

Mental Health Related Stereotype Threat, Self-Stigma, and African-American College Students' Willingness to Seek Counseling

by

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Abstract

A substantial amount of literature has shown that there are a number of academic, cognitive, and physiological outcomes associated with stereotype threat including underperformance, academic stress/fatigue, anxiety, academic withdrawal, and memory impairment. African-Americans have a relatively low rate of seeking counseling services and it is conceivable that some aspects of stereotype threat may be involved. While there has not been much research on the factors that influence African-Americans from seeking mental health counseling, a new body of research has emerged assessing how health-related stereotype threat may affect whether individuals seek medical/preventative treatment and schedule regular physical examination appointments. This research has provided another perspective on the wide array of consequences resulting from stereotype threat. In the current study, 74 African-American college students recruited via emails to college organizations, listservs, and social media platforms completed an online survey that assessed self-stigma and mental health-related stereotype threat as predictors of willingness to seek counseling. Through hierarchical regression analyses, the research found that self-stigma was a significant predictor of willingness to seek counseling while mental-health related stereotype threat was not. However, when self-stigma and mental health-related stereotype threat were used together, they accounted for more variance together than by themselves.

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CHAPTER1. INTRODUCTION

Stereotyping the abilities and characteristics of various groups of people is a common occurrence in society today. Many individuals judge others based on factors such as race, class and gender to form conclusions about groups of people and their capabilities (Steele & Aronson, 1995). It is an easy way for people to formulate opinions about others without having to take the time to get to know them. In addition, it can be a way to demean others by ascribing negative characteristics to specific groups or by assuming that they are in some way inferior. As evident in the media and in society in general, these behaviors have consequences that can negatively affect those who are being scrutinized in this manner. History has illustrated the dangers of such stereotypes which have resulted in racial profiling, employment inequality, gender inequality, education inequality, health care inequality, and in many situations, violence and unlawful imprisonment (Gamble, 1997). Stereotypes can also affect the cognitive process as well leading to memory and performance impairment. Johns, Inzlicht, and Schmader (2008) showed that there is tremendous pressure to disprove negative stereotypes which can cause cognitive functions to become overwhelmed and cause impairments in working memory. Over time, the efforts being used to disprove negative stereotypes can strain executive functioning and potentially cause permanent memory concerns.

As the work of Steele (1997) has shown, not only do victims of stereotypes have the pressure of avoiding negative stereotypes, but there is a substantial amount of pressure to act in a way to disprove these stereotypes as well. Negative perceptions can often cause individuals who are stereotyped to suffer from the anxiety that arises when striving to disconfirm inaccurate depictions of them (Smith, 2004). Claude Steele, a pioneer of this type of research coined the term *stereotype threat* to highlight the difficulties that many individuals have to confront to avoid

confirming negative stereotypes. According to Steele (1997), stereotype threat is the fear that an individual will fulfill or confirm a negative stereotype which can lead to decrements in their performance. In the beginning phases of the literature surrounding this topic, research primarily focused on the academic effects. As the literature has evolved, physiological and cognitive decrements in one's level of functioning have been evaluated as well. The present study attempts to extend this knowledge even further by exploring some of the psychological implications that have not been well understood.

Early Stereotyping

Research has shown that stereotypes can be due to two underlying processes. When we are in contact with a group of people, our brains activate certain characteristics and memories that we have formulated about different groups of people (Krieglymeyer & Sherman, 2012). In addition, we formulate impressions of various groups based on our experiences with them which may increase or decrease levels of stereotype activation altering our social interactions (Krieglymeyer & Sherman, 2012; Freeman & Ambady, 2009). The initial step when processing one's surroundings and the individuals within it is to cognitively access pre-existing information pertaining to our perceptions and interactions. Our memories allow us to formulate decisions based on past experiences with various groups or particular environments (Krieglymeyer & Sherman, 2012). If negative perceptions are held based on what one has experienced in the past, stereotype activation can be very high (Krieglymeyer & Sherman, 2012). When individuals behave in manners consistent with these perceptions, stereotype activation is increased and generalizations are strengthened and extended (Krieglymeyer & Sherman, 2012). However, if an individual is able to use past experiences to disconfirm negative stereotypes produced in certain situations, then this will cause low stereotype activation (Freeman & Ambady, 2009). These

different types of stereotype activation are influenced by associations individuals have created between specific groups and stereotyped behaviors (Campbell & Mohr, 2011).

Research has revealed that children as early as three years old can determine differences in skin color and begin to form racial attitudes about racial groups including their own by the time they are in kindergarten (Jones & Nelson- LeGall, 2008). Young children develop the knowledge about social roles, appearance, gender, and behaviors that are associated with various groups of people at an early age as well (Jones & Nelson- LeGall, 2008). One of the most famous studies illustrating negative stereotyping by children was the Clark and Clark (1939) study. The authors demonstrated that when over two hundred Black children were presented dolls that were either Black or White and were asked to decide which one they liked the most, almost 70% chose the White doll. This finding led many to conclude that racial attitudes are formed at extremely young ages (Clark & Clark, 1939). In a study of a related topic, Steinberg and Hall (1981) revealed that children (ranging from Kindergarten to 1st grade) watching African-American actors engaging in negative or neutral behaviors were not viewed favorably compared to Caucasian actors engaging in the same behaviors. This research added to the literature showing that at an early age, all children, including African-American children, learn to associate stereotypes and negative characteristics based on race and other external factors (Hartley & Sutton, 2013; Jones & Nelson- LeGall, 2009). These stereotypes then continue on as children age into their high school years and even into adulthood (Hartley & Sutton, 2013).

Stereotype Threat

Over 300 empirical studies have revealed that stereotype threat can create significant impairments in performance across various tasks including intellectual assessments (Appel, Kronberger, & Aronson, 2011; Aronson & McGlone, 2009). Stereotype threat is a state in which individuals experience high levels of discomfort over the course of completing activities that are evaluative in nature that remind them of negative stereotypes pertaining to their identified group (Appel, Kronberger, & Aronson, 2011). For example, research has shown that when a group of African-Americans are reminded before taking a standardized test of the stereotype that they do not perform as well as their Caucasian counterparts, they underperform. Simply being reminded of the stereotype creates anxiety resulting in underperformance compared to a group of African-Americans who were not exposed to stereotype threat activation (Steele, 1997; Steele & Aronson 1995).

Stereotype threat has also been examined in other domains such as gender. When women were reminded of the stereotype that they do not perform as well as men on mathematical tasks, they performed significantly lower than woman without such exposure (Steele, 1997). In addition, research has shown that individuals who experience stereotype threat also experience difficulties in their preparation and note taking abilities when asked to report on specific tasks (Appel et al., 2011). As individuals are trying to learn new information and take notes, they are bombarded with negative thoughts preventing them from properly describing what they have learned (Appel et al., 2011). Additionally, studies have shown that stereotype threat undermines the necessary cognitive processes that are needed to complete various intellectual tasks (Johns, Inzlicht, & Schmader, 2008). In fact, individuals with continuous stereotype threat exposure can

display deficits in working memory and executive functioning (Schmader & Johns, 2003) as well.

Studies have revealed that under stereotype threat conditions, individuals experience impaired self-control and anxiety, increased self-monitoring, impaired emotion regulation, and increased blood pressure (Appel et al., 2011; Blascovich, Spencer, Quinn & Steele; 2001, Johnson, 2009; Reyna, 2000). Other studies have shown that individuals affected by stereotype threat can experience significant reductions in self-esteem due to continuous thoughts in which they begin to believe negative stereotypes depicting them as inferior or less intelligent (Burkley & Blanton, 2009). This decline in self-esteem and self-confidence can be reduced to a level in which individuals begin to question their competence and may even avoid activities that they are stereotyped to not do well in to avoid failure (Aronson, Burgess, Phelan, & Juarez, 2011; Boucher, Rydell, Van Loo, & Rydell, 2011; Burkley & Blanton, 2009; Forbes & Schmader, 2010).

Burkley and Blanton (2009) revealed that many of the effects from stereotypes are due to chronic internalization. They revealed that chronic internalization causes individuals to internalize negative stereotypes which can be consistent over time and across various situations (Burkley and Blanton, 2009). For example, if African-Americans chronically internalize that they are inferior to their Caucasian counterparts on standardized tests and academic tasks, then they will generalize this assumption across a variety of other situations leading to detrimental effects and potentially avoidance of the tasks that they are being stereotyped (Burkley and Blanton, 2009; Appel, et al., 2011).

Few studies have looked at the psychological effects of stereotype threat outside of anxiety. Risher et al. (2003) found that people who endorse experiencing negative stereotypes exhibit higher self-reported levels of depressive symptoms and a wide array of physiological symptoms compared to those who do not endorse experiencing negative stereotypes. In addition, when exploring aging stereotypes, research shows that when aging adults held negative views of their age increasing, they lived almost eight years less than those with positive views (Levy, Slade, Kunkel & Kasi, 2002). Overall, the impacts of negative stereotypes are undoubtedly detrimental to the health and overall functioning of individuals, particularly African-Americans and other marginalized groups who are more susceptible to stereotypes (Burkley & Blanton, 2009; Steele & Aronson, 1995; Steele, 1997). Negative stereotypes create a sense of favoritism and superiority for the majority, while members of the minority group feel a sense of inferiority and lowered sense of competence affecting daily functioning (Burkley & Blanton, 2009).

Statement of the Problem

Although the effects of stereotype threat have been widespread across ethnicity, class, gender, sexual orientation, age, region, disabilities, athletic ability and body weight, research has shown that African-Americans, compared to other groups, are most likely to be negatively stereotyped in U.S. culture (Steele & Aronson, 1995; Steele, 1997; Moore, 2006; Ragsdale, 2000). Based on the large amount of literature illustrating the detrimental effects resulting from stereotype threat and the large number of African-Americans who have been affected academically and physiologically, it is worth further exploration of additional psychological effects. The presence of academic, cognitive and physiological detriments to those affected by stereotype threat may account for many psychological issues that individuals have to confront on

a daily basis. Due to these issues, more attention needs to be devoted to the psychological realm regarding the mental health consequences that arise from stereotype threat.

Mental illness is highly stigmatized in U.S. society, which undoubtedly leads many people to avoid counseling altogether. Researchers have found that the most common reason why individuals avoid seeking therapy is due to stigmas associated with psychological treatment and mental illnesses (Corrigan, 2004). In fact, stigmas can decrease the likelihood of one seeking mental health treatment despite the severity of their presenting concerns (Sibicky & Dovidio, 1986; Vogel, Wade, & Hacker, 2007). Public perception contributes to mental health stigmas as well. Public perceptions/attitudes influence how individuals perceive seeking treatment. Due to often negative stigmas associated with mental health services, many individuals view treatment negatively (Sibicky & Dovidio, 1986; Vogel, Wade, & Hacker, 2007). This causes many people suffering from an array of psychological issues to not seek counseling to avoid being negatively stigmatized (Corrigan & Matthews, 2003). College students surveyed regarding mental illness indicated that those who endorse stigmas attached to mental health are less likely to seek counseling and psychological treatment (Cooper, Corrigan, & Watson, 2003). Fears of confirming negative stereotypes cause individuals to experience anxiety and eventually avoid various activities (Steele, 1995). This phenomenon has been demonstrated in numerous academic tasks and research has recently revealed this with various aspects of physical health (Hammond et al., 2010; Hammond, Matthews, Mohottige, Agyemang, & Corbie-Smith, 2010; Jones et al., 2013). Health-related stereotype threat has emerged in the literature as an important variable influencing one's decision about seeking medical treatment or annual health exams due to fears of confirming negative stereotypes related to their health (Hammond, Matthews, & Corbie-Smith, 2010; Jones, Taylor, Dampeer-Moore, Van Allen, Sauders, Snowden & Johnson, 2013).

Health related stereotype threat research has shown how African-Americans tend to avoid annual medical exams and preventative treatment due to the effects of stereotype threat (Jones et al., 2013). Therefore, when African-Americans are reminded of negative stereotypes (e.g. the health of African-Americans is inferior to their White counterparts) pertaining to their race, they avoid treatment (Jones et al., 2013). Based on these findings, it would be helpful to better understand the impact of stereotype threat related to mental health treatment. This knowledge can be beneficial with developing programs, interventions and the necessary awareness to help African-Americans to develop more confidence in health care and mental health services.

Significance of the Study

The literature has provided a substantial body of empirical information regarding how intellectual functioning has been disrupted when individuals are confronted with negative stereotypes and attempt to disconfirm them (Steele & Aronson, 1995, Steele, 1997; Moore, 2006; Appel, Kronberger, & Aronson, 2011; Johnston, 2006; Von Hippel, Hawkins & Schooler, 2001). Studies have also shown the difficulties that stereotype threat has caused to African-Americans in the realm of memory problems, decreased cognitive functioning, elevated stress, and task avoidance (Schamder, Johns & Forbes, 2008). In addition, Jones et al. (2013) demonstrated health-related stereotype threat from a physical health standpoint and outside of an experimental context. Stereotype threat was originally defined as the fear that one's performance or behavior would confirm a negative stereotype leading to underperformance (Steele, 1995). Jones et al. (2013) revealed that dispositional stereotype threat is present in medical settings in which individuals who have the belief that they are being negatively stereotyped by their medical provider will be less likely to seek help. This is an effort of not wanting to confirm the stereotype or not feeling like their treatment would be unbiased and without negative judgement. If

stereotype threat can influence some individuals' decisions about seeking help for problems related to their physical health, it stands to reason that the same processes might affect their willingness to seek help for psychological problems. In the present study, the effect of stereotype threat on an individual's decision to seek counseling will be investigated.

Research Questions

African-Americans often have to contend with a wide array of negative stereotypes that unfairly associate them with unintelligence, laziness, and violent behavior (Steele, 1997; Steele & Aronson, 1995). Due to these negative stereotypes, there is a great amount of effort devoted towards disconfirming these stereotypes leading to overwhelming anxiety and other significant effects. Research has also shown that African-Americans seek counseling at a much lower consistency than their Caucasian counterparts and often have to contend with negative stereotypes in health (physical and mental) settings as well (Constantine, Wilton, & Caldwell, 2003; Thompson, Bazille, & Akbar, 2004; Townes, Cunningham, & Chavez Korell, 2009). Avoidance of counseling may be due to a wide variety of factors including stereotype threat, cultural mistrust, self-stigma, health-related stereotype threat and possibly other factors (Alston & Bell, 1996; Burgess, Warren, Phelan, Dovidio, Van Ryn, 2010; Duncan & Jonson, 2007). As a result, the current study explored how self-stigma and mental health-related stereotype threat in particular contribute to African-Americans' willingness to seek counseling. The study addresses the following research questions: 1) Does self-stigma predict one's willingness to seek counseling? 2) Does mental health-related stereotype threat predict one's willingness to seek counseling? 3) Do both measures account for significantly more variance together, than either used in isolation, as predictors of willingness to seek counseling?

CHAPTER II. REVIEW OF THE LITERATURE

The following is a summary of the wide range of literature on the topic of stereotype threat from various aspects and populations. Prior research has explored stereotype threat across: ethnicity, gender, socio-economic status, intellectual abilities and physical abilities. The effects of stereotype threat have been explored academically, cognitively and physiologically. By examining the literature across these domains the review will demonstrate the diverse consequences of this issue. In addition, the summary includes new directions being taken in stereotype threat research to further assess difficulties resulting from negative stereotypes and fears of discrimination.

Stereotype Threat and Performance

Steele (1997) explored the effects of stereotype threat amongst two populations: African-Americans and among women. In their meta-analysis, Steele (1997) noted the strong empirical support indicating that individuals who are susceptible to various stereotypes experience a vast level of difficulty when trying disprove negative stereotypes in testing situations. For instance, the authors illustrated the fact that Blacks are stereotyped for having lower levels of ability compared to their White counterparts when asked to perform intellectual tasks. In addition, women are stereotyped to have lower abilities on mathematical tasks when compared to men. Regardless of how adept individuals in these populations are at performing various tasks, when they are reminded of a negative stereotype pertaining to their identified group that is relevant to the task, it creates a decline in performance. This is due to the pressure that one faces to reject the stereotype. However, the authors found that when stereotype threat activation is not present, Blacks perform similarly to their White counterparts and the same is the case regarding the performance of women compared to men.

Based on the various academic effects of stereotype threat, Smith and Hung (2008) explored the impact of these effects on education. Through their meta-analysis, they revealed that stereotype threat has many effects not just on the individuals experiencing stereotype threat, but on the education system as a whole. Through their examination of the literature they showed that the effects of stereotype threat prevent minorities from being able to perform at their full capacity thus leading to lower grades and scores on standardized tests. For women, it leads to lowered performance on mathematical tasks, and can create a sense of avoidance of trying to pursue an interest in fields involving or requiring mathematical abilities. Overall, they argued that stereotype threat creates additional problems for minorities and women that could be avoided if the education system would implement programs and techniques in teaching to combat the effects of stereotype threat.

Steele and Aronson (1995) explored test performance among African-Americans through a series of experiments. Their experiments looked at multiple variables ranging from self-doubt in participants to overall performance. Their study also included several different measures including a stereotype threat inventory exploring stereotype avoidance. The measure included 57 items which asked participants about their hobbies/interests, their personality type, traits believed to be stereotypical of African-Americans (i.e. involvement in sports, perceived laziness and aggressiveness), and how they believe race impacts their academic performance. The measure also asked demographic information to assess if participants try to distance themselves from negative stereotypes related to their racial background. Their findings revealed consistent results across their studies, showing that African-Americans exhibited lower levels of performance on intellectual tasks when stereotype threat was activated. Activation was also consistent with higher levels of self-doubt and other negative thoughts that affected performance. However,

when activation was not present, African-Americans performed almost equally to their Caucasian counterparts. Even when individuals were tested under the stereotype threat condition and later tested again without the activation, there were clear differences in their performance.

Rydell, Rydell, and Boucher (2010) explored the effects of stereotype threat from the perspective of how it affects learning in individuals before completing tasks. The authors wanted to assess if activation of stereotype threat can affect one's ability to learn and retain information. Through various examinations, they proved that when exposed to stereotype threat, regardless of the difficulty of the learned tasks being taught, participants demonstrated lower levels of accuracy on the various tasks. In comparison, individuals who were not exposed to any form of threat were consistently accurate. The authors proposed that stereotype threat may affect one's motivation to learn as well as perform tasks that may have been sufficiently learned. These findings add to the wealth of information providing evidence regarding the detrimental effects of stereotype threat.

Cadinu, Maass, Frigerio, Impagliazzo, and Latinotti (2003) explored the effects of stereotype threat from the perspective of expectancy. The authors believed that lowered expectations would be consistent with the effects of stereotype threat. In addition, they believed that higher expectations would help to mitigate the effects of stereotype threat activation. Through two experiments, the authors confirmed that when women were provided favorable information regarding their gender, they excelled in their performance on mathematical tasks. However, when women were provided unfavorable information regarding their gender while completing mathematical tasks, they underperformed. When assessing African-Americans and Caucasian levels of expectancy based on favorable and unfavorable information provided, the unfavorable group had the lowest levels of performance. The findings of the study were

consistent with similar research pertaining to stereotype research and its effects. However, as mentioned by the authors, the findings also added to the literature by revealing the effects it has on Caucasians when put in a situation that made them feel inferior. The results add to the vast accumulation of evidence on the effects of stereotype threat and ultimately how it can affect anyone.

Nguyen, O'Neal and Ryan (2003) completed a 10-year meta-analysis examining the effects of stereotype threat. Specifically, the authors focused their assessment on minorities and women. The aim of the study was not only to assess the detrimental effects of stereotype threat but also to assess beyond race by exploring gender as well. Consistent with previous research, the authors concluded that stereotype threat does in fact have significant implications on race and gender revealing declines in performance across both demographics. However, the authors also indicated that it appears that minorities are the most consistently affected by stereotype threat when comparing the effects between minorities and women. The findings of the authors highlighted the need to restructure the ways tests are administered as previous research has implied. They alluded to ensuring that test takers are in an environment free of stereotypes and from possible reminders of them. In addition, it is important that everyone is encouraged in manner that will facilitate the highest level of performance and effort amongst test takers. Overall, they believed that by taking advantage of the knowledge obtained from stereotype threat research, decrements in performance amongst vulnerable populations can be corrected and performance can be enhanced.

Marx and Stapel (2006) contributed to the body of literature on stereotype threat by exploring emotional reactions when the activation occurs. In addition, they wanted to measure these emotions even after the completion of an intellectual task. To assess this, the authors

proctored an experiment to assess mathematical abilities in male and female participants. The aim was to measure their emotional reactions before and after the examination. In addition, they wanted to gauge their level of performance on the mathematical tasks. Congruent with previous research, women scored significantly lower than men when stereotype threat was present. In addition, they showed the highest level of emotional reactions before the test and after when the threat was present. When the threat was not present, women scored much higher on mathematical tasks and exhibited lower levels of emotional reactions compared to men. Their research added further knowledge of the anxiety that individuals under stereotype threat experience before being asked to complete a task. In addition, their research showed the level of frustration and disappointment they experience after they complete a task under the threat as well.

Elizaga and Markman (2008) examined the influence of in-group and out-group exposure on the effects of stereotype threat. The authors' aim was to add to knowledge about stereotype threat while also determining if performance is enhanced when individuals do not experience reminders of stereotypes attached to their identity group. Through their experiments, female participants were either exposed to a confederate who confirmed the stereotype regarding female performance on mathematical tasks or to one who disconfirmed the stereotype. Their results indicated that when female participants were exposed to a confederate (posed as a peer) from the in-group (female) who was said to have performed well, they performed well. When they were exposed to members of the out-group (male) who confirmed the stereotype and performed well, participants in this condition showed lowered performance. In addition, consistent with previous literature, when confederates were used to merely remind participants of stereotypes regarding their sex and mathematical task completion, they scored significantly lower than those where

there was no exposure to the confederates. Their work demonstrated how the social component in stereotype threat activation and how being reminded by a peer can influence performance.

Appel, Kronberger, and Aronson (2011) explored the effects of stereotype threat on test preparation, particularly through note-taking. The researchers wanted to add to the body of literature on stereotype threat affecting performance and assess how it affects one's ability to prepare. They asked participants who were all women to look up words in an online encyclopedia and then compile notes in a word processing software. The participants were instructed to produce the notes in a manner that would make them helpful to anyone who wanted to use them for learning science terms. Before being asked create these notes and before being asked to review information in the online encyclopedia, participants were broken into two groups: 1) Exposure group and 2) Non-Exposure group. The exposure group was reminded of the stereotype that women do not perform as well as men in several intellectual domains. The non-exposure group received no reminder. After receiving or not receiving the exposure, participants completed notes based on what they learned regarding science. Two independent psychologists who were both blind to the study evaluated all of the notes. Their findings revealed that participants who received stereotype threat exposure produced notes that were significantly lower in quality than those who were not exposed. In addition, these participants took longer to produce their notes and were overall seen as less efficient. Their research added another dynamic to the effects of stereotype threat by showing that it not only affects performance but it also affects one's ability to prepare as well.

Rivardo, Rhodes, Camaione, and Legg (2011) explored the effects of stereotype threat on women. Instead of merely focusing on decrements in their performance as a result of threat activation, they assessed if the threat would reduce the number of tasks women completed.

Anxiousness was also measured while participants completed intellectual tasks. Through their experiments the authors concluded that when women were exposed to stereotype threat activation their anxiety levels were higher than those who were not exposed. In addition, they showed lower levels of item completion in comparison to participants who were not exposed. Even though there were no significant differences in performance between the exposure and non-exposure group, the significant differences in task completion and anxiety levels revealed some educational ramifications associated with stereotype threat. As demonstrated in their findings, the items that individuals did not finish due to anxiety could relate to the number of items left incomplete on standardized tests leading to lower scores. The authors indicated that this phenomenon has to be taken into consideration when trying to help individuals overcome stereotype threat.

Pseekos, Dahlne, and Levy (2008) created a 47-item instrument, the Academic Stereotype Threat Inventory (ASTI) to measure stereotype threat among women related to mathematical tasks. Their instrument explores participant beliefs related to gender and academic performance, susceptibility to stereotype threat, feelings of inadequacy, and anxiety along with academic interests and ability surrounding mathematics. These areas are assessed through three domains: a stereotype awareness subscale consisting of 24 items (i.e. awareness of the stereotype that men perform better than women on mathematical tasks), a mathematics subscale consisting of 19 items (i.e. enjoyment in completing mathematical tasks and perceptions of their ability), and an equality subscale consisting of 4 items (i.e. the belief that both men and women have similar interests and performance in math). The Academic Stereotype Threat Inventory showed internal consistency in the acceptable to excellent range with the following reliabilities: Stereotype awareness ($\alpha = .98$), mathematics ($\alpha = .97$) and equality ($\alpha = .79$).

Research by Burkley and Blanton (2009) showed that stereotype threat can reduce one's motivation towards completing various performance tasks and reduce self-esteem. Their study revealed that when individuals are confronted with tasks that can potentially confirm a negative stereotype that is linked to their identified group, it can create a great amount of pressure. When group members fail at disconfirming negative stereotypes, this outcome can create lowered levels of confidence when asked to complete the task again in the future. If frequent failures continue, reduced amounts of effort can result due to formed beliefs that they will never be able to perform at a sufficient level of performance. In their study, participants were given a math test and were later given feedback that they had failed. The participants were then told that they would have another chance to do the test over again and would have a chance to complete an optional math tutorial. They were told that this program would provide them with information regarding various mathematical concepts that would help them to do better. They were also told that they could use the tutorial as long as they would like. The amount of time each participant spent utilizing the tutorial was recorded to examine motivation to improve their performance on mathematical tasks. Their findings revealed that participants who learned to identify with negative stereotypes that deemed them as intellectually inferior to other groups spent significantly less time on the tutorial than those who did not identify with stereotype threat. Those exposed to stereotype threat also reported being less interested in math and found it less enjoyable. In addition, they reported being less likely to pursue math as a potential major and less interest in pursuing a potential career in any math related field. Their study showed the impact of negative stereotypes and the detrimental effects it can cause to performance as well as an individual's confidence in engaging in an intellectual task.

Schmader, Johns, and Forbes (2008) studies the wide range of effects that are caused by stereotype threat through conducting a meta-analysis. They revealed that individuals who belong to groups (ethnicity, gender, regional) that are subjected to negative stereotypes regarding intellectual performance experience great difficulties trying to invalidate these generalizations. The authors described that there is great pressure for individuals to go against a negative stereotype attributed to their identified group. This pressure leads to impairments in performance due to levels of anxiety created by one's fear of confirming an existing stereotype. The authors revealed that stereotype threat can affect one's ability to retain information and it reduces their cognitive capacities. Due to the pressure and anxiety experienced, it overwhelms the brain to the extent that it cannot process or retain as it would under situations in which the activation was not present. The authors revealed that stereotype threat causes physiological stress responses, and continuous negative thinking about one's ability that cause cognitive imbalances. In addition, stereotype threat was shown to create academic and social discomfort due to feelings of inferiority. The article revealed how the effects of stereotype threat can inhibit an individual's ability to achieve at a level they are capable of performing and create many cognitive effects.

Armenta (2010) explored the effects of stereotype threat when completing intellectual tasks. In addition, the study incorporated the notion of stereotype boost which serves as an activation to encourage positive performance on intellectual tasks. Using Latino and Asian-American populations, they evaluated the two concepts of the threat and the boost to determine how much of an effect is present in the context of one's ethnic identification. They structured their experiments to assess Asian-Americans completing tasks with various cues that either influence stereotype threat activation or stereotype boost. The authors concluded that when a cue (negative stereotypes pertaining to their ethnic identity and performance on mathematical tasks)

was activated, Asian-Americans scored higher than their Latino counterparts. No significant difference was noted when stereotype threat was not present. When exploring their performance in terms of ethnicity to note stereotype boost, Asian-Americans with low ethnic identification had no significant difference in math scores regardless of whether the cue was present or not. However, those with high ethnic identification scored significantly higher than Asian-Americans with no cue. Congruent to their Asian-American counterparts, Latinos with low ethnic identities showed no significant differences regardless of the presence of a cue. The findings further revealed the effects of stereotype threat and how ethnic identification can encourage performance or decrease performance. This study is a key contribution in stereotype threat research due to the addition of the cultural identity component and how it can potentially influence the effects of the threat. In addition, it provides knowledge of how cultural and ethnic identity can alleviate the effects.

Osborne and Walker (2006) examined the impact of stereotype threat on one's ability to remain in school based on academic identification. The authors explored the common belief that if a student is highly invested in their academics, then there would also be a correlation to how well that individual performed. The authors aimed to answer this question while also accounting for stereotype threat in the study. By assessing students longitudinally, their results showed that high retention rates in school were associated with high academic identification amongst Caucasian students. Interestingly, among minorities in the study, lower academic identification was associated with higher retention rates. Osborne and Walker (2006) concluded that the higher the academic identification for minorities, the higher the pressures and expectations they experience. Due to stereotype threat being considered the fear that one's behavior will confirm an existing stereotype, there is great difficulty among minorities when exposed to stereotype

threat activation to ensure that they are not confirming existing stereotypes that are attached to their race. In addition, due to higher levels of performance, there is also pressure to maintain consistency with performance among minorities. Their study also revealed the effects of stereotype threat among individuals with high levels of academic achievement and identification and how it can affect their ability to remain in school. Talented minority students may eventually decide to leave school due to the overwhelming presence of pressure and the fear of not wanting to fail.

Stone, Lynch, Sjomeling and Darley (1999) also explored the effects of stereotype threat in the domains of sports. They were interested in assessing measures of intelligence and sports achievement in African-American and Caucasian athletes. Due to the perception that African-Americans are considered talented in sports but behind intellectually, their intelligence was assessed. Based on the perception that Caucasians are considered more talented intellectually but behind in terms of athleticism, their sports performance was assessed. They concluded that when stereotype threat activation occurred, African-Americans demonstrated lower levels of sports intelligence/knowledge than those were not exposed. Similarly, Caucasians who were exposed to the activation in the performance group showed declines in their performance when compared to those who were not exposed. This finding was said to be a result of being reminded of the stereotype that they are not as athletically gifted as their African-American counterparts. The findings obtained by the authors demonstrated the effects of stereotype threat even in the sports realm and how it can affect confidence even when mastery of a particular task was previously demonstrated.

Stereotype Threat and Physiological Effects

Considering that high blood pressure is often associated with anxiety, Blascovich, Spencer, Quinn and Steele (2001) wanted to explore the effects of stereotype threat on high blood pressure in African-Americans. In their study, they demonstrated that before completing cognitive tasks, African-Americans who received stereotype threat activation (reminded of a negative stereotype that pertained to them), showed significant elevations in high blood pressure. This result was shown in comparison to Caucasians, as well as in comparison with other African-Americans who were not exposed to the activation. Their research demonstrated that there can be physiological effects of stereotype threat. Not only can activation create levels of anxiety and affect performance, it also can raise blood pressure which could potentially create health problems later in life. Their study illustrated the various dangers that stereotype threat can create.

Schmader et al, (2008) revealed that stereotype threat is also associated with increases in cortisol levels resulting from anxiety and stress. Essentially, when stereotype threat activation occurs, it causes physiological arousal and increased stress levels in some individuals compared to other individuals who do not experience the same exposure. The researchers demonstrated that when women are completing mathematical tasks under the stereotype threat conditions, their cortisol and stress levels increase. The same occurs when African-Americans are asked to complete intellectual assessments under stereotype threat conditions. The researchers also demonstrated high activation in the sympathetic nervous system in participants experiencing stereotype threat activation. Although this system is helpful in fight or flight situations, continuous activation as seen in individuals trying to overcome the effects of stereotype threat can create a weakened immune system, with ensuing additional health problems. (Johns, Inzlicht & Schmader, 2008).

Clark, Anderson, Clark, and Williams (1999) demonstrated some physical impacts of race and prejudice. Their research showed that African-Americans experience high amounts of stress and physiological arousal based on having to regularly confront discrimination and negative stereotypes. They showed that African-Americans are extremely susceptible to stress due to racism and frequent cues in the environment reminding them of prejudice associated with their race. They also demonstrated how prejudice weakens the immune systems of African-Americans who have to contend with negative portrayals while also trying to disprove them. After continuous utilization of their physiological resources, the overexertion can lead to health issues (e.g. cardiovascular) and mental health problems such as depression. The researchers further added that these experiences resulting from stress can also result in substance use and increased anger and hostility.

Stereotype Threat and Cognitive Effects

Schmader and Johns (2003) focused their attention on how stereotype threat affects memory capacity and one's ability to retain information. Considering that research reveals that fear and anxiety can reduce working memory due to the amount of effort being used to combat the fear, the authors wanted to determine if the same result could be found with stereotype threat. To explore this question, they conducted three experiments to assess memory capacity. The results revealed that when women and men were asked to perform mathematical tasks under stereotype threat activation, women showed reduced cognitive capacities/resources. This effect did not occur when the activation was not present. In the second experiment comparing Latinos and Caucasians in terms of intellectual tasks, there was also an effect. When the activation occurred, Latinos showed a decrease in memory performance compared to Caucasians. There were no significant differences when the activation was not present. In the third experiment

looking at performance on standardized tests, the results were congruent with the first two experiments. Activation of stereotype threat reduced performance of a memory task.

Johns, Inzlicht, and Schmader (2008) revealed that stereotype threat increases negative thoughts and appears to undermine cognitive processes that are necessary to perform well on intellectual assessments and tasks. Their research showed that underperformance is largely due to significant reductions in working memory. Ultimately, negative stereotypes affect performance by increasing the mental workload of the individuals it affects thereby exhausting their executive functioning.

Stereotype Threat and Socio-Economic Status

Harrison, Stevens, Monty, and Coakley (2006) explored stereotype threat in the context of socioeconomic status. Due to stereotypes surrounding the lower class as being less intelligent in comparison to their middle and upper class counterparts, it was expected that this group would show the lowest level of performance on intellectual tasks in comparison to the other classes. In addition, they wanted to assess for anxiety levels and how their fears affected performance based on class. They found that lower class students had the highest levels of anxiety when exposed to stereotype threat activation. The middle class had the second highest level of test anxiety and then upper class students. There were no significant differences across all three class levels when activation was not present. When the authors assessed for verbal abilities, the lower class students once again showed the lowest levels of performance. The middle class students showed the second lowest level of performance. When activation was not present, the classes were essentially equal in performance. However, the upper class students actually performed higher under the stereotype type threat exposure condition which was something the authors did not expect. When exploring mathematical abilities, once again, the lower class students revealed the

lowest scores under stereotype threat activation. Interestingly, the middle and upper class students actually performed higher under the activation than without it. These paradoxes were said to be from the middle and upper class students experiencing no negative responses to the threat. This finding was interpreted as possibly being due to the middle class and upper class students having fewer experiences with stereotype threat compared to lower class students.

Croizet and Claire (1998) also explored why students from low socioeconomic backgrounds perform significantly worse than those from the middle and upper class on academic tasks. The researchers were interested in the notion that students from poor backgrounds risk confirming a negative reputation of low intellectual ability. The study explored stereotype threat by manipulating the instructions given to students before taking an exam. When students were told that the test would measure their academic and intellectual ability, low socioeconomic students performed worse in comparison upper class students. However, when the test had no accompanying stereotype threat activation in which students were not told that the test was going to measure their intellectual abilities, lower class students were not affected.

Stereotype Threat and Region

Clark, Eno, and Guadagno (2011) explored stereotype threat from a regional perspective. They wanted to evaluate how the effects can be expanded to individuals based on their geographic location while being reminded of threats pertaining to them. Due to negative stereotypes associated with intellectual ability in the South, the researchers decided that this would be a good region to study. They composed four different experiments all of which introduced different forms of threats that would remind participants of the stereotypes associated with their region while completing various tasks. As shown in studies that have explored ethnicity and gender, their results showed significant differences among individuals in the

activation group and those who received no exposure to stereotype threat. Individuals who were exposed before taking a test measuring intellectual ability scored significantly lower than those who were not exposed across all four experiments.

Willingness to Seek Therapy

As demonstrated in the preceding review, stereotype threat has been extensively studied in the realm of academic, physiological and cognitive effects. However, there are some areas of behavior that conceivably may be affected by stereotype threat that have received little or no attention in the research literature. One such area is seeking counseling services. Numerous studies have shown that African-Americans underutilize counseling services compared to their Caucasian counterparts (Cheatham, Shelton, & Ray, 1987; Constantine, Wilton, & Caldwell, 2003; Duncan & Johnson, 2007; Nickerson, Helms, & Terrell, 1994; Phelps, Taylor, & Gerard, 2001; Thompson, Bazile, & Akbar, 2004). African-Americans' ethnic identity and cultural mistrust appear to play a significant role in whether or not they seek counseling (Duncan & Johnson, 2007). In addition, negative attitudes and cultural mistrust have been linked to African-Americans refusing treatment, and requesting premature terminations when they do attend counseling (Duncan & Johnson, 2007; Terrell & Terrell, 1984).

Thompson et al. (2004) indicated that there are many barriers that affect African-Americans' willingness to seek counseling which include: cultural barriers, stigmas, mistrust, and the therapeutic process. Cultural barriers were related to family beliefs surrounding keeping private matters/adversity within the family structure (Constantine et al., 2003; Thompson et al., 2004). Cultural beliefs also encompass mental illness being perceived as a weakness by the family structure. Weakness is also associated with gender with research showing that many African-American men see seeking mental health services as a sign of weakness (Thompson et

al., 2004). Many African-Americans are also taught through cultural beliefs that they have had an extensive history of dealing with and overcoming adversity. As a result, they are often taught to sustain and endure the difficulties they confront rather than seek professional help (Thompson et al., 2004).

Mistrust can be a major barrier. Due to experiences with racism and discrimination, many African-Americans develop mistrust for mental health services (Thompson et al., 2004). Many African-Americans may mistrust mental health services due to negative stereotypes pertaining to their race and not believing that Caucasian counselors can be unbiased in treatment (Thompson et al., 2004; Townes, Cunningham, & Chavez-Kovell, 2009). African-Americans who do decide to seek therapy often request an African-American counselor who they are more likely to believe they can trust (Nickerson et al., 1994; Townes et al., 2009). Research has suggested that African-American clients who work with Caucasian counselors tend to disclose less information, possibly due to not wanting to be misunderstood or negatively stereotyped (Alston & Bell, 1996). The fear of being judged has been linked to premature terminations where African-Americans are likely to terminate prematurely with a Caucasian counselor compared to an African-American counselor (Alston & Bell, 1996). Securing the trust of clients is an important aspect of therapy and is vital for successful outcomes (Watkins & Terrell, 1988). Trust is often associated with the ability to explore, self-disclose, and make progress (Patterson, 1985; Watkins & Terrell, 1988). Considering that African-Americans already seek counseling at a low rate due to fears of being negatively stereotyped, gaining their trust is paramount (Watkins & Terrell, 1988). Research has suggested that African-Americans who do not possess trust in counseling view it as less appealing and experience decreased focus (Watkins & Terrell, 1988). Based on issues of mistrust that can arise, Priest (1991) recommended that counselors continue to strive for

multicultural competence while also developing strategies to help African-Americans to feel more comfortable seeking counseling.

Health-Related Stereotype Threat

Aronson, Burgess, Phelan, and Juarez (2013) examined the role of stereotype threat in health disparities. Their findings revealed that stereotype threat presents an uncomfortable atmosphere when it is activated in health care settings. The researchers showed that this discomfort along with various cues (e.g. demographic forms) serve as reminders of stereotypes pertaining to a particular group, can lead to many detrimental effects. Discomfort and feelings of discrimination can lead to missed appointments, lack of adherence to a treatment plans, and potentially an avoidance to the health care system altogether. Also, discomfort can cause psychological (anxiety, decreased self-esteem, etc.), and physiological (increased blood pressure) effects which can exacerbate pre-existing conditions. Due to the potential dangers, Aronson et al., (2013) called for health providers to continue to develop ways to eliminate any cues or biased communication with patients that could interfere with their compliance and willingness to seek/maintain treatment.

Burgess, Warren, Phelan, Dovidio, and Van Ryn, (2010) also explored stereotype threat from the perspective of health disparities. Their research suggested that stereotype threat in health care settings occurs in a three phase process: 1) sources 2) internal mechanisms and 3) consequences. In the sources phase, African-Americans experience stereotype threat activation through situational cues (medical forms or visual/audio cues that trigger stereotype threat). The internal mechanisms phase is the response one has to environmental cues including anxiety, negative thoughts, physiological arousal, decreased effort, decreased self-control, and decreased working memory. These outcomes lead those affected by stereotype threat to the consequences

phase which includes disengagement (avoiding medical appointments due to feelings of inferiority), dis-identification (more likely to engage in stereotype behaviors such as unhealthy eating due to no longer viewing health behaviors as imperative), and non-adherence to treatment. This phase also leads to African-Americans no longer valuing the importance of various types of feedback (e.g. not seeing the importance of refraining from behaviors such as nicotine use). Based on the low percentage of African-Americans seeking medical treatment compared to their Caucasian counterparts, it is important to develop more awareness and knowledge of this phenomenon to help mitigate these effects (Abdou & Fingerhut, 2014; Burgess et al., 2010).

In another study in the domain of health, Seacat and Mickelson (2009) found that individuals who are negatively stereotyped tend to act in a consistent manner with the stereotype attached to their identified group. In their study they examined overweight women to explore how stereotype threat would affect their desire to lose weight. Their findings revealed that overweight women who experienced stereotype threat activation were less likely to engage in exercise and healthy eating compared to the group that did not experience such activation. Their research suggested that stereotype threat has many implications beyond the academic domain. They showed that stereotype threat can affect personal health intentions and one's overall well-being.

In a significant departure from the way in which Steele and others have defined and studied the construct of stereotype threat, Jones et al. (2013) explored stereotype threat from a physical health perspective. They wanted to assess how health-related stereotype threat factors into one's acceptance or refusal of medical treatment. The researchers developed the Health-Related Stereotype Threat Scale (HRST-24) consisting of 24 items exploring perceptions of medical care. The researchers wanted determine what discourages African-Americans from

seeking treatment by assessing how negative stereotypes related to African-Americans' health might affect their willingness to seek medical treatment. The researchers modified measures from several instruments including two stereotype threat instruments from the research of Steele & Aronson (1995) and Pseekos et al. (2008). The researchers modified race, gender and academic stereotype threat scales to create physical health measures. They found that health-related stereotype threat does factor into many African-Americans' avoidance of medical assistance due to fears of being viewed negatively by medical staff and not wanting to confirm negative stereotypes regarding African-Americans' health. Their research has made a major contribution by extending the construct of stereotype threat to a physical health perspective.

Stereotype Threat Spillover

Inzlicht, Tullett and Gutsell (2011) postulated that individuals can experience a wide range of effects unrelated to the source of a threat. Essentially, the researchers suggested that stereotype threat is a stressor similar to others (adversity, financial strain, adjustment etc.) that can evoke involuntary reactions (physiological, cognitive, or emotional). In addition, they suggest that stereotype threat can have short-term and long-term effects. An example of a short-term consequence is aggression or emotional reactions to underperforming on intellectual tasks due to stereotype threat activation. Long-term effects are associated with more detrimental health conditions such as obesity, poor health, disengagement, substance use, etc. The threat is seen as "spilling over" into different aspects of one's life. The authors suggest that long-term exposure to dealing with challenges to one's social identity can have devastating effects on one's health. These ramifications are exacerbated due to efforts to cope during these stressful situations because they require a high utilization of resources (thoughts, emotions, behaviors) that also are needed for other tasks. This process of exhausting resources is referred to as ego depletion.

Congruent with the findings in health related research, continuous exposure leads to unhealthy behaviors, and also to disengagement behaviors (Burgess et al., 2010; Inzlicht, Tullett, & Legault, 2011).

Inzlicht et al. (2011) demonstrated that when confronted with negative stereotypes and threats to one's identity, stress responses occur. These involuntary stress responses can lead to declines in health and even changes in neural circuitry. Consistent with the Seacat and Mickelson (2009) study, the authors demonstrated how stereotype threat can affect self-control behaviors such as eating and emotion regulation. In addition, the resources used to combat the effects can exacerbate stress responses that are needed to handle daily tasks. The researchers offered recommendations to help individuals to address threats. They suggested that individuals could strengthen their coping mechanisms and support networks to avoid stereotype spillover. The authors also recommended that individuals surround themselves with positive role models, increase their self-motivation, and engage in healthy activities to help overcome these stressors.

Self-Stigma

Vogel, Wade, and Hackler (2007) explored public stigma, self-stigma and attitudes towards seeking counseling to assess how these factors affect one's willingness to seek counseling. The researchers assessed 680 college students with the Self-Stigma of Help Seeking Scale (SSOHS). This scale measures how one's attitudes towards counseling is related to their willingness to seek counseling. Their results revealed that public stigma regarding mental illnesses influences self-stigma. Essentially, individuals develop negative stigmas towards mental illnesses and services due to negative perception from society. To avoid being stigmatized, individuals then decide to not to seek counseling services. Participants who developed negative attitudes resulting from stigma attached to counseling were less likely to seek

help. The researchers called for a need for further research to assess how different groups respond to self-stigmas and the need to develop more awareness/interventions to help combat these perceptions. In addition, Vogel et al. (2007) called for exploring self-stigma in populations other than Caucasian.

Kendra, Mohr, and Pollard (2014) explored stigmas as a barrier in mental health treatment. The authors suggested that stigmas and negative attitudes towards counseling do not only prevent a potential client from seeking therapy, but can also prevent clients in therapy from having successful outcomes. Their research showed that self-stigma is a predictor of client engagement and the ability to establish and maintain the working alliance. They found that individuals who endorsed high self-stigma and perceived public stigma exhibited less engagement with counseling and were at great risk of having exacerbated psychological symptoms.

Corrigan (2004) found that African-Americans do not seek psychological services or medical treatment as consistently as Caucasians. Similar to previous research, the study explored how public-stigma and self-stigma influences one's willingness to seek counseling. The findings were congruent with other studies revealing that public-stigma and self-stigma play a significant role in one's decision to seek counseling. Public stigma creates negative perceptions of psychological services and the mentally ill, and self-stigma can result in more psychological problems due to fears of being labeled and regarded as inferior because of psychological problems. As discussed by the researcher and as shown in previous literature, these phenomena can be detrimental for people genuinely in need of help who avoid treatment to elude being negatively stereotyped.

After reviewing the literature on stereotype threat and the various domains in which it has been studied, it is clear that many more questions remain for better understanding of the effects of stereotype threat. Building primarily from the work of Jones et al. (2013) and Vogel et al. (2007) this study will address the influence of mental-health related stereotype threat and self-stigma on African-American college students' willingness to seek counseling. This will be done by addressing the following research questions:

- 1) Will self-stigma predict one's willingness to seek counseling?
- 2) Will mental health-related stereotype threat predict one's willingness to seek counseling?
- 3) Will both measures account for significantly more variance together compared to either being used in isolation as predictors of willingness to seek counseling?

CHAPTER III. METHOD

This chapter will present the research method, including participants, procedures, instruments, design, and analyses.

Procedure

After receiving approval from the Institutional Review Board, the researcher contacted African-American student organizations such as Black Student Unions at historically black colleges and universities (HBCUs) and at predominantly white universities (PWIs). The researcher contacted 40 Black Student Union presidents via email to request participation from their members. Their presidents' email addresses were obtained through the National Black Student Union (nbsu.org). Correspondence to these organizations and departments included a link to the study to be shared with their members. Snowball sampling was also used by asking colleagues (including mental health professionals) to share the online survey on Facebook.com and appropriate listservs to increase recruitment. The survey was shared on several psychological listservs including the American Psychological Association Division 45-Society for the Psychological Study of Culture, Ethnicity, and Race. This procedure was utilized after receiving limited participation from Black Student Unions alone. Although, the survey was shared by individuals known by the researcher, the sample of participants who completed it were not known directly. A power analysis revealed that to detect a medium to large (.20) effect size at .80 power at the .05 level of confidence for a hierarchical regression analysis with two predictors, a sample of 68 is needed.

Upon agreeing to participate in the study, participants were directed to an informed consent screen before beginning the survey. The information letter educated participants on their

right to discontinue at any time and that their information will be confidential and not linked to them in any research documents. Once the information letter was complete, participants were directed to a demographic form. The form asked for their gender, race/ethnicity, educational status (freshman, sophomore, junior or senior), whether their school is a HBCU or a PWI, and whether their school is public or private. The demographic information form is essential for exclusion and inclusion purposes. Only results from African-American participants were used. In addition, the aim was to ensure that all of the participants were undergraduate students. All participants were invited to complete the 24-item Health-Related Stereotype Threat Scale (Jones et al., 2013) which was modified to reflect mental health items rather than medical items. Participants also completed the Self-Stigma of Seeking Help Scale (Vogel et al., 2007), and the Intentions to Seek Counseling Inventory (Cash et al., 1975).

Participants

The sample consisted of 81 undergraduate students from across the United States who completed the entire survey. The sample mostly identified as African-American (91%) with a few participants identifying as Bi-racial (6%) and Multi-racial (2%). Due to the focus of the study, responses from students who did not identify as African-American were removed to be consistent with prior research. Therefore, the data analyzed in the current study was taken from the 74 African-American participants who completed the online survey. During the survey, participants completed a demographic form, the Self-Stigma of Seeking Help Scale, the Health Related Stereotype Threat Scale-24, and the Intentions to Seek Counseling Inventory. Each of the 74 participants completed each item of the online survey without any questions left unanswered. Twenty two participants did not complete the survey and their results were not included in the results. Eighteen of these participants identified as female, three identified as

male, and one identified as other gender identity. The majority of the participants who did not complete were seniors (12), five were juniors, one was a sophomore and four were 1st year students. The survey was presented in the following order: demographic information, the Health Related Stereotype Threat Scale (HRST), the Self-Stigma of Seeking Help Scale (SSOSH), and the Intentions to Seek to Counseling Inventory (ISCI). Incomplete surveys consisted of two ending during the demographic information questions, 11 during the Health Related Stereotype Threat Scale (HRST) questions, 8 during the Self-Stigma of Seeking Help Scale (SSOSH), and one during the Intentions to Seek to Counseling Inventory (ISCI).

The majority of the sample that completed the survey identified as female (70%). 28% identified as male; and 1% identified as other gender identity. Regarding year in college, 16% were first year students, 26% were sophomores, 23% were juniors, and 35% were seniors. When asked how the participants would characterize their academic institution, 86% characterized their school as a Predominantly White Institution (PWI) while 14% reported attending a Historically Black College or University (HBCU). When asked if their academic institution was considered a public or private school, 53% reported private while 47% reported public. Table 1 illustrates the demographic information requested for the current study.

Table1
Demographic Information

Gender	Year in College	HBCU or PWI	Public or Private
Male 28% (21)	1 st Year 16% (12)	HBCU 14% (10)	Public 47% (35)
Female 70% (52)	Sophomore 26% (19)	PWI 86% (64)	Private 53% (39)
Other Gender Identity 1% (1)	Junior 23% (17)		
	Senior 35% (26)		

N = 74

HBCU = Historically Black Colleges and Universities

PWI = Predominantly White Institution

Public = Public academic institution

Private = Private academic institution

Numbers in parentheses = number of participants who identified with each item

Instrumentation

The Health-Related Stereotype Threat Scale is a 24 item scale containing various statements to which participants respond on a 5 point scale ranging from (1) never to (5) almost always. Items include statements such as: “It is commonly believed that Whites have an easier time maintaining good health than Blacks,” “Many people believe that performing well on routine medical screenings is more difficult for Blacks than Whites.” The last two items of the instrument also have a 5 point scale but it ranges from (1) strongly disagree to (5) strongly agree. An example of an item of this type of item is: “On routine physical exams, people of my race rarely face biased diagnoses.” Jones et al. (2013) modified measures from several instruments including two stereotype threat instruments from the research of Steele and Aronson (1995) and

Pseekos et al. (2008). The current research utilizes the same strategy by converting the statements to reflect mental health statements. Scores are calculated by averaging the scores across all the items with the highest possible total score of 120.

The Health Related Stereotype Threat Scale (HRST-24) is internally consistent with adequate convergent and incremental validity when compared to the traditional stereotype threat scale (Jones et al., 2013). Reliabilities included: Full Scale ($\alpha = 0.96$), Perceived black health inferiority (18 items; $\alpha = 0.96$), and Perceived Physician Bias (6 items $\alpha = 0.85$). The scale was also designed so that it could be read and understood at a 7th grade reading level (Jones et al., 2013).

The Self-Stigma of Seeking Help Scale (SSOSH) is a 10 item instrument with statements rated on a 5 point scale ranging from (1) strongly disagree to (5) strongly agree (Vogel et al., 2007). Items include statements such as: “I would feel inadequate if I went to a therapist for psychological help” and “I would feel worse about myself if I could not solve my own problems.” Low stigma is associated with scores ranging from 10-22. Medium stigma is assigned for scores in the 23-32 range. Scores in the 33-50 range are regarded as high stigma. Internal consistency reliabilities ranged from .86-.90, test re-test reliability was .72 with college students. Overall internal consistency was .89. Validity coefficients found through correlations with participant attitudes geared towards seeking help and the intention to seek counseling show $r_s =$ -.53 to -.63 and -.32 to -.38 respectively (Vogel et al. 2006).

The Intentions to Seek Counseling Inventory (ISCI) is a 17-item instrument with statements rated on a 4 point scale ranging from (1) very unlikely to (4) very likely (Cash et al., 1975). Participants using the instrument are asked to respond to questions asking how likely they

would be to seek counseling for various concerns (e.g. depression). The instrument assesses their willingness to seek counseling and psychological treatment based on different problems listed ranging from depression and relationship difficulties to academic concerns and substance abuse (Cash et al., 1975). Low scores are in the 17-34 range, moderate scores are in the 35-67 range, and scores from 51-68 are considered high. The Intentions to Seek Counseling Inventory contains three subscales: Psychological and Interpersonal Concerns (10 items; $\alpha = .90$), Academic Concerns (4 items; $\alpha = .71$), and Drug Use Concerns (2 items; $\alpha = .86$). For the sake of this study and to replicate the strategy of Vogel et al. (2007), only the Psychological and Interpersonal Concerns subscale was used. Internal consistency of the Psychological and Interpersonal Concerns subscale was .87 in a college student population (Cash et al., 1975).

Analysis

The primary statistical analysis used in this study was a hierarchical regression analysis. This test was performed to explore the influence of mental health-related stereotype threat and self-stigma when predicting African-American college students' willingness to seek counseling. Vogel et al., (2007) demonstrated that high self-stigma related to attitudes towards counseling $r = .76$, and attitudes towards counseling were related to one's willingness to seek counseling $r = .59$ (Vogel et al., 2007). While Vogel et al. (2007) utilized a sample that was predominantly European-American (90%), the current study tested the relationship between self-stigma and the willingness to seek counseling in an African-American sample. Based on the Vogel et al. (2007) findings, it was expected that health related stereotype threat from a mental health perspective would be related to less willingness to seek counseling. It was also expected that the hierarchical regression including both health related stereotype threat and self-stigma would add to the

predictive power together over using either instrument alone. The hierarchical regression analysis was performed using the Statistical Package for the Social Sciences (SPSS).

Design Model for the Study



CHAPTER IV. RESULTS

This chapter reviews the results of the data analyses used in the current study. Included are demographic information about the participants, means and standard deviations for all instruments, bivariate correlations among the measures, and the results of the hierarchical regression and ANOVA analyses.

Internal Consistency of Measures

The Health Related Stereotype Threat Scale (HRST), the Self-Stigma of Seeking Help Scale (SSOSH), and the Intentions to Seek to Counseling Inventory (ISCI) were all assessed for internal consistency. The Health Related Stereotype Threat Scale had good internal consistency as determined by a Cronbach alpha of 0.86. Self-Stigma of Seeking Help Scale had good reliability with a Cronbach alpha of 0.84. Lastly, the Intentions to Seek to Counseling Inventory (ISCI) had excellent reliability with a Cronbach alpha of 0.92.

Analyses and data

ANOVA analyses were conducted to examine difference between groups (i.e. gender, year in college, public vs. private, and HBCU vs PWI). Results revealed no significant differences ($p > .05$, refer to Table 2 for descriptive statistics of groups). Tests of multicollinearity indicated a very low level of multicollinearity was present for the variables used ($VIF = 1.18$ for self-stigma and 1.18 for mental health-related stereotype threat). The current study attempted to assess if mental health-related stereotype threat and self-stigma are predictors of one's willingness to seek counseling which was determined through the Intentions to Seek Counseling Inventory (ISCI). In addition, the study attempted to assess if both mental health-related stereotype threat and self-stigma will account for more variance used together

compared to when they are used alone to predict willingness to seek counseling. Regression analyses were utilized to analyze responses on the adapted Health-Related Stereotype Threat Scale, the Self-Stigma of Seeking Help Scale, and to what extent they predict willingness to seek counseling through the Intentions to Seek Counseling Inventory.

Table 2
Descriptive Statistics of All Scores

	SSOSH	HRST	ISCI
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Male	21.71 (7.07)	75.14 (13.09)	35.61 (11.32)
Female	22.0 (5.66)	78.28 (12.58)	40.15 (11.8)
Other Gender Identity	14.0 (0)	86.0 (0)	33.0 (0)
1 st Year	23.08 (7.59)	80.83 (9.97)	40.08 (13.16)
Sophomore	21.52 (4.81)	72.31 (10.20)	39.73 (9.7)
Junior	22.82 (7.78)	80.70 (14.96)	37.94 (13.29)
Senior	20.76 (4.94)	77.65 (13.19)	38.0 (11.89)
HBCU	21.90 (7.80)	76.60 (12.43)	42.40 (9.60)
PWI	21.79 (5.83)	77.64 (12.80)	38.20 (11.99)
Public	20.54 (6.09)	74.77 (11.62)	38.88 (13.08)
Private	22.94 (5.91)	79.94 (13.21)	38.66 (10.54)

N = 74

SSOSH=Self-Stigma of Seeking Help; HRST=Health Related Stereotype Threat; ISCI= Intentions to Seek Counseling Inventory; HBCU=Historically Black Colleges and Universities; PWI= Predominantly White Institution; Public= Public academic institution
Private= Private academic institution

The findings revealed that on average the sample had a moderate willingness to seek counseling based on the 17-34 range indicated by Cash (1975). When asked how likely participants would be to seek counseling for the following items as examples, the majority of the sample responded: 43% unlikely for weight control, 30% very unlikely for excessive alcohol use, 31% unlikely for relationship difficulties, 53% very unlikely with concerns with sexuality (least favorable reason to seek counseling), 34% unlikely for conflicts with parents, 36% very unlikely for speech anxiety, 38% very unlikely for difficulties with dating. Participants appeared to view counseling more favorably with seeking treatment for depression (38% responded very likely), and choosing a major (32% responded very likely). This revealed a small range of concerns that African-American college students would be willing to seek treatment for on average.

Mental health-related stereotype threat scores were moderate on average revealing mental health related stereotype threat. For example, the majority of the participants responded “often” (27%) to the statement: “It is commonly believed that Whites have an easier time maintaining good mental health than Blacks.” The majority of the participants responded “almost always” (36%) to the statement: “Whites usually do better at seeking help for mental health issues compared to Blacks.” The majority of the participants responded “often” (27%) to the statement: “I have heard that White patients have an advantage over Black patients in routine mental health screenings.” The majority of the participants responded “often” (41%) to the statement: “Blacks have a harder time maintaining a healthy lifestyle than Whites.” In addition, the majority of the participants responded “often” (30%) to the statement: “Psychologists expect Whites to receive more positive feedback than Blacks during mental health visits.” These responses provide an illustration of how these beliefs might affect African-American willingness to counseling. There appeared to be a prevalent perception that some diagnoses are biased against them. For example,

the majority of the sample responded “strongly disagree” to the statement: “During mental health screenings, people of my race rarely face biased diagnoses.” The results revealed that there was a negative correlation between The Self Stigma of Seeking Help measure and the Intentions to Seek Counseling Inventory, $r = -.35, p < .01$ (See Table 3). As self-stigma increases, willingness to seek counseling decreases. The association between the mental health related stereotype threat and willingness to seek counseling was approaching significance ($r = .22, p = .054$; See Table 3). There was no significant correlation between self-stigma and mental health-related stereotype threat $r = .13, p < .05$ (See Table 3). The results also revealed normal distributions of the variables with no outliers.

Table 3
Pearson Correlation Coefficients

	ISCI	SSOSH	HRST
ISCI	-	-.35**	.22
SSOSH		-	.13
HRST			-

** = $p < .01$

The first hypothesis of the study stated that self-stigma would be a predictor of willingness to seek counseling. Step 1 of the hierarchical regression supported this hypothesis, ($R^2 = .012, p = .002$). Results suggest that self-stigma predicts 12% of the variance in willingness to seek counseling. Table 5 shows that self-stigma ($\beta = -.35$) has a negative standardized regression weight, indicating that higher scores on self-stigma were expected to have lower scores on willingness to seek counseling. The 2nd hypothesis stated that mental health-related stereotype threat would also be a predictor of willingness to seek counseling. A separate

regression analysis revealed that mental health-related stereotype threat was not a significant predictor of willingness to seek counseling ($p = .054$). Finally, the third hypothesis predicted that the combination of both self-stigma and mental-health related stereotype threat would account for more variance in willingness to seek counseling. This hypothesis was supported, as Step 2 of the hierarchical regression revealed significance for both self-stigma and mental-health related stereotype threat ($p = .001$ and $p = .012$, respectively). Furthermore, this model predicted variance above and beyond the predictive ability of self-stigma alone, ($\Delta R^2 = .075$, $p = .012$). Results suggest that both variables predict 20% of the variance in willingness to seek counseling. Table 4 shows that self-stigma ($\beta = -.39$) continues to have a negative standardized regression weight. Additionally, mental-health related stereotype threat ($\beta = .28$) has a positive standardized regression weight, suggesting that higher scores on mental-health related stereotype threat were associated with higher scores on willingness to seek counseling.

Table 4
Summary of Hierarchical Regression Analysis for Willingness to Seek Counseling

Variable	Step 1			Step 2		
	B	SE B	β	B	SE B	β
Self-Sigma	-.68	.21	-.35**	-.75	.21	-.39**
MHRST				.26	.10	.28*
R^2		.12			.20	
ΔR^2		.012*			.075*	

* = $p < .05$ ** = $p < .01$

Summary of Results

The results of this study found that self-stigma is statistically shown to predict willingness to seek counseling. As self-stigma increases, willingness to seek counseling decreases. Mental health-related stereotype threat was not shown to predict willingness to seek counseling on its own; however, this relationship was approaching significance. It is possible that with an increased sample size, this model would also demonstrate significance. Results revealed that the combined model of both self-stigma and mental-health related stereotype threat significantly predicted a higher amount of variance, when compared to self-stigma alone. These findings support the hypothesis 1 and 3 of the study.

CHAPTER V. DISCUSSION

The purpose of this study was to assess if self-stigma and mental health-related stereotype threat are predictors of African-American college students' willingness to seek counseling. In addition, the study aimed to assess if self-stigma and mental health-related stereotype threat used together are stronger predictors of willingness to seek counseling and would account for more variance compared to each being used alone. This research focus contributes to a better understanding of barriers that may affect African-Americans from seeking mental health services while in college.

Steele and Aronson (1995) helped to develop an understanding in the literature surrounding the effects of stereotype threat from an academic perspective. Steele, who is regarded as the pioneer of stereotype threat research, was curious about why intelligent African-Americans were experiencing difficulties performing well on tasks such as standardized achievement and admissions tests. Stereotype threat was explored to assess the effects of negative stereotypes pertaining to one's race on performance. For the past few decades, this research has been helpful in understanding how stereotype threat has affected African-Americans' performance on intellectual tasks. It has also helped in understanding how other identifications such as gender, socio-economic status, and geographic location are affected by stereotype threat (Clark et al., 2011, Harrison et al., 2006, Yopyl et al., 2005, Rivardo, et al., 2011). This knowledge has been extremely beneficial in the academic realm to help understand help improve performance. The current research aimed to expand the literature to also include mental health outcomes. In this study, stereotype threat from a mental health perspective was shown to relate to African-American college students' willing to seek counseling.

Jones et al. (2013) created the Health-Related Stereotype Threat Scale (HRST-24) to explore stereotype threat from a health perspective among college students. They were interested in how stereotype threat is related to African-Americans' seeking medical treatment. In the current study this scale was modified to reflect mental health treatment and replaced "physicians" with "therapists" to assess views of counseling and mental health professionals.

Vogel et al. (2007) through the Self-Stigma of Help Seeking Scale (SSOHS) demonstrated the impact of negative attitudes surrounding mental health in college and how these views affect one's willingness to seek counseling. Self-stigma was successfully proven to predict willingness to seek counseling. Their sample, although large with 680 college students, was 90% European-American and only 2% African-American. A goal of the current research was to explore the self-stigma as it relates to willingness to seek counseling in an African-American sample.

The findings confirmed the following hypotheses:

- 1). Self-stigma will predict one's willingness to seek counseling based on the findings of Vogel et al. (2007). Self-stigma was positively correlated with one's willingness to seek counseling.
- 3). Both measures together will account for more variance together compared to either being used in isolation in the prediction of willingness to seek counseling. Combined, both measures accounted for more variance together.

Self-stigma through a hierarchical regression was shown to be a significant predictor of willingness to seek counseling which was consistent with Vogel et al. (2007). Mental health-related stereotype threat was not shown to be a significant predictor of willingness to seek

counseling, yet this model was approaching significance. Given the small sample size of the current study, it is likely that this relationship would be significant in a larger sample. Finally, both measures together accounted for more variance in willingness to seek counseling, when compared to the predictive ability of self-stigma alone which is an anomalous finding. Also, standardized regression weights revealed an inverse relationship between self-stigma and willingness to seek counseling. As stigma increased, willingness to seek counseling decreased. This finding adds to the growing literature of better understanding the influence of self-stigma and stereotype threat on negative views pertaining to one's race and how it influences willingness to seek counseling.

Implications

The results from the study can be helpful in creating interventions and awareness to help college students to overcome hesitations to seek counseling (Boone, Edwards, Halton, Hill, Liang, Mier, Shropshire, Belizaire, Kamp, Murthia, Wong, Yau, 2011). The findings can assist with outreach and programming efforts to help educate students about self-stigma and stereotype threat (Eisenberg, Golberstein & Gollust, 2007). In addition, they can be helpful with further creating an understanding surrounding the goals of counseling and the ethical principles that aim to foster support, comfort, non-judgement and respect for people of all backgrounds in mental health settings. Training seminars could also be developed to assist in these efforts by training educators, clinicians, as well as students in recognizing when someone is exhibiting signs of needing help but is apprehensive due to stigma and stereotype threat related issues (Boone et al., 2011).

Trainees could be also be taught to assess for signs of distress and learn how to encourage a peer, colleague or student to seek assistance. Expanding on current resources such as *Let's*

Talk, which is an informal consultation service provided by several universities across the United States to help support students on campus and educate them on mental health services could also be beneficial (Boone et al., 2011). The findings could be used in conjunction with *Let's Talk* to help mitigate stigma, stereotype threat and anxiety pertaining to counseling. Also, the instruments used in the study could be used in pre-college orientations, clinical assessments, and for treatment planning purposes (Boone et al., 2011; Eisenberg et al., 2007).

Limitations of the Study

There were several limitations to the current study. Generalizability was a concern due to the limited sample size of participants (N= 74). Based on these low numbers, external validity is limited. Another limitation is that snowball sampling was used in the study due to difficulties trying to recruit African-American participants. Originally, the researcher intended to use only emails to Black Student Unions across the country with additional help from the National Black Student Union Association. However, due to a low number of responses, snowball sampling was used through Facebook.com and psychological listservs such as the American Psychological Association Division 45- Society for the Psychological Study of Culture, Ethnicity, and Race to help increase recruitment. Although snowball sampling was helpful with increasing participation (55 participants were gained), this procedure has limitations with generalizability and sample bias which could have influenced the results (Emerson, 2015). Individuals who shared the study could have sent the survey to people who were similar to them which could have influenced the external validity in the study (Emerson, 2015). Having individuals share the survey with people potentially similar to them is a disadvantage of using social media. This is due to biased individual social networks (Kosinski, Matz, Gosling, & Stillwell, 2015). In addition, several mental health professionals, professors, and mental health related listservs assisted in recruitment

efforts which raises further questions about generalizability. Having mental health professionals distribute the online survey may have influenced the sample who participated impacting external validity. Another limitation to the study was not knowing the level of mental health concerns that were present in the different areas of the Intentions to Seek Counseling Inventory. Knowing what concerns were present before participants were instructed to complete the Intentions to Seek Counseling Inventory may have helped to better understand the influence of mental health-related stereotype threat and self-stigma.

Despite the increases in participants through snowball sampling, the overall N was lower than desired. Lack of offering an incentive frequently used in recruiting undergraduates (e.g. course credit; drawing for some attractive item) might have been related to the low response rate. Further, reluctance to complete the study after being sent to dozens of Black Student Unions and through snowball sampling may relate to the discomfort surrounding mental health research in the African – American community. Completion data from Qualtrics, the survey software used in the study, showed that most participants who did not complete the survey, discontinued while completing the HRST-24 instrument. This finding could be attributed to concerns about negative beliefs surrounding race or could also relate to the perceived repetitiveness of the items in instrument. Although a minimum of 68 participants were needed for statistical purposes and the study recruited 74 participants, external validity is still a concern despite significant results. Another limitation in the current study is that it did not assess for level of concern. Therefore, it is possible that participants indicated that they were unlikely to seek treatment due to not having any of the concerns they were asked to respond to in the Intentions to Seek Counseling Inventory.

Recommendations for Future Research

Due to the limitations of the study, increasing overall participation in future is recommended for external validity and generalizability purposes. Considering the reluctance to participate in a study surrounding mental health, it would be beneficial to add an incentive to help with recruitment efforts. In addition, an increased sample would also provide more data when exploring differences in gender, year in college, whether the institution one attends is a Historically Black College or University (HBCU) or a Predominantly White Institution (PWI), or whether one attends a public or private academic institution. Future studies with increased participation should explore how these factors may influence willingness to seek counseling. A larger sample size would also be helpful with potentially achieving significance with health-related stereotype threat as a predictor of willingness to seek counseling. The current data was trending towards significance but it is possible that a larger sample was needed for mental-health related stereotype threat to be significant when used alone. Future researchers should also consider studying African-American graduate students to assess how having higher levels of education affects willingness to seek counseling. Exploring this population would also be helpful in increasing participation and add another dimension to the literature. In addition, future research should consider adding a socio-economic status and religious status component. Considering that the sample were all college students who mostly had access to free counseling at their institutions, it would helpful to assess if the results would be different for populations who have to pay for mental health services. Future studies could also explore international populations, especially college students who identify as African for additional insight on willingness to seek counseling.

The current study showed that out of the 17 items on the Intentions to Seek Counseling Inventory, there were only two that the majority of participants felt comfortable seeking therapy for: depression and choosing a major. It would be helpful to further understand what other factors are contributing to this reluctance. As research continues to explore how to help mitigate stigma and stereotype threat and increase willingness to seek counseling, more information about the influences would be helpful. Also, it could be beneficial to prime participants before responding to items related to their willingness to seek counseling with instructions such as, “In responding to these questions, please imagine you are experiencing problems with depression.” This could be helpful in achieving more accurate results on African-American college students’ willingness to seek counseling.

Conclusion

This study explored the effect of self-stigma and health related stereotype threat on African-American college students’ willingness to seek counseling. Stereotype threat research has provided a wealth of information on the psychological, academic, and cognitive effects on African-Americans but little has been known about it might influence seeking mental health services. This study showed that mental health-related stereotype threat and self- stigma used together predicted seeking treatment and accounted for more variance together than independently. Although numerous limitations were considered, the data obtained make a contribution to the body of research in this area. In particular, it is to our knowledge the first research study exploring self-stigma with a predominantly African-American population. Better understanding of the influences of seeking help and perceptions of mental health may provide many benefits in mental health and academic settings. As knowledge of these topics continues to increase, efforts to combat stigma and mental health-related stereotype threat may be able help

African-Americans experience fewer barriers in the process of being able to receive help.

Research such as the current study can serve as data for enhancing educational outreach efforts, mental health programming, and increasing awareness not only pertaining to mental health but helping to mitigate and eventually eliminate negative beliefs about the role of mental health services and potential views pertaining to one's race if they seek services.

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Appendix A

INFORMATION LETTER for Research Study entitled:

“Stereotype Threat and Help-Seeking for Mental Health Concerns: An Exploration of Dispositional Stereotype Threat and Self-Stigma on African-American College Students' Willingness to Seek Counseling”

You are invited to participate in a research study to investigate perceptions surrounding mental health. Romero Huffstead, M.S., is conducting the study under the direction of Joseph Buckhalt, Ph.D. in the Auburn University Department of Special Education, Rehabilitation and Counseling Psychology. You may participate if you identify as an African-American Student, are currently enrolled as an undergraduate student, and are aged 18 and over.

Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to respond to several responses regarding your perceptions of mental health and psychological services. Your total time commitment will be approximately 15-20 minutes.

You will receive no direct benefits for participating in this study and there are no costs to participate in the current study.

If you change your mind about participating, you can withdraw at any time during the study. Your participation is completely voluntary. Your decision to participate, not to participate, or discontinue your participation will not jeopardize your future relations with Auburn University, the Department of Special Education, Rehabilitation and Counseling Psychology.

Any information obtained in connection will not be linked to you and you will not be asked to provide any personal information. Any data obtained through your participation may be published in a professional journal and presented at a professional conference, but such information will not be directly connected with you.

If you have questions about this study, please contact Dr. Joseph Buckhalt, Ph.D. at buckhja@auburn.edu. A copy of this document will be given for you to keep.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone 334-844-5966 or email at hsubjec@auburn.edu or IRBchair@auburn.edu

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE LINK BELOW. YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

Appendix B

E-MAIL INVITATION FOR ON-LINE SURVEY

Dear _____,

I am a doctoral candidate in the Department of Special Education, Rehabilitation, and Counseling at Auburn University. I would like to invite members of your organization to participate in my research study exploring the perceptions of mental health. The only participation requirements is that individuals are African-American undergraduate students and are aged 18 and over.

For the study, participants will be asked to complete an online questionnaire that will take approximately 15-20 minutes.

Any information obtained in connection with the questionnaire will not be linked to any of the participants and no identifying information will be requested.

If you would like to know more information about this study, an information letter can be obtained by sending me an email. If you decide to participate, you can access the survey from the link below.

If you have any questions, please contact me at rrh0007@auburn.edu or my advisor, Dr. Joseph Buckhalt, at buckhja@auburn.edu.

Thank you for your consideration,

Appendix C

For the Study entitled:

“Stereotype Threat and Help-Seeking for Mental Health Concerns: An Exploration of Dispositional Stereotype Threat and Self-Stigma on African-American College Students' Willingness to Seek Counseling”

Dear Participant;

During this study, you were asked to respond to statements exploring your perceptions of mental health. The actual purpose of the study was to assess the impact of race, stereotypes, and stigmas on African-American college students' willingness to seek counseling. This research will be very beneficial in helping to increase our understanding of potential factors that may influence African-Americans' perceptions of mental health services and their desire to seek these services as well.

We did not tell you everything about the purpose of the study because we did not want to influence your responses to the items you were provided. You are reminded that your original consent document included the following information: If you change your mind about participating, you can withdraw at any time during the study. Your participation is completely voluntary. Your decision to participate, not to participate, or discontinue your participation will not jeopardize your future relations with Auburn University, the Department of Special Education, Rehabilitation and Counseling Psychology. Any information obtained in connection will not be linked to you and you will not be asked to provide any personal information. Any data obtained through your participation may be

published in a professional journal and presented at a professional conference, but such information will not be directly connected with you.

If you have any concerns about your participation or the data you provided in light of this disclosure, please discuss this with us. We will be happy to provide any information we can to help answer questions you have about this study.

If you have questions about your participation in the study, please contact me at rrh0007@auburn.edu or my faculty advisor Joseph Buckhalt, Ph.D. at buckhja@auburn.edu.

If you have questions about your rights as a research participant, you may contact the Office of Research Compliance (334-844-5966, IRBadmin@auburn.edu or an Auburn University Institutional Review Board (IRBChair@auburn.edu).

Please again accept our appreciation for your participation in this study!