

PSYCHOLOGICAL DISTRESS, WELL-BEING AND ACADEMIC PERFORMANCE: A
CASCADE EFFECT AMONG BLACK COLLEGE STUDENTS

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Dedication

I would like to dedicate this dissertation to my wife, Abby Adeyiga, for her patience, sacrifices, kindness, support and for always reminding me that all things are possible to them that believe. To my children: Israel, David, Joseph, Philip, and Michelle, for sharing their “daddy” with his school commitments and clinical trainings. My success would not be possible without the grace and favor of God that I enjoyed throughout my educational pursuit.

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Abstract: In the traditional paradigm, mental health and illness exist on a single continuum where the emphasis is on the presence or absence of pathological outcomes. In contrast, a new theoretical framework recognizes and promotes a dual continua model where mental health is no longer consider the absence of mental illness. Using a sample of Black college students in a midwestern state, the goal of this current study was to evaluate the predictors of educational outcome of Black college students by answering the following research questions: (a) what is the linear relationship between psychological distress (i.e., Internalizing, as measured by level of depression [Total score of the CES-D] and Externalizing, as measured by level of aggression [Total score of the Aggression Questionnaire] with academic performance, as measured by overall GPA, among Black/African American college students? (b) what is the linear relationship of subjective well-being (i.e., Positive Affect and Negative Affect subscales of the PANAS, and the overall life satisfaction score of the Satisfaction with Life Scale) with academic performance, as measured by GPA, in Black/African American college students? (c) what is the linear relationship of psychological distress and subjective well-being with academic performance, as measured by overall GPA, in Black/African American college students? A total of 184 Black/African American students were recruited from three universities in the midwestern region of the United States and were asked to complete an online survey, which included a demographic page as well as the following questionnaires: Positive and Negative Affect Scale, the Satisfaction with Life Scale, the Center for Epidemiologic Studies Depression Scale, and the Aggression Questionnaire. The results indicated psychological distress and quality of life were not significant predictors of academic success among Black/African American college students for this sample. Implications for future research and intervention are discussed.

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CHAPTER I

INTRODUCTION

The number of African Americans enrolled in college has grown substantially over recent decades. For example, the enrollment of Black students increased from 10% in 1976 to 14% in 2016 (U.S. Department of Education, 2016). However, the academic outcomes or performance of African American / Black college students continue to lag behind those of their White counterparts (Aruguete & Hardy, 2016). Knaap, Kelly-Reid, and Ginder (2012) reported that within six years after initial college enrollment, 60.2% of White students earn a degree. However, only 37.9% of African American students completed their program and earned degrees. Further, during the first year of school attendance, African American college students show significantly lower achievement in college courses even when high school GPA, ACT scores, and other demographic variables are controlled (Lora & Ndum, 2013).

Several factors have been associated with the reasons for the achievement gap between African Americans/Black and White college students. These factors include social, political, economic, and psychological factors (Fletcher & Tienda, 2010; Rowley & Wright, 2011, National Center for Education Statistics, 2015; Rowley & Wright, 2011). Even though many factors have been highlighted as the source of gap in academic performance between African American / Black and White college students, this current study will focus on the relationship between psychological variables and academic success of African American/Black college student

Given the enduring nature of race as a source of stigma, race-based rejection sensitivity has been identified as a significant factor responsible for the achievement gap between African American/Black college students and their White counterparts (Mendoza-Denton et al., 2002). A history of rejecting experience can lead to doubts about one's acceptance by a member of the dominant group. It can also trigger an expectation of rejection based on one's status as a member of a stigmatized group (Mendoza-Denton et al., 2010). Tatum (2017) expresses it quite clearly when she writes:

life for Black students or other people of color in a predominantly White campus can be stressful. White students and faculty frequently underestimate the power and presence of overt and covert manifestations of racism on campus, and students of color often come to predominantly White campuses expecting more civility than they find. Whether it is the loneliness of being routinely overlooked as a lab partner in science courses, the irritation of being continually asked by curious classmates about Black hairstyles, the discomfort of being singled out by a professor to give the “Black perspective” in class discussion, the pain of racist graffiti scrawled on dormitory room doors, the insult of racist jokes circulated through campus email, or the injury inflicted by racial epithets (and sometimes beer bottles) hurled from a passing car, Black students on predominantly White college campuses must cope with ongoing affronts to their racial identity, p.90.

Drawing on cultural ecology, Fordham and Ogbu (1986), explained that a psychological pattern observed among African American / Black students may be responsible for the poor academic performance of Black students. They explained that the anger and resentment that emerges in response to the systematic exclusion of African Americans / Black from fully participating in the economic, political, and educational domains in American society has led to the development of oppositional cultural identity. Oppositional cultural identity suggests that when African American students are alienated within the dominant culture, they may decide to define themselves by how much they differ from or oppose the dominant culture. For example, a Black student, instead of aspiring to do well in school or get along well with his teachers, may

desire not to do well and not be liked by teachers. Ogbu (1980) suggests that African Americans' oppositional identity evolves because Blacks perceive and experience treatment by White Americans as collective and enduring oppression.

In addition to developing an oppositional cultural identity, African Americans also developed a cultural frame of reference, which includes devices that enable them to protect their identity and maintains boundaries between them and White Americans. As such, African Americans/Black regard some particular behaviors, events or activities as not appropriate for them because such behaviors are considered to be characteristics of White Americans. To behave in a manner, characterize as primarily White or within the cultural frame of White, is regarded as "acting white," and Blacks negatively sanction these behaviors (Fordham & Ogbu, 1986).

Therefore, based on this explanation, Ogbu (1980) asserts that African American/Black students' academic success is hampered by the burden of acting white. This burden becomes more cumbersome when academically able black students face both pressures from black peers to conform to the collectively identified attributes and doubt from whites about their abilities (Fordham & Ogbu, 1986). As laudable as this explanation may seem, if care is not taken, it can be considered as "victim-blaming" because it puts the responsibility of inclusion on African Americans/ Black students.

To prevent the twin problem of retraumatizing and stereotyping African American/ Black college students, it is imperative to explore the relationship between psychological distress and academic success from a positive psychology perspective. Positive psychology's proponents emphasize the quality of life indicators such as subjective well-being in the understanding of college students' global mental health (Lyons, Huebner, & Hills, 2013). This perspective focuses on positive emotional experiences and suggests that individuals' overall mental health should be

understood from the combination of both psychological symptoms and competencies (Eklund et al., 2011). Therefore, the framework that guides this study seeks to provide a complete understanding of African American/Black college students' global mental health. As such, this study is steered by the Dual Factor Model or Dual Continua Model of Mental Health and Illness.

Mental Health and African American/Black Students

It is over 60 years since the end of segregation in the United States schools. However, 87% of Black youth still experienced discrimination in the past year (Jones, Lee, Gaskin, & Neblett, 2014). Sadly, these experiences of discrimination have negative impacts on the psychological well-being of Black college students. The relationship between racial discrimination and psychological well-being is essential to explore within this population because evidence suggests that Black college students who attend predominantly White institutions may be vulnerable to negative adjustment given their experience as a member of an ethnic minority group (Jones et al., 2014).

Black students have the highest number of exposures to traumatic events that may later adversely affect their college experience (Walker, 2015). For instance, Black college students have significantly higher exposure to child maltreatment compared with White students, due to higher rates of domestic violence. Further, Black students have significant exposure to assaultive violence than their White counterparts (Roberts et al., 2012). According to Boyraz, Horne, Owens, and Armstrong (2013), Black college students report higher rates of trauma exposure and PTSD in comparison to other groups. Palmer, Davis, and Gasman (2011) reported that Black women experienced higher rates of interpersonal violence (sexual assault, molestation, domestic violence, among others), while Black men are more likely to encounter random acts of violence (robberies, stabbing, and so on).

Studies have found a higher prevalence of depression and anxiety among students of color, as well as higher levels of functional impairments compared to that of White students. For example, a study conducted by Eisenberg, Hunt, and Speer (2013) observed that Black students depicted a high prevalence of depression in comparison to White students. Further, students who reported multiple racial/ethnic categories demonstrated a higher prevalence of depression, suicidal ideation, and NSSI compared to White students. Similar to the findings of Eisenberg et al. (2013), Salami and Walker (2013) found similarities between Black and White college students on a number of dimensions; however, Black college students reported more symptoms of depression and anxiety than White college students.

Similarly, feelings of invisibility, racial microaggression, perceived discrimination, and segregation often impact self-esteem, well-being, and mental health of Black college students (Cokley, Smith, & Bernard, 2017). Moreover, Cokley et al. (2017) reported that Black and other ethnic minority students are more likely to experience an impostor phenomenon than their White European counterparts. The said phenomenon signifies the belief in oneself as an intellectual fraud, whereby individuals find it challenging to internalize their achievements (Cokley; et al. 2017). This lack of confidence in one's ability may be a result of poor college preparation and isolating college campus climates, which prompt high-achieving Black students to question the validity of their achievements and intellectual abilities (Bernard, Lige, Willis, Sosoo, & Neblett, 2017). However, caution needs to be taken with this assessment that poor college preparation should be held responsible for the impostor phenomenon when burdens of racial discrimination and hostile college environment are predictors of impostor syndrome, poor academic aspirations, and outcomes among Black college students (Smith et al., 2007).

Given the relationship among psychological distress, subjective well-being, and academic performance, this current study will explore the linear relationship of psychological distress and subjective well with overall GPA among African American/Black college students. As such, it is essential to focus on these variables both together and separately rather than focus on psychopathology/mental illness. Further, exploring these variables with respect to academic outcomes among African American college students will provide insight into how the patterns of well-being and mental health problems differ for African American college students.

CHAPTER II

REVIEW OF THE LITERATURE

The theoretical framework and research literature pertaining to psychological distress, subjective well-being, and academic performance of college students, and specifically, African American college students, will be summarized in this section. We will examine psychological distress from the positive psychology perspective to better understand the implications of psychological distress and well-being on overall academic performance of African American college students. We broadly examined prevalence of mental illness among college students by summarizing research on mental illness prevalence among college populations through a positive psychological lens to better understand this relationship with academic outcomes. Next, we introduce the concept of dual continua model of mental health and mental illness. Following this, we examined the impacts of mental illness on academic performance of general college population. Finally, we explored the implications of mental illness on the academic performance of African American college students.

Definition of Key Terms

Dual continua model (DCM). The dual continua model supports the idea that assessment of mental health should include indicators of subjective well-being (SWB) in addition to the indicators of psychopathology (internalizing and externalizing behavior problems). Two groups have historically been identified with the traditional indicators: those

with complete mental health (high subjective well-being and low psychopathology) and individuals classified as distressed (low subjective well-being and high psychopathology).

However, the said model provides opportunities to identify two additional groups who would have been overlooked in the traditional indicators. These two groups are: individuals with high subjective well-being and high psychopathology; and individuals with low subjective well-being and low psychopathology. The current study will employ the methods of assessment and terms of DCM created by Suldo and Shaffer, 2008.

The four mental health groups yielded from the dual continua model of mental health are depicted in Table 1.

Table 1. *Mental Health Groups Yielded from a Dual Continua Model of Mental Health*

	High Subjective well-being	Low Subjective well-being
High Psychopathology	<i>Symptomatic but Content</i>	<i>Troubled</i>
Low Psychopathology	<i>Complete Mental Health</i>	<i>Vulnerable</i>

(Adapted from Thalji, 2012, p. 39)

Psychological distress. Emotional and behavioral problems are described across two broadband syndromes: internalizing and externalizing problems (Suldo, Thalji, & Ferron, 2010). Individuals with internalizing problems (depression, anxiety, somatic complaints) often deals with their problems internally. In contrast, individuals with externalizing problems (aggressive behavior, hyperactivity) direct their problems onto other people or objects in their environment.

In the current study, students will self-report both their internalizing and externalizing behavior by using standardized inventories of mental health problems. Elevated scores on either inventory will indicate high psychological problem.

Subjective well-being. Subjective well-being is an individual experienced quality of life and includes both cognitive and affective components. Subjective well-being is comprised of three related but separate constructs: life satisfaction, positive affect, and negative affect and it is a facilitator of optimal functioning (Diener, 2012). Individual's cognitive perception of their satisfaction with life, in addition to frequency of their experiences of both positive and negative affect will determine their subjective well-being (Antaramian, 2015).

Academic performance. Students' earned grade point average as reported by students.

Mental Health and College Students

According to the Center for Collegiate Mental Health (CCMH) (2018), the percentage of college students who availed themselves of counseling for mental health concerns rose from 46.0% in 2011 to 54.4% in 2018. During the same reporting periods, the percentage of those who took medication for the same increased from 31.3% to 34.3%. Further, the percentage of students who were hospitalized for mental health concerns rose from 7.2% to 9.9%, while those with suicidal thoughts and suicide attempts increased from 24.0% to 35.8% and 8.0% to 10.3%, respectively.

During the 2017-2018 academic year, out of the 69,596 college students who sought counseling, 64% presented with concerns related to anxiety disorders, 49.8% with depression, and

43.9% with stress. Furthermore, 41.5% of them suffered from generalized anxiety, and 31.0% faced problems about family issues (CCMH, 2018).

According to the 2017 National College Health Assessment sponsored by the American College Health Association (ACHA-NCHA), mental health and other health indices have significant impacts on the academic performance and/or functioning of college students. Among these health indices, stress was reported by 30.6% of the surveyed students as the leading cause of poor academic performance, followed by anxiety (24.2%), depression (15.9%), and relationship difficulties (9.1%) (ACHA-NCHA, 2017). Given the prevalence of these disorders on college campuses, factors of immediate concern are students contemplating suicide and those exposed to traumatic events before entering college. Approximately 6% of undergraduate college students and 4% of graduate students attempt suicide. Moreover, 20% of the general student population contemplates suicide at some point during their college career (Lipson et al., 2014).

Growing mental health problems among the college population has generated a lot of initiatives and interventions from colleges and universities across the US. To elaborate, universities provide opportunities to address the shortcomings of mental health delivery common within the general population. Barriers to mental health utilization as witnessed in the community, are minimized through the services provided by the universities because services are provided on campuses (Bruns et al., 2016). By reducing such barriers, colleges have increased access to service delivery to the general student population, and particularly to members of minority groups, that may not have access outside of their universities.

Francis et al. (2016) questioned the effectiveness of outsourcing mental health services to off-campus facilities. They contended that 42% of the students referred for services outside of their campus were inadequately connecting with their providers. Clearly, minority students

demonstrated lower rates of successful referrals (Francis et al. 2016). As noted, the severity and prevalence of mental health concerns among college students may have lasting consequences that may affect their academic performance, future employments, and relationships.

Prevalence of Mental Illness in College Population

College students are faced with a variety of mental health conditions. Per the analysis of the Healthy Minds Study, 6% of college student surveyed in 2007 reported suicidal ideation, however, in 2017, 11% of college students surveyed reported suicidal ideation. Similarly, within the same years, the percentage of students who reported depression or depressive symptoms rose from 23% to 31%. In 2013, 17% of survey respondents reported a feeling of anxiety, and in 2017, it rose to 26% (Eisenberg, Lipson, & Posselt, 2016).

The 2008 National College Health Assessment sponsored by the American College Health Association indicated that one in three undergraduate students reported a feeling of depression and one in 10 seriously considering attempting suicide in the previous year. According to a study of 26,000 students in 70 colleges in 2006, 6% of undergraduates and 4 % of graduate students reported considering attempting suicide in the last 12 months (Drum, Brownson, & Denmark, 2009). In survey data collected by Hunt et al. in 2007 and 2009 in 26 colleges and universities, 17% of the students had positive screens for depression, and 10% had positive screens for an anxiety disorder (Hunt et al. 2010).

Depression is a common health problem among the adult population and a growing health concern on colleges across the United States. According to Lindsey, Fabiano, and Starks (2009), depression is the third leading cause of death among young adults and the second leading cause of death among college students. In 2016, an estimated 16.2 million adults in the United

States aged 18 or older had at least one major depressive episode. This number represented 6.7% of all adults in the United States (National Institute of Mental Health, 2016). An analysis of the Substance Abuse and Mental Health Services Administration (2013) found that between 2009 and 2012, 7.4% of adults in the United States aged 18 or older had depression (moderate or severe depressive symptoms in the past two weeks). These data suggest that college students as a subset of the adult population are at a higher risk for depression or depressive symptoms.

According to a study completed by Lindsey et al. (2009), 26% of all students surveyed reported experiencing depression in the last school year. In this study, more women (19.3%) than men (12.2%) indicated they had been diagnosed with depression at some point in their lives while 36.3% of those diagnosed were diagnosed in the last school year. A higher proportion of women (20%) than men (3.8%) reported being in treatment for depression and a higher percentage of women (31%) than men (8%) were currently taking medication for depression. College students in their second year (19.3%), third year (21.8%), fourth year (19.1%), and fifth year (19.7%) were more likely to have been diagnosed with depression than first years (5.8%). Depressed college students (11.3%) were more likely to report their health status as fair or poor than non-depressed college students (6.1%). This data suggests a need for college administrators to implement mental health outreach programs that specifically target depression in college men.

Similarly, Furr, McConnell, Westefeld, and Jenkins (2001) reported the following: of the 1455 students they surveyed, 53% indicated that they had experienced depression since beginning college. Among the students who reported depression, the most frequently cited causes of depression were grade problems (53%); loneliness (51%); money problems (50%); relationship problems with boyfriend/girlfriend (48%); and hopelessness (26%). It is worth pointing out that the majority of students who indicated experiencing depression did not seek

treatment. This finding agreed with the results of Lindsey et al. (2009) most especially on the causes of depression among college students.

In a study by Blanco and colleagues (2008), they compared the prevalence of mental health issues among college students with non-college attending young people. They found that the most prevalent disorders among the college student populations were alcohol use disorders, followed by personality disorders. In contrast, the prevalent mental health disorder among non-college attending peers were personality disorders, followed by nicotine dependence. They also emphasized no differences in the odds of having anxiety disorder between college students and their non-college attending counterparts. They claimed that personality disorders were significantly more common among non-college attending young people than among college students of the same age. They concluded that the odds for any psychiatric disorders in the last 12 months were similar for both college students and their non-college attending peers.

A study by Carter et al. (2010) identified 18 studies that compared college drinkers with non-college attending drinkers of the same age. They found nearly in all the studies that college students consumed higher quantities of alcohol than non-college attending peers or engaged in riskier consumption patterns. It is worth pointing out that two of the studies found no significant differences in alcohol dependency between college students and non-college attending counterparts. In contrast, two other studies found that non-college attending peers were drinking at a higher quantity than college students. They concluded that college students are more likely to be at risk for alcohol-related problems including alcohol abuse and alcohol dependence. This study by Carter et al. is consistent with those conducted by Blanco et al. (2010).

Given that anxiety disorders frequently onset in late adolescence and early adulthood, it is essential to educate college students on the prevalence and impacts of anxiety disorders on their

general well-being. Evidence provided by Cole, Coleman, and Schubert (2015) supports the need for mental health literacy, especially related to anxiety disorders, among college students. They reported that less than half of the students surveyed correctly labeled the symptoms of generalized anxiety disorder (41.4%) and panic disorder (47.7%) while most of the students correctly recognized social phobia (86.8%). With this available data, it is evident that a lack of understanding of generalized anxiety might be responsible for the lack of treatment for anxiety disorders among college students.

The social nature of the university environment is likely going to motivate students to want to socialize with their peers. However, the unfamiliarity of the setting and the people may result in social anxiety in some students. No wonder about 37% of college undergraduate students report feelings of anxiety when socializing with their peers (Burke & Stephens, 1999). In this type of environment and setting, a socially anxious student may use alcohol to cope with the nervousness of meeting unfamiliar faces in a new environment, this may lead to a pattern of maladaptive coping strategy that persists beyond college years (Ham, Zamboanga, Bacon, & Garcia, 2009).

A study by Ham et al. (2009) suggests a positive relationship between social anxiety and alcohol use disorder among college students. These authors tested a complicated relationship between social anxiety and drinking difficulty among college students by examining the mediating role of the negatively reinforcing motives in a sample of college students using structural equation modeling analyses. The results indicate that social anxiety was associated with all drinking motives (coping, conformity, social, and enhancement) but the associations seemed significantly stronger for negative reinforcement than positive reinforcement. This suggests an indirect relationship between social anxiety and hazardous drinking.

Social Impacts of Mental Health in African American Students Population

The mental health of college students with an ethnic minority status has been identified as a priority concern as noted in the U.S. Public Health Service's recommendation (Leong & Kalibatseva, 2011). Mental health concerns like anger, anxiety, and depression are conceptualized to be related to stressful events. Some scholars have argued that the United States is a racist society where African Americans and other minority groups have endured oppression and racial injustice. This injustice often leads to psychosocial stressors. As a result, African American students and others with a minority status are expected to display high levels of psychological symptoms (Rosenthal & Schreiner, 2000).

African American college students and other students of color often confront racial discrimination and oppression in historically White institutions. A multi-ethnic college survey suggests that African American college students, both males and females, and other minority students struggle academically while battling racial discrimination. The FBI and the United States Department of Justice reports that Black male students are often the target of racially motivated hate crimes (Smith, Allen, & Danley, 2007). Despite these hostile environments, African American college students are feel pressure to excel.

Smith et al. (2007) warned that in analyzing racial discrimination, it is essential to look beyond the gross, blatant, macro aggressions but rather to focus more on the subtle, cumulative microinsults, and mini assaults. According to Smith and his colleagues (2007), these mini assaults are the substance of today's racism. Unfortunately, these are battles minority students have to confront in their day to day activities on a college campus. Smith et al. (2007) carefully pointed out that "racialized insults may seem harmless, but the cumulative effect of microaggressions can contribute to diminished mortality, augmented morbidity, and flattened

confidence” p. 554. This seems to support the argument that suggests a positive relationship between racial discrimination and social-psychological stressors.

Historically, environments where college campuses are situated are known to be hostile to the presence of African American males (Smith et al., 2007). Hostile environment describes a climate where African Americans and other students of color become the target of verbal and physical abuse and racially motivated hate crimes. These unwelcome attitudes are very detrimental to the academic aspirations of African American male students. Consequently, African American male students often respond to these racial discriminations in a unique way that is different from other males, Whites, and even African American females. This is not in any way suggests that African American males are being more oppressed than other people of color including African American females. However, the argument is that the intersectionality of race and gender creates a specific disadvantage position for some in comparison to others. It appears that Black males carry the burdens of two negative identities as they walk around a college campus. One, being a member of the African American community, and secondly, being Black males (Smith et al. 2007). These identities may be responsible for the unique ways African American male students respond to these stressors.

Based on a sample of 36 African American male college students, Smith et al. (2007) found that microaggressions manifest in these following domains: campus-academic, campus-social, and campus-public spaces. Across these three domains, respondents reported they were treated as “out of place” and as “illegitimate nonmembers” of the campus community. There was a unanimous subjective agreement among these African American male students that the college environment is hostile towards a Black male. This hostile treatment leads to poor mental and physical health outcomes. Sadly, the impact of these racial microaggressions on Black students is

communicable. That is, these impacts are passed on to family, friends, and the community at large and across generations (Smith et al. 2007).

Scholars have argued that feelings of invisibility, racial microaggression, perceived discrimination, and segregation often impacts the self-esteem, well-being, and mental health of African American college students (Cokley, Smith, & Bernard, 2017). Cokley et al. (2017) report that African American and other ethnic minority students are more likely to experience impostor phenomenon than their White European counterparts. Impostor phenomenon is “the belief in oneself as an intellectual fraud and involves the individual finding it challenging to internalize her or his achievement (Cokley, et al. 2017, p. 142). This lack of confidence in one’s ability may be as a result of poor college preparation and isolating college campus climates which give room for high achieving African American students to question the validity of his or her achievements and intellectual ability (Bernard, Lige, Willis, Sosoo, & Neblett, 2017). Smith and his colleagues (2007) disagree with this assessment that poor college preparation was responsible for impostor phenomenon. They warned that researchers should be careful not to ascribe failures of minority college students to poor college preparation. According to them, it is the burdens of racial discrimination and a hostile college environment that is responsible for the lack of academic aspirations and outcomes of African American college students.

In a study by Salami and Walker (2014) using cognitive vulnerability-stress theory, the authors argued that the interactions between the preexisting cognitive vulnerability (hopelessness) and the occurrence of adverse events might lead to the onset of depressive and anxious symptoms for African Americans. In this study, the authors stated that since 24% of African Americans are living below the poverty level, it is likely that African Americans are relatively more stressed than their Caucasian counterparts. According to their study, African

American students who reported lower SES also reported higher levels of anxiety and depression. Surprisingly, those African American college students who reported higher SES also reported higher levels of anxiety and depression. The findings of this study might be supported by the notion that African American students in a Predominantly White Institutions (PWI) tend to report poorer psychosocial adjustment and more psychological distress than their counterparts enrolled in a Historically Black Colleges and Universities (HBCU).

In examining the importance of cognitive vulnerability as it relates to the impact of stress on depression, Salami, Walker, and Beach (2017) suggested that it is essential to consider the cultural and historical context that may shape their development and their impact on depressive symptoms. Given the historical and pervasive experience of discrimination, economic inequality, and injustice among African Americans, it is probable that external attributions about the occurrence of negative events may generate feelings of hopelessness which may ultimately increase levels of depression. Furthermore, Salami et al. (2017) stressed that it is essential to appropriately measure cognitive vulnerability between African Americans and their White counterparts to understand the development of depression between the two groups. In their study, they revealed that African Americans locus of control is external as opposed to internal control in White, and this was responsible for the psychological disturbance in African Americans.

Transition to college for African American students is not without its stressors, particularly for those students who have been exposed to potentially traumatic events or have symptoms of posttraumatic stress disorder (PTSD) (Ai, Plummer, Kanno, Heo, Appel, Simon, & Spigner, 2011). It is important to point out here that these stressors are not specific to students of color. A study shows that most students enter college with a history of one potentially traumatic event, and many reported lifetime exposures to multiple traumatic events (Boyratz, Horne,

Owens, & Armstrong, 2013). It is essential for future research to explore the impact of trauma on academic performance because this association has been said to determine whether a student remains enrolled in college or not. For example, Duncan (2000) found that PTSD symptoms in the first year of college predicted a lack of college enrollment in the senior year.

Ai et al. (2011) argued that African American college students report higher rates of trauma exposure and PTSD in comparison to their counterparts. The higher rates of PTSD or exposure to traumatic events among African American college students may be due in part to living in at-risk areas and secondly, it might be as a result of limited access to financial and social resources which make them more vulnerable to the impact of negative life events (Boyras et al. 2013)

In a study conducted by Boyras et al. (2013), the impacts of PTSD on the academic performance of African American college students were explored. Data were collected from first-year African American college students attending the historically Black institution, and predominantly White institution. Data were collected in three-time points. Three-quarters of their sample reported lifetime exposure to at least one potentially traumatic event. Majority of the sample students endorsed the violent death of a loved one as the most traumatic event in their lives. Most men in the sample endorsed the following as most potentially traumatic events: experiencing a life-threatening accident, being the victim of a robbery, being threatened with a weapon, or being present when another person was killed. On the other hand, a higher percentage of women endorsed sexual assault, sexual abuse, and emotional abuse.

The findings of this study indicated that of 423 trauma-exposed students, 138 of them did not enroll in the spring of their second year in college. There was no significant gender

difference in second-year enrollment. The study also indicated a significant difference in dropout rates between students who reported trauma exposure but did not meet criteria for PTSD and those who screened positive for PTSD. The results also indicated no significant difference in dropout rates of those with PTSD across the two institutions: historically Black institution and predominantly White institution. Lastly, the results indicated a significant gender difference in dropout rates for females who screened positive for PTSD than their male counterparts. These findings suggest that while both African American male and female may begin college with exposure to traumatic events in high numbers, PTSD symptomatology appears to increase the risk of dropping out of college, particularly for African American women.

Most African American male college students endorsed exposure to personal or community violence or witnessing the death of a loved one through violent means as potentially traumatic events in their lives that have a negative impact on their academic performance (Boyratz et al., 2013). To further explore the relationship between personal or community violence and academic performance of African American college student, Kelly (2014) sought to explore the effect of early exposure to violence upon the academic performance or achievement of African American college students, particularly first-generation college students as they are most vulnerable. The study employed a causal and correlational design to investigate the association between the variables of interest. About 738 African American students from a historically Black institution and predominantly White institutions were surveyed for this study. The results of this study indicated a significant relationship between early exposure to violence and the later academic achievement of African American students attending a predominantly White institution.

Research evidence suggests that African American students enrolled at predominantly White institutions generally have poorer college adjustment and lower academic performance in comparison to their counterparts attending historically Black institutions (Greer & Brown, 2011). Greer and Brown (2011) further stated that this difference in academic outcome by institution type is as a result of minority status stress. According to these authors, “minority status stress is a unique source of stress that emanates from psychosocial difficulties related to racial and ethnic background” (Greer & Brown, 2011, p. 26). To explore the relationship between minority status stress and academic performance, the authors sampled 202 African American undergraduate students from a large predominantly White institution and a historically Black institution.

The results from this study indicated that academic performance was significantly associated with minority status stress. According to their findings, there was an inverse relationship between minority status stress and academic performance. The results also indicated a significant difference in grade point average across the institutions. African American students who are attending historically Black institutions reported a higher mean grade point average than their counterparts attending a predominantly White institution. The results of this study suggest that exposure to race-related events or incidents is distressing to African American college students and this distress seems to be negatively impacting their academic performance or outcomes.

In an effort to explore the relationship between depressive symptomatology and academic performance, Boyraz, Horne, Owens, and Armstrong (2016) looked at the role of depressive symptomatology in college persistence among African American students. The author used a longitudinal study design to examine the association of these variables on African American

students' academic performance. The authors focused on first-year Black students to determine whether entering college with depression had a significant effect on performance at the end of the first year and also on the second-year enrollment. The results of this study indicated that there was no significant difference in dropout rates between participants that attended a historically Black institution and those that attended predominantly White institutions. Similarly, the authors found that there was no significant difference in depressive symptomatology between the student groups. However, a student attending a historically Black institution reported a significantly higher first-year GPA than those students attending a predominantly White institution.

Dual Continua Model and Subjective Well-Being

Mental health has been traditionally defined as the absence of mental illness, such as depression or anxiety. However, the World Health Organization declares that health is a state of complete physical, mental, and social well-being (Slade, 2010). Given the limitations of the traditional conceptualization of mental health and mental illness, positive psychologists have proposed the dual continuum model of understanding mental health and illness.

The dual continua model (DCM) of mental health was proposed to conceptualize mental illness symptoms and indicators of psychological well-being as separate, co-occurring factors that contribute to overall mental health functioning (Eklund, Dowdy, Jones, & Furlong, 2011). Based on this model, individuals are categorized by their mental illness status and according to their mental health profile (flourishing, moderate, and languishing). Evidence suggests that individuals categorized into different mental health profiles differed on key individual

characteristics and desirable outcomes, including academic achievement, motivation, and physical health (Antaramian, 2015).

In Keyes' model (Figure 1), individuals suffering from a mental illness may still possess a positive level of mental health and well-being as depicted in the upper left quadrant. This model also suggests that the absence of a mental illness does not mean that an individual possesses positive mental health as shown in the bottom right quadrant. Keyes' (2002) proposes that individuals with anything less than flourishing mental health are diagnosed with incomplete mental health, irrespective of the presence or absence of any mental illness. In contrast, a Complete state mental health model can be achieved when an individual is both flourishing and free of mental illness.

Figure 1. *Keyes's Dual Continuum Model of Mental Health and Mental Illness*

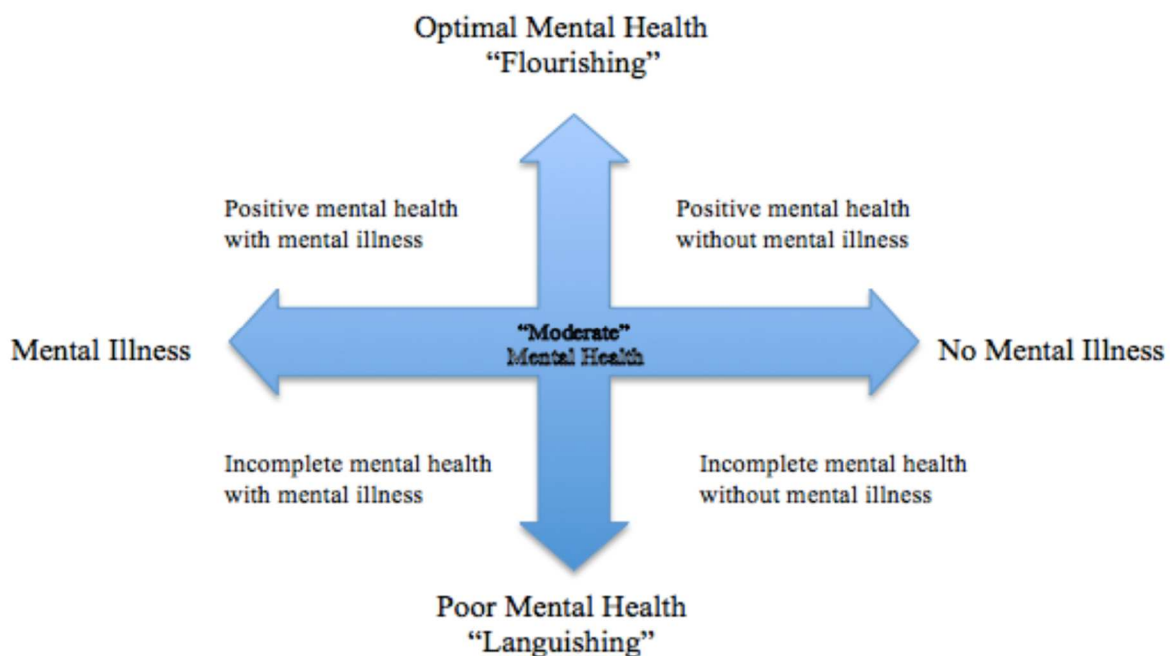


Figure 1. *Keyes's Dual Continuum Model of Mental Health and Mental Illness*

(Adapted from MacKean, 2011, p. 11 and Keyes, 2003, p. 294)

More recent literature has applied the dual continua model of mental health (Antaramian, 2017; Suldo, Thalji, Kiefer, & Ferron, 2016) to the academic performance of college students. For example, the model has been used in previous research works conducted on youths to examine their academic outcomes and social functioning (for example, Eklund, Dowdie, Jones, & Furlong, 2010; Suldo & Shaffer 2008). Subsequently, the current study will attempt to use this model as a framework to explore the association among psychological distress, well-being and educational experiences among a sample of Black college students.

Greespoon and Skalafske (2001) first examined the utility of a DCM of mental health in 407 elementary school students. Using measures of wellness and psychopathology, four groups of youth were identified in their study. Two of the groups were children with both elevated subjective well-being and psychopathology and children with low subjective well-being and low psychopathology. The other remaining groups are children with elevated psychopathology and low subjective well-being, and children without psychopathology and with high subjective well-being. In this study, children with low subjective well-being, regardless of their psychopathology status, reported low self-concept related to academic competence and performance.

In one study using a sample of college students, Eklund, Dowdy, Jones, and Furlong (2011) explores the dual factor theory of global mental health by focusing on the constructs of hope and gratitude. They chose these constructs because of their link with self-reported happiness, on grit and their relation to success and well-being in college students. Based on students' responses to both measures of psychological well-being and measures of clinical symptoms, student participants were placed into four groups. The four distinct groups created are as follows: Group 1: well adjusted (78%); Group 2: at -risk (9%); Group 3: ambivalent (4%); and Group 4: distressed (9%). The authors found that well-adjusted and at-risk individuals demonstrated lower mean scores compared to the other two groups on two of the four indicators of maladaptive behaviors. Similarly, they found that the mean psychological well-being scores for the well-adjusted group significantly exceeded the means of the remaining three groups.

In contrast to Eklund et al. (2011) study, Van Zyl and Rothman (2012) explored the utility of the dual continua model by using student participants in South Africa. This was the first study of the dual continua model among college students in which the majority of the

participants were Blacks (66.1%). Their study aimed to examine the relationship between flourishing and academic performance, life satisfaction, and positive affect. The authors found that the participants did not vary on academic performance across the categories of the model. The results indicated that languishing, moderately flourishing and flourishing students had similar academic results, however, when this relationship was further investigated by grouping academic performance into five categories: underperforming, average, above average, slightly above average, and excelling, there were significant differences between languishing, moderately flourishing, and flourishing.

Unlike Eklund et al. (2011), Keyes, Eisenberg, Geraldine, Shanta, Kroenke, and Satvinder (2012) found that less than 50% of their sample were flourishing and did not screen positive for a mental disorder. The authors in this study found that students with a current mental disorder, over half (52.0%) with languishing, 34.6%, with moderate, and 20.4% with flourishing mental health reported academic impairment. However, students free of a mental disorder, three times as many with languishing mental health (17.0%) had an academic impairment as those with moderate mental health (5.6%). Over twice as many students with moderate mental health had an academic impairment as those with flourishing mental health (2.4%). This study's outcome suggests that individuals diagnosed with mental disorders are more likely to have academic impairment than those without any symptoms. Antaramian (2015) examined the utility of dual continua model in understanding the psychological adjustment and educational functioning of college students. In this study, a sample of 561 college students was grouped into four groups based on their levels of subjective well-being and clinical symptoms. Participants were considered high subjective well-being if they scored at or above the mean on the subjective well-being composite, and they were determined as low subjective well-being if they scored

below the mean. Further, for symptoms, a T-score of 60 was chosen as the decision point. Individuals were classified as having high levels of symptoms if their score was greater than a T-score of 60 (Antaramian, 2015). Those below this score were classified as having low levels of symptoms. Upon classifying the students into these groups, group differences in students' engagement and academic achievement were examined. On the student engagement dimension, the author found that the well-adjusted group scored significantly higher than the distressed and the at-risk groups. The ambivalent group was not significantly different from the other groups on most of the engagement dimensions; however, they did score significantly higher than the distressed group beyond class engagement. This suggests that individuals who are well adjusted are more likely to engage in academics, and by implications, they are more likely to have a better academic outcome. In respect to the GPA, the well-adjusted student participants had the highest scores, followed by the at-risk and ambivalent. The distressed students had the lowest GPA scores. The author reported that the only statistically significant difference in GPA was between the well-adjusted and distressed groups.

The literature shows that students with higher levels of psychological and emotional well-being are more likely to have higher levels of academic achievement. Of interest, positive emotions, the fulfillment of needs, individual strengths are likely to influence the intersection or the relationship between well-being and academic performance. This relationship is vital to the current study because it will highlight the importance of well-being to the mental health profile of African American students.

Case for the Theoretical Model Being Tested

The theoretical framework that initially guided this current research study was the dual continual model of mental health and mental illness (Keyes, 2002). However, the researcher is choosing to not to incorporate the original variables of the study and instead will examine the presence of lesser known (i.e., not been studied yet) and less observable factors (to others) for African American/Black students, such as Internalizing and Externalizing as well as their subjective experiences of well-being such as their internal positive and negative mood states and overall life satisfaction that may contribute to the understanding of their academic performance (overall GPA) as African American/Black students. Therefore, researcher is testing his own theoretical model of the factors that predict academic success among African American/ Black college students.

Researcher believes that African American/Black students will connect better with these measures than ones used previously in other research studies for two reasons: 1) these measures are not focused on psychopathology/mental illness and 2) previous measures used in the original theoretical model as well as in other research studies have not been normed with African American/Black students. The measures selected for this dissertation study have been used with African American/Black samples in the past, but not necessarily with African American/Black college students. It is important for counselors and psychologists to recognize African American/Black college student development and that internalizing and externalizing as well as positive and negative mood states and overall life satisfaction represent more of a developmental approach to and measurement of African American/Black students' internal experiences during their college years. As such, in this study, the linear relationships of psychological distress and subjective well-being with overall GPA among African American/Black students will be

explored, both together and separately using the measures identified chapter two rather than a focus on how psychopathology/mental illness related to academic success for African American/Black college students.

Purpose of Study

The purpose of this non-experimental quantitative study is to explore the relationship among psychological distress, well-being and academic performance among Black college students. This study was inspired by the dual continua model research. This current study will examine the unique characteristics of Black college students with respect to the intersectionality of disorders and well-being. In addition, it seeks to expand on previous research by providing further evidence for the utility of the intersectionality of disorders and well-being when dealing with Black college students. Early research studies conducted in this regard support its use in the college population. However, more evidence is required to fully establish whether this model is appropriate for understanding unique mental health profiles and the needs of African American college students. The current study seeks to build on this evidence by examining the said model with a demographically distinct sample compared to those used in the previous studies. Furthermore, this study will add to the existing literature by examining this model in the context of Black students' educational outcomes, in addition to investigating whether African Americans differed not only in terms of their mental health profiles, but also their academic success.

Research Questions

The overarching or primary research question of this study focuses on the nature of the relationship between mental health and academic performance in Black American students. Its aim is to explore the following questions:

- 1) Is there a relationship between psychological distress (i.e., Internalizing, as measured by level of depression [Total Score of the CES-D] and Externalizing, as measured by level of aggression [Total score of the Aggression Questionnaire]) with academic performance, as measured by overall GPA, among African American/Black college students?
- 2) Is there a relationship between subjective well-being (i.e., Positive Affect and Negative Affect subscales of the PANAS, and the overall life satisfaction score of the Satisfaction with Life Scale) with academic performance, as measured by GPA, in African American/Black college students?
- 3) How well do psychological distress (i.e., Internalizing [overall depression score of CES-D] and Externalizing [overall aggression score of AQ] and subjective well-being (i.e., Positive and Negative Affect subscales and overall life satisfaction score of the Satisfaction with Life scale) predict academic performance, as measured by overall GPA, in African American/Black college students?

Hypotheses

Based on the previous studies that explored the presence of the dual continua model in elementary, middle and high schools, as well as colleges (Antaramian, Huebner, Hills, & Valois, 2010; Antaramian, 2015; Greenspoon & Saklofske, 2001; Suldo & Shaffer, 2008; Thalji, 2012), the following hypotheses will be tested using SPSS:

- 1) It is hypothesized that the Internalizing and Externalizing variables of level of depression and aggression respectively will be statistically significant predictors of academic performance, as measured by overall GPA, for this sample of African American/Black students. It is expected that the overall depression and aggression scores will negatively load with overall GPA for this sample (i.e., examination of the beta weights). In other

words, higher levels of depression and aggression will be associated with lower overall GPA scores. Overall depression and aggression will be negatively correlated with overall GPA for this sample (Pearson correlational findings). This prediction is based on previous research findings demonstrating that psychological distress is negatively correlated with academic performance among African American/Black students (Greer, 2008).

- 2) It is hypothesized that the subjective well-being variables of positive and negative affect and overall life satisfaction will be statistically significant predictors of academic performance, as measured by overall GPA, for this sample of African American/Black college students. There will be statistically significant positive loadings for Positive Affect and Overall Life Satisfaction with overall GPA (i.e., based on examination of the beta weights). There will be a statistically significant negative loading for Negative Affect with overall GPA (i.e., based on examination of the beta weights). Positive Affect and Overall Life Satisfaction will be significantly and positively correlated with Overall GPA. Negative Affect will be significantly and negatively correlated with Overall GPA (Pearson correlational findings). This prediction is based on previous research findings demonstrating that subjective well-being is positively correlated with academic performance for Black college students (Owusu-Ansah, Agyei-Baffour, & Edusei, 2012).
- 3) It is hypothesized that psychological distress, as measured by level of depression (i.e., Internalizing) and level of aggression (i.e., Externalizing), will explain more of the variance in overall academic performance, as measured by overall GPA, than subjective well-being, as measured by positive affect, negative affect, and overall life satisfaction. This prediction is based on previous research findings demonstrating that psychological

distress was more related to academic performance (i.e., accounted for more of the shared variance) than subjective well-being in samples of Black children and adolescents (Barriga et al., 2002; Fowler et al., 2017; Kremer, Flower, Huang, & Vaughn, 2016;).

Contributions to the Literature

Multiple studies support the presence of a dual continua model of mental health in children, adolescents, and youth adults (college students). However, no study has examined this model specifically in relation to African American college students. The current study contributes to the literature by conducting the first examination of this model among the African American college population. Similarly, this study will provide insight into how the patterns of well-being and mental health problems differ among the groups classified from the said model.

Summary

There is an increasing incidence of mental illness across colleges in the US. Given the historical trauma experience and reduced service utilization by Black college students, attention needs to be given to their mental health. Black college students must possess positive mental health to persist in their education. Mental health is essential to Black students' academic performance. Research evidence supports an inverse relationship between externalizing problems (attention deficit, aggression, and antisocial behavior) and school achievements. Furthermore, externalizing behaviors are associated with lower rates of enrollment in higher education.

CHAPTER III

METHODOLOGY

The current study sets out to test a theoretical model of factors that predict academic success among African American college students. This study investigated the associations between psychological variables, related to mental health symptoms and subjective well-being, and academic performance of African American/ Black college students. This chapter provides a description of the research design and information regarding study participants.

Research Design

The current study utilized a non-experimental design in order to determine the utility of the dual continua model of mental health in Black college students. Non-experimental research is a process of gathering information to support associations between two or more naturally occurring variables. In this study, there was no manipulation of the independent variables or random assignment to groups. Given that the primary aim of this study was to investigate correlations among measures of those constructs, a non-experimental research design was the most appropriate research approach.

Participants

The participants in this study were 184 African American undergraduate students recruited from three universities in the midwestern region of the United States. Most of the participants were women (i.e., 101 women, 81 men, and 2 gender non-conforming or gender queer). Participants self-identified primarily as African American (N= 159), African (N=12), Caribbean American (N=6), Jamaican American (N=1), and other (N=6). Participants ranged in age from 18- 32 years (M = 19.73, SD= 2.15).

Most of the participants identified as middle class (N= 96); other class self-identifications included working class (N=42), low income or poor (N=23), upper middle or professional (N=19), and no response (N=4). Vast majority of the participants reported their sexual orientation as heterosexual (N=109); other sexual orientations included asexual (N=20), bisexual (N=12), Fluid (N=3), gay (N=6), lesbian (N=1), pansexual (N=2), queer (N=3), questioning (N=2), and no response (N=26).

The largest single group of participants indicated that their parents were never married (39.7%), followed by married (32.1%), divorced (19.0%), separated (6.0%), and no response (3.2%). Participants reported their parents' level of education as follows: did not finish high school (1.1%), high school diploma (38.6%), attended college but did not complete (19.0%), associates degree (7.1%), bachelor's degree (19.0%), masters degree (9.8%), doctoral or professional degree (4.3%), and prefer not to answer (1.1%).

Procedures

We recruited participants from three universities in the midwestern region of the United States. They were recruited with the help of program administrators and coordinators of programs that cater to the needs of African American college students on campus. Programs that received emails were Black Students Association, African Students Association, African American Students Association, and classes where African and African American studies are taught in the universities of interest. Those who agreed to participate in the study self-identified as African American or Black American undergraduate students.

The age of consent for participation was 18 years of age. Because of the required racial identity, we assumed that all of the participants were African American or Black undergraduate students. There were no restrictions with regards to gender, sexual or affectional orientation, religious or spiritual beliefs, ability status, or socioeconomic status. Additionally, participants were required to have at least one semester of university experience in order to be able to report a GPA.

Measures

The current study includes predictors in the form of indicators of mental health functioning, and outcomes pertinent to academic performance.

Demographic Form

This questionnaire contained items that gathered information on student classification (level), age, gender, socioeconomic status (SES), as well as their family structure (e.g. “my biological parents are married,” “my biological parents are divorced;” see Appendix B).

Positive and Negative Affect Schedule

Subjective well-being was assessed by measuring each of three components; the Satisfaction with Life Scale and the two subscales of the PANAS. The emotional components of subjective well-being, positive and negative affect were measured using the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1998). The PANAS is a well-established 20-item scale that assesses the experience of positive and negative emotions. The Positive Affect (PA) subscale includes 10 positive emotions such as “excited” and “proud,” whereas the Negative Affect (NA) subscale includes 10 negative emotions, such as “nervous” and “upset.” Respondents rated the extent to which they have experienced each emotion during the past few weeks on a 5-point scale, and a total score was calculated for each subscale. In previous related research, coefficient alpha was reported to be .86 for PA and .84 for NA (Antaramian, 2015). Confirmatory factor analysis supports the two-factor structure of the PANAS (Tuccitto et al., 2010). In the same vein, validity has been established through positive relationships between NA and measures of depressive symptoms and through negative relationships between PA and distress indicators (Rush and Hoffer, 2014).

Life Satisfaction

The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) was developed as a measure of self-appraised component of subjective well-being. The Satisfaction with Life Scale is shown to be a valid and reliable measure of life satisfaction, suited for use with a wide range of age groups and applications, which makes possible the savings of interview time and resources compared to many measures of life satisfaction. In addition, the high convergence of self and peer reported measures of subjective well-being and life satisfaction provide strong

evidence that subjective well-being is a relatively global and stable phenomenon, not simply a momentary judgment based on fleeting influences (Pavot et al., 1991).

The Satisfaction with Life Scale consists of five items which measure the individual's evaluation of satisfaction with life in general (e.g. "I am satisfied with my life" and "If I could live my life over, I would change almost nothing"). Responses range from 1 (strongly disagree) to 7 (strongly agree) for each question. Responses are then totaled to provide a total life satisfaction score. Research has established acceptable psychometric properties for the satisfaction with life scale, with reliability indices ranging between .67 and .87 (Diner et al., 1985).

Internalizing Symptoms (depression)

Psychological distress was assessed by measuring a sample of symptoms within the two broad categories of internalizing and externalizing, similar to measurement procedures used in previous studies of the dual-continua model (Antaramian, et al., 2010; Antaramian, 2015; Suldo & Shaffer, 2008). Participants' internalizing symptoms was assessed using the Center for Epidemiologic Studies Depression Scale (CES-D; Antaramian, 2015). This well-established 20-item self-report measures includes statements that reflect depression, anxiety, withdrawal, as well as feeling sad, fearful, and lonely. Respondents rated each item based on how often they have felt that way over the past week on a 4-point scale. Internal consistency of the CES-D is high, with a coefficient alpha of .90 (Antaramian, 2015). Validity has been established through positive correlations with other self-reported measures of depression and clinician and interviewer ratings of depressive symptoms (Skriner & Chu, 2014).

Externalizing symptoms (aggression).

Participants' externalizing symptoms were evaluated using the Aggression Questionnaire (AQ; Buss and Perry, 1992). This widely used scale consists of 29 items that assess four types of externalizing behaviors, including physical aggression, verbal aggression, anger, and hostility. Respondents will rate their agreement with each statement on a 5-point scale, and all items scores will be combined to yield a total externalizing score. Internal consistency for the scale is good, with an alpha of .91 (Antaramian, 2015). The validity of the scale is supported through positive correlations with other self-report measures and peer ratings of aggression and measures of impulsiveness and competitiveness (Rotton & Burns, 2006).

Grade Point Average (GPA).

GPA was obtained through self-report. Participants were asked to provide their exact cumulative GPA, which is measured on a traditional 4-point scale (reported to two decimal places).

Research Questions

The research questions this study aims to answer are as follows:

- 1) Is there a relationship between psychological distress (i.e., Internalizing, as measured by level of depression [Total Score of the CES-D] and Externalizing, as measured by level of aggression [Total Score of the Aggression Questionnaire]) with academic performance, as measured by overall GPA, among African American/Black college students at a PWI?
- 2) Is there a relationship between subjective well-being (i.e., Positive Affect and Negative Affect subscales of the PANAS, and the overall life satisfaction score of the Satisfaction

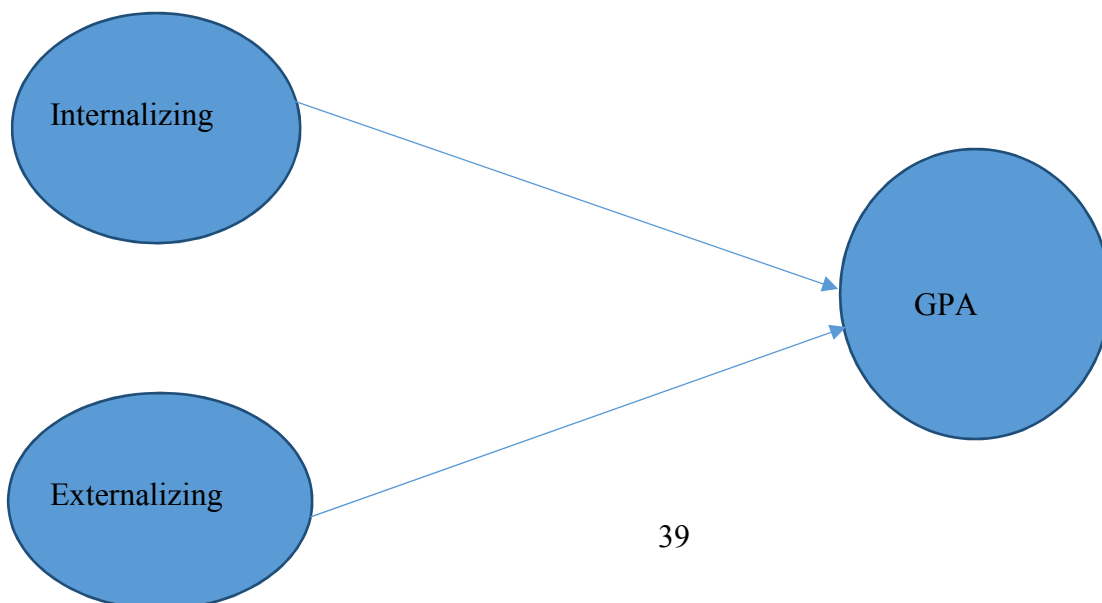
with Life Scale) with academic performance, as measured by GPA, in African American/Black college students at a PWI?

- 3) How well do psychological distress (i.e., Internalizing [overall depression score of CES-D] and Externalizing [overall aggression score of AQ] and subjective well-being (i.e., Positive and Negative Affect subscales and overall life satisfaction score of the Satisfaction with Life Scale) predict academic performance, as measured by overall GPA, in African American/Black college students at PWI?

Data Analysis

Research Question 1: Is there a relationship between psychological distress (i.e., Internalizing, as measured by level of depression [Total Score of the CES-D] and Externalizing, as measured by level of aggression [Total score of the Aggression Questionnaire]) with academic performance, as measured by overall GPA, among African American/Black college students?

Predictor Variables Related to Psychological Distress Outcome Variable of Academic Success



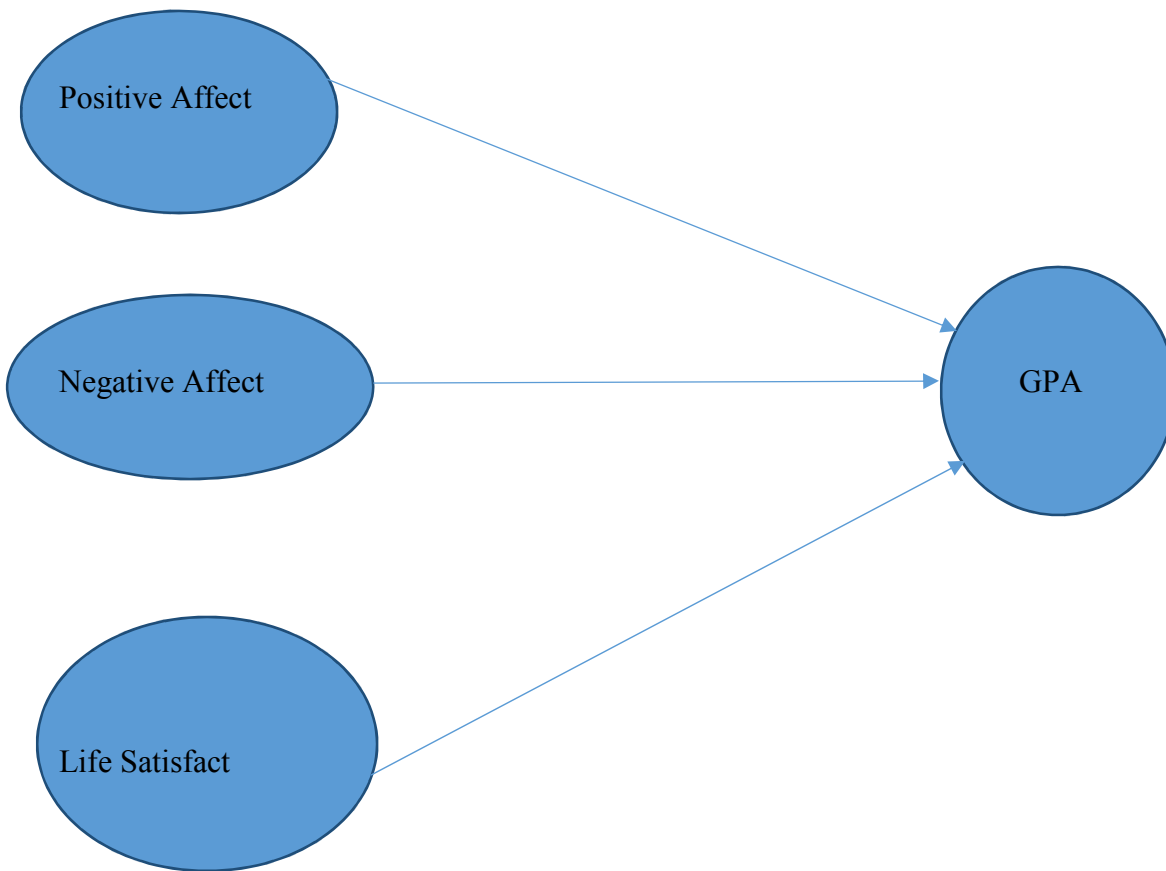
Research Hypothesis Related to Research Question 1: It is hypothesized that the Internalizing and Externalizing variables of level of depression and aggression respectively will be statistically significant predictors of academic performance, as measured by overall GPA, for this sample of African American/Black students. In a regression analysis, it is expected that the overall depression and aggression scores will have negative pathways to overall GPA for this sample (i.e., examination of the beta weights). In other words, higher levels of depression and aggression will be associated with lower overall GPA scores. Overall depression and aggression will be negatively correlated with overall GPA for this sample (Pearson correlational findings).

This prediction is based on previous research findings demonstrating that psychological distress is negatively correlated with academic performance among African American/Black students (Greer, 2008).

Research Question 2: Is there a relationship between subjective well-being (i.e., Positive Affect and Negative Affect subscales of the PANAS, and the overall life satisfaction score of the Satisfaction with Life Scale) with academic performance, as measured by GPA, in African American/Black college students?

Predictor Variables of Subjective Well-Being

Outcome Variable of Academic Success



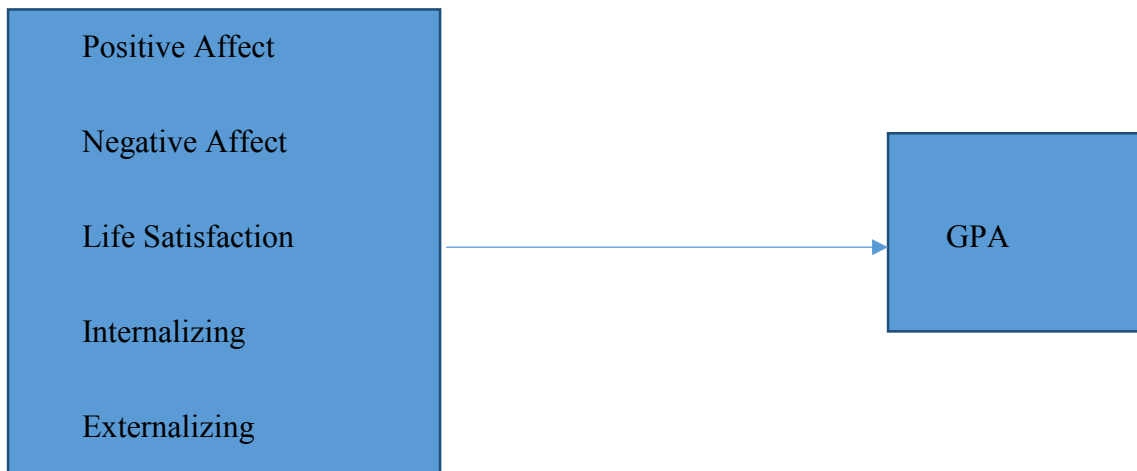
Research Hypothesis Related to Question 2: It is hypothesized that the subjective well-being variables of positive and negative affect and overall life satisfaction will be statistically significant predictors of academic performance, as measured by overall GPA, for this sample of African American/Black college students. There will be statistically significant positive pathways for Positive Affect and Overall Life Satisfaction with overall GPA (i.e., based on examination of the beta weights). There will be a statistically significant negative pathway for Negative Affect with overall GPA (i.e., based on examination of the beta weights). Positive Affect and Overall Life Satisfaction will be significantly and positively correlated with Overall GPA. Negative Affect will be significantly and negatively correlated with Overall GPA (Pearson correlational findings).

This prediction is based on previous research findings demonstrating that subjective well-being is positively correlated with academic performance for Black college students (Owusu-Ansah, Agyei-Baffour, & Edusei, 2012).

Research Question 3: How well do psychological distress (i.e., Internalizing [overall depression score of CES-D] and Externalizing [overall aggression score of AQ] and subjective well-being (i.e., Positive and Negative Affect subscales and overall life satisfaction score of the Satisfaction with Life scale) predict academic performance, as measured by overall GPA, in African American/Black college students?

Predictor Variables of Subjective
Well-Being and Psychological Distress

Outcome Variable of Academic Satisfaction



Research Hypothesis Related to Research Question 3

It is hypothesized that psychological distress, as measured by level of depression (i.e., Internalizing) and level of aggression (i.e., Externalizing), will explain more of the variance in overall academic performance, as measured by overall GPA, than subjective well-being, as measured by positive affect, negative affect, and overall life satisfaction. This prediction is based on previous research findings demonstrating that psychological distress was more related to academic performance (i.e., accounted for more of the shared variance) than subjective well-being in samples of Black children and adolescents (Barriga et al., 2002; Fowler et al., 2017; Kremer, Flower, Huang, & Vaughn, 2016;).

Ethical Considerations

All information shared during this study were de-identified to the furthest extent possible in order to protect the privacy of the participants. Further, the researcher's advisor, analyst team members, and those consulted during the course of the study were reminded of confidentiality and ethical concerns. In addition, each of these individuals only had access to the deidentified, primarily numerical data. Further, surveys were coded for confidentiality and anonymity. They were stored in locked file cabinets within the researcher's home office until such an event that the data are no longer needed.

CHAPTER IV

FINDINGS

In this chapter, we described our data and research questions. First, we described the data cleaning process and decisions to drop some participants due to missing values. Following this, we talked about descriptive statistics of the individual variables as well as their intercorrelations. Next, we evaluated each of the research questions that have been proposed. These research questions focused on the prediction of academic performance among African American college students as measured by self-reported GPA by variables related to psychological distress and subjective well-being. Finally, we described the post hoc analyses employed in this current study.

Results

First, I calculated the total number of missing questions for each participant. There were 10 people who were missing more than 50% of the data (i.e., more than 37 questions) and were deleted. Five people were missing all questions from the Externalizing scale and were deleted. One person was deleted because their GPA was 209 which is not possible, and another person was deleted because their GPA was missing. The missing data were handled via participant-specific mean item imputation. Specifically, if a participant had data for at least 80% of the items on a given subscale from a measure, then the participant's mean score on the items completed within that subscale or measure was calculated and rounded to the nearest whole number. That

mean value for the measure was then substituted for the data point formerly coded as missing. The final sample after data cleaning was 184.

The descriptive statistics for the main study variables are presented in Table 2. Of interest, 20 (10.9%) participants out of 184 were identified as Asexual and 73 (39.7%) participants reported that their parents have never been married. These demographics are unusually surprising when compared to the general population. These atypical demographics suggest that the sample in this study may be described as unusual. To address research questions in this study, Pearson correlational analyses were conducted to explore the bivariate relationships between and among the main study variables, including Internalizing, Externalizing, PANAS Positive, PANAS Negative, Life Satisfaction, and GPA. See Table 1 for the correlation matrix.

Out of the correlation matrix, only three coefficients came out with a significant p-value. One was for PANAS positive and externalizing ($r = .311$, $P < .05$). This association may seem counterintuitive, but for the way these scales are defined, it makes sense. For example, it is possible that individuals with externalizing behavior like aggression may have an inflated perception of other aspects of their functioning, which engenders them to be satisfied with their lives. Notably, with these individuals, aggression may be seen as an adaptive emotion (Cillessen & Mayeux, 2004). The other two were the association between female (gender) and PANAS positive ($r = -.189$, $P < .05$) and between female (gender) and GPA ($r = .328$, $P < .05$). This suggests that Black college women may relate to different experiences of positive emotions

differently than Black men. Additionally, the data support the assumption that Black college women have stronger GPA than their male counterparts.

A series of multiple regression analyses were conducted to answer the research questions of this study. Before interpreting the regression findings, we used diagnostic tests to evaluate assumptions related to linearity, independence, homoscedasticity, and whether errors correlated with the independent variables. Notably, we were interested in the dependent variable's influence on the independent variables, the validity and reliability of the independent variables, and whether the regression analyses included all the common causes of the presumed cause of the supposed effect.

Of interest, the first assumption is that there is a linear relationship between the outcome variable and the independent variables. Scatterplots was used to test this assumption. The scatterplots revealed a curvilinear relationship. As such, this assumption was met. Secondly, the assumption related to multivariate normality was tested. This assumes that the residuals are normally distributed. A histogram was used to test this assumption. The histogram of the residuals appears normal. This assumption was also met. The next assumption tested was related to multicollinearity. Multicollinearity assumes that the independent variables are not highly correlated with each other. This assumption was tested using variance inflation factor (VIF) values. For this assumption, a VIF of 1.07 was reached for both the internalizing and externalizing variables. A VIF under 10 indicated this assumption was met. Finally, the assumption related to homoscedasticity was tested. This assumption states that the variance of

error terms is similar across the values of the independent variables. A plot of standardized residuals versus predicted values shows whether points are equally distributed across all values of the independent variables. Since the plot shows no discernible pattern, the assumption was met. Given that all assumptions were met, the decision was made to proceed with conducting the multiple regression

To answer research question 1, we explored the linear relationship of psychological distress (i.e., depressive symptoms) and externalizing symptoms (i.e., the aggressive tendencies) with academic performance as measured by overall GPA (i.e., outcome variable). The overall model was not significant, $R^2 = .012$, $F(2,181) = 1.06$, $p > .05$. Further examination of the beta weights revealed that both depressive symptoms and aggressive tendencies were not significant predictors of academic performance. See Table 4. Thus, the hypothesis for research question 1 was not confirmed. For answer research question 2, multiple regression analyses were conducted to explore how the quality of life satisfaction, as well as positive and negative affect subscales were linearly related to the academic performance of African American college students. The overall regression model for the linear relationship of quality of life, positive and negative affect subscales with academic performance (as measured by GPA) of African American college students was not statistically significant, $R^2 = .008$, $F(3,180) = .461$, $p > .05$.

Examination of the beta weights indicated that all three variables, positive affect, negative affect, and overall life satisfaction were not significant predictors of academic performance in African American college students. See Table 5.

Finally, to answer research question 3, multiple regression analysis was conducted to explore how internalizing, externalizing, positive and negative affect subscales, and overall life satisfaction were linearly related to academic performance in African American college students. The academic performance as measured by self-reported GPA was found to be statistically non-significant with all the variables, $R^2 = .024$, $F(5,178) = .862$, $p > .05$. Further examination of the beta weights showed that all the five variables, depressive symptoms, aggressive tendencies, tendency to experience positive emotions, the experience of the world in a negative way, and overall life satisfaction were not predictors of academic performance in African American college students in this sample. See Table 6. Thus, in this sample, higher levels of life satisfaction, propensity to experience positive emotions, experiencing the world negatively, tendency to use physical force and symptoms associated with depression were not associated with or predictive of academic performance of African American college students in predominantly White institutions.

Post Hoc

In this current study, because we noticed gender differences as we reported in the results, we ran a different independent t-test for the sake of future research. The results indicate that the academic performance as measured by self-reported GPA was significantly different between African American male and female students, $t(182) = -4.665$, $p < .05$. This suggests that differences between African American male and female students are not due to chance. See Table 7. Further, separate regression analyses were conducted based on gender. The results

indicate that all variables in this study: internalizing, externalizing, positive and negative affect, and life satisfaction, were found to be statistically significant for African American female students, $R^2=0.136$, $F(5, 95) = 2.985$, $P < .05$. See Table 8.

In summary, we do not find support for our research questions. In the next chapter, we will talk extensively about the potential explanation for this result. Because we could not find evidence for the relationship among psychological distress, subjective well-being, and academic performance among African American college students, we did some additional exploration to see what the data might tell us for future research.

CHAPTER V

CONCLUSION

Discussion

Our primary objective was to examine the impact of subjective well-being and psychological distress on African American college students' academic performance. The results of this study indicated that symptoms associated with depression, feeling negative emotions, aggressive tendencies, interacting with others and experiencing life's challenges in a positive way, and satisfaction with the quality of life were not significant predictors of academic performance of African American college students in a predominantly white institution, at least in this sample. There are a number of hypotheses as to why the results did not turn out as expected.

Specifically, there was no corresponding decrease in the academic performance as measured by the GPA of African American students who exhibited symptoms of depression such as restless sleep, poor appetite, and feeling of loneliness. This may be due in part to the fact that Black individuals tend to report depressed affect in somatic terms (Lu et al., 2017). This suggests that somatic complaints by African Americans should be taken seriously. Given the relationship between somatic complaints and racial prejudice, it is likely that Black students might express more depressed mood or somatic complaints only when they experience interpersonal problems

(Lu et al., 2017). In other words, those with interpersonal problems are more likely to report higher levels of depressed affect which the measure in the current study did not capture.

Further, the grade point average of African American students who experienced the world more negatively, feeling negative emotions and more negativity in relationships and surroundings appeared not to have been negatively impacted. Similarly, the grade point average of African American undergraduate students attending predominantly white institutions seemed not to be affected by their endorsement of aggressive tendencies at least for the measures in this study. As others have noted, aggressive behavior may be adaptive as individuals who engaged in relational aggression may be perceived as more popular by peers. As such, externalizing behavior such as aggression may cause inflated perceptions of other aspects of life which may engender individuals to be satisfied with their lives (Cillessen & Mayeux, 2004).

The existing measures on well-being, positive affect, negative affect, internalizing and externalizing used in this study tend to have individual western cultural bias that fail to integrate many dimensions that may be of importance to those from collectivistic cultures (Pedrotti, 2011). Additionally, measures used in this study may not function in the population surveyed by this study in the same way they did in the samples used in the previous studies. For example, the Center for Epidemiologic Studies Depression Scale (CES-D) may not be accurate measure of depressed mood for African American college students because it did not account for the relationship between depressed mood, somatic complaints, and interpersonal problems. In the same vein, the measure used for life satisfaction in this study did not account for the cultural differences in the meaning of subjective well-being. As such, it is not a culturally inclusive measure that fully explored the lived experience of Black or African American college students.

Despite a significant body of research indicating increased academic performance related to increased subjective well-being, (Antaramian, 2015; Datu et al., 2018; King et al., 2018; Lewis et al., 2011; Van Zyl & Romans, 2014), the quality of life satisfaction and positive emotions experience did not impact African American college students' academic performance in the current study. This was possibly due to the fact that positive factors like life satisfaction, positive emotions, and the tendency to view the world positively may not be the accurate measurement of subjective well-being for African American college students. The concept of subjective well-being differs from person to person, place to place, and it is influenced by cultural traditions (Anderson, 2017). As such, other measures of subjective well-being like optimism, interpersonal skills, family ties, friendships, spirituality, creativity, and wisdom might capture the lived experience of African American college students better (Anderson, 2017; Ellison, 1990). Given the cultural variation in the meaning of subjective well-being, perhaps a more culturally inclusive measure of subjective well-being will better assess dimensions relevant to diverse racial ethnic groups.

Of interest in this study is the negative relationship between female (gender) and positive PANAS. The data suggests that Black women may relate to experiences with positive emotions differently than Black men. Literature speaks robustly to the assertion that women show greater emotional expressivity, especially positive emotions and internalizing negative emotions. This finding might be explained by the social context effect (Chaplain, 2015). The social context effect shows that gender differences in the expression of positive affect are stronger in the presence of an unfamiliar adult or peer and are insignificant in the presence of peer or when alone. As such, the female participants in this study likely completed their questionnaire while they were alone, and this may have produced this outcome. Furthermore, it is likely that Black

women are more sensitive to external variations and to physical and cognitive changes than the homeostatic system in male (Gonzales-Carrasco et al., 2017).

Another relationship worth noting is the association between female (gender) and GPA. As others have noted, African American college women have significant higher GPAs than their male counterparts (McClain & Cokley, 2017). The result of this current study supported the assumption that Black college women will have a stronger GPA than their male counterparts. This finding may be explained by the level of trust Black women have in the institution of higher learning compared to their male peers. (McClain & Cokley, 2017). Of interest, trust may be more important to academic motivation for students who are particularly marginalized or stereotyped in academic domains. While it is true that both Black men and women are faced with stereotypes and discrimination in the Predominantly White Institution (PWI), Black men face more unique academic challenges than their female counterparts (McClain & Cokley, 2017).

Implications for Counseling Practice

While the number of African Americans admitted to universities have increased, only 43% are graduating in a 6-year period compared to 60.2% among White students (National Center for Education Statistics, 2010). For African American students, a college education is seen as a tool to facilitate upward mobility and reduce income disparities. However, Black or African American students are more likely to experience racial stressors that hinder their integration and academic performance in predominantly white institutions. Of note, African Americans are more likely to report marginalized experiences, which may trigger psychological distress and affect their academic performance and retention (McClain & Cokley, 2017). Despite these marginalized experiences (racial issues, tense campus climate, and a lack of financial

resources), African American college students are underutilizing campus mental health services (Harris & Wong, 2018).

Given the benefits associated with counseling and challenges face by African American college students, the university counseling centers can enhance the college adjustment of African American students by devoting more attention to African American students' experiences with stigma. By addressing stigma, we posit that African American college students will be more interested in seeking mental health services. It is essential to recognize that men in general, and Black men in particular are much less likely to seek counseling services. Therefore, counseling centers need to be challenged to make their services more available and attractive to Black men.

Given that African American college students are more likely to go to their church or family members for help with different kinds of issues, it is important for college counselors to partner with campus ministry leaders to facilitate their referral of African American college students for counseling. We propose that this partnership would normalize mental health-seeking behavior and minimize cultural mistrust with mental health providers. Developing a partnership with the campus spiritual leaders may improve therapeutic alliance and enhance African American college students' therapeutic outcomes.

It is pertinent for college counselors to attend African American students' fraternities, sororities, and other student organizations' meetings and discuss mental health issues and resources available on campus. These discussions should focus on how mental health issues impact African Americans' academic performance and retention. This partnership will build positive interactions with African American leaders on campus and foster a relationship built on trust, leading to better information sharing and self-disclosure. More importantly, this

recommendation would provide an opportunity for cross-cultural relationships between the university counselors and African American campus leaders.

Similar to Harris and Wong's (2018) recommendation on the importance of partnership between college counselors and school counselors in a school district with a significant amount of African American students, we believe that such collaboration would provide essential information to African American high school students and enhance their understanding and minimize the stigma associated with mental health help-seeking by the time they get to college.

Strengths and Limitations of this Study

This study has many strengths. Our study is the first to explore the relationship among psychological distress, subjective well-being, and academic performance of African American undergraduate students. Our study may contribute to counseling psychology by providing additional information pertinent to delivering mental health services to African American students, improving their academic performance, and increasing retention.

This study has some potential limitations as well. It is essential to note the demographics of respondents. Because the study primarily focused on African American undergraduate students in Oklahoma universities, this study's results may not apply to African American graduate students or students at universities with different characteristics. Therefore, group differences and similarities between these two groups of students remain unknown.

Additionally, the method of data collection may have limited the generalizability of our results. Of interest, the study completed measures related to psychological distress and subjective well-being online, and we did not account for social desirability. As such, it is not impossible participants were not completely truthful and forthcoming in their responses. This may be

especially true for the psychological distress measures. Given the stigma associated with mental illness in the African American community, we acknowledge the difficulty of reporting accurately.

Given that the data was collected in three colleges in the central part of the United States, African American students in other colleges outside of these three universities did not receive an invitation to participate. As a result, this study's results may be generalizable only to African American students attending colleges in the region where the data was collected.

Of note, some of the instruments used in this study to measure the predictor variable are short-term or state measures, while the outcome variable (GPA) develops over multiple years. This mismatch between the predictor and outcome measurements may also explain the lack of significant results in this study.

Additionally, there is a lack of qualitative data as part of this study. Although the data for this study was quantitative, qualitative data is also beneficial as it would lend richness to the story related to psychological distress and subjective well-being and lived experiences of African American students in a predominantly White institution. Qualitative studies, by its nature, provide in-depth experiences. Therefore, it would have allowed the participants to share their experiences related to positive emotions, satisfaction with life, and aggressive tendencies.

Further, the grade point average used in this study was self-reported. Moreover, many of the participants appeared to report estimates rather than exact values for their GPA since many of the values ended in 0 or 5. Consequently, it is unclear if these reported grades accurately reflected their actual earned grades (Kuncel et al., 2005).

Finally, as we consider an alternative explanation for the results, we must take note of what was going on in the country as we collected our data. For example, the data for this study

was collected during the racial pandemic, COVID-19, and the period leading up to the 100th anniversary of the Tulsa race massacre in Oklahoma. The situation in the country may have influenced who responded and how they responded to the survey.

Recommendations for Future Research and Future Directions

Conducting this research study and obtaining statistically non-significant findings prompts considerations for future research studies. Notably, more research is needed to explore African American college students' lived experiences in a predominantly white institution related to their psychological distress, well-being, and academic performance. It is essential to understand how these constructs impact retention, performance, and college experience specifically for African American students.

As previously noted, the literature is scanty on exploring how psychological distress and subjective well-being may predict academic performance for African American college students. These relationships have been well studied among elementary school children, high school students, and white college students. While the scanty literature on how this phenomenon impacts the academic performance of African American students makes our study unique, we believe that conducting more research on the applicability of the dual continuum model to academic performance for African American college students would be beneficial not only to students of color, but also to the university counselors and administrators. Other areas of investigation might include other factors our study did not cover. For example, we did not look into resiliency and family support and the influences these variables may have on academic performance. Additionally, this current study did not examine an alternative outcome like retention.

We recognize and understand the importance of fully capturing African American students' psychological distress and subjective well-being. Therefore, we recommend that future research studies should look into measures that fully captured these variables. More importantly, future research may also consider using qualitative research. This would offer a better opportunity to allow African American students to narrate their lived experiences in a predominantly white institution.

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APPENDIX A

TABLES

Table 1

Pearson Correlation matrix

		Internalizing	Externalizing	PANAS Positive	PANAS Negative	Life Satisfaction	GPA
Internalizing	Pearson <i>r</i>	1					
	p-value						
	N	184					
Externalizing	Pearson <i>r</i>	.251	1				
	p-value	.001					
	N	184	184				
PANAS Positive	Pearson <i>r</i>	-.277	.311	1			
	p-value	.000	.000				
	N	184	184	184			
PANAS Negative	Pearson <i>r</i>	.687	.379	.121	1		
	p-value	.000	.000	.102			
	N	184	184	184	184		
Life Satisfaction	Pearson <i>r</i>	-.356	-.126	.263	-.212	1	
	p-value	.000	.088	.000	.004		
	N	184	184	184	184	184	
GPA	Pearson <i>r</i>	-.106	-.043	.001	-.025	.084	1
	p-value	.151	.560	.988	.737	.254	
	N	184	184	184	184	184	184
Female (v. male)	Pearson <i>r</i>	.160	-.088	-.189	.060	-.114	.328
	p-value	.031	.238	.011	.420	.124	.000
	N	182	182	182	182	182	182

Table 2

Demographics of the Sample (N = 184)

Descriptive statistics for categorical variables.

Variable	N	%
Race		
African American	159	86.4
African	12	6.5
Jamaican American	1	.5
Other	6	3.3
Caribbean American	6	3.3
Gender identity		
Man or male or masculine	81	44.0
Woman or Female or Feminine	101	54.9
Gender non-conforming or Gender queer	2	1.1
Social class		
Upper-middle or professional	19	10.3
Middle-class	96	52.2
Working-class	42	22.8
Low-income or poor	23	12.5
No Response	4	2.1
Sexual orientation		
Asexual	20	10.9
Bisexual	12	6.5
Fluid	3	1.6
Gay	6	3.3
Heterosexual	109	59.2
Lesbian	1	.5
Pansexual	2	1.1
Queer	3	1.6
Questioning	2	1.1
No Response	26	14.1
Class year		
First-year (0-29 credits)	75	40.8
Sophomore (30 – 59 credits)	40	21.7
Junior (60- 89 credits)	45	24.5
Senior (90+ credits)	24	13.0
Born in US		
Yes	171	92.9
No	12	6.5
No answer	1	0.5
Generation status		
All my grandparents and both of my parents were born in the United States	139	75.5
Both of my parents were born in the United States	17	9.2

One of my parents was born in the United States	5	2.7
Neither of my parents were born in the United States	21	11.4
No Response	2	1.1
Parents education level		
Did not finish high school	2	1.1
High school diploma or GED	71	38.6
Attended college but did not complete degree	35	19.0
Associates degree (A.A., A. S., etc)	13	7.1
Bachelor's degree (B.A., B. S., etc)	35	19.0
Master's degree (M.A., M.S., etc)	18	9.8
Doctoral or professional degree (Ph.D., J.D., M.D., etc)	8	4.3
Prefer not to answer	2	1.1
Parents marital status		
Married	59	32.1
Divorced	35	19.0
Never married	73	39.7
Separated	11	6.0
No Response	6	3.2
Do you have a disability?		
Yes	10	5.4
No	172	93.5
No answer	2	1.0
Geographic region		
Urban	59	32.1
Suburban	82	44.6
Rural	32	17.4
No Response	11	5.9

Table 3

Descriptive Statistics for the Main Study Variables

		Internalizing	Externalizing	PANAS Positive	PANAS Negative	Life Satisfaction	GPA
N	Valid	184	184	184	184	184	184
	Missing	0	0	0	0	0	0
Mean		41.6250	77.5163	31.5924	22.7554	4.3935	3.20
Median		39.0000	76.0000	31.0000	20.0000	4.2000	3.17
Std. Deviation		11.18477	19.68994	9.17600	8.27003	1.35080	0.462
Variance		125.099	387.694	84.199	68.393	1.825	0.213
Skewness		0.548	0.521	-0.131	0.670	-0.190	-0.083
Kurtosis		-0.423	1.346	-0.436	0.179	-0.330	-0.584
Range		49.00	116.00	40.00	40.00	6.00	2
Minimum		22.00	29.00	10.00	10.00	1.00	2
Maximum		71.00	145.00	50.00	50.00	7.00	4

Table 4

Results of Multiple Regression for RQ1

Predictor	B	SE	Beta	T-Value	P-Value
Internalizing total score	-.00	.00	-1.0	-1.33	.18
Externalizing total score	.00	.00	-.02	-.2.3	.82

	Sum of Squares	df	Mean Square	F	Sig
Regression	0.452	2	0.226	1.06	0.348
Residual	38.54	181	0.213		
Total	38.991	183			

Table 5

Results of Multiple Regression for RQ2

Predictor	B	SE	Beta	T-Value	P-Value
-----------	---	----	------	---------	---------

PANAS positive	-.00	.00	-.02	-.28	.78
PANAS negative	-.00	.00	-.00	-.04	.97
Life Satisfaction	.03	.03	.09	1.13	.26

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.087 ^a	0.008	-0.009	0.464

	Sum of Squares	df	Mean Square	F	Sig
Regression	0.297	3	0.999	0.461	.710 ^b
Residual	38.694	180	0.215		
Total	38.991	183			

	Sum of Squares	df	Mean Square	F	Sig
Regression	0.922	5	0.184	0.862	0.508 ^b
Residual	38.069	178	0.214		
Total	38.991	183			

Table 6
Results of Multiple Regression for RQ3

Predictor	B	SE	Beta	T-Value	P-Value
Internalizing total score	-.01	.01	-.20	-1.67	.10
Externalizing total score	.00	.00	-.01	-.14	.89
PANAS Positive total score	-.00	.01	-.09	-.91	.36
PANAS Negative total score	.01	.01	.14	1.23	.22
Life Satisfaction total score	-.02	.03	-.06	-.78	.44

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.154 ^a	0.024	-0.004	0.462

Table 7

Results of the Independent T-test

		F	Sig.	t	df	Sig.(2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
GPA	Equal Variance assumed	.127	.722	4.665	180	.000	-.306	.066	-.435	-.176
	Equal Variance not assumed			-4.62	164.297	.000	-.306	.066	-.437	-.175

Table 8

Regression by Gender

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.368 ^b	0.136	0.09	0.402

	Sum of Squares	df	Mean Square	F	Sig
Regression	2.415	5	0.483	2.985	0.015
Residual	15.373	95	0.162		
Total	17.789	100			

APPENDIX B

INFORMED CONSENT

Dear Participant,

My name is Yemi Adeyiga. I am a doctoral candidate enrolled in the Counseling Psychology program at Oklahoma State University, Stillwater, OK. I invite you to participate in my dissertation research: “Examining the Psychosocial Stress and Academic Performance and Integration Among Black College Student”.

The purpose of this study is to examine the relationship between mental health and academic performance among Black college students.

If you choose to participate in this study, you will be asked questions about your mental health, wellbeing and perception of the impact these have had on your academic performance and integration. It will take less than 30 minutes to complete. If you are willing to participate, please open the attached confidential survey link below. Selection of the link constitutes informed consent.

There are no negative consequences if you choose not to participate in this study. This study poses minimal risk to most participants; however, it is possible that questions related to mental health may feel uncomfortable or create distress for some individuals. The electronic delivery method of this survey is intentional so that individuals may select a comfortable time and location for completion. The survey is designed so it may be returned to for completion at any time or discontinued without utilization of any partial responses. Should survey questions create distress, please consider making contact with your college Counseling Services.

Participants who complete the survey will be given option to enter a drawing to win one of four \$20 Wal-Mart gift cards that will be randomly selected at the completion of the study. If participants choose not to participate in the drawing, their participation in the study will not be affected in anyway.

Participation in this study is anonymous. Participants are assigned a computer-generated code by the electronic survey software Qualtrics. Data will be stored electronically, password protected and accessible only by the researcher. The results of this study may be published or presented at professional meetings without identification of any individual participant. The research team works to ensure confidentiality to the degree permitted by technology. It is possible, although unlikely, that unauthorized individuals could gain access to your responses because you are responding online. However, your participation in this online survey involves risks similar to a person’s everyday use of the internet. If you have concerns, you should consult the survey provider privacy policy at <https://www.qualtrics.com/support/survey-platform/getting-started/data-protection-privacy/>?

Your participation is voluntary and can be discontinued at any time without any consequences. Any information that you provide is confidential. Email addresses and personal information are de-identified using the Qualtrics survey tool. The results will be gathered and analyzed in aggregate and with no individual notation.

I am available by phone or email if you have any questions that might clarify an item 718-864-1577 or Oyeyemi.adeyiga@okstate.edu

This study is being conducted in part to fulfill requirements for a Doctoral Degree in Counseling Psychology at Oklahoma State University,

Stillwater, OK. You may also contact the advisor for this dissertation, Tom Berry with any questions or concerns at Thomas.berry@okstate.edu.

If you agree to participate after reading the above information, please click on the survey link below. By selecting the link and completing the survey, you are consenting to participate in the study and confirming that you are 18 years of age or older.

Your participation is greatly appreciated.

Sincerely,

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APPENDIX C

DEMOGRAPHIC QUESTIONS

1. What is your current age (in years)?
2. What is your current GPA?
3. How would you describe your racial identity?
 - African American
 - African
 - Jamaican American
 - Other
 - No Response
 - Prefer not to answer.
4. How do you describe your gender identity?
 - Man or male or masculine
 - Transgender man or male or masculine
 - Woman or Female or Feminine
 - Transgender woman or female or feminine
 - Gender non-conforming or Gender queer
 - Intersex or other related terms
 - No Response
 - Prefer not to answer
5. What is the highest level of education completed by either of your parents (or those who raised you)?
 - Did not finish high school
 - High school diploma or GED
 - Attended college but did not complete degree
 - Associates degree (A.A., A. S., etc)
 - Bachelor's degree (B.A., B. S., etc)
 - Master's degree (M.A., M.S., etc)
 - Doctoral or professional degree (Ph.D., J.D., M.D., etc)
 - No Response
 - Prefer not to answer
6. Which term best describes your social class identity?
 - Wealthy
 - Upper-middle or professional

- Middle-class
 - Working-class
 - Low-income or poor
 - No Response
 - Prefer not to answer
7. How do you describe your sexual identity?
- Asexual
 - Bisexual
 - Fluid
 - Gay
 - Heterosexual
 - Lesbian
 - Pansexual
 - Queer
 - Questioning
 - No Response
 - Prefer not to answer
8. What is your student classification? (Based on Credit reporting)
- First-year (0-29 credits)
 - Sophomore (30 – 59 credits)
 - Junior (60- 89 credits)
 - Senior (90+ credits)
 - No Response
 - Prefer not to answer
9. Were you born in the United States?
- Yes
 - No
 - No Response
 - Prefer not to answer
10. Please indicate your generation status:
- All my grandparents and both of my parents were born in the United States
 - Both of my parents were born in the United States
 - One of my parents was born in the United States
 - Neither of my parents were born in the United States
 - No Response
 - Prefer not to answer
11. Do you have a disability?

- Yes
- No
- No Response
- Prefer not to answer

12. Which of the following best describes the type of geographical area you grew up in?

- Urban
- Suburban
- Rural
- No Response
- Prefer not to answer

13. To what extent do you agree or disagree with the following statement: my religious beliefs are a very important part of my life?

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree
- No Response
- Prefer not to answer

APPENDIX D

OSU IRB APPROVAL

Date: 09/21/2020

Application Number: IRB-20-411

Proposal Title: Psychological Distress and Academic Performance: A Cascade Effect Among African American/Black College Students.

Principal Investigator: Oyeyemi Adeyiga

Co-Investigator(s):

Faculty Adviser: Tom Berry, PhD

Project Coordinator:

Research Assistant(s):

Processed as: Exempt

Exempt Category:

Status Recommended by Reviewer(s): Approved

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in 45CFR46.

This study meets criteria in the Revised Common Rule, as well as, one or more of the circumstances for which continuing review is not required. As Principal Investigator of this research, you will be required to submit a status report to the IRB triennially.

The final versions of any recruitment, consent and assent documents bearing the IRB approval stamp are available for download from IRBManager. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be approved by the IRB. Protocol modifications requiring approval may include changes to the title, PI, adviser, other research personnel, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any unanticipated and/or adverse events to the IRB Office promptly.
4. Notify the IRB office when your research project is complete or when you are no longer affiliated with Oklahoma State University.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about

the IRB procedures or need any assistance from the Board, please contact the IRB Office at 405-744-3377 or irb@okstate.edu.

Sincerely,
Oklahoma State University IRB

UCO IRB APPROVAL

7 October 2020

STUDY TITLE: Psychological Distress and Academic Performance: A Cascade Effect Among African American/Black College Students

Oyeyemi Adeyiga

Tom Berry, PhD

Dear Mr. Adeyiga and Dr. Berry:

The University of Central Oklahoma Institutional Review Board has reviewed your submission materials and accepts the decision made by the Institutional Review Board at Oklahoma State University in regards to IRB Application IRB-20-411 titled above by Oyeyemi Adeyiga.

This approval for recruitment at UCO is granted with the understanding that the research will be conducted in a manner consistent with the regulatory requirements in section 45 CFR 46, and under the policies and procedures as outlined in the Standard Operating Procedures of the Oklahoma State University Institutional Review Board, as they are the board of record.

If there are any modifications to the application, adverse events or allegations of non-compliance, the UCO IRB must be notified.

If you have any questions please do not hesitate to contact us. We wish you all the best with your research.

Sincerely,

Melissa Powers, Ph.D.

Chair, Institutional Review Board

University of Central Oklahoma

100 N. University Dr.

Edmond, OK 73034

405-974-5497

irb@uco.edu

OU IRB APPROVAL

Hi Yemi,

Thank you so much for working with me on this one! With the revision included to attach a resources flyer for counseling services, the IRB Chair has determined that she would recommend allowing OU to be used as a data collection site for this study. You may use this email when contacting other OU departments to participate as confirmation that it meets our ethical research standards. Other departments (if applicable) and student participants still have the ability to decline to participate in the study, but this confirmation can be provided if anyone has IRB-related concerns.

Thank you, and good luck with your project!
Sierra

Sierra Smith, CIP
Director
Office of Human Research Participant Protection - IRB
University of Oklahoma
(405) 325-8110

Anonymous Hot Line

405-271-2223
866-836-3150

APPENDIX E

REVIEW OF LITERATUR TABLE

Mental Illness Incidence / Prevalence	General College /MI/Academics	Black Students /MI/Academics	Demographic Variables	Dual Continuum Framework
College Population	GPA	GPA	College Population	General Population
Center for Collegiate Mental Health, 2018 Lipson et al., 2014. Gruttadero et al., 2012. Campus, 2013. Douce et al., 2014. Turner et al., 2013 ACHA-NCHA, 2017. Bruns et al., 2016 Francis et al., 2016 Hefner & Eisenberg, 2009).	Caskie, Sutton, & Eckhardt, 2014. Volwerk & Tindal, 2012. Kuncel, Crede, & Thomas, 2005.	Walker, 2015 Eisenberg et al., 2013). Salami et al., 2013. Palmer et al., 2011. Boyratz, Horne, Owens, and Armstrong (2013). Bernard et al., 2017. Cokley, Smith, & Bernard, 2017 Jones, Lee, Gaskin, & Neblett, 2014. Duncan, 2000. Ai, Plummer, Kanno, Heo,	U.S. Department of Education, 2016. Aruguete & Hardy, 2016). Knaap, Kelly-Reid, and Ginder, 2012. Lora and Ndum, 2013. Fletcher & Tienda, 2010. Rowley & Wright, 2011. Allen, 1992. Spenner, Buchmann, & Landerman, 2004. Allen, Epp, & Hanniff, 1991.	Keyes (2002) Keyes (2003) MacKean (2011). Antaramian, 2017. Suldo et al., 2016. Eklund, Dowdie, Jones, & Furlong, 2010. Suldo and Shaffer, 2008 Van Zyl and Rothman (2012)

<p>Eisenberg, Lipson, & Posselt, 2016.</p> <p>Drum, Brownson, & Denmark, 2009.</p> <p>Furr, McConnell, Westefeld, and Jenkins 2001.</p> <p>Blanco, 2008.</p> <p>Lindsey et al. 2009.</p> <p>Ham, Zamboanga, Bacon, & Garcia, 2009.</p> <p>Mental Illness and Academic Performance</p> <p>De luca, et al., 2016.</p> <p>Khubchandani, Brey, Kotecki, Kleinfelder, & Anderson, 2015.</p>		<p>Appel, Simon, & Spigner, 2011.</p> <p>Rosenthal et al., 2000.</p> <p>(Greer & Brown, 2011).</p> <p>Leong & Kalibatseva, 2011).</p> <p>Bynum et al., 2007.</p> <p>Smith, Allen, & Danley, 2007.</p> <p>Torres, Driscoll, and Burrow, 2010.</p> <p>Mental Health and Gender.</p> <p>Eaton et al., 2012</p> <p>World Health Organization (2002).</p> <p>Harkness et al., 2012.</p> <p>Klose & Jacobi, 2004.</p> <p>Xu et al., 2012.</p> <p>McClellan, et al., 2011.</p> <p>Caballo et al., 2014.</p> <p>Mond, 2011.</p>		
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<p>Bruffarts, Mortier, Kieken, Auerbach, Guijpers, Demmyttenaere, Green, Nock, & Kessler, 2018. Ploskonka, & Servaty-Seib, 2015.</p>		<p>Striege-Moore et al., 2009. Wei et al., 2013. Callanan & Davis, 2012.</p>		
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APPENDIX F

SAMPLE SIZE CALCULATION

The screenshot displays the G*Power 3.1.9.4 software interface. The main window shows a graph of central and non-central distributions with a critical F value of 2.63731. The input parameters are: Effect size $f = 0.25$, α err prob = 0.05, Power ($1 - \beta$ err prob) = 0.95, and Number of groups = 4. The output parameters are: Noncentrality parameter $\lambda = 17.5000000$, Critical F = 2.6373109, Numerator df = 3, Denominator df = 276, Total sample size = 280, and Actual power = 0.9509908. A table on the right shows 5 groups with equal means (0) and sizes (5).

Group	Mean	Size
1	0	5
2	0	5
3	0	5
4	0	5
5	0	5

APPENDIX G

CENTER FOR EPIDEMIOLOGIC STUDIES DEPRESSION SCALE (CES-D)

Center for Epidemiologic Studies Depression Scale (CES-D), NIMH

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

During the Past

Week

Occasionally or a Most or all of moderate amount of time the time (5-7 (3-4 days) days)

Some or a little of the time (1-2 days)

Rarely or none of the time (less than 1 day)

1. I was bothered by things that usually don't bother me.
2. I did not feel like eating; my appetite was poor.
3. I felt that I could not shake off the blues even with help from my family or friends.
4. I felt I was just as good as other people.
5. I had trouble keeping my mind on what I was doing.
6. I felt depressed.
7. I felt that everything I did was an effort.
8. I felt hopeful about the future.
9. I thought my life had been a failure.
10. I felt fearful.
11. My sleep was restless.
12. I was happy.
13. I talked less than usual.
14. I felt lonely.
15. People were unfriendly.
16. I enjoyed life.
17. I had crying spells.
18. I felt sad.
19. I felt that people dislike me.
20. I could not get "going."

Positive and Negative Affect Schedule (PANAS)

Positive and Negative Affect Schedule (PANAS-SF)

Indicate the extent you have felt this way over the past week.		Very slightly or	A little	Moderately	Quite a bit	Extremely
PAN	Interested	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Distressed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Excited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Upset	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Strong	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Guilty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Scared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Hostile	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Enthusiastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Proud	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Irritable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Alert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Ashamed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Inspired	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Nervous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Determined	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Attentive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Jittery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Active	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAN	Afraid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AS		1	2	3	4	5

The Satisfaction with Life Scale

Scale:

Instructions: Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item.

Please be open and honest in your responding.

- 7 - Strongly agree
- 6 - Agree
- 5 - Slightly agree
- 4 - Neither agree nor disagree
- 3 - Slightly disagree
- 2 - Disagree
- 1 - Strongly disagree

_____ In most ways my life is close to my ideal.

_____ The conditions of my life are excellent.

_____ I am satisfied with my life.

_____ So far I have gotten the important things I want in life.

_____ If I could live my life over, I would change almost nothing.

Aggression Questionnaire

Aggression Questionnaire (Buss & Perry, 1992)

Instructions:

Using the 5-point scale shown below, indicate how uncharacteristic or characteristic each of the following statements is in describing you. Place your rating in the box to the right of the statement.

1 = extremely uncharacteristic of me

2 = somewhat uncharacteristic of me

3 = neither uncharacteristic nor characteristic of me

4 = somewhat characteristic of me

5 = extremely characteristic of me

- | | | |
|--|--------------------------|----|
| 1. Some of my friends think I am a hothead | <input type="checkbox"/> | A |
| 2. If I have to resort to violence to protect my rights, I will. | <input type="checkbox"/> | PA |
| 3. When people are especially nice to me, I wonder what they want. | <input type="checkbox"/> | H |
| 4. I tell my friends openly when I disagree with them. | <input type="checkbox"/> | VA |
| 5. I have become so mad that I have broken things. | <input type="checkbox"/> | PA |
| 6. I can't help getting into arguments when people disagree with me. | <input type="checkbox"/> | VA |
| 7. I wonder why sometimes I feel so bitter about things. | <input type="checkbox"/> | H |
| 8. Once in a while, I can't control the urge to strike another person. | <input type="checkbox"/> | PA |
| 9.* I am an even-tempered person. | <input type="checkbox"/> | A |
| 10. I am suspicious of overly friendly strangers. | <input type="checkbox"/> | H |
| 11. I have threatened people I know. | <input type="checkbox"/> | PA |
| 12. I flare up quickly but get over it quickly. | <input type="checkbox"/> | A |
| 13. Given enough provocation, I may hit another person. | <input type="checkbox"/> | PA |
| 14. When people annoy me, I may tell them what I think of them. | <input type="checkbox"/> | VA |
| 15. I am sometimes eaten up with jealousy. | <input type="checkbox"/> | H |
| 16.* I can think of no good reason for ever hitting a person. | <input type="checkbox"/> | PA |
| 17. At times I feel I have gotten a raw deal out of life. | <input type="checkbox"/> | H |
| 18. I have trouble controlling my temper. | <input type="checkbox"/> | A |
| 19. When frustrated, I let my irritation show. | <input type="checkbox"/> | A |
| 20. I sometimes feel that people are laughing at me behind my back. | <input type="checkbox"/> | H |
| 21. I often find myself disagreeing with people. | <input type="checkbox"/> | VA |
| 22. If somebody hits me, I hit back. | <input type="checkbox"/> | PA |
| 23. I sometimes feel like a powder keg ready to explode. | <input type="checkbox"/> | A |
| 24. Other people always seem to get the breaks. | <input type="checkbox"/> | H |
| 25. There are people who pushed me so far that we came to blows. | <input type="checkbox"/> | PA |

- | | | |
|--|--------------------------|----|
| 26. I know that “friends” talk about me behind my back. | <input type="checkbox"/> | H |
| 27. My friends say that I’m somewhat argumentative. | <input type="checkbox"/> | VA |
| 28. Sometimes I fly off the handle for no good reason. | <input type="checkbox"/> | A |
| 29. I get into fights a little more than the average person. | <input type="checkbox"/> | PA |

VITA

Oyeyemi Ademolu Adeyiga

Candidate for the Degree of

Doctor of Philosophy

Dissertation: PSYCHOLOGICAL DISTRESS, WELL AND ACADEMIC PERFORMANCE: A CASCADE EFFECT AMONG BLACK COLLEGE STUDENTS

Major Field: Counseling Psychology

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in Counseling Psychology at Oklahoma State University, Stillwater, Oklahoma in July 2021.

Completed the requirements for the Master of Human Relations (Mental Health Counseling) at the University of Oklahoma, Norman, Oklahoma, 2014.

Completed the requirements for the Master of Business Administration at Oklahoma City University, Oklahoma City, Oklahoma, 2010.

Complete the requirements for the Bachelor of Arts in Political Science and Economics at the University of Central Oklahoma, Edmond, Oklahoma, 2008.

Experience:

Psychology Intern

Eastern Oklahoma VA Health Care System

August 2020 – Current

Professional Organizations:

Member, The Association of Black Psychologist

Member, Oklahoma Psychological Association

Member, American Psychological Association

Member, International Society for Traumatic Stress Studies