly impacted by the MDFT treatment on substance use frequency compared to the control.

Focus on family and strengthening familial connections have been seen to influence change in behavior, cognitions, and health. Approaches taken to improve behavioral problems such as the aforementioned studies could be beneficial for combatting racial battle fatigue as a result for the experience of racial-ethnic microaggressions and other forms of discrimination.

Aims of the Current Study

The current study sought to examine the effect of racial-ethnic socialization practices, specifically seeking familial support as a result of experienced racial-ethnic microaggressions. It is evident that familism and racial-ethnic socialization practices contribute to well-being across several psychological, physiological, and behavioral areas, although few studies have established causal relationships between the variables of interest. The current study investigated the following hypotheses to contribute to the growing body of literature examining these mechanisms and their relationships to one another as well as provide knowledge on the reliability of methodological tasks such as stress induction and imaginal exercises.

Aim 1: To provide support for the use of a racially-based stress induction task to induce stress in college students of color.

Hypothesis 1.a: Self-reported stress was hypothesized to be significantly higher from Baseline (pre-stress induction) to Time 1 (post-stress induction) for individuals in the experimental condition.

Hypothesis 1.b: No significant difference between self-reported stress scores was hypothesized from Baseline to Time 1 for participants in the control condition.

Hypothesis 1.c: A significant difference in self-reported stress was hypothesized between the experimental and control conditions following the stress induction task, such that participants in the experimental condition would report significantly higher stress levels than participants in the control conditions.

Aim 2: To provide support for the use of a familial imaginal exercise in lowering the stress responses of college students of color following a racially-based stressor.

Hypothesis 2.a: Self-reported stress was hypothesized to be significantly lower from Time 1 (post-stress induction) to Time 2 (post-intervention) for individuals in the experimental condition.

Hypothesis 2.b: No significant difference between self-reported stress scores was hypothesized from Time 1 to Time 2 for participants in the control condition.

Hypothesis 2.c: A significant group-by-condition interaction on self-reported stress was hypothesized following the familial imaginal exercise, such that participants self-reported stress at Time 2 will be significantly lower for participants in the racially-based stress induction task compared to participants in the control condition.

Aim 3: To understand if and to what degree familial attitudes (as measured by the Attitudinal Familism Scale) change as a result of exposure to a familial imaginal exercise.

Hypothesis 3.a: Familial attitudes was hypothesized to be significantly higher from Baseline (pre-intervention) to Time 1 (post-intervention) for individuals in the familial based intervention.

Hypothesis 3.b: No significant differences in familial attitudes was hypothesized from Baseline to Time 1 for participants in the control conditions.

Aim 4: To understand if and to what extent kinship support (as measured by the Kinship Social Support Scale) served as a moderator for the relationship between racial socialization (as measured by the Nondominant Capital Cultural Scale) and racial battle fatigue (as measured by the revised and modified Racial Battle Fatigue Scale).

Hypothesis 4.a: A negative association between racial socialization and racial battle fatigue was hypothesized.

Hypothesis 4.b: Kinship support was hypothesized to moderate the relationship between racial socialization and racial battle fatigue, with higher levels of kinship support significantly strengthening the relationship between racial socialization and racial battle fatigue.

CHAPTER 3

METHOD

Research Design

The current online study proposed an experimental mixed methods design. Variables used for analysis were measured quantitatively. Additionally, a quality check item following the imaginal exercise was implemented to demonstrate accurate completion of the exercise. The primary dependent/outcome variables of interest were state stress responses and familial attitudes (as measured by the VAS and Attitudinal Familism scales), post-stress induction and imaginal exercise tasks, and racial battle fatigue. Independent/predictor variables of the current study included stress condition (Racially-based Stress or Neutral), imaginal exercise (Familial or Self-reflection), and racial-ethnic socialization. Kinship support was investigated as a moderating variable for the present study.

Random assignment for each participant was used for both the racially based stress induction and the imaginal exercise, with participants being randomly assigned to one condition per task. The experimental conditions include the racially-based stress induction tasks and the familial imaginal exercise. The control conditions include the neutral induction task and the self-reflection imaginal exercise. Participants were given baseline state stress and attitudinal familism measures to later examine changes across multiple points in time (following the tasks). Additional self-report questionnaires were counterbalanced and administered following the final repeated measures.

Participants

A total of 339 participants were sampled and recruited using SONA (Georgia Southern University's experimental management system), social media advertisements (i.e., Facebook, Twitter, and Reddit.com), and emails to Multicultural organizations leaders at Georgia Southern

to complete the online study. To be eligible to participate in this study, participants had to identify as a person of color and be over the age of 18. Participants identifying as White non-Hispanic or non-Latino were removed before final analysis. Thus, 194 participants were excluded from the analysis because they identified as White non-Hispanic individuals or did not complete the study in full. Additionally, 52 participants were excluded due to reporting a "0" on the study's vividness assessment for the stress induction task or failing to provide any description for the imaginal exercise quality check. Lastly, five participants were removed for being younger than 18, not being in college, or failing to report their classification.

Eighty-eight participants were included in the final analysis (Women: n = 56; Men: n = 32). Participants were mostly undergraduate students (First year: n = 54, 61.8%; Sophomore: n = 10, 11.2%; Junior: n = 10, 11.2%; Senior: n = 9, 10.1%). Five participants reported being graduate students (n = 3, 3.4%) and other (n = 2, 2.2%). Participants ranged in age from 18 to 41 with an average age of 20.10 (SD = 3.39). Self-reported race for the current study was American Indian/Alaskan Native (n = 3, 3.4%), Asian American (n = 5, 5.7%), African American/Black (n = 51, 58%), Bi/Multicultural (n = 19, 21.6%), Native Hawaiian/Other Pacific Islander (n = 2, 2.3%), and White (n = 7, 8%). One participant failed to report their race. Regarding ethnicity, 22.7% (n = 20) of participants identified as Hispanic or Latino, 75% (n = 66) of participants identified as Not Hispanic or Latino, and 2.3% (n = 2) of participants failed to report their ethnicity.

Individuals enrolled in undergraduate psychology courses involving a research participation requirement had the option to select from several in-person and online studies to complete. Those who decided to participate in this study had the opportunity to earn 1 credit for their participation. Those who did not wish to participate in research had the option to complete

alternative assignments. Individuals who were recruited outside of the SONA system and decided to participate in the research had the opportunity to win a $20 gift card (30 total) through a randomized drawing. Data collection was anonymous to protect anonymity. Prior to data collection, IRB approval was obtained.

Measures and Materials

Demographics

Each participant completed a demographics questionnaire that asked participants to provide information on their age, gender, race/ethnicity, academic classification, and first-year generational status. See Appendix A for a full list of items.

Attitudinal Familism Scale (AFS)

The Attitudinal Familism Scale (Steidel & Contreras, 2003) is an 18-item measure assessing four components of familism: familial support, familial interconnectedness, familial honor, and subjugation of self to family. Participants rated items using a 10-point Likert type scale ranging from 1 (“Strongly disagree”) to 10 (“Strongly agree”). An overall score was calculated by summing all 18 items with higher scores indicating stronger familism attitudes. The original study found the scale to be reliable with a high internal consistency (α = .83). In the current study, the AFS produced scores with adequate consistency for both Baseline (Cronbach’s α = .86) and Time 1 (Cronbach’s α = .89).

Racial Battle Fatigue Scale (RBF scale)

The Revised RBF scale (Franklin et al., 2014) is a 21-item measure that assesses four subscales, including (1) the frequency of racial microaggressions and the (2) psychological, (3) physiological, and (4) general behavioral effects people of color experience because of regular exposure to racial microaggressions. Participants rated items using a 5-point Likert scale ranging

from 1 (“Never”) to 5 (“Often”), indicating how frequently participants believed they had experienced these items. Four subscale scores were calculated by summing their respective items, with higher scores indicating more racial battle fatigue. In the current study, the RRBF produced scores with adequate consistency for all subscales: frequency (Cronbach’s α = .85), psychological (Cronbach’s α = .91), behavioral (Cronbach’s α = .89), and physiological (Cronbach’s α = .88).

The Brief RBF scale (BRBF scale; Tang et al., 2012) is a 41-item measure assessing the three dimensions of racial battle fatigue manifests: psychological, physiological, and substance-related behaviors. For the purposes of this study, only the behavioral dimension of the revised RBF scale was used to assess substance-related behavioral stress responses because of racial microaggressions. Participants responded to the five items of the Substance-related Behaviors subscale using a 5-point Likert type scale ranging from 1 (“Never”) to 5 (“Very Often”). A subscale score was calculated by summing the 5 items, with higher scores indicating more behavioral responses to racial microaggressions. The original study found this subscale to have reliable internal consistency (α = .89) (Tang et al., 2012). In the current study, the BRBF produced a score indicating adequate consistency (Cronbach’s α = .88).

For the purposes of this study, an overall total score for Racial Battle Fatigue (RBFSum) was calculated using the four subscales of the RRBF scale and the one subscale of the BRBF scale to test Aim 4 hypotheses.

Kinship Social Support Scale (KSS scale)

The KSS scale (Taylor et al., 1993) is a 13-item measure that assesses the perceptions of adolescents on the amount of social and emotional support they believe their families receive from adult relatives in the areas of problem-solving, socialization, entertainment, and advice.

Participants rated items using a 4-point Likert-type scale ranging from 1 (“Strongly disagree”) to 4 (“Strongly agree”), with computed scores of 39 or lower classified as low levels of kinship social support, scores ranging between 40-44 being classified as moderate levels of support, and scores of 45 or higher being classified as high levels of support. The original study found the measure to have a reliable internal consistency (α =.72) (Taylor et al., 1993). In the current study, the KSS produces scores with adequate consistency (Cronbach’s α = .87).

Nondominant Capital Cultural Scale (NDCC scale)

The NDCC scale (Sablan, 2019) is a 31-item measure assessing the experiences of school-based discrimination and inequity of students of color through the lens of Critical Race Theory across four forms: Aspirational, Familial, Navigational, and Resistant. For the purpose of this study, only the Familial Capital subscale was used to assess participants’ connections to familial and kinship networks as well as their knowledge of those networks. Participants responded to eight items in this subscale using a 6-point Likert type scale ranging from 1 (“Not at all like me”) to 6 (“Exactly like me”). The original study found this subscale to have high reliability (α = .87). In the current study, the NDCC produces scores with adequate consistency (Cronbach’s α = .88).

Visual Analogue Scale (VAS)

The VAS (Luria, 1975) is a single-item measure assessing participants' state stress levels and was administered to all participants three times throughout the study during (1) baseline after the informed consent, (2) following the stress induction task, and (3) after the imaginal exercise. The item was scored using a 5-point Likert-type scale ranging from 1 (“Very slightly or Not at all”) to 5 (“Very strongly”). See Appendix B for a full list of items.

Stress Induction

Racially-based Stress Induction Task. For those assigned to this condition, a modified guided imagery method (Sinha, 2005) was used as an experimental condition to induce stress related to a personally relevant racially-based event.

For this task, participants were first instructed to describe in detail a recent event in which they experienced stress due to the experience of a racial-ethnic microaggression. Participants were asked to describe thoughts and emotions they felt during the event, as well as indicate physiological responses (e.g., the heart stops, want to smash something, feel like crying) that occurred. See Appendix C for example script construction.

Neutral Grocery Store Induction Task. Participants assigned to this condition, a modified guided imagery method (Sinha, 2005) was used as a control condition related to a personal experience at a grocery store.

For this task, participants described in detail a recent trip to the grocery store. Participants described thoughts and emotions they felt during the event, as well as mark any physiological responses (e.g., the heart stops, want to smash something, feel like crying) that occurred from a list provided. See Appendix D for script details.

Vivid Imagery Assessment. Following the racially-based stress induction task, a single-item Vivid Imagery Assessment was used to assess the vividness in which each participant was able to visualize the guided imagery scene. See Appendix E for the item.

Imaginal Exercise

Familial Imaginal Exercise. Created for the purposes of this study, a 5-minute audio-recorded imaginal exercise guided participants through a visualization procedure. Throughout the audio-recording, participants were prompted so that participants were engaged in the exercise to maximize the effect of this task. Participants randomly assigned to this condition were

instructed to imagine speaking to a close family member who they would go to, to discuss the scene they completed for the stress or neutral induction task. See Appendix F for scripted instructions for the Familial imaginal exercise.

Self-reflection Imaginal Exercise. Created for the purpose of this study, a 5-minute audio-recorded imaginal exercise guided participants through a similar visualization procedure. Participants randomly assigned to this condition were instructed to reflect on the scene they completed for the stress induction task. See Appendix G for scripted instructions for the Self-Reflection imaginal exercise.

Quality Check Item. A single open-ended question following the completion of the imaginal exercise was constructed to assess the imaginal quality of the activity for each participant. See Appendix H for the item.

Procedures

Students at Georgia Southern were able to register for the current study through SONA, which was administered online via Qualtrics, and students recruited through social media advertisement or Reddit were presented a link to the current study. Upon opening the study, participants were randomly assigned to one of four conditions: (1) Racially-based Stress Induction and Familial Imaginal Exercise, (2) Racially-based Stress Induction and Self-Reflection, (3) Neutral Induction and Familial Imaginal Exercise, (4) Neutral Induction and Self-reflection.

Once assigned, participants began the study by reading and signing the informed consent. Following the consent, a demographics questionnaire was administered so that individuals who identify as White Non-Hispanic/Latino were removed before participating. Upon completion of these materials, participants completed the VAS and Attitudinal Familism Scale for a baseline

assessment. Following these questionnaires, participants were asked to complete a script construction by hand for the stress induction task. After completing this task, participants were re-administered the VAS (T1). Once completed, participants were then presented with instructions to listen to an audio recording for a guided imaginal exercise--either familial based or self-reflection, depending on their assigned condition. Following the completion of this task, participants completed a quality-check item then were administered the VAS (T2) and Attitudinal Familism Scale (T1) for a final time. Lastly, participants were asked to complete a series of questionnaires, presented in random order for counterbalancing purposes, including both RBF scales (brief and revised), KSS scale, NDCC scale.

After all measures were completed, all participants were instructed to listen to a brief 3-minute relaxation audio, to reduce any stress created as a result of participating in the study. Upon completion of this final task, participants were debriefed on the purpose of the study and awarded participation credit for their time if recruited via SONA or had the opportunity to be enrolled in the drawing if recruited via social media advertisement or Reddit. The average completion time of the study was 36 minutes. See Appendix I for visual flowchart of procedures.

Statistical Plan

A series of descriptive statistics to analyze the demographics of the sample including sex, classification, race, and ethnicity were conducted to provide general knowledge of sample characteristics. Preliminary analysis consisting of Pearson's correlation analyzed the nature of relationships among key variables: racial socialization (as measured by Nondominant Capital Cultural Scale), racial battle fatigue (as measured by the revised and modified Racial Battle Fatigue Scale), and kinship support (as measured by the Kinship Social Support Scale). Additionally, attention checks were conducted to provide general knowledge of task efficacy. To

address effectiveness of the stress induction an independent-samples t-test assessed self-reported vividness induction scores.

Following these preliminary analyses, two separate mixed model ANOVAs were used to examine differences in state stress levels across multiple time points. The first ANOVA, a 2 (stress induction) x 2 (imaginal exercise) x 3 (Baseline, Time 1, and Time 2), to assess changes in self-reported stress levels as assessed by the Visual Analogue Scale (Aim 1 & 2). A second ANOVA, a 2 (stress induction) x 2 (imaginal exercise) x 2 (Baseline and Time 1), compare changes in self-reported familial attitudes as assessed by the Attitudinal Familism Scale (Aim 3). Stress induction type and imaginal exercise type served as between-subjects factors for both analyses. Change in stress or attitude responses over time served as the within-subject factor.

The Hayes (2021) PROCESS macro for moderation analysis was used to determine the extent to which kinship support moderates the association between racial socialization and racial battle fatigue (Aim 4). Variables were centered in PROCESS during the moderation analysis, and a single total score was calculated by summing the four RRBF and one BRBF subscales, representing overall racial battle fatigue in participants within the model.

CHAPTER 4

RESULTS

Preliminary Analysis

Preliminary analyses consisting of Pearson's correlation yielded valuable information on the relationships between variables and subscales used in the current study. A number of significant associations between baseline VAS and other variables were found including an association with Racial Battle Fatigue Sum $r(76) = .31$, $p = .007$. A significant association was found between Baseline Familial Attitude and Kinship Social Support, $r(84) = .27$, $p = .012$. Additionally, Baseline Familial Attitude were found to be significantly correlated to racial-ethnic socialization, $r(81) = .43$, $p < .001$.

Unexpectedly, a significant correlation between Racial-Ethnic Socialization and Racial Battle Fatigue sum were not found in the current study, $r(77) = -.06$, $p = .63$., although, a significant association was found between Kinship Social Support and Racial-Ethnic Socialization, $r(82) = .68$, $p < .001$. Additionally, a negative association was found between Kinship Social Support and Racial Battle Fatigue frequency, $r(81) = -.24$, $p = .031$. Table 1 includes the means and standard deviations for each of these variables and sub-scales, and Table 2 provides full correlational results.

Additionally, a one-way ANOVA was used to examine baseline differences for VAS and Familial Attitudes across the study's four conditions to determine if there was an effect of random assignment. The ANOVA did not yield a significant main effect of state stress, $F(3, 83) = .072$, $p = .975$, thus demonstrating no differences in state stress between groups prior to the study's experimental tasks. Table 3 includes the means and standard deviations for baseline VAS scores across the four conditions. A second one-way ANOVA was used to examine baseline

differences for Familism Attitudes across the study's four conditions. The ANOVA did not yield a significant main effect of familism attitudes, $F(3, 82) = .779$, $p = .509$, thus demonstrating no differences in baseline familism attitudes between groups prior to the study's experimental tasks. Table 4 includes the means and standard deviations for baseline Familism Attitude scores across the four conditions.

Table 1

Means and Standard Deviations from Preliminary Analysis

Variable	*M*	*SD*	*Minimum*	*Maximum*
Kinship Social Support	36.38	7.04	16.00	48.00
Racial-Ethnic Socialization	3.88	1.16	1.00	6.00
Racial Battle Fatigue Sum	13.29	3.37	5.00	22.44
Racial Battle Fatigue Frequency	2.91	0.82	1.00	5.00
Racial Battle Fatigue Psychological	3.26	0.95	1.00	5.00
Racial Battle Fatigue Behavioral	3.17	1.2	1.00	5.00
Racial Battle Fatigue Physiological	2.62	1.11	1.00	5.00
Racial Battle Fatigue Substance Use	1.52	0.82	1.00	4.00
VAS Baseline	2.37	1.07	1.00	5.00
AFS Baseline	5.53	1.28	2.33	8.14

Table 2

Intercorrelations from Preliminary Analysis

	1	2	3	4	5	6	7	8	9	10
1. Kinship Social Support	--									
2. Racial-Battle Fatigue Sum	0.68**	--								
3. Racial-Ethnic Socialization	-0.16	-0.06	--							
4. Racial Battle Fatigue Frequency	-0.24**	0.66**	-0.06	--						
5. Racial Battle Fatigue Psychological	-0.16	0.73**	-0.16	0.67**	--					
6. Racial Battle Fatigue Behavioral	-0.15	0.76**	0.04	0.20	0.32**	--				
7. Racial Battle Fatigue Physiological	-0.05	0.78**	0.10	0.25*	0.37**	0.65**	--			

8. Racial Battle Fatigue Substance Use	0.06	0.54**	0.17	0.31**	0.17	0.20	0.32**	--		
9. VAS Baseline	-0.11	0.31**	0.02	0.24*	0.38**	0.20	0.28	0.20	--	
10. AFS Baseline	0.27*	-0.10	0.43**	0.08	-0.20	-0.05	-0.04	0.15	-0.05	--

**Correlation is significant at the 0.01 level (2-tailed)

*Correlation is significant at the 0.05 level (2-tailed)

Table 3

Means and Standard Deviations from Baseline VAS Scores Across Four Groups

Condition	*M*	*SD*	*N*
1 (Racially-based Stress Induction and Familial Imaginal Exercise)	2.32	0.95	25
2 (Racially-based Stress Induction and Self-Reflection Imaginal Exercise)	2.44	1.25	18
3 (Grocer Store Stress Induction and Familial Imaginal Exercise)	2.41	1.18	22
4 (Grocery Store Stress Induction and Self-Reflection Imaginal Exercise)	2.32	1.00	22

Table 4

Means and Standard Deviations from Baseline AFS Scores Across Four Groups

Condition	*M*	*SD*	*N*
1 (Racially-based Stress Induction and Familial Imaginal Exercise)	5.78	1.18	25
2 (Racially-based Stress Induction and Self-Reflection Imaginal Exercise)	5.34	1.42	19
3 (Grocer Store Stress Induction and Familial Imaginal Exercise)	5.30	1.39	22
4 (Grocery Store Stress Induction and Self-Reflection Imaginal Exercise)	5.66	1.16	20

Stress Induction Manipulation Check.

To investigate the effectiveness of the mood induction, the study examined self-reported scores on vividness assessment. Participants who reported the induction vividness to be zero were removed prior to the statistical analysis. The sample mean for the vividness assessment was found to be $M = 7.19$ ($SD = 2.03$) indicating an average vividness induction for the current sample. An independent sample t-test was used to examine group differences in vividness based on stress induction tasks and found no group differences, $t(86) = -1.32$, $p = .718$. As expected, participants in the racially-based stress induction task ($M = 7.48$, $SD = 2.05$) did not differ significantly in their vividness assessment scores compared to participants in the neutral condition ($M = 6.91$, $SD = 2.00$). These non-significant findings indicate no differences in vividness based on stress induction task such that all participants indicated relatively similar vividness scores for the task completed.

Primary Analyses

Aims 1 & 2 (2x2x3 ANOVA).

To test whether state stress levels would differ depending on group-by-condition, (i.e., racially-based stress induction and familial imaginal exercise, racially-based stress induction and self-reflection imaginal exercise, neutral induction and familial imaginal exercise, or neutral induction and self-reflection imaginal exercise) across time, a 2 (stress induction) x (imaginal exercise) x 3 (time) mixed model ANOVA was conducted. Table 5 includes means and standard deviations for the state stress levels as measured by the Visual Analogue Scale across conditions over time. Tests of statistical assumptions were met for Levene's test and Box's test of equality of covariance matrices.

Contrary to predictions, a significant main effect of stress induction was not found, $F(1,83) = 1.24$, $p = .269$, partial $\eta^2 = .02$ indicating that mean state stress scores for participants in the racially-based stress induction and the control induction task did not significantly differ failing to support *Hypothesis 1a-c*. Additionally, a significant main effect of the imaginal exercises was also not found, $F(1,83) = 0.69$, $p = .408$, partial $\eta^2 = .01$, indicating that mean state stress scores for participants in the familial and the self-reflection imaginal exercise task did not significantly differ thus failing to support the study's predictions in *Hypothesis 2a-b*. Unexpectedly, a significant main effect of time was found, $F(2,166) = 3.25$, $p = .04$, partial $\eta^2 = .04$, such that state stress level mean scores across the three time points (i.e., baseline, Time 1, and Time 2) significantly differed from each other. A Bonferroni pairwise comparison revealed significant differences between Time 1 and Time 2, with Time 1 ($M = 2.51$, $SD = .12$) state stress scores being significantly higher than state stress scores at Time 2 ($M = 2.26$, $SD = .12$). Lastly, a significant three-way interaction between stress induction, imaginal exercise, and time was non-significant, $F(2,166) = .02$, $p = .984$, partial $\eta^2 = .000$. Suggesting that differences in state stress level means, as measured by the Visual Analogue Scale, across time as result of group-by-condition combinations was not significant, thus failing to confirm the present study's *Hypothesis 2c*. Figure 1 presents VAS mean scores for each of the four conditions at Baseline, Time 1, and Time 2.

Table 5

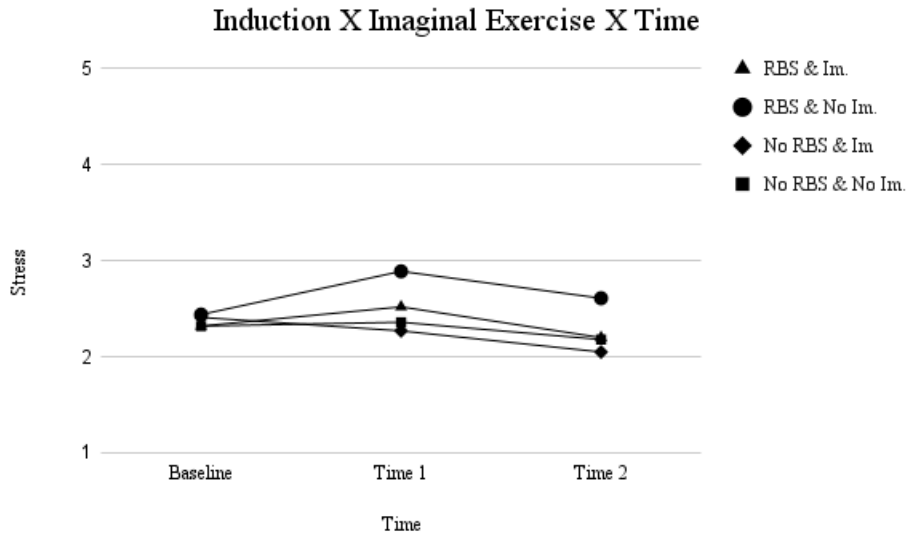
Means and Standard Deviations for VAS across Four Groups over Time

Time	*Condition*	*M*	*SD*	*N*
Baseline	1	2.32	0.95	25
	2	2.44	1.25	18
	3	2.41	1.18	22
	4	2.32	1.00	22
Time 1	1	2.52	1.00	25
	2	2.89	1.08	18
	3	2.27	1.02	22
	4	2.36	1.09	22
Time 2	1	2.20	1.08	25
	2	2.61	1.15	18
	3	2.05	1.21	22
	4	2.18	1.05	22

Note: 1 (Racially-based Stress Induction and Familial Imaginal Exercise); 2 (Racially-based Stress Induction and Self-Reflection Imaginal Exercise); 3 (Grocer Store Stress Induction and Familial Imaginal Exercise); 4 (Grocery Store Stress Induction and Self-Reflection Imaginal Exercise)

Figure 1

Mean Scores for VAS across Time



Aim 3 (2x2x2 ANOVA).

To test *Hypotheses 3a* and *3b* and whether familism attitudes would differ depending on group-by-condition, (i.e., racially-based stress induction and familial imaginal exercise, racially-based stress induction and self-reflection imaginal exercise, neutral induction and familial imaginal exercise, or neutral induction and self-reflection imaginal exercise) across time, a 2 (stress induction) x (imaginal exercise) x 2 (time) mixed model ANOVA was conducted. Table 6 includes means and standard deviations for the familism attitudes as measured by the Attitudinal Familism Scale across conditions over time. Tests of statistical assumptions were met for Levene's test.

A significant main effect of stress induction was not found, $F(1,72) = 0.19$, $p = .890$, partial $\eta^2 = .00$. A significant main effect of the imaginal exercises was also not found, $F(1,72) = 0.21$, $p = .648$, partial $\eta^2 = .00$. A significant main effect of time was found, $F(1,72) = 10.39$, $p = .002$, partial $\eta^2 = .13$, such that familism attitudes scores at baseline ($M = 5.51$, $SD = 1.29$) and Time 1 ($M = 5.80$, $SD = 1.41$) significantly differed from each other.

Contrary to the study's predictions, non-significant three-way interaction between stress induction, imaginal exercise, and time was not found, $F(1,72) = .65$, $p = .423$, partial $\eta^2 = .001$. Such that differences in familial attitude scores as measured by the Attitudinal Familism Scale occurred across time, were not found, thus failing to confirm the study's predictions. Figure 2 presents AFS mean scores for each of the four conditions at Baseline and Time 1.

Table 6

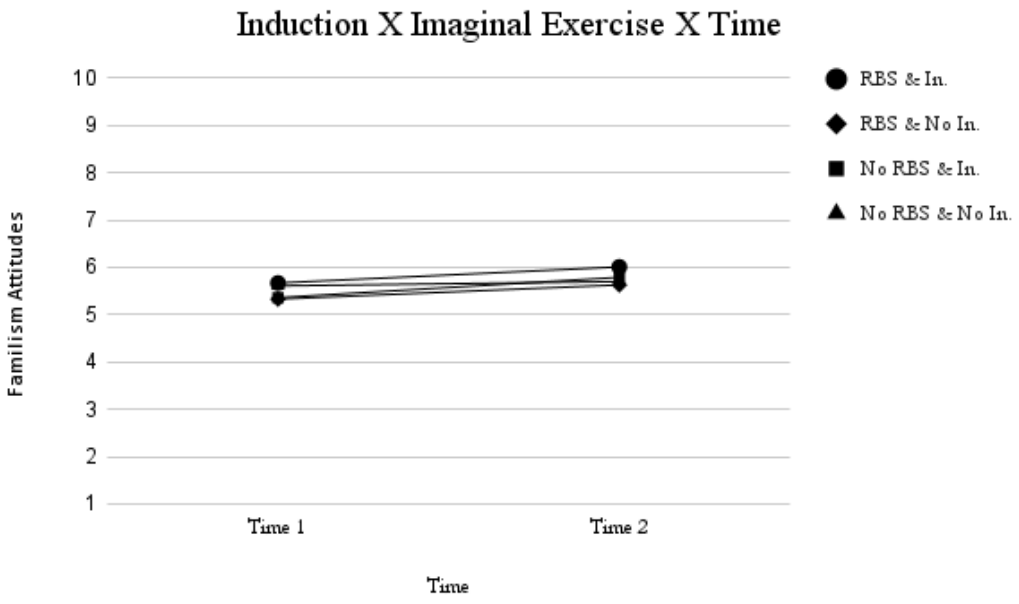
Means and Standard Deviations for AFS across Four Groups over Time

Time	*Condition*	*M*	*SD*	*N*
Baseline	1	5.67	1.14	22
	2	5.33	1.54	15
	3	5.36	1.43	20
	4	5.61	1.17	19
Time 1	1	6.01	1.28	22
	2	5.63	1.59	15
	3	5.79	1.53	20
	4	5.70	1.36	19

Note: 1 (Racially-based Stress Induction and Familial Imaginal Exercise); 2 (Racially-based Stress Induction and Self-Reflection Imaginal Exercise); 3 (Grocer Store Stress Induction and Familial Imaginal Exercise); 4 (Grocery Store Stress Induction and Self-Reflection Imaginal Exercise)

Figure 2

Mean Scores for AFS across Time

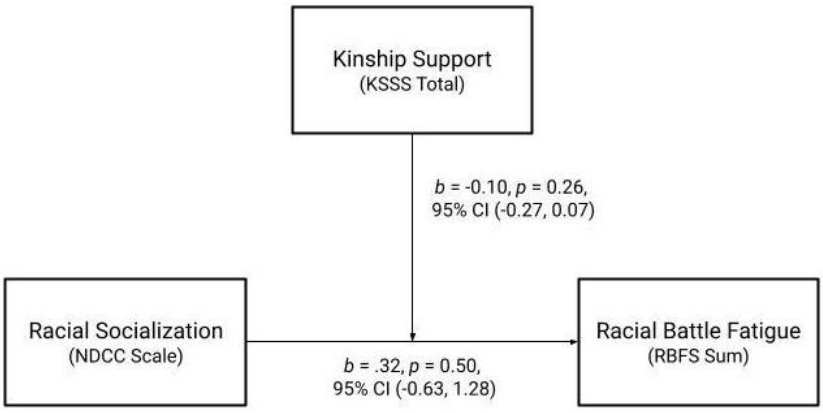


Aim 4 (Moderation Analysis).

Using the Hayes (2021) PROCESS macro for moderation analysis, a multiple regression model was tested to investigate whether the association between racial-ethnic socialization and racial battle fatigue was moderated by kinship social support. Unexpectedly, these variables accounted for a non-significant amount of variance (5% total) in racial battle fatigue scores, R^2 = .05, $F(3,71) = 1.18$, $p = .32$. Additionally, these results indicate that racial-ethnic socialization did not relate to racial battle fatigue, and the level of kinship social support did not moderate this relationship contrary to the study's *Hypotheses 4a-b*. Figure 3 presents the unstandardized beta, standard error, and confidence intervals for the moderation model.

Figure 3

Moderation Model for Kinship Support on Racial Socialization and Racial Battle Fatigue



CHAPTER 5

DISCUSSION

Cultural principles such as familism alter the lived experiences of racial-ethnic minorities. Specifically, familisms' values of strong family relationships and interdependence are understood to establish strong social support networks, thus impacting psychological well-being, physiological well-being, and behaviors. Additionally, parental racial-ethnic socialization practices further instill these values and influence well-being similarly to familism. Taken together, the benefits of these mechanisms on racial-ethnic discrimination and microaggressions can be understood to build resilience or even buffer against these negative lived experiences.

The purpose of the current study was twofold: (1) to examine and provide evidence of a causal relationship between familial social support and racial-ethnic microaggressions in a sample of college students of color, and (2) to evaluate a proposed moderation model of kinship support on the relationship between racial-ethnic socialization practices and racial battle fatigue. Unexpectedly, the results of the current study failed to support the proposed hypotheses although a large body of literature has established and identified relations between the study's constructs.

Correlations Among Racial Battle Fatigue, Familism, and Stress

Preliminary analysis revealed significant and non-significant associations between the present study's constructs, providing support for some findings in the literature. Consistent with previous findings, racial battle fatigue in the current study was related to perceived stress, thus indicating the impact of racial-ethnic microaggressions on well-being and providing a basis for a causal relationship (i.e., Franklin et al., 2014; Ong et al., 2013; Quaye et al., 2020). Additionally, the present study examined the protective mechanisms of familism, kinship support, and racial-ethnic socialization on well-being. The results failed to find support for these associations, thus

demonstrating inconsistencies with the literature (i.e., Ayón, 2016; Harris & Molock, 2000; Kawachi & Berkman, 2001). Although these associations were null in the present study, the conceptualization of these constructs perhaps was incorrect. Previous research has demonstrated variances in the conceptualization of these constructs due to factors such as generalizability between racial-ethnic groups and age, providing a plausible explanation for these results and demonstrating a case for further examination.

Effects of a Stress Induction and Imaginal Exercise on Stress

Previous studies have found a causal relationship between racial-ethnic microaggressions and stress (i.e., Gonzales et al., 2002; Ong et al., 2013), familism and well-being (i.e., Campos et al., 2018; Harris & Molock, 2000; McConnell et al., 2019) as well as their association to socialization practices. Through experimental manipulation, Gonzales et al. (2002) found in participants' exam scores, individuals whose exams included commentary on the ability to perform on the current exam based on personal factors significantly underperform on the exam compared to participants who did not receive such comments. Compared to these findings, the current study's use of a stress induction task failed to induce higher state stress thus failing to support the proposed hypotheses. An explanation for these null findings could be due to the methodology of the present study such as the modality of inducing racially-based stress (i.e., in-person versus online) or method of stress induction (i.e., guided imagery vs. standardized test). It is important to note, the current study used personal experiences as the method to induce stress while other researchers used tasks that threatened the individual (e.g., stereotype threat). While the latter method has been successful in past research, the guided imagery methodology has been found to be effective and valid particularly in substance use literature (i.e., Sinha, 2005; Sinha & Li, 2007; Sinha et al., 2009). Typically, the task is administered by a researcher who guides the

participant through the prompts thus allowing for an impactful stress induction. Therefore, the use of this task in an online study perhaps weakened the effectiveness of the racially-based stress induction task.

Additionally, the present study failed to find an effect of the imaginal exercise on stress levels compared to the previous literature which found significant associations between familism, racial-ethnic socialization practices, and well-being. Examining racial-ethnic socialization practices specifically, Taylor et al., (2001) found family closeness and assistance from extended family members to be related to life satisfaction. Based on this literature, a specialized imaginal exercise using values of familism and racial-ethnic socialization practices of kinship support was constructed in an effort to influence changes in self-reported stress. Furthermore, it is important to consider the findings of previous studies examining the effects of these constructs on well-being have most commonly been clinical interventions that typically have involved therapy sessions over a period (e.g., Henderson et al. 2010; Valdez et al., 2013). Similar to the stress induction task, the online administration of the imaginal exercise perhaps minimized the effect of the exercise. Future studies should consider in-person administration of the task to further guide participants through the activity as well as monitor participant attention in the task.

Overall, the current study failed to find any differences in state stress levels affected by group-by-condition assignment across time as hypothesized. Individuals in the racially-based mood induction task and the familial imaginal exercise were hypothesized to report higher state stress levels following the mood induction task and reduced state stress levels following the familial imaginal exercise compared to all other conditions. Although the main aims were not supported, an important finding was that of a positive association between familism and racial-

ethnic socialization practices. Considering the literature and its findings, effectiveness of the methodology could differ depending on modality and administration (i.e., research assistant vs. individual) which warrants further examination and replication.

Effects of an Imaginal Exercise on Familial Attitudes

Research on the effects of positive familial attitudes has demonstrated positive results on well-being. Although fewer studies have examined factors which influence familial attitudes, exploration is necessary in order to identify factors of influence and understand factors that promote different attitudes. Additionally, experimentation with familial attitudes has been slow, although McConnell et al., (2019) examined familial properties and their effect on well-being through the manipulation of the participants' perception of familial properties. It was found that altering the participants' perception to be more positive toward their family was found to improve well-being. Compared to these findings, the use of the imaginal exercise failed to alter familial attitudes as hypothesized. As discussed previously, the present's study format perhaps diluted the effectiveness of the stress induction task and imaginal exercise thus failing to manipulate familial attitudes. Furthermore, previous studies have explained familial attitudes in racial-ethnic minorities to be impacted by factors such as acculturation and family cohesion (Lee et al., 2005; Meja et al., 2021). An additional explanation for these findings could be due to characteristics of the current sample that were not considered as covariates (i.e., classification and first-generation students). Although the current study failed to find support for the manipulation of familial attitudes, previous research has been successful. Further testing of different methodologies and consideration of individual factors is required to order to understand the effects on well-being for individuals of color thus informing practice and intervention.

Kinship Support

The current study also examined the role of kinship support on the relationship between racial-ethnic socialization and racial battle fatigue. As explained by McCreary et al. (2006), racial-ethnic socialization practices are imperative to children of color such that families that do not socialize their children may leave them vulnerable to stress and inability to adjust to life events. In a study conducted by Bynum et al., (2007), specific socialization messages and their relation to experiences with discrimination and psychological stress were examined. It was found that messages pertaining to the use of cultural resources such as extended familial support, cultural pride, and spirituality moderated this relationship. Unlike these results, our study failed to find an association between racial-ethnic socialization and racial battle fatigue, and support for the kinship social support moderation model as hypothesized. Additionally, the moderation model's proportion of variance was found to be low considering the strong positive association found between kinship support and racial-ethnic socialization. Thus, these findings should be further considered for future models as the current model did not fit the data perhaps due to the ordering of predictor variables.

Although the results for the current study did not find support for the relationship between racial-ethnic socialization and racial battle fatigue outcomes, much research has found support for this association (i.e., Hughes et al., 2006; Reynolds & Gonzales-Backen, 2017). These findings perhaps could be due to differences in the operationalization of variables. Specifically, the operationalization of racial-ethnic socialization varies across scales (i.e., generalizability, subscales) such that measures are not always generalizable to other minority groups or subscales depicting message type vary. Evidently, this is problematic in examining racial-ethnic socialization practices as researchers need to consider individual factors of interest such as age, race/ethnicity, and specific socialization practices. Additionally, research examining

the influence these practices have on individuals of color typically have examined the areas of racial battle fatigue separately (i.e., psychological, behavioral, and physiological) in comparison to the current study. In their review of the literature, Hughes et al., (2006) identifies youth outcomes associated with racial-ethnic socialization practices such as self-esteem, academic outcomes, psychosocial outcomes, and coping strategies. To further understand the relationship of racial-ethnic socialization practices and racial battle fatigue, these conditions should be considered.

Limitations

The current study was not without limitations. The most significant limitation was the inability to effectively induce stress and subsequently reduce stress through an imaginal exercise. The most likely cause of these results could be due to the current study's use of an online survey. Previous studies using the Sinha (2005) mood induction task have demonstrated success, but many of these results came from laboratory studies with trained research assistance guiding participants through the task (e.g., Sinha & Li, 2007; Sinha et al., 2009). An online study leaves room for extraneous variables as such future studies administering these tasks would benefit from being completed in a laboratory setting with trained research assistants. Participants in the current study were asked to report the location at which they were completing the study as well as the device used to help determine the reliability of the data. It could be possible that lack of control, guidance or clear instruction in an online environment could have led to reduced potency and may have been the determinant for the number of failed vividness assessment checks and quality checks for both tasks.

Additionally, the final sample size of the current study was small and drastically reduced due to a few factors (i.e., Non-Hispanic White participants, failure complete the study, and

failing quality checks). The use of these exclusionary criteria perhaps inadvertently selected a subsample and should be considered as a limitation. To reach moderate power, the study would require a sample of roughly 300 participants, but the final sample size used in the study's analysis was 88 and future studies should obtain a larger sample size to detect potential effects of the study's experimental manipulations.

Lastly, it should be noted that the current study did not include attention checks throughout the battery of questionnaires provided to all the participants. Completion of the study took on average 36 minutes for participants, and the procedural flow of completing multiple tasks beforehand could have resulted in fatigue and disinterest in actively completing the final questionnaires. Future research should include these attention checks throughout their measures to further validate possible findings as well as randomize the presentation of tasks such that a portion of participants receive questionnaires first followed by the study's tasks or the study's tasks first followed by the questionnaires.

Future Directions and Conclusions

Overall, examination of the protective mechanisms against racial discrimination is warranted to provide information of the intricacies of cultural values and practices that may buffer against negative physical and mental health outcomes and inform better treatment and care for college students of color. Specifically, future researchers should continue using experimental designs to provide evidence of causal relationships between the constructs of familism, racial-ethnic socialization, and racial battle fatigue.

The current study collected Qualitative data through stress induction and imaginal exercise tasks, yet for the purpose of the study were not examined. One could argue that future research should include qualitative methods to confirm the validity of relevant scales and

interventions based on the lived experiences, attitudes, and beliefs of these individuals. Although similarities in experiences between racial-ethnic groups is true, there are also several differences due to individual factors such as ethnicity, gender, and generational status thus understanding, and consideration of these differences is vital to avoiding generalizations between groups. The use of qualitative methods to examine these research questions could further insight into the lived experiences of these individuals as following the recent events of the many activist movements seen across the country a shift in experiences, attitudes, and thoughts could be seen.

To conclude, the lived experiences of racial-ethnic minority college students regarding racial-ethnic microaggressions and discrimination is well-known; however slow progress is being made in understanding the mechanisms that create resilience, grit, and perseverance to move forward and succeed in settings that may keep them from doing so. Emerging adulthood is a critical time in which researchers should examine the relationships between familism, socialization practices, and racial battle fatigue and the effects of these constructs on well-being and other behaviors.

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APPENDIX A

DEMOGRAPHICS SURVEY

Instructions: Please read and answer the following questions.

What is your age?

What is your gender?

- Male
- Female
- Non-binary/ third gender
- Prefer not to say

What is your ethnicity?

- Hispanic or Latino
- Not Hispanic or Latino

What is your race?

- American Indian/Alaska Native
- Asian
- Native Hawaiian or Other Pacific Islander
- Black or African American
- White
- More than one race
- Other

What is academic classification?

- Freshman
- Sophomore
- Junior
- Senior
- Graduate
- Other

Are you a first-generation college student?

- Yes
- No

How are you completing this study?

- Computer/table
- Cell phone

Please provide some information on where you are completing this survey (e.g., bus, bedroom, library, etc.)

APPENDIX B

VISUAL ANALOGUE SCALE (VAS)

Instructions: Presented is a statement that asks about your current emotional state. Please read the statement and rate to what degree you feel this emotion.

Rating Scale:

(1) Very slightly or Not at all
(2) Slightly
(3) Neutral
(4) Strongly
(5) Very Strongly

Using the scale above, how stressed do you feel at this moment?

Appendix C

RACIALLY-BASED STRESS INDUCTION TASK SCRIPT CONSTRUCTION

Scene Construction Questionnaire

We would like you to **describe a racially-based situation you found most <u>stressful</u>.** These would be situations that made you **sad, mad or upset and in which, at that moment, you felt as if you could not do much to change it**. These situations could like:

Microassaults: Verbal or nonverbal attacks that are derogatory in nature meant to hurt the victim.
Microinvalidations: Comments that negate the experience, thoughts, or emotions of the victim.
Microinsults: Rude, insensitive, and demeaning comments meant to demean the racial heritage or identity of the victim.

Choose a situation in which you are or were involved. Sometimes it is difficult to think of a stressful situation "on the spot." It may help to close your eyes and try to imagine yourself in the situation. While you are imagining the situation, try to generate the same sensations and feelings you experienced as if you were actually in the situation.

While this image is vivid in your memory, please describe where you were in detail. What was the setting (i.e., campus, work, other public setting):

_____

_____

Please describe who was there in detail:

_____

_____

Please describe what you were doing in detail:

_____

_____

Please describe how things looked in detail:

_____

_____

Describe any more details (e.g., thoughts feelings, and sensations) you noticed or felt during this racially-based stressful situation:

_____

_____

Reflecting on the experience you just described, please describe any bodily sensations you noticed or felt during this trip to the grocery store (e.g., heart stops, clenched fist, butterflies in stomach, eye twitches, warm excitement, etc.):

_____

_____

Appendix D

NEUTRAL GROCERY STORE INDUCTION TASK SCRIPT CONSTRUCTION

Scene Construction Questionnaire

Instructions: We would like you to describe a trip to the grocery store. Choose a situation in which you are or were involved. It may help to close your eyes and try to imagine yourself in the situation. While you are imagining the situation, try to generate the same sensations and feelings you experienced as if you were actually in the situation.

While this image is vivid in your memory, please describe where you were in detail. What did the grocery store look like:

_____

_____

Please describe the people who were there in detail:

_____

_____

Please describe what you were doing in detail:

_____

_____

Please describe how things looked in detail. How did the grocery store isles and other sections look like:

_____

_____

Describe any more details (e.g., thoughts feelings, and sensations) you noticed or felt during this trip to the grocery store:

_____

_____

Reflecting on the experience you just described, please describe any bodily sensations you noticed or felt during this trip to the grocery store (e.g., heart stops, clenched fist, butterflies in stomach, eye twitches, warm excitement, etc.):

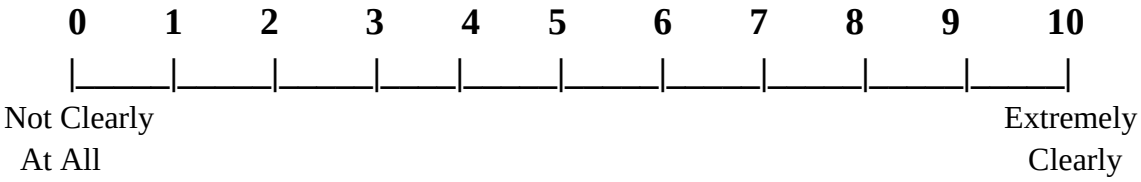
_____

_____

APPENDIX E

VIVID IMAGERY ASSESSMENT SCALE

Instructions: Please rate how clearly you were able to imagine this scene:



APPENDIX F

FAMILIAL IMAGINAL EXERCISE AUDIO SCRIPT

Family Intervention Instructions: We would like you to imagine a scene in which you are speaking to a family member who you would be comfortable with discussing the activity you just completed. Close your eyes and take a deep breath. Imagine the setting in which you would hold this conversation, picture your family member sitting across from you or beside you.

Imagine how you would feel coming to them to discuss the audio, imagine how the conversation would go with this family member, imagine how they would respond. Take your time, visualize the conversation.

Slowly begin to bring the conversation to an end. Imagine how the conversation with this family member ends, how would you feel after this conversation. Take a deep breath, and click the arrow button to proceed to the next activity.

APPENDIX G

SELF-REFLECTION IMAGINAL EXERCISE AUDIO SCRIPT

Self-Reflection Instructions: For this part of the study, take a moment to think about the activity you just completed.

Close your eyes and take a deep breath. Imagine the scene from beginning to end. Visualize the individuals involved, the setting, the emotions felt by the individuals. Take your time.

Slowly begin to bring the scene to a stop. Take a deep breath, and click the arrow button to proceed to the next activity.

APPENDIX H

QUALITY CHECK ITEM

Instructions: In the following area, please briefly describe in a few words what you imagined for the imaginal exercise.

APPENDIX I

PROCEDURE FLOW CHART