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GENDERED RACISM AND RISKY SEXUAL BEHAVIOR AMONG AFRICAN AMERICAN COLLEGE WOMEN: A MODERATED MEDIATION STUDY OF PSYCHOLOGICAL DISTRESS, ALCOHOL USE, SAFE SEX PRACTICES, AND ALCOHOL PROTECTIVE BEHAVIORAL STRATEGIES

by

Danielle Patrice Frilot Cottonham

A Dissertation
Submitted to the Graduate School,
the College of Education and Psychology,
and the Department of Psychology
at The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

GENDERED RACISM AND RISKY SEXUAL BEHAVIOR AMONG AFRICAN AMERICAN COLLEGE WOMEN: A MODERATED MEDIATION STUDY OF PSYCHOLOGICAL DISTRESS, ALCOHOL USE, SAFE SEX PRACTICES, AND ALCOHOL PROTECTIVE BEHAVIORAL STRATEGIES

by Danielle Patrice Frilot Cottonham

August 2018

Approved by:
Dr. Michael Madson, Major Professor Professor, Psychology
Dr. Bonnie Nicholson, Committee Member Associate Professor, Psychology
Dr. Richard Mohn, Committee Member Associate Professor, Educational Research and Administration
Dr. Donald Sacco, Committee Member Assistant Professor, Psychology
Dr. D. Joe Olmi Chair, Department of Psychology
Dr. Karen S. Coats Dean of the Graduate School

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ABSTRACT

GENDERED RACISM AND RISKY SEXUAL BEHAVIOR AMONG AFRICAN

AMERICAN COLLEGE WOMEN: A MODERATED MEDIATION STUDY OF

PSYCHOLOGICAL DISTRESS, ALCOHOL USE, SAFE SEX PRACTICES, AND

ALCOHOL PROTECTIVE BEHAVIORAL STRATEGIES

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August 2018

Investigation of the effects of gender racism (i.e., discrimination based on race and gender) among African American college women is limited, which is concerning considering the impact this specific type of discrimination may have on mental health and coping behaviors among African American college women. African American students who have experienced racial discrimination and college women who have experienced sexual discrimination experience increased levels of psychological distress (i.e., symptoms of depression and anxiety). Further, harmful alcohol use is a common coping strategy for psychological distress among college students and has been linked to increased risky sexual behavior among African American college women. The present study explored the relationship between experiences of gendered racism, psychological distress, harmful alcohol use, and risky sexual behavior among African American college women at a mid-sized, Southern, and predominantly White institution. Additionally, the present study investigated factors associated with less harmful alcohol use and risky sexual behavior among AACW, specifically the moderating effects of alcohol protective behavioral strategies (PBS-A) and safe sex practices. Psychological distress and harmful alcohol use did not sequentially mediate the relationship between gendered racism and

risky sexual behavior; however, symptoms of anxiety and harmful alcohol use uniquely mediated the relationship between gendered racism and risky sexual behavior. PBS-A and safe sex practices did not moderate the predicted sequential relationship. Clinical and research implications will be discussed.

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DEDICATION

This document is dedicated to the African American women at The University of Southern Mississippi who participated in or contributed to this project, the women of color who shared their experiences and served as the inspiration for this study, and my parents, Danny and Patricia Cottonham, who have always been an unwavering source of love, support, and wisdom.

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CHAPTER I - INTRODUCTION

Racial and sexual discrimination are common experiences among young adult African Americans and college-aged women in the United States (Barnes & Lightsey, 2005; Fischner & Holz, 2010). Thus far, racial and sexual discrimination among African American young adult women has been studied independently (Moradi & Subich, 2003), so little is known about the cumulative effects of these constructs. However, examining gendered racism (i.e., discrimination based on race and gender; Essed, 1991) more accurately reflects the simultaneous experience of discrimination among African American women – a group that holds a minority status in race and gender (Moradi & Subich, 2003). Very little research has explored the experiences of gendered racism among African American college women (AACW). Furthering research on this specific type of discrimination is important considering the effect experiences of gendered racism may have on the mental health of AACW.

The relationship between experiences of discrimination and increased levels of psychological distress (e.g., symptoms of depression and anxiety) among African American college students has been established (Bentley-Edwards & Chapman-Hilliard, 2015; Chao, Mallinckrodt, & Wei, 2012). Alcohol use, a common activity among college women (Johnston, O'Malley, Bachman, Schulenberg, & Miech, 2015a), is a behavior one may engage in to cope with psychological distress (Obasi, Brooks, & Cavanagh, 2016). This is concerning due to the link between alcohol use and other common maladaptive behaviors among college women, such as risky sexual behavior (Ingersoll, Ceperich, Nettleman, & Johnson, 2008). More specifically, harmful alcohol use (e.g., heavy episodic drinking) predicts risky sexual behavior among AACW (Cottonham, Madson,

Nicholson, & Mohn, 2017). Taken together, the purpose of the present study was to explore the link between experiences of gendered racism, psychological distress, harmful alcohol use, and risky sexual behavior among AACW using the General Strain Theory (Agnew, 1992). Further, to inform prevention and intervention efforts that target maladaptive coping behaviors, researchers in the present study also sought to investigate protective factors associated with lower levels of harmful alcohol use and risky sexual behavior among AACW, such as safe sex practices (e.g., consistent condom use) and use of alcohol protective behavioral strategies (PBS-A; CDC, 2013a; Pearson, 2013).

Theoretical Framework: General Strain Theory

The General Strain Theory (GST; Agnew, 1992) is commonly used to study risky behaviors in minority populations, particularly among African Americans (Jang & Johnson, 2005; Jennings, Piquero, Gover, & Perez, 2009; Walton, Dawson-Edwards, & Higgins, 2015). GST proposes that risky behavior may be a result of stressful experiences that cause negative emotional responses. Agnew (1992) argues that negative emotions can occur because of strain or stress experienced in negative interactions with others or when a negative stimulus is presented. An individual may respond in different ways to cope with negative emotions such as engaging in: 1) cognitive responses (e.g., restructuring negative cognitions), 2) emotional responses (e.g., engaging in maladaptive activities that decrease negative emotions) or 3) behavioral responses (e.g., taking direct action towards the source or cause of negative emotions; physical altercation). African American women may deal with psychological distress by using avoidance and maladaptive coping strategies that are perceived to reduce tension (West, Donocan & Roemer, 2010). Thus, emotional responding is the primary type of coping mechanism

relevant to this study being that harmful alcohol use and risky sexual behavior are activities one may engage in to decrease negative emotions, or psychological distress.

It has been argued that experiences of discrimination are events that evoke negative emotions that greatly impact psychological functioning and wellness (Landrine, Klonoff, Corral, Fernandez, & Roesch, 2006; Pieterse, Carter, Evans, & Walter, 2010). Thus, the GST helps to further conceptualize the relationship between variables in the present study in that experiences of gendered racism may act as stressful interactions that contribute to psychological distress. More specifically, AACW may use emotional responding (i.e., alcohol use, risky sexual behavior) as a form of coping with psychological distress associated with experiences of gendered racism.

Gendered Racism Among African American Women

There is a wealth of literature dedicated to examining the prevalence and experience of racial discrimination among African Americans and sexual discrimination among women. However, the experience of racial and sexual discrimination specifically among African American women may be unique considering the simultaneous minority status in race and gender. Very few studies have sought to investigate discrimination among AACW in a way that accurately captures the concurrent experience of racial and sexual discrimination (Lewis, Mendenhall, Harwood, & Huntt, 2013). Thus, researchers have acknowledged the need to use theoretical perspectives that recognize the effects of multiple types of discrimination experienced by African American women (Moradi & Subich, 2003).

Gendered Racism Theory (GRT; Essed, 1991) is one such perspective that provides a framework to conceptualize and measure experiences of discrimination among

African American women. The theory acknowledges the complexity of concurrent discrimination experienced by African American women based on their minority status in terms of both race and gender. This theory proposes that African American women experience unique forms of racism and sexism based on historical and socially-constructed stereotypes of African American women, such as African American women being perceived as dominant, resilient, abusers of welfare, and sexually promiscuous (Jordan-Zachery, 2009). Based on GRT, the present study focused on gendered racism to more accurately investigate experiences of discrimination among AACW. Although no empirical studies thus far have explored the effects of gender racism on psychological distress and subsequent alcohol use that leads to risky sexual behavior among AACW, studies examining racial and sexual discrimination can provide insight into the relationship gendered racism may have with the variables in this study. Therefore, discrimination is discussed in terms of racial and sexual discrimination separately. Discrimination Among African American College Women

Racial discrimination is defined as actions directed towards a particular group based on race (Nadal, 2011). African American college students experience racism on a regular basis (Swim, Hyers, Cohen, Fitzgerald, & Bylsma, 2003) and perceive the racial climate on college campuses more negatively than White, non-Hispanic students and other ethnic minority groups, such as Asian American students (Pieterese et al., 2010; Thompson, 2002). The sample for the current study was collected from a Predominantly White Institution (PWI; i.e., institutions that has historically consisted of majority White, non-Hispanic students (McCorkle, 2012). Thus, it is relevant to highlight that African American students from PWIs experience significantly more global, institutional, and

individual racism compared to African American students at Historically Black Colleges and Universities (HBCU; i.e., institutions founded for the purpose of educating African American students; Bentley-Edwards & Chapman-Hilliard, 2015 McDonald, 2011).

Although overt forms of racial discrimination continue to occur, the way in which racial discrimination is experienced by ethnic minorities has changed over the years. Specifically, for African Americans, modern researchers argue that after the progress made during the Civil Rights Movement, racism has transitioned from overt acts (e.g., hate crimes, verbal assaults, lynchings; Nadal, 2011) to more covert acts of discrimination (e.g., following an African American around a store, claiming to not see race; Nadal, 2011; Lewis et al., 2013). Although overt forms of discrimination have been deemed more socially unacceptable than they were prior to the Civil Rights Movement (Nadal, 2011; Sue, 2010), racial prejudices and biases continue and they have taken on another form that is subtler and socially acceptable (Lewis et al., 2013; Nadal, 2011). In fact, West and colleagues (2010) found that majority of African American females' experiences of racial discrimination consisted of more subtle, covert forms of racism than overt racism. Therefore, it was important for the current study to capture covert forms of discrimination, such as racial microaggressions, which are subtle verbal, behavioral, or environmental messages that intentionally or unintentionally communicate racial insults towards a specific individual or group of people (Sue et al., 2007).

Similar to racial discrimination, sexual discrimination (e.g., inappropriate sexual advances, sexual demeaning jokes or names) is a common occurrence among women, particularly college women in the United States regardless of race or ethnicity (Choi, Bowleg, & Neilands, 2011; Fischner & Holz, 2010; Lott Asquith, & Doyon, 2001; Nye,

Brummel, & Drasgow, 2009). Sexist jokes, sexist name-calling, and unwanted sexual advances are specific types of sexual discriminatory experiences that are common among women over the course of a lifetime (Lott et al., 2001). However, experiences of sexual discrimination appear to differ based on age. In comparison to women over 30 years of age, women under 30 years of age report more experiences of sexual discrimination (Lott et al., 2001).

Experiences of discrimination can be conceptualized as events that evoke negative emotions which greatly impact psychological functioning and wellness (Landrine et al., 2006; Pieterse et al., 2010). Further, discriminatory experiences can act as stressors that may increase the likelihood of engaging in maladaptive coping behaviors (Zucker & Landry, 2007). Gendered racism may be a unique form of discrimination that negatively affects the psychological well-being of African American college women and contributes to maladaptive coping strategies that can result in various negative consequences. Thus, the purpose of the present study was to examine the sequential link between experiences of gender racism, psychological distress, and use of harmful coping strategies (i.e., alcohol use and risky sexual behavior) among AACW.

Psychological Distress Among African American College Women

Psychological distress (i.e., symptoms of depression and anxiety) appears to be a

factor that influences alcohol use and sexual behavior among young adults (Choi et al.,

2011; Christopher, Ramsey, & Antick, 2013). Although young adults in general

experience a significant amount of distress, college students in particular experience

unique external stressors that increase their risk for psychological distress. In addition to

typical stressors associated with transitioning from adolescence to adulthood, college

students are increasingly vulnerability to stress due to maintaining various responsibilities (e.g., living independently, finances, academics) and adjusting to a new social life (Brougham, Zail, Mendoza, & Miller, 2009; Klonoff, Landrine, & Campbell, 2000). Psychological distress differs among college students in terms of gender. College women experience higher levels of overall stress in comparison to college men (Pedersen, 2012) and are more likely to use maladaptive coping strategies for stress (e.g., avoidance, punishing oneself; Brougham et al., 2009).

In addition to gender, racial differences also exist regarding psychological distress. African American women report more depressive symptoms (e.g., sadness, hopelessness) than White, non-Hispanic women (Schiller, Lucas, Ward, & Peregoy, 2012). Additionally, African American women frequently experience somatic symptoms of anxiety, such as headaches, which is consistent with African Americans being commonly diagnosed with anxiety-related disorders (Himle, Baser, Taylor, Campbell, & Jackson, 2009; U.S. Department of Health & Human Services, 2001).

There has been a call for research to explore the relationship between racial microaggressions and mental health outcomes, such as depression and anxiety (Nadal, 2011). Racism-related stress (i.e., stress specifically related to being a member of a group that is marginalized by the dominant culture; Carter, 2007) predicts psychological distress among African Americans above and beyond general levels of stress (Anglin & Wade, 2007). Further, some researchers have proposed that the link between perceived racial discrimination and health related problems among African Americans may be mediated or moderated by psychological factors (Clark, Anderson, Clark, & Williams, 1999). In a meta-analysis examining the effects of various components of psychological distress

associated with perceived racism, researchers found that symptoms of anxiety and depression had the strongest effect sizes (Pieterse, Todd, Neville, & Carter, 2012).

Similar results have been found among African American college students.

Racism-related stress is linked to various interpersonal (e.g., relating with peers, making new friends), physical health (e.g. poor sleep hygiene, poor diet), and academic related problems (e.g., time management, study skills, adjusting to the university setting) among African American college students, particularly those students who attend PWIs (Chao et al., 2012). African American students who attend PWIs experience higher levels of stress associated with being an ethnic minority than African American students at HBCUs (Bentley-Edwards & Chapman-Hilliard, 2015; Greer & Chwalisz, 2007). Furthermore, rates of anxiety and depression are significantly higher for African American students who attend PWIs and report more experiences of perceived racism (Chao et al., 2012). These findings provide evidence to support the importance of examining racial discrimination and psychological distress among AACW, particularly those at PWIs.

Gender differences have also been established in terms of racism-related stress. In a longitudinal study among African American high school students, the association between racial discrimination and anxiety were found to be stronger for African American women, suggesting that African American women in early adulthood may be at a greater risk of developing anxiety as a result of discriminatory experiences (Hurd, Varner, Caldwell, & Zimmerman, 2014). Additionally, African American women tend to experience more racial discrimination and have higher levels of racism-related stress than African American college men (Chao et al., 2012; Landrine & Klonoff, 1997). Few empirical studies have examined the relationship between racial discrimination and

psychological distress only among AACW, but racial discrimination is positively related to psychological distress among African American college students as well as the general population of young adult African American women (Chao et al. 2012; Moradi & Subich, 2003).

Comparable to racial discrimination, experiences of sexism can act as external factors that contribute to additional stress above and beyond general levels of stress, which can exacerbate mental health issues (Meyer, 2003). Experiences of sexual discrimination have been linked to increased levels of psychological distress among young adult women (Choi et al., 2011). More specifically, sexual discrimination predicts increased levels of depression, anxiety, and overall psychological distress among college women (Fischer & Holz, 2007; Fischer & Holz, 2010; Klonoff et al., 2000; Landry & Mecurio, 2009). Klonoff and colleagues (2000) found that the only group of college women who experienced significantly more symptoms of anxiety and depression were those women who also had frequent experiences of sexual discrimination. Further, Moradi and Subich (2003) found that frequent experiences of sexual discrimination were linked to increased levels of psychological distress among African American women.

Although experiences of gendered racism and psychological distress among AACW has yet to be investigated, Thomas, Witherspoon, and Speight (2008) attempted to measure gendered racism through revising a measure of sexual discrimination by replacing "woman" with "Black woman". These researchers found gendered racism predicted an increase in psychological distress among African American women 18 to 51 years of age and older (Thomas et al., 2008). Being that individuals may engage in maladaptive behaviors to reduce or alleviate psychological distress (Khantzian, 2003), it

is important to examine the ways in which AACW may attempt to manage or reduce symptoms of depression and anxiety associated with experiences of gendered racism by engaging maladaptive coping behaviors, such as harmful alcohol use.

Psychological Distress and Alcohol Use Among African American College Women

Previous researchers have found that college students who report experiencing

more stressful life events (e.g., interpersonal discord, academic demands) are more likely
to experience alcohol-related negative consequences even after accounting for frequency
of alcohol use (Christopher, et al., 2013). More specifically, stressful life events predict
an increase in harmful alcohol use among young adults (Christopher et al., 2013). Obasi
and colleagues (2016) found that college students with higher levels of psychological
distress who perceive alcohol as a strategy to regulate negative affect are more likely to

engage in harmful alcohol use.

Although no empirical studies have examined the relationship between gendered racism, psychological distress, and alcohol use among AACW, there is evidence to suggest that psychological distress may act as mediator in the relationship between discrimination and alcohol use. Zucker and Landry (2007) found that psychological distress mediated the relationship between perceived sexual discrimination and harmful alcohol use among college women. Among a sample of AACW, strain (i.e., stress associated with external factors) associated with racial discrimination has a direct effect on harmful alcohol use through symptoms of depression. In other words, depression mediated the relationship between strain and harmful alcohol use among AACW (Walton et al., 2013). Exploring alcohol use among AACW is not only important because of its relationship to psychological distress, alcohol is also a proximal predictor of risky sexual

behavior (Hingson, Zha, & Weitzman, 2009), another common behavior among AACW associated with negative consequences (Buhi, Marhefka, & Hoban, 2010).

Harmful Alcohol Use and Risky Sexual Behavior Among African American College

Women

Alcohol use and risky sex are common among college women (Gilmore & Granato, 2013; Moorer, Madson, Mohn, & Nicholson, 2014; Rehm, Shield, Joharchi, & Shuper, 2012). Although alcohol use among male and female college students has remained relatively consistent over the past few decades, the gender gap is growing smaller with alcohol use among college women increasing (Johnston, O'Malley, Bachman, & Schulenberg, 2012; Johnston et al., 2015a). Additionally, rates of harmful alcohol use have been on the rise among college woman (Johnston et al., 2015a). Recent findings emphasize the importance of looking at alcohol use separately from other groups among AACW. AACW are more likely to experience alcohol-related problems as a result of heavy episodic drinking (HED; i.e., four or more drinks in a row during one sitting; Johnston et al., 2015a) while participating in drinking games than White, non-Hispanic men and women, as well as African American men (Zamboanga et al., 2015). This is concerning due to the link between harmful alcohol use, specifically HED, and alcoholrelated negative consequences among college women, such as sexual assault and sexual victimization (McCauley, Calhoun, & Gidycz, 2010; Moorer, 2016; Valenstein-Mah, Larimer, Zoellner, & Kaysen, 2015).

Alcohol use in general has been linked to increase risky sexual behavior among college students regardless of race and ethnicity (Scott-Sheldon, Carey, & Carey, 2010; White, Fleming, Catalano, & Bailey, 2009). Although college men report consuming

larger amounts of alcohol, college women report more risky sexual behavior after drinking (Patrick & Maggs, 2009). Harmful alcohol use has also been linked to risky sexual behavior among college women, such that sexually active college women are more likely to report engaging in harmful alcohol use (Ingersoll et al., 2008). Further, harmful alcohol use is a factor that differentiates college women who effectively use contraceptive methods and condoms from those who do not. College women who participate in harmful alcohol use are more likely to use contraceptive methods and condoms ineffectively and inconsistently (Ingersoll et al., 2008). Harmful alcohol use has also predicted more risky sexual among AACW (Cottonham et al., 2017). Collectively, these findings highlight the importance of exploring possible risk factors that may contribute to harmful alcohol use that results in risky sexual behavior among AACW, specifically experiences of gendered racism and psychological distress.

Although it is relevant to explore the link between gendered racism, psychological distress, harmful alcohol use, and risky sexual behavior among AACW, it is as equally important to identify and investigate behaviors that may attenuate this relationship and act as buffers or protective factors, such as safe drinking and sexual practices.

Safe Drinking and Sexual Practices Among College Women

Safe Drinking Practices

Considering the relationship between harmful alcohol use and risky sexual behavior among AACW (Cottonham et al., 2017), it is important to explore safe drinking practices, such as alcohol protective behavioral strategies (PBS-A). PBS-A are strategies one can use before or while drinking to decrease the risk of potential alcohol-related negative consequences (Martens et al., 2005; Martens, Martin, Littlefield, Murphy, &

Cimini, 2011). A growing number of empirical studies among college students have found PBS-A to be associated with fewer alcohol-related negative consequences and less harmful alcohol use (e.g., HED) among college students (Borden et al., 2011; D'Lima, Pearson, & Kelley, 2012; Madson, Arnau, & Lambert, 2013; Marten et al., 2008). Brief alcohol interventions that incorporate PBS-A use are more effective in reducing alcohol use and alcohol-related negative consequences among college students (Barnett, Murphy, Colby, & Monti, 2007; Larimer et al., 2007; Murphy et al., 2012), especially among college women (Kenney, Napper, LaBrie, & Martens, 2014).

Both gender and race play a role in the use of PBS-A (Borsari, Murphy, & Barnett, 2007; Kenny & Labrie, 2013; Madson, Moorer, Zeigler-Hill, Bonnell, & Villarosa, 2013; Madson & Zeigler-Hill, 2013). In general, college women report more PBS-A use as well as less harmful alcohol use and fewer alcohol-related negative consequences (Labrie, Lac, Kenney, & Mirza, 2011; Madson & Zeigler-Hill, 2013). PBS-A is also associated with fewer sex-related negative consequences among college women, such as unwanted sexual experiences (Moorer et al., 2014). Similar to White non-Hispanic students, PBS-A use is negatively associated with harmful alcohol use (e.g., HED) and alcohol-related negative consequences among African American college students (Madson, Villarosa, Moorer, & Zeigler-Hill, 2015). However, African American college students tend to engage in more PBS-A use than White, non-Hispanic students (Madson & Zeigler-Hill, 2013). Further, African American women are more likely to engage in PBS-A use than White, non-Hispanic women (Landry, Moorer, Madson, & Zeigler-Hill, 2014). Although empirical studies with heterogeneous samples have provided relevant information about racial differences in PBS-A use, there is research to

suggest the importance of examining within-group differences as well. For example, Madson and colleagues (2015) found unique relationships among drinking patterns, motives for drinking, and use of PBS-A that were not reflected in heterogeneous samples but were found when exclusively examining these relationships among African American college students at a PWI. Thus, it is important to investigate the effects of PBS-A use on the link between gendered racism, psychological distress, harmful alcohol use, and risky sexual behavior among AACW.

Safe Sexual Practices

Safe sexual practices reduce the likelihood of experiencing negative sex-related consequences (CDC, 2013a; CDC, 2013b). One of the most significant factors contributing to sex-related negative consequences among college women is lack of consistent condom use (Roberts & Kennedy, 2006). Although male latex condoms do not eliminate the risk of contracting STDs and HIV, effective condom use significantly reduces the risk of infection (CDC, 2013a). However, young adult women are more likely to report rarely or never using condoms than young adult men (Johnston et al., 2015b).

In addition to consistent condom use, condom negotiation is an important type of safe sexual practice, particularly among college women. Power differentials can be an influential factor on condom use and negotiation. In unbalanced relationships among college students, the partner with more power in the relationship usually makes decisions about condom use for themselves as well as their partner (Woolf & Maisto, 2015).

Another type of safe sexual practice is having one's own personal condoms to provide during sexual activity, which may be influenced by traditional gender roles. Researchers have found that college men usually provide condoms; however, they expect college

women to initiate the negotiation of condom use (Carter, McNair, Corbin, & Williams, 1999). College women who endorse more traditional gender roles have greater difficulty with condom use (Shearer, Hosterman, Gillen, & Lefkowitz, 2005). Further, both male and female college students have a negative view of women who provide condoms during sexual activity, which may cause college women to avoid providing condoms and place the responsibility of condom use on men (Frankel & Curtis, 2008).

Risk perception about a partner's physical health and sexual history raises great concern in terms of condom use. The perception of sexual exclusivity among college students may not always be accurate, placing students at risk for negative sex-related consequences (Fehr, Vidourek, & King, 2015). College students are less likely to use condoms with a partner they perceive as safe, low-risk, and sexually exclusive (Patel, Yoskowitz, & Kaufman, 2007). However, both male and female college students report engaging in sexual activity outside of what their partner perceived to be a sexually exclusive or monogamous relationship (Fehr et al., 2015). More specifically, African American adolescent females who believe their significant other has concurrent sexual partners report less relational power, more interpersonal stress, and a previous STD diagnosis (Brown, Sales, DiClemente, Davis, & Rose, 2012). Thus, an individual's ability to accurately assess the level of sexual risk associated with their partner is another type of safe sexual practice. This particular practice has been examined among college women through sexual assertiveness, which consists of one's ability to refuse unsafe sex with a partner they perceive as being a high risk or questioning a partner about their sexual history. Increase levels of sexual assertiveness is linked to more condom use among college women (Roberts & Kennedy, 2006). Further, sexual assertiveness has been

highlighted as a critical component of prevention of negative sex-related consequences among AACW (Alleyne & Gaston, 2010). Taken together, few studies have sought to examine safe sex practices that may act as protective factors among this group of women. Thus, the present study sought to explore the attenuating effects of safe sex practices on the relationship between gendered racism, psychological distress, harmful alcohol use, and risky sexual behavior among AACW.

Present Study

Few studies have sought to explore gendered racism among AACW. Addressing this gap in the literature is important based on the established link between experiences of discrimination and psychological distress (Chao et al., 2012; Hurd et al., 2014). Furthermore, increased levels of psychological distress have been found to predict increased alcohol use (Obasi et al., 2016). Specifically, harmful alcohol use is predictive of risky sexual behavior among AACW (Cottonham, et al., 2017). Based on these findings, the present study examined the sequential link between experiences of gender racism, psychological distress, harmful alcohol use, and risky sexual behavior among a sample of AACW. Previous researchers have also found that engaging in PBS-A use and safe sex practices are associated with a decrease in alcohol use and risky sexual behavior (CDC, 2013a; CDC, 2013b; Madson & Zeigler-Hill, 2013). Thus, the present study also examined the moderating role of PBS-A use and safe sex practices on the relationship between experiences of gender racism, psychological distress, harmful alcohol use, and risky sexual behavior among a sample of AACW. Although no empirical studies thus far have examined these relationships, the present study addressed the following questions based on previous literature:

Question 1: To what degree does psychological distress (i.e., depression, anxiety) and harmful alcohol use sequentially mediate the relationship between experiences of gendered racism and risky sexual behavior among AACW?

Hypothesis 1: Psychological distress and harmful alcohol use will sequentially mediate the relationship between experiences of gendered racism and risky sexual behavior, such that more experiences of gendered racism will predict higher levels of psychological distress, which will in turn predict more harmful alcohol use, which in turn predicts increases risky sexual behavior.

Question 2: Is the sequential relationship between experiences of gendered racism, psychological distress (i.e., depression, anxiety), harmful alcohol use, and risky sexual behavior among AACW moderated by PBS-A use?

Hypothesis 2: The sequential relationship between experiences of gendered racism, psychological distress, harmful alcohol use, and risky sexual behavior will be moderated by PBS-A use, such that the sequential relationship is less likely to occur for those with more PBS-A use than those with less PBS-A use.

Question 3: Is the sequential relationship between experiences of gendered racism, psychological distress (i.e., depression, anxiety), alcohol use, and risky sexual behavior among AACW moderated by use of safe sex practices?

Hypothesis 3: The sequential relationship between experiences of gendered

racism, psychological distress, harmful alcohol use, and risky sexual behavior will be moderated by use of safe sex practices, such that the sequential relationship is less likely to occur for those with more use of safe sex practices than those with less use of safe sex practices.

CHAPTER II - METHODS

Participants and Procedures

The present study was approved by an Institutional Review Board (see Appendix A) and consisted of 250 traditional age (18 - 25) African American female college students from a mid-sized Southeastern PWI. Participants identified as heterosexual or bisexual and reported sexual behavior over the last six months and alcohol use within a month of taking the survey. There were two recruitment methods. First, participants were recruited through the Department of Psychology research participation system (http://usm.sona-systems.com/) and received partial class credit in exchange for their participation in the study. Second, participants who did not participate in the class credit opportunity were recruited through university listservs and meeting with various campus organizations. These participants were compensated with gift cards through research funds. Participants were directed to a Qualtrics, a secure on-line survey software. After completing the informed consent (See Appendix B), participants were directed to a demographic questionnaire followed by measures assessing their experiences with gendered racism, psychological distress, harmful alcohol use, risky sex, and safe drinking and sex practices. The measures were randomly presented to reduce attrition effects.

Measures

Demographic Questionnaire

Participants completed a brief demographic questionnaire assessing for sex, race, classification, GPA, sexual orientation, current relationship status, length of current relationship, sexual activity in the past six months, alcohol use in the last month, context

in which participants experience discrimination most frequently, and evaluation of experiencing discrimination based on race and/or gender.

Gendered Racial Microaggressions Scale – Frequency (GRMS – F)

The GRMS - F (Lewis & Neville, 2015) is a 26-item self-report measure that assesses the frequency of gendered racial microaggressions experienced among African American women. It consists of four subscales: Silenced and Marginalized (SM), Strong Black Woman Stereotype (SBWS), Angry Black Woman Stereotype (ABWS), and Assumption of Beauty and Sexual Objectification (ABSO). The SM subscale consists of seven items (e.g., "Someone has assumed that I do not have much to contribute to the conversation."). The SBWS (e.g., "I have been told that I am too assertive.") and ABWS (e.g., "Some has accused me of being angry when I was speaking in a calm manner.") subscales each have three items and the ABSO subscale has 10 items (e.g., "Someone has made a sexually inappropriate comment about my butt, hips, or thighs."). The current study only assessed the frequency of experiences and not the level of stress associated with these experiences. Participants were asked to indicate how often they experienced each event over the course of their lifetime on a 6-point Likert scale (0 = never; 5 = oncea week or more). Total scores were summed and divided by the number of items. Scores range from 0 to 5 with higher scores indicating greater frequency of experiences. Internal consistency for the current sample was alpha of .90.

Depression, Anxiety, and Stress Scale (DASS – 21)

The DASS (Lovibound & Lovibound, 2004) is 21-item self-report questionnaire that examines symptoms of depression, anxiety, and general stress. Participants were asked to rate the degree to which they have experienced items in the past week on a scale

from 0 (did not apply to me at all) to 3 (applied to me very much or most of the time). The measure consists of three subscales that measure depression (e.g., "I couldn't seem to experience any positive feelings at all"), anxiety (e.g., "I had a feeling of shakiness") and stress (e.g., "I felt that I was rather touchy"). Based on the conceptualization of psychological distress as symptoms of depression and anxiety, only the subscales for depression and anxiety were used in the present study. Scores for the depression and anxiety subscales range from 0 to 21 with higher scores indicating greater severity of symptoms. Internal consistency for the depression and anxiety subscales was alphas of .87 and .83, respectively.

Alcohol Use Disorder Identification Test – Consumption US (AUDIT – US)

The AUDIT – C US (CDC, 2014) is a brief version of the 10-item AUDIT (Saunders, Aasland, Babor, De La Fuente, & Grant, 1993) that was developed to specifically assess for hazardous drinking patterns. Items on the AUDIT – C measure frequency (Item #1: "How often do you have a drink containing alcohol?") and quantity of alcohol use (Item #2: "How many standard drinks containing alcohol do you have on a typical day?"). Based on previous research (Olthius, Zamboanga, Ham, & Tyne, 2011), recent modifications to item three indicate using "four or more drinks" for women and "five or more drinks" for men. Therefore, "four drinks or more" will be used being that the sample for the current study consisted of only college women (i.e., "How often do you have 4 or more drinks on one occasion?"). Participants were asked to respond to items using a 5-point Likert scale. Scores were summed and ranged from 1 to 12 with higher scores indicating more harmful drinking patterns. A cut off score of 5 is indicative

of harmful drinking patterns among college women (DeMartini & Carey, 2012). Internal consistently for the current sample was alpha of .60.

Sexual Risk Survey (SRS)

The Sexual Risk Survey (SRS; Turchik & Garske, 2009) is a self-report questionnaire that measures the frequency of risky sexual behaviors over the past six months. It consists of 23 open-ended questions. Participants respond with an estimated number to items such as "How many sexual partners have you had sex with?" and "How many times have you given or received oral sex on a man without a condom?" Participants are asked to respond with a "0" for questions that do not apply to them or they have never engaged in. Items are standardized by recoding the responses along a scale ranging from 0 to 4. After recoding, the item scores were summed for a total score ranging from 0 to 92 with higher scores indicating more risky sexual behavior. Internal consistency for the current was alpha of .87.

Protective Behavioral Strategies Scale – Revised (PBSS – R)

The PBSS-R (Madson et al., 2013), a modified version of Martens and colleagues' (2005) Protective Behavioral Scale, is an 18-item survey that measures PBS-A use while drinking. Participants were asked to respond on a scale ranging from 1 (never) to 6 (always) to indicate the degree to which they engage in behaviors such as "avoiding drinking games" or "knowing where your drink has been at all times". The total score was used in the current study. Scores range from 18 to 108, with higher scores indicating more PBS-A use. Internal consistency for the current study alpha of .92. Safe Sex Behavior Questionnaire (SSBQ)

The SSBQ (Dilorio, Parson, Lehr, Adame, & Carlone, 1992) is a 24-item self-report questionnaire that assesses for the degree to which participants engage in safe sexual practices. Participants are asked to respond to items (e.g., "If I disagree with information that my partner presents on safer sex practices, I state my point of view") using a scale of 1 (*never*) to 4 (*always*). The SSBQ consist of nine items that are negatively worded that are reversed scored (e.g., "It is difficult for me to discuss sexual issues with my sexual partners"). Scores range from 24 to 96 with higher scores indicating more use of safe sexual practices. Internal consistency for the current study was alpha of .73.

Data Analytic Approach

Prior to running analyses, 361 AACW met criteria to participate in the study (i.e., identified as African American female, consumed alcohol within 30 days, engaged in sexual behavior within six months). Twelve participants were excluded from analyses for not completing at least 75% of each measure used in the current study and 94 participants were excluded for missing two of the three validity check items included in the survey. Five participants were also removed for having an AUDIT-C score of zero. Altogether, 250 participants were included in the analyses. Missing values for the SRS were recoded into zeros. Any remaining missing data was corrected using linear trend at point. The truncation method (i.e., next highest score plus one) was the proposed method to address potential outliers; however, there were none. Bootstrapping was conducted to correct for any skewed data (i.e., 5,000 samples). Descriptive statistics and Cronbach's alphas were calculated for all measures as well as bivariate correlations to assess relationship among all measures.

Global Fit Statistics

The current study examined a moderated sequential mediation model using a structural equation model framework to explore the mediating role of psychological distress (i.e., depression and anxiety) and harmful alcohol use on the relationship between experiences of gendered racism and risky sexual behavior (see Figure 1). The moderating role of PBS-A use and safe sex practices on the aforementioned sequential relationship was also examined (see Figure 1). Investigating global statistics is one primary advantage of using a structural equation model. Another important advantage is correlating error terms that are conceptually related to eliminate shared variance between variables and increase confidence in the findings (Muthen & Muthen, 2012). For the current study, error terms for depression (DASS-D) and anxiety (DASS-A) were correlated based on the conceptual overlap and similarity between these two constructs (see Table 2). The degrees of freedom was zero and the sequential mediation model and moderated sequential mediation models were just identified models. As such, the parameter estimates were interpreted but the global fit statistics were not (Muthen & Muthen, 2012). For all models, a bootstrapping confidence interval was conducted to assess for significant paths. Paths with confidence intervals that did not contain zero were deemed significant (Preacher & Hayes, 2004).

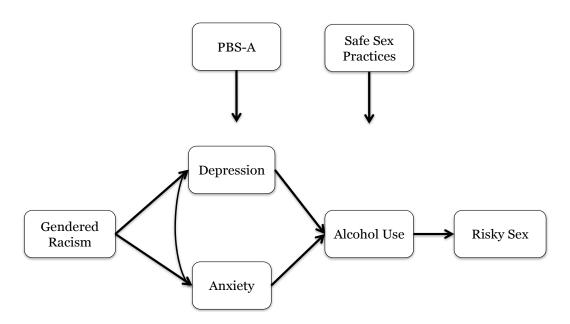


Figure 1. Predicted moderated mediation model.

Predicted moderated mediation model with PBS - A and safe sex practices as the moderators and all possible relationships between gendered racism, psychological distress (i.e., depression, anxiety), harmful alcohol use, and risky sexual behavior provided.

CHAPTER III - RESULTS

Means, standard deviations, and intercorrelations of all measures used in the current study are provided in Table 1. The average age of the sample was 20 years of age (SD = 1.70). The sample consisted of majority juniors (31.2%) and freshman (30.4%) who identified as heterosexual (90.0%) African American women in committed romantic relationships (47.2%). In terms of experiences of gendered racism, the four items endorsed most frequently for occurring once a week or more were as follows: "I have been assumed to be a strong Black woman", "Someone has made sexually inappropriate comments about my butt, hips, or thighs", "Someone has assumed that I should have a certain body type because I am a Black woman", and "Someone assumed I speak a certain way because I am a Black woman". In general, participants reported experiencing discrimination primarily based on both their race and gender. Additionally, participants reported experiencing discrimination most frequently in a school setting than at home (e.g., close family and relatives), in a place of employment, or in relationships (e.g., close friends, romantic partners) and reported the discrimination they experience on campus is based primarily on their race. Only 28.4% of the sample met the clinical cut off for depressive symptoms and 38.8% percent met the clinical cut off for anxiety symptoms. However, 49.2% of the sample met the clinical cut off score of 5 for harmful alcohol use on the AUDIT- C (DeMartini & Carey, 2012).

As seen in Table 1, depression and anxiety were significantly correlated.

Additionally, depression and anxiety were positively related to gendered racism and risky sexual behavior. However, depression and anxiety were not correlated with harmful alcohol use. Gendered racism was positively correlated with alcohol use and risky sexual

behavior. Lastly, risky sexual behavior was negatively correlated with safe sex practices and harmful alcohol use was negatively correlated with PBS-A.

Table 1

Means, Standard Deviations, and Intercorrelations of Measures

Measure	1	2	3	4	5	6	7
1. GRMS – F							
2. DASS-D	.37**						
3. DASS-A	.34**	.72**					
4. AUDIT – C	.16*	.12	.09				
5. SRS	.32**	.36**	.33**	.24**			
6. PBSS-R	12	26**	24**	32**	27**		
7. SSBQ	02	18**	11	02	26**	.35**	
Mean	3.06	3.28	3.94	6.90	16.83	57.88	80.14
SD	.92	3.77	4.16	4.28	12. 25	8.79	18.46

Note: GRMS - F = Gendered Racial Microaggression Scale - Frequency; DASS - D (Depression, Anxiety, Stress Scales -

Depression; DASS – A = Depression, Anxiety, Stress Scales – Anxiety; AUDIT – C = Alcohol Use Disorder Identification Test – Consumption; SRS = Sexual Risk Survey; PBSS – R = Protective Behavioral Strategies Scale – Revised; SSBQ = Safe Sexual Behaviors Questionnaire; **Correlation is significant at the .01 level; *Correlation is significant at the .05 level.

Sequential Mediation Analyses

The first hypothesis examined the mediating role of psychological distress (i.e., depression, anxiety) and harmful alcohol use on the relationship between gendered racism and risky sexual behavior. It was predicted that an increase in experiences of gendered racism would predict an increase in psychological distress, which would then predict more harmful alcohol use and subsequent risky sexual behavior. The sequential mediation model conducted and all paths are shown in Figure 2. Additionally, the total (c), direct (c'), and indirect parameter estimates (i.e., standardized betas) are presented in Table 2. The analyses revealed that gendered racism was directly related to risky sexual behavior (c = .310, p = .001). However, after including psychological distress and harmful alcohol use into the model, the relationship remained significant (c' = .174, p = .1001).

.001), which suggests the relationship between gendered racism and risky sexual behavior was partial mediated by these variables. Although the predicted sequential relationship did not emerge, bootstrapping analyses indicated significant mediation at the 95% confidence interval for anxiety (β = .070; Cl lower = .005, Cl higher = .146) and harmful alcohol use (β = .024; Cl lower = .004, Cl higher = .059) separately. Specifically, gendered racism predicted more symptoms of anxiety (β = .36; p = 001). In turn, anxiety (β = .19; p = .04) predicted more risky sexual behavior. Similarly, gendered racism predicted more harmful alcohol use (β = .13; p = .02), which in turn predicted more risky sexual behavior (β = .18; β = .006). Taken together, experiences of gendered racism among AACW is related to risky sexual behavior through symptoms of anxiety and harmful alcohol use.

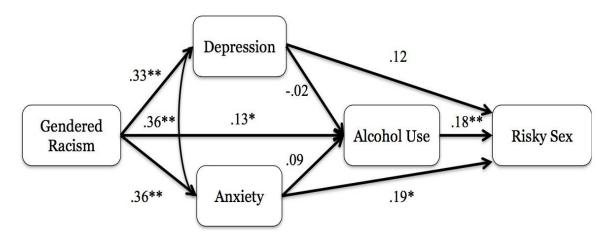


Figure 2. Observed sequential mediation model.

Observed sequential mediation model with all possible relationships provided.

Table 2

Total, Direct, and Indirect Effects of Gendered Racism on Risky Sexual Behavior

	β	p	Bootstrapping C.I.
Gendered Racism			
Total effect	.31	.001	.213, .400
Direct effect	.17	.001	.072, .279
Indirect effect	.14	.001	.070, .214
Specific indirect effects			
Depression	.04	.22	014, .110
Anxiety	.07	.05	.005, .146
Harmful Alcohol Use	.02	.07	.004, .059
Depression & Harmful Alcohol Use	.00	.42	005, .023
Anxiety & Harmful Alcohol Use	00	.86	012, .011

Note: All significant beta coefficients (p < .05; p < .01) and confidence intervals (95%) are bold. All parameter estimates and significance test are based on 5,000 bootstrapped sample.

Moderating Role of Safe Drinking Practices

The second hypothesis examined the moderating role of PBS-A on the sequential relationship in the first hypothesis. It was predicted that the sequential relationship would be less likely to occur among those higher in PBS-A use than those lower in PBS-A use. Using a median split, fit statistics of the sequential mediation model for high and low groups of PBS-A are presented in table 3. Model 1 examined the model with all parameter estimates and the error term correlation freed across both groups. Fit statistics of this configural model was just identified, which indicated perfect fit. In Model 2, analyses were conducted with all parameter estimates and the error term correlation constrained to determine if the fit statistics worsen based on evaluation of the chi-square statistic and recommended cutoffs for CFI and RMSEA (i.e., CFI < .01; RMSEA > .015; Chen 2007) once all parameters are constrained equally across both groups. As outlined in Table 3, the chi-square statistic did become significantly worse ($\Delta \chi^2 = 19.357$, 10; p = .04) in Model 2, indicating changes in the model across groups. The subsequent model

entailed freeing the significantly mediated path (i.e., gendered racism to anxiety to risky sexual behavior) to determine differences across high and low groups of PBS-A use. A lack of significant change in multiple global fit indices ($\Delta \chi^2 = 5.568$, 3; p = .13) suggested no practical differences were found. Thus, no moderating effects emerged for PBS-A.

Table 3

Multigroup Analyses of the Sequential Mediation Model (High and Low PBS – A)

	Fit indices					
	χ^2	df	CFI	RMSEA	ΔCFI	ΔRMSEA
Model 1						
Configural, no constraints	0	0	1	0		
Model 2						
Fully Constrained	19.357	10	.967	.087		
Model 3						
GR – Anxiety constrained	5.568	3	.991	.083	024	.004

Note: CFI=Confirmatory Factor Index; RMSEA = Root Mean Square Approximation.

Moderating Role of Safe Sex Practices

The third hypothesis examined the moderating role of safe sex practices on the sequential relationship in the first hypothesis. It was predicted that the sequential relationship would be less likely to occur among those with more use of safe sex practices than those with less use of safe sex practices. Using a median split, fit statistics of the sequential mediation model for high and low groups of safe sex practices are presented in table 4. Model 1 examined the model with all parameter estimates and the error term correlation freed across both groups. Fit statistics of this configural model was just identified, which indicated perfect fit. In Model 2, analyses were conducted with all parameter estimates and the error term correlation constrained to determine if the fit statistics worsen once all parameters are constrained equally across both groups based on

evaluation of the chi-square statistic, CFI, and RMSEA. As outlined in Table 4, the chi-square statistic did not become significantly worse ($\Delta \chi^2 = 6.513,10$; p = .77) and CFI is not less than .01 in Model 2, indicating no changes in the model across groups. Thus, no moderating effects emerged for safe sex practices.

Table 4

Multigroup Analysis of the Sequential Mediation Model (High and Low Safe Sex Practices)

	Fit indices				
	χ^2	df	CFI	RMSEA	
Model 1					
Configural, no constraints	0	0	1	0	
Model 2					
Fully constrained	6.513	10	1.00	.067	

Note: CFI=Confirmatory Factor Index; RMSEA = Root Mean Square Approximation.

CHAPTER IV - DISCUSSION

The purpose of the present study was to assess how psychological distress (i.e., anxiety and depression) and harmful alcohol explained the relationship between experiences of gendered racism and risky sexual behavior among AACW. Additionally, the present study sought to examine how this relationship was attenuated by PBS-A use and safe sex practices. Although the predicted sequential relationships were not significant, anxiety and harmful alcohol use uniquely mediated the relationship between gendered racism and risky sexual behavior. The present study also predicted that PBS-A use and safe sex practices would moderate the sequential relationship; however, no moderating effects emerged, which suggests that the predicted sequential relationships did not vary or change based on high or low levels of PBS-A use or sex safe practices.

Main effects found in the current study support previous research. First, gendered racism predicted depression and anxiety in African American female college students. This is consistent with the link established between racial discrimination and increased psychological distress among African American college students (Chao et al., 2012; Bentley-Edwards & Chapman-Hillard, 2015; Greer & Chwalisz, 2007), as well as findings that AACW have higher levels of stress related to racism (Chao et al., 2012; Landrine & Klonoff, 1997). Similarly, sexual discrimination is also linked to increased psychological distress among college women (Fischer & Holz, 2010; Klonoff et al., 2000; Landry & Mecurio, 2009), as well as AACW (Moradi & Subich, 2003).

Researchers have increasingly recognized the impact of cultural factors on psychological distress. Based on components of GRT (e.g., strong black woman stereotype), some researches argue that African American women are expected to exhibit strength and

practice self-reliance and self-silencing when experiencing general stress as well as symptoms of depression and anxiety (Black & Peacock, 2011; Harrington, Crowther, & Shipherd, 2010). Watson and Hunter (2015) found that African American women who strongly endorse these expectations are more likely to experience symptoms of depression and anxiety.

Secondly, gendered racism predicted harmful alcohol use in AACW, which is consistent with research examining racial discrimination among the general population of African American adults and harmful drinking patterns and alcohol-related problems (Boynton, O'Hara, Covault, Scott, & Tennen, 2014; Clark, Salas-Wright, Vaughn, & Whitfield, 2015; Hunte & Barry, 2012). Additionally, previous research found that racial microaggressions predict alcohol use and negative alcohol-related consequences among students of color (Blume, Lovato, Thyken, & Denny, 2012). Similarly, college women with more experiences of sexual discrimination also engage in more HED within a two-week period (Zucker & Landry, 2007). Also consistent with previous research among AACW (Cottonham et al., 2017), harmful alcohol use predicted an increase in risky sexual behavior among the sample.

Lastly, gendered racism predicted risky sexual behavior in AACW. These results are consistent with others who have established direct links between racial and sexual discrimination and risky sexual behavior among African American adolescent females and college-aged women (Choi et al., 2011; Gibbon et al., 2012; Tobler et al., 2013). GRT (Essed, 1991) acknowledges various historical stereotypes of African American women rooted in a history of slavery, specifically, the stereotype of African American women as being sexually promiscuous. This stereotype may have an impact on how

African American women perceive themselves and their sexuality (Brown, White-Johnson, & Griffin-Fennell, 2013; Ross & Coleman, 2011). Taken together, it could be that AACW who experience more gendered racism may also internalize the stereotype of sexual promiscuity and engage in sexual behaviors that reflect the representation of their sexual identity.

The finding that anxiety partially mediated the relationship between gendered racism and risky sexual behavior among AACW supports the conceptual framework used for the present study. According to the General Strain Theory (GST; Agnew, 1992), gendered racism is an adverse experience that triggers symptoms of anxiety, a negative emotion. As proposed by the GST, emotional responding may be one type of maladaptive behavior used to cope with negative emotions. Risky sexual behavior can be one form of emotional responding used to cope with symptoms of anxiety. Further, risky sexual behavior and symptoms of anxiety were positive correlated in the present study. Similar results have been found when using the GST to explain the relationship between strain (i.e., stress associated with external factors), depression, and HED among AACW (Walton et al., 2013). Walton and colleagues (2013) found that strain increased depressive symptoms which in turn predicted more HED among AACW. Although novel among a sample of AACW, this finding supports that sexual discrimination among young adult women is linked to risky sexual behavior through psychological distress (Choi et al., 2011). Additionally, symptoms of anxiety and depression mediated the relationship between sexual assault, a negative interpersonal event, and use of risky sexual behavior among college women (Littleton, Grills-Taquechel, Buck, Rosman, & Dodd, 2013). Interestingly, a similar relationship did not emerge with depression. Gendered racism

predicted depressive symptoms; however, depressive symptoms did not predict risky sexual behavior among the sample. More participants in the study met the clinical cut off for anxiety (38.8%) than depression (28.4%), which supports that African Americans in general are more commonly diagnosed with anxiety related disorders (U.S. Department of Health & Human Services, 2001). Although African American college students can accurately identify depressive symptoms, they view depression and mental illness as stigmatizing and a personal weakness (Stansbury, Wimsatt, Simpson, Martin, & Nelson, 2011), which could result in underreporting of depressive symptoms. Additionally, depressive symptoms may negatively affect sexual arousal and functioning among women (Fabre & Smith, 2012). Thus, AACW who experience depressive symptoms may be less likely to engage in sexual activity.

The finding that harmful alcohol use partially mediated the relationship between experiences of gendered racism and risky sexual behavior among AACW is another novel aspect of the current study. This finding is consistent with previous research which found a direct relationship between discrimination and risky sexual behavior, discrimination and harmful alcohol use, and harmful alcohol use and risky sexual behavior (Choi et al., 2011; Clark et al., 2015; Cottonham et al., 2017; Tobler et al., 2013). This finding can also be conceptualized as an example of maladaptive coping as outlined by the GST. In empirical studies where GST was used as the theoretical framework, researchers found that African Americans tend to cope with strain through other-directed activities (e.g., physical altercations); however, African American women cope with strain using more self-directed forms of responding (e.g., alcohol use; Jang & Johnson, 2005). Taken together, harmful alcohol use might be a method of coping with

experiences of gendered racism that increases of the likelihood of risky sexual behavior among AACW.

In contrast to the predicted hypothesis, the sequential mediation did not emerge in the findings. No relationships were found between symptoms of depression and anxiety and harmful alcohol use among the sample. Although general psychological distress has consistently been associated with alcohol use among college students (Obasi et al., 2016), results from the present study may be explained by the fact we examined the effects of anxiety and depression separately on alcohol use among college students. For example, depression (Geisner, Mallet, & Kilmer, 2012; Linden & Lau-Barraco, 2013) and anxiety (Magrys & Olmstead, 2015) when examined independently predict increased alcohol use among college students; however, only anxiety is associated with more alcohol use when looking at both anxiety and depression simultaneously (Armeli et al., 2014). Additionally, the significant correlation between depression and anxiety in the current study is further evidence of comorbidity and overlap in the two constructs that may have resulted in multicollinearity even after accounting for shared variance in the model. Taken together, examining depression and anxiety in two separate models rather than in the same model or as a combined indicator of psychological distress in this model may have yielded different results.

PBS-A use and safe sex practices were not found to moderate the relationship between gendered racism, psychological distress, harmful alcohol use, and risky sexual behavior as predicted. The lack of moderating effects for PBS-A use may be related to the measurement of PBS-A among the sample. The total score was used for PBSS-R; however; different results may have emerged when using the subscales of PBSS-R,

which consists of direct (i.e., controlled consumption) and indirect (i.e., serious harm reduction) strategies related to alcohol use (Kison, 2013; Madson et al., 2013). Further, previous research has not examined PBS-A use and safe sex practices as moderators among AACW; however, PBS-A use and safe sex practices may only be associated with certain variables or relationships within the model and not with the model as a whole. For example, safe sex practices were only significantly negatively correlated with depression and risky sexual behavior. This is supported by findings that safe sex practices are negatively related negative sex-related consequences (CDC, 2013a; CDC, 2013b) and that African American adolescent females with higher levels of depression experience more difficulty with condom negotiation (Seth et al., 2011). Similarly, PBS-A was significantly negatively correlated with depression, anxiety, harmful alcohol use, and risky sexual behavior among the sample, which is consistent with the inverse relationship between PBS-A use and psychological distress among college women (Labrie, Kenney, Lac, Garcia, & Ferraiolo, 2009) and alcohol use among African American college students (Madson & Zeigler-Hill, 2013; Madson et al., 2015). However, PBS-A use was not related to gendered racism. Based on the GST, those who experience more general strain are more likely to engaging in harmful coping behavior. Therefore, it could be that AACW who experience more gendered racism and engage in harmful alcohol use and risky sexual behavior as coping behaviors are less likely to utilize healthy behaviors, particularly as it relates to their alcohol use and sexual behavior.

The current findings have relevant clinical implications for intervention and prevention methods among AACW. Participants in the current study reported experiencing discrimination based primarily on both race and gender, which is evidence

of the concurrent experience of racial and sexual discrimination among African American women. This finding supports the use of GRT in developing interventions and prevention methods that address racial and sexual discrimination among AACW in a way that is congruent with their experiences. It could be helpful for intervention and prevention methods to use other common multicultural theories that support GRT when discussing gendered racism among AACW, such as intersectionality, a theoretical approach that examines the intersection of different forms of oppression holistically rather than independently (Richardson & Taylor, 2009). Although majority of participants experienced discrimination based on race and gender in general, participants reported experiencing discrimination based primarily on race while on campus. Further, the majority of participants experienced discrimination primarily in school settings. These findings highlight a need to advocate for and support various efforts that address changing the social climate on college campuses, particularly PWIs, for AACW. The current study also informs intervention and prevention efforts that aim to target discrimination among AACW by specifically exploring the impact experiences of gendered racism has on psychological distress, specifically anxiety, and how harmful alcohol use and risky sexual behavior may be used as mechanisms of coping with experiences of gendered racism.

The current study contributes to the literature among AACW; however, the findings should be interpreted within the limitations of the study. The sample was collected from a single, mid-sized university in the southeastern region of the United States. Results may not be generalizable to the college population at large based on extraneous factors that may have impacted the results. For example, the influence of

religion in the southeastern region of the United States may have impacted behaviors assessed in this study, particularly alcohol use and risky sexual behavior. College students who identify with a religious affiliation consumes less alcohol and are less likely to engage in risky sexual behavior (Boyd-Starke, Hill, Fife, & Whittington, 2011; Burke, Olphen, Eliason, & Howell, 2014; Fife et al., 2011; Wells, 2010). The college environment may also act as a protective factor for African Americans students in terms of alcohol use (Paschall, Bersamin, & Flewlling, 2005). Therefore, the results may not be generalizable to college-aged African American women not enrolled in a four-year institution. Based on the history of slavery and racial oppression in the southern region, African American's perception of their regional identity is strongly connected to and expressed through racial identity (Thompson & Sloan, 2012). The experience of discrimination may be different for African Americans in the southeastern region, limiting the generalizability of the results of other regions of the country. Lastly, the sample was collected from a PWI. African American students report experiencing more discrimination than those at HBCUs (Bentley-Edwards & Chapman-Hilliard, 2015). Thus, the current findings may only be applicable to AACW attending PWIs.

There are also limitations associated with underreporting as result of using self-report data. Examining stigmatized topics in African American communities, such as mental health, and stigmatizing behaviors related to values and beliefs about gender and culture, such as alcohol use and risky sexual behavior, may have resulted in some level of social desirability in our sample that was not accounted for. Lastly, causal conclusion could not be drawn from the current study because of its cross-sectional design.

Longitudinal studies, such as diary design studies, could be more beneficial in accounting

for fluctuations and changes symptoms of psychological distress as well as developmental changes that may occur in terms of alcohol use and how young adults perceive experiences of discrimination.

The present study also highlights implications for future research. The findings support using gendered racism as an important theoretical approach to accurately investigating the experiences of discrimination among AACW. Additionally, the current study supports the need to continue examining within group differences in alcohol use among AACW. Although AACW tend to consume less alcohol than their counterparts (O'Malley & Johnston, 2002; Siebert, Wilke, Dela, Smith, & Howell, 2003), almost half of the participants (i.e., 49.2%) in the current study met the clinical cut off for harmful alcohol use. This suggests that AACW are engaging in drinking patterns that may place them at an increased risk for negative alcohol-related consequences. Being that African American students experience more discrimination and race-relates stress than those at HBCUs (Bentley-Edwards & Chapman-Hilliard, 2015) and the current study was conducted at a PWI, future research may focus specifically on how experiences of gendered racism may differ between AACW at PWIs and HBCUs.

It could also be helpful to investigate other relevant factors that may influence the relationships examined in the present study. For example, maladaptive coping behaviors (e.g., alcohol and drug use) mediate the relationship between experiences of gendered racism and psychological distress among AACW (Szymanski & Lewis, 2016). Thus, future research should investigate coping strategies among AACW. Based on findings that African American college-aged women with higher levels of religiosity engage in less alcohol use and risky sexual behavior (Abdullah & Brown, 2012; Iles, Boekeloo,

Seate, & Quinton, 2016), religiosity may have a moderating role in the relationship between gendered racism, psychological distress, harmful alcohol use, and risk sexual behavior among AACW. Racial identity development (Carter et al., 2017; Collins & Lightsey, 2001; Jones, Cross, & DeFour, 2007; Richman, Boyton, Costanzo, & Banas, 2013) and racial-ethnic self-esteem (Brown et al., 2013; Mandara, Gaylord-Harden, Richards, & Ragsdale, 2009) are associated with less psychological distress and alcohol use among African Americans. Thus, similar to religiosity, racial identity development may play a protective role for AACW. Racial identity also plays a significant role in activism among African American college students (Szymanksi & Lewis, 2015). Furthering research on factors that may encourage activism among African American young adults as well as advocating for and supporting social justice efforts can have a large impact on gendered racism and subsequent factors, such as psychological distress, harmful alcohol use, and risky sexual behavior among AACW.

Overall, the current study contributed to the literature among AACW by demonstrating a relationship between gendered racism, psychological distress, harmful alcohol use, and risky sexual behavior among AACW. Specifically, symptoms of anxiety and harmful alcohol use appear to play a unique in the relationship between experiences of gendered racism and risky sexual behavior among AACW. Moreover, the findings highlight relevant direct relationships between gendered racism, symptoms of depression and anxiety, harmful alcohol use, and risky sexual behavior among AACW. The current findings may begin to inform and cultivate intervention and preventions efforts that are culturally congruent and accurately reflect the experiences and behaviors of AACW as it

relates to gendered racism, psychological distress, harmful alcohol use, and risky sexual behavior.

APPENDIX A – Electronic Informed Consent

PURPOSE: The present study is designed to examine the influence of gendered racism and psychological distress on harmful alcohol use and risky sex as well as safe sexual and drinking practices among African American college women.

DESCRIPTION OF STUDY: Participation will consist of completing several brief questionnaires via the Internet. The completion of these initial questionnaires should take approximately X minutes and participants will receive X credit. Questionnaires completed via the Internet will concern your feelings, attitudes, behaviors, and experiences. You will only receive credit for completing the survey and answering honestly.

BENEFITS: Participants are not expected to directly benefit from their participation. However, it is hoped that this study will contribute to our understanding of harmful alcohol use and risky sexual behaviors.

RISKS: No foreseeable risks, beyond those present in routine daily life, are anticipated in this study. Due to the sensitive nature of items assessing experiences of discrimination, alcohol use and sexual activity, if participants find they are distressed by completing these questionnaires, they should notify the researcher immediately.

CONFIDENTIALITY: You will place your name on the informed consent form and the internet-based questionnaires. At the conclusion of data collection for this study, all identifying information will be deleted. Data gathered from the present study will be stored in a secure location for six years, at which time it will be destroyed. Findings will be presented in aggregate form with no identifying information to ensure confidentiality.

PARTICIPANT ASSURANCE: Whereas no assurance can be made concerning results that may be obtained (since results from investigational studies cannot be predicted) the researcher will take every precaution consistent with the best scientific practice. Participation in this project is completely voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits.

Questions concerning the research should be directed to the primary researcher Danielle Cottonham (Danielle.cottonham@eagles.usm.edu) or the research supervisor, Dr. Mike Madson at (601) 266-4546 (or e-mail at michael.madson@usm.edu). This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human participants follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, Box 5147, Hattiesburg, MS 39406, (601) 266-6820.

If you experience distress as a result of your participation in this study, please notify the primary researcher Danielle Cottonham (Danielle.cottonham@eagles.usm.edu) or the research supervisor, Dr. Michael Madson (michael.madson@usm.edu). A list of available agencies that may able to provide services for you are provided below:

University of Southern Mississippi Counseling Center (601) 266-4829

Community Counseling and Assessment Clinic (601) 266-4601

Pine Belt Mental Healthcare (601) 544-4641

Pine Grove Recovery Center (800) 821-7399

Forrest General Psychology Service Incorporated (601) 268-3159

Lifeway Counseling Service Incorporated (601) 268-3159

Behavioral Health Center (601) 268-5026 Hope Center (601) 264-0890

Consent is hereby given to participate in this study.

APPENDIX B – IRB Approval Letter



INSTITUTIONAL REVIEW BOARD

118 College Drive #5147 | Hattiesburg, MS 39406-0001

Phone: 601.266.5997 | Fax: 601.266.4377 | www.usm.edu/research/institutional.review.board

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- · The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- · The selection of subjects is equitable.
- · Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
 - If approved, the maximum period of approval is limited to twelve months.

 Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: CH16082902

PROJECT TITLE: Gendered Racism and Risky Sexual Behavior Among African American College Women: A Moderated Mediation Study of Psychological Distress, Alcohol Use, Safe Sex Practices, and Protective Behavioral Strategies

PROJECT TYPE: Change to a Previously Approved Project RESEARCHER(S): Danielle Cottonham

COLLEGE/DIVISION: College of Education and Psychology

DEPARTMENT: Psychology FUNDING AGENCY/SPONSOR: N/A

IRB COMMITTEE ACTION: Expedited Review Approval PERIOD OF APPROVAL: 08/31/2016 to 08/30/2017

Lawrence A. Hosman, Ph.D. Institutional Review Board

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