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Between 2010 and 2015, Black students' high school graduation rates rose from 67 to 75 percent (Garunay, 2016). These are notable gains; however, the national average is 83 percent, constituting an educational gap. Moreover, research indicates that Black students dropout at higher rates in ninth and tenth grade compared to students from other racial or ethnic groups (Kim, Chang, Singh, & Allen, 2015). Researchers have only partially explained graduation disparities due to narrow or deficit-perspectives (Ladson-Billings, 2007), emphasis on isolated variables rather than interrelationships (Pharris-Ciurej, 2012), the omission of variables unique to Black students' schooling experiences (e.g., Noguera, 2003_b), and limited exploration into how school context influences Black students' perceptions of schooling or themselves and their academic and attainment outcomes (e.g., Nasir, 2012).

Aligned with these recommendations and critiques, the dissertation researcher has proposed a Social Cognitive Career Theory (SCCT)-Based Model of Black High School Students' Graduation Promise. The model hypothesizes that Black students' perceptions of the school context (i.e., racial school climate), relative to their racial identity, has implications for students' beliefs about themselves (i.e., Black Scholar Identity), their capabilities (i.e., high school completion self-efficacy), and perceived outcomes (i.e., high school completion outcome expectations). Moreover, the hypothesized model postulates how those variables and associations impact students' "graduation promise," conversely dropout risk.

The first step in testing this model and the purpose of this dissertation study was to create and assess the psychometrics of the Black Scholar Identity (BSI) scale (Gray, 2016). In the dissertation study, the researcher assessed the construct validity and reliability of the BSI (Gray) using factor analyses and the factor rho coefficient equation, respectively. The dissertation researcher conducted Pearson's product moment correlations to assess the convergent, divergent, and external criterion validity.

Confirmatory factor analyses findings suggested marginal fit and provided preliminary support for the structural validity of the second-order, 25-indicator BSI-Revised (Brunson, 2017) model. The BSI-Revised scale (Brunson) has seven factors: Academic Goal Orientation, Academic Pride-School, Academic Prioritizing, Black Student Resilience, Academic Pride-Personal/Familial, Internal Locus of Control, and Scholar Self-Efficacy. Study findings suggested that the factors were appropriately reliable. There was also preliminary evidence for the convergent, divergent, and external criterion validity of the BSI-Revised scale (Brunson) and subscales. The dissertation researcher found a positive association between the BSI-Revised scale (Brunson) and a subscale measure of school engagement and a negative association with a subscale measure of anxiety. Moreover, parents of Black high school students with higher average scholar identity scores reported higher average grades and a higher GPA for their students. The findings have implications for future dropout research and practical implications for how school counselors and educators promote Black students' academic success.

BLACK STUDENTS "AT PROMISE" FOR HIGH SCHOOL GRADUATION: A BLACK SCHOLAR IDENTITY SCALE

by

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For God hath not given us the spirit of fear; but of power, and of love, and of a sound mind. –2 Timothy 1:17

The dissertation process has been a journey; one of personal discovery and endurance. I want to thank God for helping me stay strong when I felt at my weakest and my lowest. I want to thank him for blessing me with family members who have supported me through this process. I want to thank my dad for "seeing" me when things got tough and having enough courage to speak up so I knew I was not alone. I want to thank my Mom for always having high expectations and never accepting can't. If it had not been for her advocacy, very early on in my educational career, I would not be here now. I want to thank my husband for helping me maintain balance throughout this process, insisting that I always get enough sleep and I make time for fun and life outside of doctoral madness. I thank God for blessing me with a family who has always been a very bright spot and a reminder of what is most important in life.

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along the way. Finally, I would like to thank the National Board of Certified Counselors (NBCC) for providing financial support that helped to make this dissertation possible.

I realized, along the way, that this was not simply an exploration into how Black students shape scholar identities but my own construction of a new identity. Change is a rewarding, and yet, painful process. Throughout this journey, I experienced self-doubt, challenges, obstacles, successes, and frustrations. And, I prevailed. My hope and prayer is that educators and researchers will use these findings to advance all that is beautiful and marvelous about the Black community and that my small example would be the catalyst for some brown or black student to know that we are "fearfully and wonderfully made" and that our possibilities are boundless.

"I can't pretend to be perfect
Or fit into some made up roll
But I can make the hand I'm dealt work if
I decide to never fold

And who says you can't win them all if you try

They say the higher that you climb
The further when you take the dive
But it's comatose
And I can't live that closed
They say the higher that you climb
The further when you take the dive
But it's comatose
And I can't live that closed
'Cause I don't know how to never try at all
So cheers to the fall, hey"

Cheers to the Fall, Andra Day

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CHAPTER I

INTRODUCTION

Currently, the national average graduation rate is 83%. This represents gains for Black students and others. According to Garunay (2016), between 2010 and 2015, Black students' high school graduation rates rose from 67 to 75%. Despite these gains, a gap persists. Research indicates that Black student's dropout at higher rates in ninth and tenth grade compared to other racial or ethnic groups (Kim, Chang, Singh, & Allen, 2015). This study will help to uncover those factors associated with graduation promise for ninth and tenth grade Black students. Black students' graduation promise increases as their dropout risk decreases.

Schools can play a major role in encouraging graduation promise and decreasing dropout risk. Research indicates that Black students are more likely to report negative perceptions of school climate (Koth, Bradshaw, & Leaf, 2008; Mattison & Aber, 2007; Shukla, Konold, & Cornell, 2016) and racial school climate (e.g., Borrero, Yeh, Cruz, & Suda, 2012; Herring, 2013; Watkins & Aber, 2009). Moreover, Black students self-report lower grades and more discipline infractions than their majority counterparts (Lee, 2010; Mattison & Aber, 2007; Shukla et al., 2016). Researchers have not empirically explored the association between black students' relatively negative perceptions of school climate relative to their white counterparts and oftentimes poorer self-reported academic and

discipline outcomes. Researchers may explore how school climate influences Black students' outcomes relative to other groups; such findings may have practical implications for educational leaders, specifically school counselors.

Noguera (2003$_b$) posited that considering "how environmental and cultural forces influence the way in which Black males come to perceive schooling and how those perceptions influence their behavior and performance in school" is important (p. 433). Moreover, qualitative researchers have examined how school climate may influence whether Black students adopt academic identities (e.g., Kane, 2016; Nasir, 2012). Scholar identity adoption or conversely disidentification may have implications for Black students' school-related beliefs and outcomes (Nasir, 2012). Understanding why the association between perceptions of context and outcomes exists is important in addressing the high school graduation gap.

This study will illuminate how Black students' perceptions of school climate, relative to their racial identity, might influence graduation promise through cognitive (e.g., self-efficacy) and identity (e.g., scholar identity) variables. The researcher will statistically examine an SCCT-Based Model of Black High School Students' Graduation Promise that displays the associations between the constructs. With this information, schools may address those factors that contribute to Black students' perceptions of a positive racial school climate and address those practices that lead to less favorable perceptions that may negatively influence outcomes.

The Achievement Gap

Achievement gaps are differential academic outcomes based on demographic characteristics (Carter & Welner, 2013). These disparities are evident in various educational areas, including mean differences in test-scores, discipline citations, high school graduation rates (i.e., high school graduation gap), and enrollment rates in advanced placement courses and special education programs (Gregory & Weinstein, 2008; Holcomb-McCoy, Gonzalez, Harris, & Hines, 2016; McKown, 2013; West-Olatunji, Goodman, & Shure, 2011). The gaps persist despite nationwide efforts catalyzed by the passing of the 2002 No Child Left Behind Act (NCLB) and *Race to the Top*, a federal program focused on turning around low performing schools.

Achievement gaps are highly consequential social problems because academic achievement is predictive of outcomes related to an individual's standard of living (e.g., wages, job opportunities, and socioeconomic status) and health outcomes (Campbell, 2015; McKown, 2013). For instance, researchers have implicated inequitable discipline practices in the proliferation of the school to prison pipeline (Cokley et al., 2014; Skiba, Arredondo, & Williams, 2014), enrollment disparities in advanced placement courses have implications for college-readiness and post-secondary opportunities (Hines, Jackson, Mayes, & Gray, 2016; Perna et al., 2008), and high school graduation has implications for social advancement and career outcomes (Campbell, 2015). Moreover, these gaps may have adverse effects on students through the deficit-based narratives or stereotypes that the disparities perpetuate, in some instances leading to school

disengagement (Noguera, 2008b) or de-identification with school or school success (Nasir, 2012).

These disparities in educational accountability measures disproportionately impact students of color and those from other marginalized groups (e.g., lower income students) in US society **(**Blad, 2016). Given the history of race and inequity in our educational system, Black students are often at the bottom of every academic totem pole because of discriminatory or exclusionary educational policies and practices, in addition to other factors (e.g., poverty, lack of access to health care, individual characteristics) (Noguera, 2003b, 2008a).

Educational leaders, including school counselors, have a professional obligation to understand what contributes to these disparities and address them, while acknowledging Black students' many successes. Educational gaps persist; therefore, additional scholarly and practical efforts are necessary to address this problem. While researchers have made efforts to understand these problems, early efforts may have exacerbated disparities. Researchers' efforts to understand the educational gaps between Black students and their majority counterparts have evolved from an exploration of innate deficits to the identification of cultural and familial deficits that contribute to the gap (Nasir, 2004). On both extremes, researchers have attempted to justify the disparity by blaming marginalized cultures or students. More recently, researchers have begun to examine institutional school policies and practices that create and perpetuate this problem.

Early investigations into the achievement gap cited Black students proposed inferior intelligence (Jencks, 1998; Kluegel, 1990), cultural deficits (Kluegel, 1990), and their caregivers' parenting styles or characteristics (Brooks-Gunn, Klebanov, & Duncan, 1996) as the culprits, with limited emphasis on the role of the school (Mattison & Aber, 2007). These early explanations constituted a deficit perspective. A major critique of this deficit approach was its individual or cultural blame orientation that ignored how educational policies, procedures, and staff created and sustained the achievement gap (Lee & Burkham, 2003; Noguera, 2008_a). If school leaders hope to address these disparities they must first focus on what schools can control—school reform, policies, procedures, practices and staff perspectives— and denounce rhetoric that would further an oppressive narrative of cultural deficits and place the burden on students of color shoulders (Edmonds, 1979). The school policies, procedures, and practices outlined below may have implications for students' view of themselves, their thoughts about school, and their capabilities (Noguera, 2008_b)

Opportunity Gaps

More recently, researchers interested in investigating the roles of schools in the proliferation of the achievement gap have turned to examining opportunity gaps (Ladson-Billings, 2006; Milner, 2012). These inequitable inputs at the societal or structural level contribute to and help explain current performance or attainment disparities. These inequitable inputs may be cultural or structural. For example, deficiencies such as disparities in per-pupil expenditures (Kozol, 1991), differential school placements of well-qualified teachers (McKown, 2013), tracking (Lucas & Berends, 2002), differential

advanced course placement patterns (Conger, Long, & Iatarola, 2009), and biased disciplinary practices (Skiba , Michael, Nardo, & Peterson, 2002) are all structural, school-based factors that lead to differential educational outcomes based on demographic characteristics (Carter & Welner, 2013). Deficit perspectives regarding students of color (Milner, 2012) is one example of a cultural factor implicated in this problem. Looking at the influence of opportunity on achievement, researchers can analyze the causes of disparities that exist between and among students, their schools, and communities, rather than focusing on the symptoms (Milner, 2012).

Researchers increasingly acknowledge and assess the influence that school factors have on students' academic outcomes (e.g., Jia, Konold, & Cornell, 2016; Lee & Burkham, 2003; Stewart, 2007). Based on a 25-year review of dropout literature, Rumberger and Lim (2008) concluded that schools account for 20% of the variability in academic outcomes. Overarching school factors include composition, structure, resources, and practices. According to Rumberger and Lim, the first three factor clusters are "given" to schools and difficult to alter. However, school policies and practices are more malleable and intervention in these areas may prove effective in improving students' outcomes and addressing the achievement gap problem. Important malleable school factors include the quality of teacher-student relationships (Noguera, 2008; Lee & Burkham, 2003) and school climate (e.g., Thapa, Cohen, Guffey, & Higgins-D'Alessandro, 2013). Both variables are particularly important for African American students who disproportionately self-report less favorable relationships with teachers

(Noguera, 2008$_b$) and perceive less equitable or supportive school climates (e.g., Bottiani, Bradshaw, & Mendelson, 2014).

Individual and Cultural Factors

Researchers who examine how the school context contributes to the achievement gap must also consider how those factors impact individual or cultural factors implicated in achievement outcomes, particularly for Black students. The conceptual model of high school performance depicts how institutional factors (i.e., families, schools and communities) and individual factors (i.e., background, attitudes, behaviors, and performance) co-vary to influence students' achievement and attainment outcomes (Rumberger & Lim, 2008). This model highlights the complexity of student outcomes and justifies a need to consider how factors influence one another to shape achievement and attainment outcomes. Pharris-Ciurej's (2012) recommendation to avoid an "individualistic perspective" where researchers analyze individual and familial factors separate from school and community factors (p. 713) coincides with the model. Several factors—individual, school-based, and cultural— operating together, may influence Black students' academic outcomes. Noguera (2003$_b$) noted that African American males' thoughts and perceptions about schooling and academic pursuits contribute to their performance alongside structural and cultural factors.

Researchers have identified several individual factors implicated in Black student performance and attainment outcomes: resilience (Moon & Singh, 2015), stereotype threat (Steele & Aronson, 1995), self-efficacy (Zimmerman, Bandura, & Martinez-Pons, 1992), and peer group affiliation (Noguera, 2008$_b$). School-based factors include,

tracking (e.g., Conger et al., 2009; Lucas & Berends, 2002), school structure and organization (e.g., Lee & Burkham, 2003), racial-discrimination (e.g., Neblett, Chavous, Nguyen, & Sellers, 2009), and school climate (e.g., Byrd, 2015). Cultural factors include social capital (e.g., Bryan, Moore-Thomas, Day-Vines, & Holcomb-McCoy, 2011), cultural capital (e.g., Carter, 2003), racial identity (e.g., Witherspoon, Speight, & Thomas, 1997), and parental socialization (e.g., Neblett et al., 2009). Previously, some researchers examined these factors in isolation, without considering how confluence might shape disparities.

Researchers (e.g., Butler-Barnes, Chavous, Hurd, & Varner, 2013; Ellis, Rowley, Nellum & Smith, 2015) have increasingly examined the interrelationship among school, individual, and cultural factors and how those factors contribute to educational disparities, collectively (e.g., Byrd, 2015; Stewart, 2008). These researchers have conducted quantitative studies to examine how school context, influences academic outcomes relative to other important variables (e.g., students' beliefs about their capabilities). In addition, qualitative researchers have demonstrated that the school context may have implications for how Black students view themselves and their place within the school (e.g., Kane, 2016; Nasir, McLaughlin, & Jones, 2009).

Researchers who examine the association among variables—e.g., contextual, individual, and cultural— that predict achievement and attainment outcomes would be better able to assess how Black students make meaning of their school experiences and how those perspectives shape outcomes (Noguera, 2003_b). The high school graduation gap is one social problem where educational leaders, specifically school counselors, may

benefit from considering the interrelationship among variables and how those factors operate together to contribute to disparate dropout rates.

High School Graduation Gap and Dropout Risk

Black students dropout at higher rates relative to other cultural groups. In North Carolina, dropout rates are highest for Black, Hispanic, and American Indian students (State Board of Education, 2016). Black students drop out at rates of 2.70 dropouts per 100 students; this rate is higher than the state average of 2.39 dropouts per 100 students, overall. Dropout is "school leaving" or a retreat from the school community for reasons other than attending a community college or transferring districts (Doll, Eslami, & Walters, 2003; Dupéré et al., 2015). This "school leaving" can be a long-term process or a discrete event. Predisposing (i.e., distal) and precipitating (i.e., proximal) factors may influence students' decision to dropout or remain in school (Dupéré et al., 2015, p. 593).

High school graduation in comparison to dropping out is associated with positive academic outcomes, economic advancement, and contributions to society (Bidwell, 2015; Butler-Barnes et al., 2013; Campbell, 2015). Dropping out is associated with the attainment of fewer cognitive skills, lower median weekly earnings, poorer health outcomes, and unfavorable labor market prospects (Campbell, 2015; Rumberger & Lim, 2008). Therefore, addressing disparate dropout rates is important for the advancement of Black students, the Black community, and society, more broadly.

The high school graduation gap is associated with other achievement markers implicated in the achievement gap literature, such as discipline citations, grades, and academic performance (i.e., Grade Point Average, GPA) (Burrus & Roberts, 2012; Lee &

Burkham, 2003; Rumberger & Lim, 2008). With the emphasis on school reform and accountability measures since the 1980s (Davidovich, Nikolay, Laugerman, & Commodore, 2010), extensive efforts have gone into the examination of the achievement gap relative to the mean differences in test scores between children of different racial or ethnic groups (McKown, 2013). With the 2018 implementation of Every Student Succeeds Act (ESSA), researchers and educators will likely broaden their focus to additional school accountability measures, including graduation rates. Therefore, school counselors and other educators may benefit from research that elucidates how to address this gap, through evidence-based means.

In this dissertation study, the researcher will focus on how researchers may address the high school graduation gap through an exploration of those factors implicated in African American ninth and tenth grade students' graduation promise. Kim et al. (2015) found that Black students dropout at higher rates during their first and second year of high school compared to White, Hispanic, and English Language Learners (ELL). Similar trends exist in North Carolina. According to the 2016 consolidated report, tenth graders had the highest dropout rates, followed by ninth grade students (State Board of Education, 2016). These statistics indicate that, high school students from all backgrounds, particularly Black students are more likely to decide to dropout when they experience academic risk factors during this period of educational development. Prevention and intervention efforts are of importance during this developmental period. Therefore, this research study will explore those factors potentially implicated in these trends.

Researchers cite various push (e.g., poor teacher-student relationships) and pull (e.g., pregnancy) factors for eventual dropout (Doll et al., 2013). Students are "pushed out" "when adverse situations within the school environment lead to consequences, ultimately resulting in dropout," and they are "pulled out" "when factors [personal to the] student divert them from completing school" (p. 2). Push and pull factors may be proximal or distal. This research study will focus on proximal school (i.e., push) factors and their influence on how students perceive themselves, their capabilities, and their beliefs about the positive or negative consequences likely upon high school graduation.

Importantly, researchers may also consider push factors from the vantage point of those school factors that encourage students to persist in school. This is an important distinction aligned with a strength-based rather than a deficit perspective. School counselors working to increase high school graduation rates need to consider those school factors that facilitate high school graduation (e.g., graduation promise) alongside those factors that might increase dropout risk. The same factors, whether present or absent, may encourage student persistence or facilitate dropout risk. According to Rumberger and Lim (2008), educational attainment requires both persistence and achievement. Uncovering the factors implicated in Black students' graduation promise is the main aim of this dissertation study.

Students experience dropout risk when there are factors within students' background or environment indicative of a higher probability of school failure (Suh, Suh, & Houston, 2007). Common academic markers implicated in Black students' high school dropout risk include suspension, low academic achievement, retention, and poor

attendance (Blount, 2012; Rumberger & Lim, 2008; Suh et al., 2007). Students with more suspensions, lower grades, at least one grade-level retention, and more absences have higher dropout risk. Conversely, Black students with graduation promise have relatively higher grades, consistently matriculate to the next grade, attend school and classes regularly, and receive fewer disciplinary citations.

Aligned with a strength-based perspective, the dissertation researcher will attempt to identify those factors implicated in Black students' graduation promise. Examining graduation promise will allow the researcher to conduct a cross-sectional analysis around those factors that would facilitate graduation without conducting a longitudinal study. With this knowledge, educational leaders may engage in more proactive and preventative measures when ensuring Black students' achievement and attainment.

Several studies reveal the complexity of students' decision to dropout and outline the factors implicated in those decisions (Rumberger & Lim, 2008). Based on these studies, Rumberger and Lim theorized the conceptual model of high school performance, outlining the institutional and individual factors that influence dropout behavior. This model provides a framework for considering a wide-range of individual (i.e., background, attitudes, behaviors, and performance) and institutional (i.e., school, community, and family) factors. In addition to this framework, several models (e.g., Finn's frustration self-esteem mode and life course models), with different antecedents and relationships, exist that explain a facet of this problem.

In the dropout literature, researchers have extensively studied those factors that contribute to dropout risk (e.g., Burrus & Roberts, 2012; Doll et al., 2013; Lee &

Burkham, 2003; Rumberger & Lim, 2008; Suh et al., 2007). Individual variables commonly implicated in dropout risk include, background and demographic factors such as, gender and race or ethnicity (Doll et al., 2013; Neild, Stoner-Eby, & Frustenberg, 2008). Frequently cited psychosocial factors implicated in students' high school completion include, student engagement and motivation (e.g., Archambault, Janosz, Morizont, & Pagani, 2009$_a$; Christenson, Sinclair, Lehr, & Godber, 2001; Fan & Wolters, 2014; Neild et al., 2008). Common school factors implicated in the dropout literature include various elements of the school environment including, school enrollment size, student-teacher relationships, and school climate (e.g., Lee, 2010; Lee & Burkham, 2003; Thapa et al. 2013).

Researchers often examine these psychosocial factors among predominately White samples, relatively fewer researchers (e.g., Cornell, Halpern-Felsher, Clifford, Crichlow, & Usinger, 1995) have considered whether these variables help explain Black students' performance and attainment outcomes. While Fall and Roberts (2012) found that engagement explained 40% of the variance in "dropping out," there may be additional variables important in understanding student outcomes. Finally, despite extensive research relative to motivation and engagement, the high school graduation gap persists. Additional research is necessary that examines those variables and interrelationships that honor Black students' realities: Black students are more likely to have inequitable school experiences and their experience of schooling is often unique, which has implications for how they come to understand themselves.

Researchers have made important contributions to understanding how and why students dropout; however, in reviewing Rumberger and Lim's framework there have been important omissions within this literature base, relative to African American students. Few researchers (e.g., Chavous et al., 2003) have considered important cultural variables implicated in secondary completion or the high school graduation gap. Experts in Black student research (e.g., Chavous et al., 2003; Nasir & Saxe, 2003, Whiting, 2006; Whiting & Kennedy, 2016) have identified variables that are missing from extant dropout literature, including scholar identity, racial school climate, and racial identity. Given the proliferation of this gap for Black students, additional variables absent from the existing literature may be instrumental in addressing this concern. In fact, Freeman and Simonsen (2015) called for the establishment of "contextually or culturally" appropriate practices and research efforts due to gaps that persist relative to important demographic factors, like race and ethnicity.

Moreover, investigations into the high school graduation gap that maintain a narrative of the promise and potential of Black students are necessary. Scholars (Butler-Barnes et al., 2013; Williams & Portman, 2014) have criticized researchers who approach studies related to Black academic outcomes from a deficit-perspective. These perspectives ignore the successes of Black students and contribute to a narrative that stereotypes this group as sub-par, incapable, or defective. Researchers must take care when designing and implementing research studies that investigate achievement gaps relative to the Black population (Ladson-Billings, 2012). Therefore, the dissertation

researcher will explore those individual and contextual factors that help explain Black students' graduation promise.

In this research study, the dissertation researcher will endeavor to advance the narrative of Black achievement and investigate those factors that might have implications for Black students' graduation promise to inform school research and evidence-based practice. The researcher will use Social Cognitive Career Theory (SCCT) as a framework to explore associations among contextual, cultural, and individual factors that influence Black students' graduation promise, as measured through academic markers associated with dropout risk.

SCCT (Lent, Brown, & Hackett, 1994) includes a model that school counselors may use to consider how person input, cognitive, and contextual factors are associated with Black students' graduation promise. The researcher will construct the model using various fields of study: educational (i.e., Ladson-Billings, 2006; Nasir, 2012; Noguera, 2008$_b$), Black identity development (i.e., Ellis et al., 2015; English-Clarke, Sellers, Smith, Shelton, Rowley, & Chavous, 1998; Slaughter-Defoe, Martin, 2012; Scottham, Sellers, & Ngyun, 2008), and SCCT (Lent et al., 1994). The researcher will explore how associations among school context (i.e., racial school climate), person inputs (i.e., racial identity and scholar identity), and students' beliefs (i.e., high school completion self-efficacy and outcome expectations) impact academic outcomes implicated as indicators of graduation promise (i.e., discipline citations, attendance, GPA, and retention) (See Figure 1).

Social Cognitive Career Theory

SCCT (Lent et al., 1994) is applicable when conceptualizing the high school graduation gap. Researchers originally used the theory to explain the formation of career interests, but there is also a precedent for examining performance and persistence in educational pursuits at the secondary and post-secondary level. (e.g., Byars-Winston, Estrada, Howard, Davis, & Zalapa, 2010; DeFreitas, 2012; Lent et al., 2003; Flores, Navarro, & DeWitz, 2008; Gibbons & Borders, 2010; Gonzalez, 2012). Examining the high school graduation gap is within the scope of this theory because Lent et al. (1994) designed the SCCT conceptual framework to assess career and academic interest development, career relevant choices, and the achievement of performance outcomes (p. 80). Lent et al. (1994) defined performance as "levels of accomplishments" and "behavioral persistence" (p. 98). Researchers may conceptualize graduation promise as a long-term performance outcome. Moreover, researchers have used SCCT to explore students' persistence or graduation at the secondary (i.e., Parr & Bonitz, 2015) and post-secondary level (e.g., Byars-Winston et al., 2010; Lent et al., 2003).

SCCT (Lent et al., 1994) includes four variable categories: person-input, contextual, cognitive, and performance or goal mechanism (i.e., interests, goals, actions, and performance attainments). The dissertation researcher will not assess interests, goals, or actions in the present study. Graduation promise operates as a performance attainment in this study. The categories are not isolated and often influence one another to impact students' outcomes. Pharris-Ciurej's (2012) recommended that researchers consider the interrelationship among variables when examining students' dropout behaviors. Aligned

with this recommendation, the dissertation researcher will assess whether a student's perception of the school context relative to their racial identity has implications for the individual's person-inputs (e.g., scholar identity), beliefs relative to school (e.g., high school completion self-efficacy and outcome expectations), and graduation promise (e.g., disciplinary citations, retention, GPA, and attendance).

Overview

Researchers may use SCCT to examine the relationship between key constructs: self-efficacy, outcome expectations, contextual factors, and person inputs. Self-efficacy is an individual's subjective beliefs about their ability to engage in or complete a specific task. Outcome expectations are an individual's positive or negative beliefs about the consequences that will ensue after a task completion. Contextual influences or affordances are environmental resources and obstacles that shape academic development. Person inputs are individual difference variables or "socially conferred or constructed statuses" (Bandura, 1986; Byars-Winston et al., 2010; Lent et al., 1994, p. 105; Shoffner, Newsome, Barrio Minton, & Wachter-Morris, 2015).

Model and variable associations. Lent et al. (1994) proposed three overlapping, segmented models: interest, choice, and performance. The dissertation researcher will use the choice model for the present study because it incorporates contextual influences (social contextual variables), cognitive variables (e.g., self-efficacy), and person inputs. In the SCCT model, there is an indirect link between self-efficacy and performance domains and attainments through interests, goals, and actions. Researchers' (e.g., Byars-Winston et al., 2010) findings support this proposition. A direct relationship may also

exist between self-efficacy or outcome expectations and students' achievement or attainment outcomes. (e.g., Bandura, 1986; Butler-Barnes et al., 2013; Chavous et al., 2003; Davis, Ajzen, Saunders, & Williams, 2002_a). Researchers have found a bi-directional relationship between contextual affordances and self-efficacy (Byars-Winston et al., 2010; Lent et al., 2003). Within the SCCT literature base, researchers have found that racial identity influences research participants' perceptions of school climate (Byars-Winston et al., 2010). Chavous et al. (2003) found that racial identity predicted self-efficacy. Scholar identity is a person-input variable that researchers have not considered in SCCT studies, previously. This may be an instructive variable in understanding Black students' graduation promise; researchers (e.g., Nasir, 2009) have proposed associations between academic identities and school context.

Appropriateness of Social Cognitive Career Theory

Merits underlie the use of SCCT to understand and address educational disparities like the high school graduation gap. SCCT is a culturally sensitive theory and appropriate when conceptualizing disparities rooted in opportunity gaps. Moreover, the theory provides researchers with a framework that examines the interrelationship among variables—person input, cognitive, and social contextual variables. Thereby, the researcher may capture the culturally unique and interrelated factors that contribute to the high school graduation gap for Black students.

First, SCCT provides researchers with a framework to capture the dynamic and interrelated nature of the achievement gap to address factors that contribute to educational disparities. Multiple factors contribute to the achievement gap (Trusty,

Mellin, & Herbert, 2008). SCCT allows researchers to consider those variables in tandem. Moreover, SCCT provides a framework whereby researchers may consider how changes in one area of the model lead to changes in another area that might facilitate or inhibit conditions for positive academic outcomes. For instance, tracking or other discriminatory practices (i.e., social contextual variables) in schools may lead Black students to have low self-efficacy (i.e., cognitive variable) or limited beliefs in their ability to complete tasks associated with success in rigorous courses. In addition, inequitable advanced course placement practices, may have implications for how Black students and others view themselves or their place in school.

Importantly, Noguera (2003_b) noted that Black males' thoughts and perceptions (i.e., cognitions) about schooling and academic pursuits contribute to performance alongside structural (e.g., school context) and cultural (e.g., racial identity) factors. SCCT provides a framework for considering variables in tandem, as Noguera recommended. Cognitive variables (e.g., self-efficacy and outcome expectations) outlined in SCCT will allow researchers to explore how cultural (e.g., racial identity) and contextual factors (e.g., school climate) are implicated in Black students' academic outcomes or persistence. Several studies support the idea that person input variables, like racial identity, have implications for students' beliefs about school, as well as beliefs about themselves and their academic success (Awad, 2007; Chavous et al., 2003; Ellis et al., 2015; English-Clarke et al., 2012; Kerpelman, Eryigit, & Stephens, 2008; Nasir, 2012).

Secondly, SCCT is a culturally sensitive theory and, therefore, useful in the conceptualization and intervention of the high school graduation gap and opportunity

gaps that exacerbate these disparities. Milner (2012) and Ladson-Billings (2006) outlined several factors that necessitate utilizing the term opportunity gap or education debt versus achievement gap. SCCT honors many of these scholars' concerns. Lent et al.'s (1994) emphasis on the importance of contextual factors in understanding performance attainments allows researchers to consider those opportunity gaps (Milner) or education debts (Ladson-Billings) that contribute to disparities. In SCCT, environmentally precipitated forces (e.g., "differential socialization processes and opportunities for skill development") and the internalization of forces (e.g., self-efficacy and outcome expectations) might impede or facilitate career development (p. 105). Researchers may use SCCT to conceptualize the high school graduation gap because the theory does not simply focus on the student or ability, but focuses on contextual factors that may moderate or mediate the relationship between variables that contribute to specific performance attainments.

Researchers have implicated several SCCT variables—self-efficacy, outcome expectations, context, and racial identity—in the academic outcomes, dropout prevention, and persistence literature bases (Butler-Barnes et al., 2013; Byars-Winston et al., 2010; Chavous et al., 2003; Ellis et al., 2015; Multon, Brown, & Lent, 1991). Researchers have found that self-efficacy is a predictor of academic performance and persistence (Multon et al., 1991), a protective factor against racial-discrimination experiences (Butler-Barnes et al., 2013), and has implications for college students' experience of the school context (i.e., school climate) (Byars-Winston et al., 2010). Racial identity—a component of self-concept that captures the significance and qualitative meaning that members of the Black

racial group attribute to themselves— is directly related to Black students' self-efficacy, school experiences, and academic outcomes (Byars-Winston et al., 2010; Chavous et al., 2003; Ellis et al., 2015). Particularly relevant to this study, racial identity, specifically racial centrality, is positively associated with high school completion (Chavous et al., 2003). Finally, researchers (Byrd, 2015; Lent et al., 2003; Nasir 2012) have implicated school context in understanding general academic outcomes and persistence. Byrd (2015) found that racial school climate (i.e., contextual variable) has implications for students' outcomes and school related beliefs. Lent et al. (2003) found that college students' perceptions of supports and barriers predicted their self-efficacy beliefs. These studies demonstrate how variable associations may influence students' outcomes.

Nasir (2012) and others (e.g., Allen, 2015; Andrews, 2009; Berry, Thunder, & McClain, 2011; English-Clarke et al., 2012; Nasir, 2012) claimed that the school context can shape which identities are made available for students through the organization of learning settings, the roles afforded to or denied to students, and access to knowledge and opportunities. Given the theoretical proposition that the school context may support or hinder Black students' perception of school as a part of or in opposition to their racial and ethnic identities, quantitative research is necessary to explore those facets of the school context that support or hinder Black adolescents' construction of academically promotive identities. The present study will contribute to the SCCT literature base by examining the influence of the context, relative to racial identity, on Black students' scholar identity. Black students construct scholar identities when they view themselves "as academicians, as studious, as competent and capable, and as intelligent or talented in school settings"

(Whiting, 2006, p. 48). Given Nasir's (2012) claim that academic identities are made available or denied within the school context, researchers may conceptualize scholar identity as a person input—a socially conferred or contextually constructed status (Lent et al., 1994, p. 105).

SCCT provides a culturally sensitive and appropriately complex framework to assess the variables and associations implicated in Black students' graduation promise. Researchers may use the SCCT-Based Model of Black High School Students' Graduation Promise to more intentionally examine interrelated factors that contribute to the high school graduation gap, consider variables that capture Black students' unique school experiences, and conduct studies that may assist the development of evidence-based practices to address disparities. Outside the SCCT literature, researchers have found that several SCCT variables—self-efficacy, outcome expectations, racial identity, scholar identity, and social-contextual factors—are integral to Black students' academic or attainment outcomes and beliefs about school. Conceptually, the dissertation researcher will assess how Black students' self-reported experience of the school context, relative to their racial identities, support or inhibit the construction of Black students' scholar identity. Moreover, the researcher will assess whether Black students' relative adoption of a scholar identity has implications for students' self-efficacy, outcome expectations, and graduation promise.

SCCT-Based Model of Black High School Students' Graduation Promise

The model is founded in SCCT (Lent et al., 1994), academic disidentification theory (e.g., Griffin, 2002; Osbourne, 1997) or oppositional resistant representation

(Fordham & Ogbu, 1986), theoretical propositions of academic identity affordance within the school context (e.g., Borrero et al., 2012; Nasir, 2012), and the racial-identity context congruence framework (Byrd & Chavous, 2011). The model incorporates culturally and contextually influenced person input (i.e., racial identity and scholar identity), cognitive (i.e., high school completion self-efficacy and high school completion outcome expectations), and contextual (i.e., racial school climate) variables to assess their influence on academic markers (i.e., disciplinary citations, retention, GPA, and attendance) for graduation promise (See Figure 1). The model explores how Black students' experience of the racial school climate, relative to their racial identity, has implications for their ability to adopt a scholar identity, believe that they can graduate from high school, and experience positive consequences as a result. The dissertation researcher will consider how these variables and relationships influence Black students' graduation promise relative to academic markers previously identified in the literature.

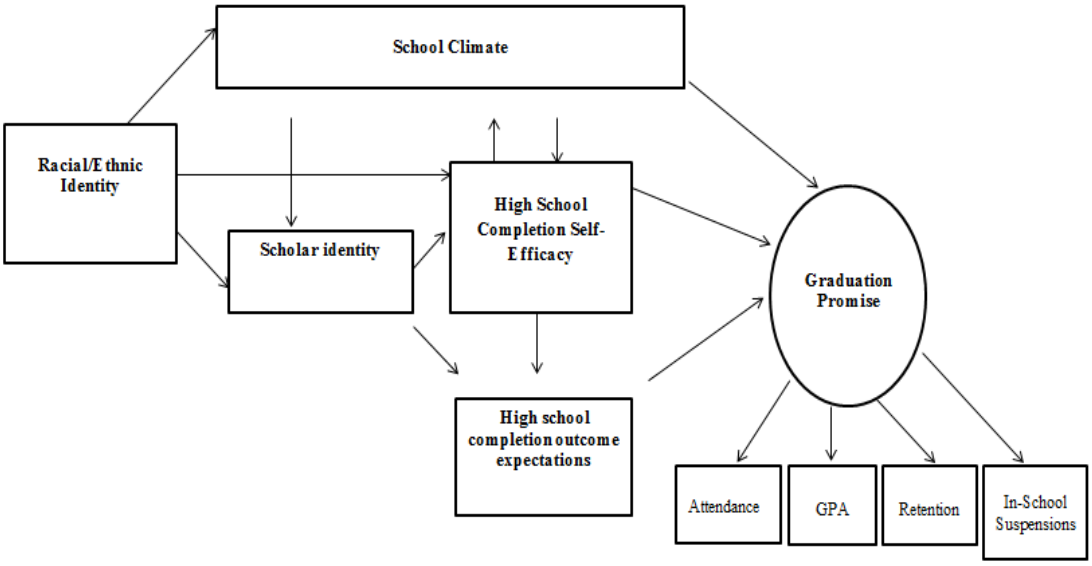

Figure 1. SCCT-based Model of Black High School Students' Graduation Promise. Adapted from Lent et al., 1994—Model of Career Choice.

Purpose of the Study

Through this dissertation study, the dissertation researcher endeavors to address gaps in the dropout literature. Despite Black students' gains in high school graduation rates, a gap persists with implications for Black students, the Black community, and society. Schools can do more to ensure that Black students graduate from high school within four years and that their rates match those of their White counterparts. Contrary to outdated research, neither biological nor scientific proof exists that would justify these gaps. Therefore, the researcher will assess the appropriateness of a model of graduation promise in elucidating those factors implicated in Black students' attainment outcomes.

Research Questions

In this study, the dissertation researcher will examine whether Black students' perceptions of the school context, relative to their racial identity, has implications for these students' beliefs about themselves, their capabilities, and likely outcomes. Moreover, how the model variables and associations impact academic outcomes associated with graduation promise. Figure 2 shows paths among the variables of interest: racial identity, high school completion self-efficacy, high school completion outcome expectations, scholar identity, racial school climate, and academic markers for graduation promise.

Phase One: Research Questions

RQ 1: Is the factor structure of the scholar identity scale consistent with Whiting and Kennedy's (2016) proposed eight-factor structure, based on a confirmatory factor analysis (CFA)?

Hypothesis 1: The CFA will yield an eight-factor structure.

RQ 2: Does the overall scale demonstrate acceptable reliability or internal consistency? Do the subscales demonstrate acceptable reliability or internal consistency?

Hypothesis 2: The factor rho coefficient will be within an acceptable range for the overall scale and each subscale.

Phase Two: Research Questions

RQ 3: Does the data support the SCCT–based model? Does the proposed model produce a population covariance matrix that is consistent with the sample covariance matrix?

Hypothesis 3: The data will support the SCCT-Based Model of Black High School Students' Graduation Promise according to several fit indices (i.e., RMSEA, RMSEA confidence interval, CFI, chi-square test, and standardized RMR).

RQ 4: Does gender membership moderate the relations specified in the structural regression model? Is the model measurement invariant?

Hypothesis 4: The model will be measurement invariant relative to gender.

$RQ4_a$: Are there latent mean differences in graduation promise for Black male and female students controlling for the influence of model variables on graduation promise (If Invariant-*RQ4*)?

Hypothesis 4_a: Given the extant literature and data trends, the researcher proposes that there will not be a significant latent mean difference between Black male and female ninth and tenth grade students' graduation promise controlling for the influence of the model variables. Black females and Black males will have similar scores on graduation promise when controlling for the model variables.

RQ5: Does the data fit the graduation promise measurement model? and Does gender membership moderate the relations specified in the measurement model of graduation promise? (Not Invariant-*RQ4*)

Hypothesis 5: The data will support the graduation promise measurement model according to several fit indices (i.e., RMSEA, RMSEA confidence interval, CFI, chi-square test, and standardized RMR). Given the extant literature reviewed and data trends, the researcher proposes that gender will moderate the relations or predictors (i.e., attendance, in-school suspensions, grades, and retentions) specified in the measurement model of graduation promise.

$RQ5_a$: Are there latent mean differences in graduation promise for Black male and female ninth and tenth grade high school students while controlling for academic markers? (Invariant-*RQ5*)

Hypothesis 5_a: Given the extant literature, the researcher proposes that there will be significant latent mean differences in graduation promise for Black male and female ninth and tenth grade high school students while controlling for the academic markers specified in the measurement model of graduation promise. Black females will have a higher latent mean on graduation promise than Black males.

Need for the Study

Research indicates that a high school graduation gap still exists despite the recent gains. Researchers and practitioners must do more to ensure Black students' graduation

promise because high school dropout is individually, culturally and socially consequential. Although researchers have extensively studied this problem, gaps persist. Researchers need to promote a strength-based perspective, consider the influence of school context, and honor Black students' unique schooling experiences to further address this problem. Such research is necessary. The findings would provide researchers and educational leaders (e.g., school counselors) with additional clarification around factors implicated in the high school graduation gap and variables implicated in proactively promoting high school completion.

School counselors can become integral to encouraging higher graduation rates with a strength-based framework or model that identifies important factors implicated in graduation promise. The school counseling literature base relative to this topic is scarce and currently a counseling model or framework for graduation promise is non-existent. Therefore, the dissertation researcher will also address an important research gap in the school counseling field.

Moreover, the educational literature base can benefit from quantitative studies that assess the impact of the school context on students' scholar identities, beliefs about their capabilities, and outcomes. Nasir (2012) and others (e.g., Allen, 2015; Andrews, 2009; English-Clarke et al., 2012; Berry et al., 2011) have qualitatively explored how the school context might have implications for students' ability to adopt or possess achievement or scholar identities. This study would examine the theoretical propositions of academic identity affordance and disidentification within the school context using a quantitative approach.

Definition of Terms

The SCCT model for Black high school students' graduation promise examines the associations between person input (i.e., racial identity and scholar identity), cognitive (i.e., high school completion self-efficacy and high school completion outcome expectations), and social-contextual (i.e. racial school climate) factors and students' academic markers (i.e., attendance, retention, GPA, disciplinary citations) associated with graduation promise. Definitions of each variable are below, as they will be operationalized for the purposes of this study.

Culturally-Influenced Person Input Variables

Racial identity. Racial identity is a component of self-concept that captures the significance and qualitative meaning that members of the Black racial group attribute to themselves (Sellers et al., 1998, p. 19). The Sellers et al. (1998) model of racial identity includes four dimensions: racial centrality, regard, salience, and ideology. This study will assess one dimension of the Sellers et al. (1998) model using Scottham et al.'s (2008) conceptualization of racial centrality because their Multidimensional Inventory of Black Identity—Teen was validated with a Black adolescent population. Racial centrality is the "extent to which an individual normatively emphasizes racial group membership as part of his overall self-concept" (p. 297). The dissertation researcher will assess racial centrality using the Multidimensional Inventory of Black Identity-Teen (MIBI-T) (Scottham, Sellars, & Nguyen, 2008).

Scholar identity. Black students construct scholar identities when they view themselves "as academicians, as studious, as competent and capable, and as intelligent or

talented in school settings" (Whiting, 2006, p. 48). Whiting's (2006; 2016) Scholar Identity Model (SIM) proposes several scholar identity dimensions: s*elf-efficacy, future orientation, willing to make sacrifices, internal locus of control, self-awareness, achievement>affiliation, academic self-confidence, race consciousness,* and *masculinity/femininity*. Whiting and Kennedy (2016) operationalized scholar identity for Black males, but the construct can be generalized to all Black students when excluding the *masculinity* dimension. To avoid assuming a gender binary, the researcher will not assess the *masculinity* factor in this study. Given that the SCCT model places prime importance on self-efficacy, the dissertation researcher may measure that dimension of scholar identity separately for the purposes of this study. The researcher will use Gray's (2016) Black Scholarly Identity Scale (BSI), to assess Black students' scholar identity.

Cognitive Variables

High school completion self-efficacy. High School Completion Self-Efficacy (HSCSE) is an individuals' subjective belief about their ability to complete high school with a degree within four years of beginning 9th grade. For the purposes of this study, the researcher will measure high school completion self-efficacy with a domain (i.e., high school completion) specific self-efficacy scale based on the North Carolina Department of Public Instruction high school graduation requirements.

High school completion outcome expectations. High school completion outcome expectations (HSCOE) are an individual's positive or negative beliefs about the consequences that will ensue after completing high school with a degree. For the purposes of this study, the researcher will measure high school completion outcome

expectations using Flores et al.'s (2008) College-Going Outcome Expectations (COE) questionnaire. The dissertation researcher will modify the scale for the purposes of this study.

Social-Contextual Variables

Racial school climate. Racial school climate refers to students' perceptions of interracial interactions and the curriculum around race and culture in a school. The construct constitutes the "norms and values around diversity and race in the school setting" (Byrd, 2012, p. 32). The construct has two domains: *school interracial interactions* and *school racial socialization*. *School interracial* or *intergroup interactions* assess students' perceptions of the nature of interactions across racial/cultural groups. This domain includes *frequency of interactions*, *quality of interactions*, *equal status*, *support for positive interactions*, and *stereotyping*. *School racial socialization* designates "messages about race and culture communicated at school" (Byrd, 2016, p. 5). The school racial socialization domain includes *cultural socialization, mainstream socialization, promotion of cultural competence, color-blind socialization*, and *critical consciousness*. For the purposes of this study, the dissertation researcher will measure Black students' perceptions of racial school climate using the School Climate for Diversity-Secondary (SCD-S) scale (Byrd, 2012).

Academic Markers: Dropout Risk

Attendance. Attendance represents the number of days that students are at school within a given academic year. It is one of the strongest predictors of course failure, which is predictive of dropout (Blount, 2012, p. 9). Higher absences increase the risk of

dropping out. For the purposes of this study, the dissertation researcher will measure high school attendance using a one-item Likert-scale question that asks students to self-report their days absent across the previous or last month of school.

Retention. Retention occurs when students are held back to repeat a grade during their primary or secondary grades of school. Research indicates that students who are at least two years older than the normative age for their grade-level are more likely to drop out (Gleason & Dynarski, 2002). White and Kelly (2010) noted that grade retention is one of the most salient predictors of high school dropout. Thus, for the purposes of this study, the researcher will measure grade retention using student's self-report regarding the number of grade retentions during the elementary and middle grades. Research indicates that retention during these grade levels is most predictive of dropout behavior (Rumberger & Lim, 2008). The dissertation researcher will also ask participants to include any grade retentions, since starting high school. For the purposes of this study, the researcher will measure academic career retention using a one-item Likert scale question that asks students to self-report the number of grade retentions throughout their academic career.

GPA. Weighted Grade Point Average (GPA) is a number representing the average value of final grades earned in a course over-time. Students with lower GPAs may be in jeopardy of not graduating from high school (Rumberger & Lim, 2008). Based on an extensive literature review, Rumberger and Lim concluded that grades are a more robust measure of achievement than test scores and more often associated with attainment

outcomes. In this study, the researcher will measure high school GPA with a one-item open-ended.

Disciplinary citations. Researchers have found associations between disciplinary citations—in school and out of school suspensions—and student engagement. Researchers have implicated student engagement in dropout risk (Hupfeld, 2007). Therefore, this academic marker is important in understanding graduation promise. Disciplinary citation statistics may be particularly important when assessing Black students' graduation promise because Black students, particularly Black males, receive a disproportionate number of school citations for subjective forms of misbehavior (Cokley et al., 2014; Skiba et al., 2002). Thus, for the purposes of this study, the researcher will measure disciplinary citations using a one-item Likert-scale question that asks students to self-report the number of in-school suspensions in the last month. The researcher selected in-school suspensions because there is likely more variability for this academic outcome measure, compared to long-term suspensions.

Overview

The researcher organized this dissertation in five chapters. In this chapter, the dissertation researcher introduced an SCCT-Based Model of Black High School Students' Graduation Promise, including a statement of the problem, purpose of the study, need for the study, and rationale for conducting the current research and research questions. Chapter Two includes a review of relevant existing literature relative to high school dropout, SCCT, racial school climate, racial identity, and scholar identity. The reviewed literature provides theoretical and empirical support for the current research.

Chapter Three includes a thorough description of the methodology and research design used in the current study, including research questions, hypotheses, sampling procedures, instrumentation, and general procedures. Chapter Four includes the results of the statistical analyses used to test the research hypotheses. Finally, Chapter Five includes a discussion of results, implications for educational leaders and the school counseling profession, recommendations for future research, and limitations of the study.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Nationally, Black students' graduation rates rose from 67 to 75% between 2010 and 2015 (Garunay, 2016). These gains—a 7.6% increase— are notable and a high school graduation gap persists between these students and their majority counterparts. The national graduation rate was 83% during the 2014-2015 school year, which exceeds Black students' national average. These trends do not reflect the failings of Black students; it reflects the failings of our school systems to provide environments that foster the conditions necessary to ensure Black student success (Ladson-Billings, 2006; Milner, 2012).

Therefore, additional efforts are necessary to ensure Black students' graduation promise. Research around dropout and high school graduation is extensive; and yet, the gap persists. Traditionally, dropout researchers have not considered important factors unique to Black students' school experiences in examining these educational disparities (e.g., Noguera, 2003$_b$). Moreover, relatively fewer researchers have considered the interrelationship among individual and contextual variables that contribute to disparities (Pharris-Ciurej et al., 2012). Finally, researchers have traditionally adopted a deficit-

based perspective when studying educational disparities that discounts Black students' promise and academic success (Noguera, 2008_b). Therefore, the dissertation researcher will examine a model that addresses these gaps to uncover factors implicated in Black students' graduation promise.

In this chapter, the dissertation researcher outlines an argument for this model. First, the researcher will explain the achievement gap and opportunity gaps or educational debts that contribute to this problem. The high school graduation gap is the focus of this study; however, a discussion of broader educational gaps will frame this discussion. Next, the author will define school reform and outline its present and future role in addressing this problem. Then, the researcher will define the dropout problem and discuss dropout risk factors commonly associated with school leaving. Given the persistence of this problem and gaps in the literature, the researcher will provide a summary and a critique relative to current researcher trends in dropout literature. Finally, the researcher will explain how an SCCT-Based Model of Black High School Students' Graduation Promise may address these gaps and provide additional insights into the persistence of the high school graduation gap.

Achievement Gap

Achievement gaps are "differential levels of accomplishment relative to different ethnic groups when data are disaggregated" (Bodenhorn, Wolfe, Airen, 2000, p. 168). These gaps are evident in various indicators of academic performance: mean differences in test-scores (McKown, 2013), discipline citations (Skiba et al., 2002), high school graduation rates (Doll et al., 2013), enrollment in advanced placement courses (Taliaferro

& DeCuir-Gunby, 2008; Theokas & Saaris, 2013), and minority representation in special education programs (Zhang, Katsiyannis, Ju, & Roberts, 2012). Gaps between students of color or those from low-income backgrounds and their majority counterparts exist relative to students' academic performance, educational outcomes, and school placements. Researchers have indicated that there have been improvements in addressing the advanced placement enrollment gap, the high school graduation gap, and the test-score gap; however, these socially consequential disparities persist. Therefore, although our work in alleviating the achievement gap problem has begun, it is not yet complete.

Despite early claims that achievement gaps originated from genetic or cultural deficits (Jencks & Phillips, 1998; Ladson-Billings, 1995; Ladson-Billings, 2012; Noguera, 2008), educational researchers now recognize that achievement gaps are the by-products of education debts (Ladson-Billings, 2006) or opportunity gaps (Milner, 2012). Inequitable inputs such as education debts or opportunity gaps may be cultural or structural. Inequitable, structural inputs include, disparities in per-pupil expenditures (Kozol, 1991), inequitable school placement of well-qualified teachers (McKown, 2013), tracking (Lucas & Berends, 2002), inequitable advanced course placements patterns (Conger et al., 2009), and biased disciplinary practices (Skiba et al., 2002).

Inequitable cultural inputs include, low expectations (Spencer, 2009) and deficit perspectives regarding students of color (Milner, 2012). These structural and cultural factors are school-based factors that lead to differential educational outcomes based on demographic characteristics (Carter & Welner, 2013). According to Ladson-Billings (2006), the education debt is the "foregone schooling resources that we could have been

investing in [primarily] low income kids" (p. 4). She outlined four debts: historical, economic, sociopolitical, and moral. Ladson-Billings also problematized how researchers approach the achievement gap and essentially perpetuate deficit-narratives about students of color and those from poorer backgrounds (2012). This conceptual reframe, along with Milner's coining of the term "opportunity gaps," has research and practice implications.

Milner (2012) coined the term opportunity gaps to question the very notion of achievement and highlight the causes of social/racial/contextual disparities rather than their symptoms (i.e., achievement gaps). Educational researchers such as Milner recognize how detrimental the framing of the achievement gap has been in effectively addressing the problem. With a shift from highlighting the concern to addressing the antecedents, educators, counselors, and other stakeholders may analyze and change their educational practices to address a problem with highly consequential social, cultural, and individual ramifications. Within such a frame, there is "a basis of hope" (Noguera, 2003, p. 1).

Aligned with Ladson-Billings' (2006) call for a more strength-based perspective, students of color, particularly African American students, continue to display resilience and promise despite at-risk environments. Butler-Barnes and colleagues (2013) noted the accomplishments and educational promise of Black students. According to Garunay (2016), Black students' high school graduation rates rose from 67 to 75% between 2010 and 2015. This constitutes a 7.6 percentage-point increase. Between 1999 and 2008, the percent change in Black students' enrollment in advanced placement courses increased by 249.9% (U.S. Department of Education, 2010). Practitioners and researchers may

learn a great deal from those students who succeed despite contextual challenges (Butler-Barnes et al., 2013). For instance, prior to the passing of the 2002 No Child Left Behind (NCLB) act—between 1992 and 2003—, Black fourth-grade students' gains in math were 23 points (Strauss, 2015). Moreover, Strauss reported an 8-point gain in Black students' reading assessment scores since NCLB.

Despite gains, disparities in high school graduation rates and other areas (e.g., AP enrollments and discipline citations) are still present. Educational leaders must continue to engage in school reform at the policy, district, and school building levels to address disparities rooted in opportunity gaps that educators have begun to address, and yet persist.

Legislation and School Reform

Educational disparities became more evident with the passing of the 2002 NCLB act and the reenergized focus on school reform. School reform is a commonly used phrase in education and represents efforts by legislators, researchers, districts, schools, communities, corporations, parents, and students to address underachievement. The passing of NCLB, a reauthorization of the1965 Elementary and Secondary Education Act, fueled the school reform movement and legislation that led to an emphasis on school accountability and ensuring no child was "left behind" (Dollarhide & Lemberger, 2006).

A major goal of NCLB was to reach a 90% graduation rate by 2020 (Witte, Cabus, Thyssen, Groot, & Massen van den Bink et al., 2013). The government incentivized schools to adopt accountability standards; federal funding became contingent upon improvements and gains. This contentious legislation, with both

proponents and critics, led to a school grading system which pressured administrators and other school stakeholders to demonstrate Adequate Yearly Progress (AYP) or face restructuring, closure, or corporate infiltration. School effectiveness under this legislation is primarily based on standardized testing results (Strauss, 2015; The Understood Team, 2016).

NCLB was the impetus for The U.S. Department of Education and the Obama Administration to develop *Race to the Top*—a federal program—that emphasized turning around low performing schools through funding to states and local school districts to develop strategies to increase achievement (U.S. Department of Education, 2009). *Race to the Top* prioritizes closing the achievement gap between demographic groups, addressing the dropout problem, increasing college and career readiness, and boosting academic performance (Hines et al., in press).

In 2018, Every Student Succeeds Act (ESSA) will replace NCLB. Important distinctions exist between the acts (The Understood Team, 2016). While NCLB gave the federal government responsibility for developing student achievement standards and school accountability, the power will shift to states and districts with the new legislation. Moreover, ESSA requires parental involvement and broader, more flexible accountability measures (e.g., high school graduation rates, state-chosen academic measures, college readiness, school climate, and absenteeism). Contrastingly, NCLB primarily stipulated state reading and math test scores when assessing school effectiveness. The differences outlined above have implications for school counselors collaborating to enact school reform and address disparities.

School counselors have been underutilized in the school reform efforts. However, researchers have indicated that school counselors are instrumental in school improvement efforts (Brigman & Campbell, 2003; Dahir & Stone, 2009). Brigman and Campbell (2003) found that students who participated in *Student Success Skills,* a counseling and classroom guidance intervention, had higher reading and math scores on standardized tests at the post-treatment assessment than students in the control group, with substantial practical significance (i.e., medium effect sizes).

In a review of collaborative action research, Dahir and Stone (2009) found that school counselor intervention and prevention efforts to address performance markers (e.g., discipline citations, attendance, grades, and postsecondary going rates) led to positive results in all but two instances. School counselors submitted approximately 175 action research plans for the study. Dahir and Stone concluded that data-driven school counseling programs alone are not a "magic bullet" to school improvement and "school counselors can initiate, develop, lead and coordinate programs that can contribute to systematic change improving learning success for every student" (p. 18).

Evidence of school counselors' effectiveness and the broadened focus of ESSA justifies a more comprehensive delineation of counselors' role in the school reform movement. With the implementation of ESSA, school counselors' expertise and unique contributions will become even more essential given the additional accountability measures (e.g., college readiness, high school graduation rates, absenteeism, and school climate) used to assess school effectiveness. Scholarly literature elucidates how essential school counselors can be in ensuring students' college readiness (Bryan et al., 2011;

Hines et al., 2016), promoting high school graduation (Bemak, Chi-Yung, & Siroskey-Sabdo, 2005; Blount, 2012; White & Kelly, 2010), and promoting and enriching school climate (Nassar-McMillan, Karvonen, Perez, & Abrams, 2009). School counselors can influence a wide range of the accountability measures and therefore instrumental to school reform efforts. Given the slow progress toward improvement and the challenges faced by administrators attempting to engage in school reform (Payne & Kaba, 2007), every stakeholder is essential in this endeavor. Specifically, school counselors may be particularly instrumental in addressing the high school graduation gap.

High School Graduation Gap

Defining the Problem

High school graduation rates have risen to a record high of 83% (Garunay, 2016). Although this is an accomplishment, disparities persist between Black students and their majority counterparts (Doll et al., 2013). In fact, in 2012 half of all dropouts attended 15% of all high schools—termed "dropout factories" (Burrus & Roberts, 2012). These factories constitute schools where the graduation level is 50% or lower. Fifty percent of Black students who dropped out in 2012 attended these schools. Through legislation and reform, many of these schools have faced closure, reformation, or intervention. Despite these measures and others; gaps persist.

This constitutes a problem. Educators and school counselor must address this problem if the nation is to reach its goal of a 90% graduation rate by 2020. Although school districts, states, and the federal government have taken strides to ensure accurate reporting of graduation statistics, additional research is warranted to assess the

effectiveness of interventions and develop models specifically catered to understanding and promoting Black students' persistence and graduation at rates equivalent to those of their White and Asian counterparts.

Dropout is "school leaving" or a retreat from the school community for reasons other than attending a community college or transferring districts (Doll et al., 2013; Dupéré et al., 2015). Dropping out is both a process and a discrete event. Burrus and Roberts (2012) reported that the dropout process may begin even one to three years before the decision to drop out (as cited in Allensworth, 2005). Moreover, evidence suggests that researcher may predict high school dropout as early as first grade (Alexander, Entwisle, & Horsey, 1997). For this reason, Rumberger (1987) defined dropout as a "process of disengagement from school" (p. 111).

Dropout: Personal, Social, and Cultural Consequences

Researchers have suggested that high school dropout is individually, culturally, and socially consequential (Burrus & Roberts, 2012; Campbell, 2015; Rumberger, 1987). Students who dropout are more likely to encounter less favorable outcomes, like low socioeconomic status and health concerns. However, researchers have not established causation. Witte et al. (2013) cautioned researchers against making loose claims regarding the causal link between dropout behavior and poorer outcomes because the individual, cultural, and social consequences associated with dropout may develop due to broader societal or systemic factors. Essentially, Witte and colleagues acknowledged that dropout may be another symptom and not the problem.

Personal and social consequences. Nevertheless, dropout is associated with negative individual, cultural, and social consequences (Burrus & Roberts, 2012; Campbell, 2015). For instance, students who dropout without obtaining an equivalency often face worse labor market prospects and learn fewer skills (Campbell, 2015). Burrus and Roberts noted that dropouts are more likely to receive government assistance, engage in criminal behaviors or drug use, and live in poverty. When citizens partake in government assistance or engage in criminal behaviors or drug use, society suffers. High school dropouts are also less likely to be eligible for or pursue post-secondary opportunities (e.g., Morgan, Sinatra, & Eschenauer, 2015).

Social consequences may also include foregone national income or tax revenues for government services, increased demand for social services, poorer levels of health, reduced political participation, and reduced intergenerational mobility (Rumberger, 1987). Individual and social consequences are especially relevant for Black students who experience more criminalization in school (e.g., Skiba et al., 2014) that can culminate in a school-to-prison pipeline. Moreover, researchers have found that Black students are more likely to live in poverty, have a mental disorder label, or emotional/behavioral disorder diagnosis (Cokley et al., 2014). The association between these statistics and dropout disparities are no surprise.

Cultural consequences. Fordham and Ogbu (1986) and Steele (1992) outlined some of the cultural consequences that may accrue because of and in response to dropout trends. Steele noted that disidentification with schooling and stereotype threat may result from or contribute to disparate graduation trends (Osborne, 1997). Disidentification

occurs when a relationship does not exist between a student's global self-esteem and academic self-esteem. Steele theorized that this could have a detrimental impact on performance outcomes because disidentification does not incentivize learning and may accompany behaviors (e.g., absenteeism) that inhibit positive academic outcomes (Osborne, 1997). Osborne found that Black high school males were more likely to engage in disidentification than their female or White counterparts. Related to the disidentification proposition, Fordham and Ogbu (1986) proposed an oppositional cultural frame of reference wherein Black students may believe that race-less-ness or "acting white" are necessary to do well in school. Essentially, Black students may adopt oppositional cultural frames of reference relative to schooling as a mechanism to protect their cultural identities. According to Fordham and Ogbu, these perspectives alongside inequitable opportunity structures prevent Black students' optimal academic achievement and may culminate in a cultural denouncement of schooling (p. 183). Researchers (e.g., Nasir, 2004) disagree with some aspects of Fordham and Ogbu's argument; however, the colloquially used term "acting white" speaks to the cultural consequences or antecedents that result from, contribute to, or are prolonged by disparate academic outcomes, such as the high school graduation gap.

These individual, cultural, and societal consequences necessitate an understanding around how and why a high school graduation gap persists in our society, particularly for Black students. Therefore, the dissertation researcher designed this research study to understand and identify those unique variables and interrelationships implicated in the high school graduation gap. Aligned with Ladson-Billings' (2006, 2012) call for a more

strength-based perspective in research and an acknowledgment of the causes (e.g., systemic factors) rather than the symptoms (e.g., dropout risk) related to disparate outcomes, the dissertation researcher will consider both student-level and school factors implicated in the graduation gap.

Graduation Promise: A Rationale

Despite persistent disparity and discouraging statistics, 75% of Black students graduated in 2015. Therefore, most Black students display resilience and persist to graduate from high school. Educators and counselors may learn a great deal from examining what encourages graduation promise, as opposed to dropout risk, for these graduates. Such an emphasis would allow for a more proactive, preventative, and strength-based approach to addressing the high school graduation gap. Ladson-Billings (2007, 2012) endorses a strength-based perspective; however, dropout researchers (e.g., Rumberger & Lim, 2008) have commonly focused on dropout risk.

The dissertation researcher will operationalize dropout risk before outlining the construct of interest: graduation promise. Students experience dropout risk when there are factors within the students' background or environment indicative of a higher probability of school failure (Suh et al., 2007). Common academic markers implicated in Black students' high school dropout risk include suspension, low academic achievement, retention, and poor attendance (Blount, 2012; Burrus & Roberts, 2012; Rumberger & Lim, 2008; Suh et al., 2007). Allensworth (2005) created a dropout indicator using grades, attendance, and credit earned (i.e., retention) and found an 85% accuracy rate in prediction.

Dropout risk academic markers are particularly salient for Black students who face higher suspension rates. During the 2014-2015 school year, Black students in North Carolina received more than three times the number of suspensions as White, Hispanic, or Asian students (NC State Board of Education, 2016). The trends are similar for long-term suspensions. The trends are evident nationally (e.g., Skiba & Losen, 2015) and are alarming given the implications that these discipline citations might have for other academic markers (e.g., attendance or grades) negatively associated with graduation promise. Moreover, Skiba and colleagues (2002) found that subjective bias exists relative to disciplinary decision-making in the classroom. These findings justify Ladson-Billings' (2006) and Milner's (2012) recommendations to consider systemic factors that contribute to educational disparities.

Compared to dropout risk, Black students experience graduation promise when they incur few disciplinary citations, achieve academically, matriculate on time each year, and attend school regularly. Students with higher graduation promise are more likely to persist and graduate from high school and possibly more likely to perform favorably in post-secondary settings. The researcher will explore graduation promise, aligned with a strength-based approach (Ladson-Billings, 2007; Witte et al., 2013, p. 16).

Although "risk" is the term researchers used commonly in dropout literature, it is important to remember that contextual and systemic variables are often complicit in creating these risks. Many students are "at promise" until they encounter "at risk" environments (Witte et al., 2013, p. 16). In *The Silent Epidemic*, a dropout report, Bridgeland, Dilulio, and Morison (2006) noted that many dropouts regretted their

decisions and believed that more support—better teachers, more enrichment opportunities, better communication between parents and schools, greater parental involvement and a more facilitative school structure (e.g., discipline and school climate)—would have facilitated their persistence. Researchers and practitioners must use caution to avoid dismissing students with the label "at-risk." These narratives do not inspire action to address this social problem. Next, the author will briefly discuss protective factors before discussing dropout predictors identified in the literature.

Protective factors. Black students who persist realize the positive consequences that result from obtaining a high school diploma (Butler-Barnes et al., 2013; Murray & Naranjo, 2008). Researchers often refer to these students as "resilient" in the literature. Williams and Portman (2014) defined educational resilience as a student's capacity to recover or achieve in school "despite exposure to personal and environmental adversities" (p. 14). When students are resilient, there are often factors (e.g., protective factors) and processes that encourage "positive adaptation within contexts of risk" (Murray & Naranjo, 2008, p. 146). Protective factors constitute characteristics of individual students or social environments that mitigate the negative impact that environmental or individual risks could have on academic outcomes (Murray & Naranjo, 2008).

Researchers (e.g., Moon & Singh, 2015; Murray & Naranjo, 2008; Williams & Portman, 2014) have identified protective factors that contribute to students' resilience and persistence. Across these qualitative studies, parental structure and support, teacher support, individual factors (e.g., help seeking behaviors, motivation, valuing education),

and achievement oriented peers emerged as important variables. William and Portman (2014) also found that five African American college students retrospectively identified counselors and school-family-community partnerships as important protective factors. School counselors who built authentic relationships; advocated for students, families, and communities; and engaged in community outreach supported Black students' resilience in high school. Although relatively fewer researchers (e.g., Moon & Singh, 2015) have identified protective factors that encourage high school graduation, many researchers (e.g., Burrus & Roberts, 2012; Doll et al., 2013; Lee & Burkham, 2003; Rumberger & Lim, 2008; Suh et al., 2007) have uncovered those factors implicated in dropout risk and more specifically the act of dropping out.

Dropout: Important Factors and Predictors

Students may be pushed, pulled, or fall out of school. Push factors are adverse conditions (e.g., disciplinary policies or student-teacher conflicts) (Campbell, 2015; Doll et al., 2013) internal to the school that lead to consequences and eventual dropout. Pull factors are usually specific to the student or, more broadly, competing demands that undermine school attendance (e.g., employment or pregnancy) (Campbell, 2015). Finally, students fall out when they become disengaged from school. These push, pull, and fall out factors constitute important factors implicated in students' decision to drop out. Despite this simplistic framework, there are several nuanced factors implicated in Black students' decisions to persist or dropout.

There are several risk factor categories: student, demographic, familial, school, and community factors (Witte et al., 2013). Witte and colleagues also noted important

interactions among factors, emphasizing the complexity of high school persistence and conversely dropout. Similarly, Rumberger and Lim (2008) theorized a conceptual model of high school performance delineating individual (i.e. background, attitudes, behaviors, and performance) and contextual factors (i.e., school, family and community) as overarching determinants in students' attainment outcomes. The factors explained below honor this framework.

Student factors. According to Witte and colleagues (2013), student related factors include academic performance (e.g., school retention or special education enrollment), psychosocial variables (e.g., engagement), behavioral variables (e.g., substance use), and circumstantial variables (e.g., pregnancy). Substance use and pregnancy constitute pull factors while school retention and special education enrollment provide examples of push factors. In a longitudinal study with 1470 primarily low-income students, Neild et al. (2008) found that 65% of students who dropped out were retained in ninth grade; comparatively, only 6% of those who graduated in four years were retained.

There is also evidence for the importance of attendance, GPA, and discipline citations in understanding students' decision to dropout (Blount, 2012; Neild et al., 2008; Suh & Suh, 2007). Neild et al. (2008) found that, for every one percent increase in courses failed in ninth grade, the odds of dropping out within four years increased 2.4%. When schools promote academic achievement, enable behavioral engagement as evidenced by school attendance, and enact fair and just disciplinary policies or practices, Black students are more likely to persist and graduate. Researchers have implicated

individual psychosocial variables in the dropout literature (Archambault et al., 2009$_a$; Chavous et al., 2003; Fall & Roberts, 2012; Lessard, Butler-Kisber, Fortin, & Marcotte, 2014; Neild et al., 2008). Engagement and motivation are two important psychosocial variables implicated in students' decision to drop out or persist.

Engagement. Engagement is a behavioral and psychological construct that captures students' general experiences in school around three dimensions: behavioral, affective, and cognitive domains (Archambault et al., 2009$_a$; Neild et al., 2008). The behavioral dimension assesses student conformity to classroom and school rules, student involvement in classroom work or discussions, and students' participation in extracurricular activities. The affective dimension captures student feelings, attitudes, and perceptions toward school, liking school, belongingness, and general enthusiasm. Cognitive engagement reflects students' psychological involvement in learning, including perceptions of competence, willingness to engage, and use of self-regulation strategies.

Researchers have established engagement as an important predictor of high school dropout (e.g., Archambault et al., 2009$_a$; Fall & Roberts, 2012; Neild et al., 2009). School climate influences student engagement; in turn, students' with higher engagement are more likely to graduate (Archambault et al., 2009$_a$). Neild and colleagues (2008) conducted a correlational study and concluded that ninth grade academic engagement was associated with lower dropout probabilities. Race and gender were salient in each of the predictive models, particularly for Black males. Fall and Roberts (2012) demonstrated the complexity of dropout outcomes. The researchers assessed how social context (i.e., teacher/parent support), self-systems (i.e., perception of control and identification with

school), and engagement (i.e., behavioral and academic) are implicated in academic achievement and dropout, using structural equation modeling to test a path analysis. As students' academic and behavioral engagement increased their achievement increased and their likelihood of dropping decreased.

***Motivation*.** In addition to engagement, researchers (e.g., Byrd, 2015; Fan & Wolters, 2014) have emphasized motivation in understanding achievement attainment. According to Fan and Wolters (2014), motivation is a construct with two dimensions: intrinsic value and ability beliefs (i.e., self-efficacy). Intrinsic value constitutes internally inspired rewards (e.g., enjoyment) acquired from engaging in activities of interest. Self-efficacy is a belief in one's ability to produce desired results, to learn, and to perform successfully. Fan and Wolters conducted a longitudinal and correlational study that surveyed 16,194 White, Black, Hispanic, and Asian high school students to examine the predictive power of early high school students' motivation in explaining students' persistence or dropout before twelfth grade. The researchers found that self-reported educational expectations for attainment mediated the relationship between students' ability beliefs and dropout. Moreover, the data supported an indirect relationship between intrinsic value and dropout through educational expectations.

Engagement and motivation are integral within the dropout literature base; however, research specific to African American students emphasizes the importance of additional individual, psychosocial, and cultural variables (e.g., racial identity and self-efficacy) in understanding students' high school persistence (e.g., Chavous et al., 2003;

Nasir & Saxe, 2003, Whiting, 2006; Whiting & Kennedy, 2016). The dissertation researcher will discuss these variables later in the chapter.

***Demographic factors*.** Demographic factors include gender, race, and age. Neild and colleagues (2008) reported that having minority status, a low socioeconomic background, and having a single parent family increase the probability of dropping out. However, Witte et al. (2013) noted that controlling for family background may erase the predictive value of race. Gender is an important variable relative to this topic (Doll et al., 2013; State Board of Education, 2015). In North Carolina, during the 2014-2015 academic year, males constituted 62% of all reported dropouts (State Board of Education, 2016). Black males (i.e., 3.39 dropouts per 100 students) dropped out at higher rates than Black females (1.97 dropouts per 100 students). According to Doll et al. (2013), males are pushed out, more often reporting school disinterest or poor performance. Moreover, African Americans cited more push factors at school. These trends are also evident in the school climate literature (e.g., Lacoe, 2015; Shirley & Cornell, 2015; Voight, Hanson, O'Malley, & Adekanye, 2015). Black students often rate school climate less favorably than their counterparts (Voight et al., 2015). This is important because school climate is predictive relative to academic outcomes, including dropping out (Thapa et al., 2013). The association between demographic factors (e.g., race) and dropout seems a likely indication of the pervasive and amorphous social inequities that exist in our society and penetrate our school walls, disproportionately affecting certain students.

Familial factors. Familial factors include socioeconomic status, parental support or involvement, and parent or guardian education level. Several studies have corroborated

the importance of parental involvement in student success (e.g., Hines et al., 2014) and specifically dropout (e.g., Ricard & Pelletier, 2016). Goldschmidt and Wang (1999) noted that risk factors differ according to students' age or stage of adolescent development. The researchers found that, absent parental involvement, students' odds of dropping out later in high school increased, but not earlier in the students' high school career. This may be due to the legal age when students can make their own decision about high school, which is age 16. Through a discrete time, survival analysis, Kim and colleagues (2015) indicated that teacher-student relationship quality influenced Black high school students' dropout status, but not their parents' education level. Therefore, there are subtle variations in factors that become important, depending upon the context and the subgroup.

School factors. The emphasis on school factors in understanding dropout has increased in recent years (Rumberger, 2011). Goldshmidt and Wang (1999) previously noted the limited emphasis on school factors and its importance in the dropout problem. School factors implicated in students' dropout behaviors include school or class size, school climate, availability of extracurricular activities, cultural relevance, course availability, and teacher-student relationships (Kim et al., 2015; Lee & Burkham, 2003; Witte et al., 2013). School climate captures students' experiences of school life; it "reflects the norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures" (Thapa et al., 2013, p. 358). Researchers have implicated this contextual variable in dropout intervention and prevention (Thapa et al., 2013).

The construct has important implications for African American students because Black students report more negative perceptions of school climate relative to their majority counterparts (Lacoe, 2015; Shirley & Cornel, 2011; Shukla, et al., 2016). Using a multilevel latent class modeling design, Shukla et al. found that students' experiences of school climate are not homogenous. There were more Black students in the negative climate latent class than the more positive climate class, characterized by self-perceptions of disciplinary structure, academic expectations, respect for students, willingness to seek help, academic and cognitive engagement, and relatively lower levels of teasing or general victimization. Similarly, Lacoe found that Black and Hispanic students perceived their school contexts as less safe. In turn, students who perceived their school climate less favorably were more likely to self-report academic markers associated with dropout risk. These findings suggest that the school context is complicit in the high school graduation gap and necessitates actions to ensure that the school climate is conducive for student learning regardless of race or ethnicity.

Community factors. Community factors include environment, peer influence, social discrimination or prejudice, and employment opportunities (Witte et al., 2013). The labor markets can influence job opportunities, which may influence students' choice to remain in or leave school. Job opportunities constitute "pull" factors. According to Doll and colleagues (2013), in 1988, 27.8% of dropouts cited "got a job" and, in 2002, 21.7% of dropouts cited "could not work at same time" as reasons for dropping out (p.8). More males than females cited this reason for dropping out.

Peers may influence Black students' interest in school and academic outcomes (Noguera, 2008), including another students' decision to dropout (Doll et al., 2013). In 1988, 4.5% of sophomores cited "friends dropping out" as their reason for dropping out. Related to community, Butler-Barnes et al. (2013) found that school based racial discrimination impacted academic persistence for 220 socioeconomically diverse African American adolescents. Perceptions of racial discrimination (i.e., push factor) were associated with lower academic persistence. Those students who reported discrimination also had lower assets (e.g., self-efficacy, racial pride, and self-acceptance).

Exploration into the risk factors for dropping out provides important insights into those students who educators and counselors may target for intervention or prevention efforts as well as which strategies might be most effective in working with them. Suh and Suh (2007) found that students with more risk factors were less responsive to intervention efforts and their probability of dropping out increased. The authors' findings elucidate the importance of early intervention before risk factors accumulate. Moreover, Kim et al. (2015) found that Black students in a sample of 5,125 students dropped out at higher rates during ninth and tenth grades than other groups. During the 2013-2014 and 2014-2015 academic years in North Carolina, ninth and tenth grade students dropped out at higher rates than eleventh and twelfth grade students. Therefore, intervention and prevention efforts during the first two years of high school may be particularly useful.

Finally, researchers are expanding their efforts to tailor dropout intervention and prevention to students' specific needs and characteristics because students may dropout for very different reasons. For example, Bowers and Sprott (2012) identified three

subgroups of African American and Hispanic female students who dropped out: jaded, quiet, and involved. Within each of the categories, the researchers described the average student according to their school experiences and important academic variables (e.g., grades, extracurricular involvement, absences, and suspensions). The authors articulated important intervention strategies on that basis of each dropout subgroup. In addition to risk factors, researchers have developed or proposed models to understand high school dropout. Next, the dissertation researcher will provide a summary and critique of the dropout literature reviewed.

Dropout Literature Summary and Critique

Researchers have primarily used quantitative methodologies to understand dropout. In conducting quantitative studies, researchers have identified factors that predict dropout behavior and used a variety of statistical analysis: latent class analysis (e.g., Bowers & Sprout, 2012), cluster analysis (e.g., Chavous et al., 2003), correlation (e.g. Fan & Wolters, 2014; Kim et al., 2015), regressions (e.g., Jia, Konold, & Cornell, 2016), hierarchical linear modeling (e.g., Lee & Burkham, 2003), and structural equation modeling (e.g., Fall & Roberts, 2012; Parr & Bonitz, 2015). The studies have included both longitudinal (e.g., Archambault et al., 2009$_a$; Goldschmidt & Wang, 1999) and cross-sectional sampling (e.g., Butler-Barnes et al., 2013) designs. Relatively fewer researchers have conducted qualitative (e.g., Murray & Naranjo, 2008; William & Portman, 2014) or experimental/quasi-experimental studies (e.g., Somers & Piliawsky, 2004). These studies have culminated in researchers identifying the factors that educators

and other professionals can monitor to prevent or intervene when students have specific risk factors.

However, there is a call for more studies that examine the interrelationships among correlates or factors that influence students' dropout behaviors (Pharris-Ciurej et al., 2012). Moreover, there is a need to consider those variables that capture Black students' unique schooling experiences (e.g., opportunity gaps) and research that is strength based (Ladson-Billings, 2007; Milner, 2012). Thus, the current study aims to fill this gap by creating a model of inter-related factors that may uniquely explain graduation promise for African American students. Next, the dissertation researcher will provide a critique of how researchers used three models to understand Black students' dropout behaviors.

Much of the dropout literature to date uncovers those individual, school, family, and community factors that predict dropout behaviors among students. Fewer researchers have conducted studies to assess the interrelationships; specifically, how individual and contextual factors influence one another to shape secondary outcomes. Pharris-Ciurej and colleagues (2012) purported that too many researchers isolate contextual and individual correlates. Studies that have considered the confluence of variables and their impact on academic outcomes, such as graduation, have proposed or tested statistical models. Researchers need to conduct additional studies like these relative to the African American community. These studies may assist researchers and educational leaders in creating evidence-based practices that can address the high school graduation gap and promote Black students' graduation promise.

With the model of high school performance, Rumberger and Lim (2008**)** highlighted the importance of both individual and contextual factors in understanding students' outcomes. Researchers have proposed several models designed to explain students' decision to persist in school or dropout: the frustration self-esteem model (Finn, 1989), life course models (e.g., Dupéré and colleagues, 2015), SCCT models (e.g., Parr & Bonitz, 2015), school membership and educational engagement models (e.g., Wehlage, 1986**)**, motivational models (e.g., Fall & Roberts, 2012; Vallerand, Fortier, & Guay), and the Theory of Planned Behavior (TPB) (e.g., Davis et al., 2002_a). Life course models are useful when examining persistence and attainment longitudinally (Dupéré et al., 2015). Davis et al. (2002_a) used TPB to understand dropout or persistence in the African American community. Researchers (e.g., Archambault, Janosz, Fallu, & Pagani, 2009_a) have commonly grounded studies in engagement and motivational models to understand students' dropout behaviors and identify preventative or intervention strategies. Thus, the dissertation researcher will explore and critique these models briefly to provide a rationale, need, and purpose for the present study.

Engagement. Researchers have identified engagement as an important variable in the dropout literature (Archambault, Janosz, Fallu, & Pagani, 2009_b; Archambault et al., 2009_a; Cornell, Shukla, & Konold, 2016; Fall & Roberts, 2012; Lamote, Speybroeck, Den Noortgate, & Damme, 2013; Wilkins & Bost, 2015). Fall and Roberts (2012) tested a motivational model of engagement, finding that students' academic and behavioral engagement functioned as a predictor of high school dropout, alongside academic achievement. Engagement mediated the relationship between dropout behavior and

students' perception of control and identification with school. Similarly, Archambault and colleagues (2009_a) found that school withdrawal was more likely among Canadian high school students with low engagement across three dimensions: behavioral, cognitive, and affective. Researchers have established the role of engagement in facilitating positive academic outcomes such as degree completion; however, there is less evidence that demonstrates the importance of this variable for Black students. For instance, the Fall and Roberts sample was predominately White—57%— and the researchers did not disaggregate the data to determine the unique influence that engagement had on Black students' decisions to dropout or persist.

Cornell and colleagues (1995) did find that school engagement predicted staying in school for African American males, but not their female counterparts. While these findings are promising, Fall and Roberts (2012) found that engagement explained approximately 40% of the variance in "dropping out" for a high school sample—12.8% were Black students. Therefore, additional variables might help explain Black students' persistence in high school. Researchers (Chavous et al., 2003; Nasir, 2009; Noguera, 2008; Whiting & Kennedy, 2016) have proposed important variables that honor the unique history and culture of this ethnic group in explaining academic outcomes.

Motivation. Researchers also commonly examined motivational models when studying dropout (e.g., Connell, Spencer, & Aber, 1994; Hardre & Reeve, 2003; Fan & Wolters, 2014; Ricard & Pelletier, 2016). Engagement can be a critical variable in motivation models (e.g., Connell et al., 1994). Connell and colleagues found that self-system processes (e.g., perceived competence or efficacy and perceived relatedness to

self and others) predicted students' engagement. Fan and Wolters (2014) tested a motivational model of expectancy value. The model posits that students' ability beliefs and interest in learning shape their educational expectancies. The researchers concluded that when students have higher beliefs in their abilities they are more likely to have higher educational expectations and graduate. Moreover, when students are interested in learning, they are more likely to have graduation expectations, and therefore, more likely to persist.

The motivational models provide insight into important factors (e.g., perceived competence or self-efficacy) implicated in Black students' decision to persist; however, Fan and Wolter's motivational model among others does not assess the role of the school context in shaping Black students' perceptions of themselves, their actions, and consequential outcomes. Moreover, Connell et al. considered the family context, but discounted the school context in facilitating or hindering positive student outcomes.

Examining and addressing the school context is critical to promoting Black students' graduation promise due to opportunity gaps that exist within our school systems and the "othering" (i.e., cultural and racial ambiguity, categorization and labeling, hierarchical power dynamics, and limited access to resources) that occurs in some schools for students of color (Borrero et al., 2012). Disproportionate disciplinary practices based on race are an example of othering that may occur in schools (Skiba et al., 2002).

Hardre and Reeve (2003) and Ricard and Pelletier (2016) did examine the impact of school context and were more aligned with Pharris-Ciurej's (2012) recommendation to

avoid an "individualistic perspective" where researchers examine individual and familial factors separate from school and community factors (p. 713). These recommendations warrant models that consider the interrelationship among variables, primarily school context and individual variables. Moreover, additional research is necessary to identify those variables unique to the African American community that might address the high school graduation gap and promote those students' graduation promise. Few models exist that examine variables unique to Black students' experience of schooling within the dropout literature base.

Theory of Planned Behavior. Fewer researchers (e.g., Davis et al., 2002_a; Davis, Johnson, Cribbs, & Sauners, 2002_b) have used models to examine or identify those variables that uniquely influence Black students' decisions to persist or dropout at the secondary level. Davis and colleagues used TPB to examine how Black youths' personal beliefs and attitudes influence their decision to stay in school. Davis and colleagues (2002_a) found that intentions to graduate and perceived behavioral control (i.e., self-efficacy) accounted for 25% of the variance in high school graduation. Although these studies are critical to understanding those factors that contribute to Black students persisting in high schools, researchers need to examine models that consider the impact of contextual and cultural factors on Black students' beliefs or attitudes and outcomes.

Scholarly justification exists relative to the importance of school context in understanding Black students' thoughts about themselves and their educational outcomes. Noguera (2003) claimed that Black males' beliefs and perceptions about schooling and academic pursuits contribute to their performance alongside structural and cultural

explanations (e.g. opportunity gaps). Moreover, qualitative researchers (e.g., Borrero et al., 2012; English-Clarke et al., 2012; Kane, 2016; Nasir, 2009; Nasir & Saxe, 2003) have proposed and found that school context may encourage or discourage students of color adoption of promotive academic identities, which has implications for their beliefs or attitudes and their outcomes. Within the dropout literature, those contextual factors that discourage promotive academic identities would constitute push factors. The need for the present study model are three-fold: (1) the high school graduation gap persists despite previous research and practice efforts, (2) opportunity gaps (i.e., inequitable inputs) perpetuate these disparities, but researchers may do more to examine how inequitable contexts impact individual characteristics to influence outcomes, and (3) the outlined models do not address Black students' unique historical and cultural schooling experiences.

The Social Cognitive Career Theory model of high school graduation promise is appropriate to address the present aims. First, Gushue and Whitson (2006) used the model to address other social disparities, such as the gender career gap. Second, Lent et al. (1994) purported that context is an important variable in the choice model. Third, the model allows the dissertation researcher to include socially constructed variables (i.e., racial identity and scholar identity) that researchers (Berry et al., (2011) and others have found capture Black students' unique schooling and cultural experiences. Finally, the theory delineates the interrelationships among contextual (i.e., school climate), person inputs (i.e., scholar identity and racial identity), cognitive (i.e., self-efficacy and outcome

expectations) and causal mechanisms for performance attainment (i.e., graduation promise) variables. A description of the model is below.

SCCT-Based Model of High School Graduation Promise

SCCT (Lent et al., 1994) delineates the interrelationships among key constructs: person inputs, context, self-efficacy, outcome expectations, and causal mechanisms (i.e., interests, goals, actions, and performance attainments). Graduation promise will constitute a performance attainment in the present study. SCCT is a culturally sensitive theory and useful in the conceptualization and intervention of achievement gaps and the opportunity gaps that exacerbate those disparities.

SCCT (Lent et al., 1994) is applicable when conceptualizing persistence gaps. Researchers originally used the theory to explain the formation of career interests. However, there is also a precedent for examining performance and persistence in educational pursuits at the secondary (e.g., Parr & Bonitz, 2015) and post-secondary (Byars-Winston et al., 2010; Lent et al., 2003) levels.

Examining high school persistence is within the scope of this theory because academic persistence often has "causal mechanisms" (i.e., interests, goals, actions) for performance attainments (e.g., high school graduation) like those found in career development. SCCT provides researchers with a framework to conceptualize Black high school students' graduation promise and to develop and assess evidence-based practices that school counselors and other educators may utilize to promote graduation promise and address the high school graduation gap.

Milner (2012) and Ladson-Billings (2004) outlined several factors that necessitate utilizing the term opportunity gap versus achievement gap; SCCT honors many of these scholars' concerns. Milner and Ladson-Billings cautioned against identifying achievement gaps without also considering opportunity gaps (i.e., systemic antecedents) because this emphasis leads researchers to focus on short-term rather than long-term solutions to complex problems (Ladson-Billings, 2006). Furthermore, an emphasis on the achievement gap, alone, does not address the causes of these disparities, may lend to assumptions or stereotypes of mediocrity relative to students of color, insinuates that White students are the norm, and focuses attention on individuals or groups of students rather than the inequitable systems that contribute to disparities (Milner, 2012). Lent et al.'s (1994) emphasis on the importance of contextual factors in understanding performance attainments avoids many of the concerns. Lent et al. proposed that environmentally precipitated forces (e.g., "differential socialization processes and opportunities for skill development") and the internalization of forces (e.g., self-efficacy and outcome expectations) might impede or facilitate career development (p. 105).

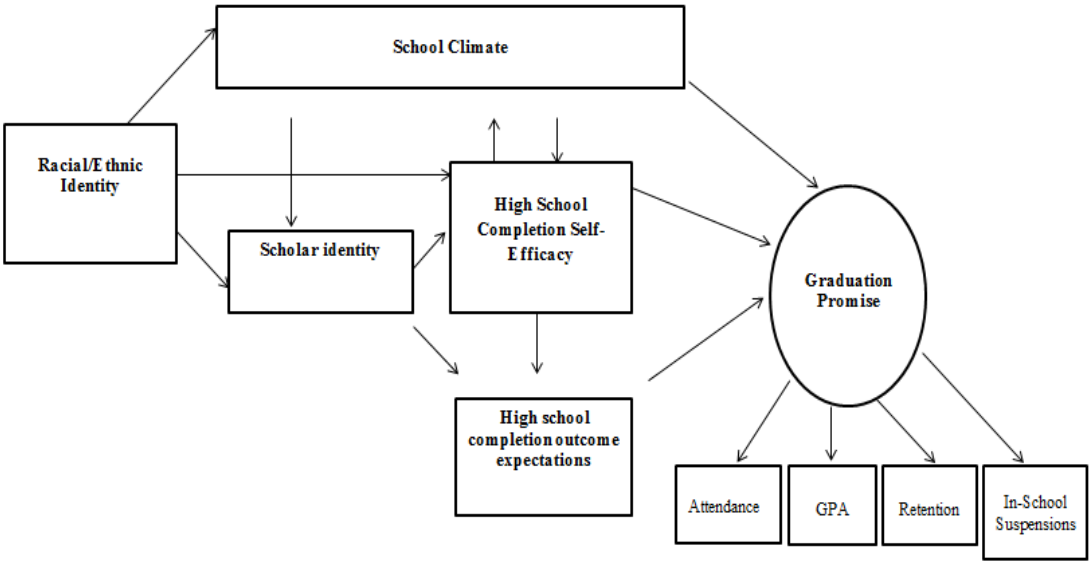

Figure 2. SCCT-based Model of Black High School Students' Graduation Promise. Adapted from Lent et al., 1994—Model of Career Choice.

Researchers and school counselors working from a social justice framework may use SCCT to conceptualize opportunity gaps because the theory does not simply focus on the student or ability, but also focuses on contextual factors that may mediate or moderate the relationships among variables identified as dropout risk indicators.

Model Variables and Empirical Justification

See Figure 2 for a diagram of the SCCT-Based Model of Black High School Students' Graduation Promise. The dissertation researcher designed the model to assess how Black students' perceptions of school climate, relative to their racial identity, impacts their scholar identity adoption, thoughts or beliefs that they can graduate from high school (i.e., self-efficacy), and beliefs about positive consequences associated with high school graduation (i.e., outcome expectations). The model also assesses whether

these variables predict or explain students' graduation promise relative to academic markers identified in the literature. The author grounded the model in SCCT, academic disidentification theory (e.g., Griffin, 2002; Osbourne, 1997), oppositional/resistant representation (Fordham & Ogbu, 1986**),** theoretical propositions of academic identity affordance within the school context (e.g., Borrero et al., 2012; Nasir, 2012), and the racial identity-context congruence framework (Byrd & Chavous, 2011).

The disidentification theory purports that Black students—involuntary minorities—may resist identification with school due to contextual inequities (e.g., tracking or low teacher expectations) and school context-cultural identity incongruence. Similarly, Fordham and Ogbu (1986) theorized that Black students may resist schooling due to perceived and unwanted assimilation into mainstream culture (Mehan, Hubbard, & Villanueva, 1994). Researchers have also argued that Black students' behavioral and attitudinal responses to context are more varied than these theoretical propositions imply.

Black students may form academic identities through a process of "accommodation without assimilation" (Mehan et al., 1994). Mehan et al. (1994) found that Black students in a program characterized by rigorous coursework opportunities for all students and high expectations were more likely to engage in accommodation without assimilation, adopting academic identities while maintaining their ethnic or neighborhood identities. Essentially, "racialized identities of [historically] marginalized students need not be defined in opposition to school success in school settings where school staff expect students to succeed and are given information about college and other supports" (Nasir, 2012, p. 86).

Nasir (2012) and others (e.g., Kane, 2016) proposed that socialization that occurs in the school context impacts students' construction of scholar identities. Specifically, expectations, role availability, social interactions, and contextual norms influence the availability of academic identities. For instance, Kane (2016) found that offering academically-affirming counter-narratives, helping students navigate between their academic and peer selves, and fostering socio-emotional connections between peers and teachers are crucial in promoting Black elementary male students' construction of science identities.

Finally, Byrd and Chavous (2011) purported that racial identity influences youth's academic outcomes to the extent that contextual norms or values support and are congruent to youth's own beliefs and values. The researchers found that when Black students' racial identity (i.e., higher self-reported *private regard*) was congruent with their perception of racial school climate (i.e., higher self-reported *frequency* or *quality of interaction*), the students reported higher intrinsic motivation. Given the extant research, the dissertation researcher will assess this congruence hypothesis relative to the extent that Black high school students are able to adopt a scholar identity, given congruence between their perception of racial school climate and their self-reported racial identity. The researcher hypothesizes that, when Black students' racial identities are congruent with their perception of school climate, they will also self-report a higher mean score on scholar identity. These theories provide the foundation for the SCCT-based model and illuminate sociocultural variables that are unique to Black students' experience of schooling and have implications for achievement and attainment outcomes.

Person-inputs. Person inputs are individual difference variables or "socially conferred or constructed statuses" (Bandura, 1986; Byars-Winston et al., 2010; Lent et al., 1994, p. 105). Racial identity and scholar identity will constitute the person inputs in this study. Both variables are internal to an individual and are shaped and constructed through an individual's exposure to and interaction with various contexts. Socialization shapes racial identity through, childhood experiences, racial interactions, and knowledge-seeking (Sellers, Rowley, Chavous, Shelton, & Smith, 1997). Nasir (2012) claimed that school socialization influences Black students' scholar identity adoption.

Racial identity. Researchers have implicated racial identity in Black students' secondary and post-secondary achievement (Awad, 2007; Cokley & Chapman, 2008; DeFreitas, 2012; Phinney, 1992; Witherspoon et al.1997), high school graduation (Chavous et al., 2003) and persistence at the secondary (Butler-Barnes et al., 2013) and post-secondary (Byars-Winston et al., 2010) level. Worrell and Gardner-Kitt (2006) noted the similarities between racial and ethnic identity. Ethnic identity does not capture the unique racial heritage and history of Black Americans; however, like racial identity, the construct captures the meaning of cultural group membership, attitudes, and sense of belonging. In a study designed to identify the correlates of ethnic identity, Phinney (1992) found that, among a sample of 131 African American high school and college students, students with A's and B's had higher ethnic identity than students with C's and D's. Black students with more ethnically affirming identities had higher self-esteem; this was not true for White students. Findings from Witherspoon and colleagues' (1997) correlational study of 86 African American high school students in an Upward Bound

Program contradicted Phinney's findings. The authors concluded that students with higher racial identity may have higher or lower grades relative to other students. These contradictory findings coincide with the "racial-identity-as-promotive" or "racial-identity-as-risk" debate (Byrd & Chavous, 2011, p. 849).

Researchers have also implicated the racial identity construct in Black high school students' graduation rates (Chavous et al., 2003) and persistence (Butler-Barnes et al., 2013). In a longitudinal analysis of 606 Black students from the Midwest, Chavous and colleagues (2003) found an association between higher scores on racial centrality and private regard and high school completion. Students with the lowest group affiliation and less-affirming private or public thoughts about race were most likely to dropout. Using latent class analysis with a sample of 220 seventh, eighth, and ninth grade African American students from lower socioeconomic backgrounds, Byars-Winston and colleagues found that students in the "higher asset" cluster—characterized by relatively higher racial pride (i.e., private regard), self-acceptance, and self-efficacy— reported the greatest persistence behaviors.

Findings suggest that racial identity may also predict variables implicated in Black students' academic performance and outcomes: self-efficacy (e.g., Chavous et al., 2003; Ellis et al., 2015) and mathematics identity (English-Clarke et al., 2012). Finally, Byrd and Chavous (2011) concluded that racial identity may influence Black students' outcomes through perceptions of the school context (i.e., school climate). Therefore, the dissertation researcher will assess direct paths or associations between racial identity and school climate and self-efficacy in the model.

Scholar identity. Researchers have indicated that scholar identities are made available or unavailable within school contexts (e.g., Nasir, 2009). Several qualitative researchers have examined this proposition (e.g., English-Clarke et al., 2012; Kane, 2016; Nasir, 2009). English-Clarke et al. (2012) found that socialization influences perceptions of capabilities, which impact emergent mathematical racial identities. Kane (2016) concluded that learning contexts transforms who we are and what we can do; it is an experience of identity. The dissertation researcher will assess this theoretical proposition in the model by quantitatively examining whether school climate predicts Black students' scholar identities. Moreover, the researcher will also assess whether there is a direct path between students' scholar identity and self-efficacy. The dissertation researcher has not found any quantitative studies that assess this association.

Self-efficacy. Self-efficacy refers to individuals' subjective beliefs about their ability to engage in or complete a specific task (Bandura, 1986). The variable is most predictive of outcomes when it is domain specific (Bong & Skaalvik, 2003; Usher & Pajeres, 2008). Therefore, the dissertation researcher will use high school completion self-efficacy in the present study. Researchers have indicated that students' perception of self-efficacy is useful in predicting African American students' academic outcomes at the secondary (Fan & Wolters, 2014; Lessard et al., 2014; Zimmerman et al., 1992) and post-secondary level (Defreitas, 2012; Lent et al., 2003), persistence (Butler-Barnes et al., 2013; Lessard et al., 2014), and high school graduation (Chavous et al., 2003).

Elementary, middle, and high school students' with higher self-efficacy often experience positive academic outcomes, regardless of race (Bandura, Barbaranelli,

Caprara, & Pastorelli, 1996; Fan & Wolters, 2014; Lessard et al., 2014; Zimmerman et al., 1992). Zimmerman and colleagues sampled a diverse group—23% were Black— of ninth and tenth grade students in an Eastern city. Using correlations, they concluded that self-efficacy and academic goals contributed more to explaining variance in final grades than did past performance. Research findings also support the association between self-efficacy and high school graduation (Chavous et al., 2003) or persistence (Butler-Barnes et al., 2013; Lessard et al., 2014), specifically for Black students. Lessard and colleagues (2014) identified self-efficacy as a characteristic of resilient Black students who graduated; however, unrealistic expectations and ambiguous future goals categorized dropouts. Butler-Barnes and colleagues found that self-efficacy explained about 16% of the variance in academic persistence behaviors for a cross-sectional sample of 220 socioeconomically diverse African American seventh, eighth, and ninth grade students. They concluded that self-efficacy is a protective factor for African American students. These findings are consistent with the proposition that efficacious students experience favorable academic outcomes.

However, the research in this area is not conclusive. In some instances, self-efficacy may promote high school completion and in other instances, the variable is associated with less favorable outcomes. Chavous and colleagues (2003) examined how students' ethnic group beliefs influence achievement beliefs, behaviors, and outcomes. The researchers used a longitudinal latent cluster analysis to place high school students in subgroups according to their racial identity. Subgroups included alienated, idealized, buffering/defensive, and low connectedness/high affinity. The alienated group,

characterized by the second lowest racial centrality, lowest private regard, and lowest public regard, experienced the highest rates of dropout—with 18.1% not in school at 12th-grade school status. The alienated group also had the lowest self-reported self-efficacy (i.e., 4.29), on average. Comparatively, students in the buffering group—characterized by relatively higher centrality and private regard—only had 5.7% not in school at 12th grade school-status. Students in the buffering group had a higher self-efficacy mean (i.e., 4.51). For students in the buffering group—characterized by high racial centrality, high private regard, and low public regard—higher self-efficacy led to an increase in dropping out behaviors. The researchers concluded that this might be consistent with Steele's (1992) theory of disidentification where students may assert more self-efficacy despite low school engagement or perceived educational barriers. This is a self-protective mechanism. Nevertheless, despite some inconsistent findings, self-efficacy is an important construct when promoting Black high school students' high school persistence and graduation.

Therefore, the researcher will assess the bidirectional relationship between school climate and self-efficacy (e.g., Byars-Winston et al., 2010; Lent et al., 2003), the direct path between self-efficacy and outcome expectations (e.g., Gibbons & Borders, 2010; Lent et al., 2003), and the direct path between self-efficacy and graduation promise (e.g., Butler-Barnes et al., 2013), as depicted in the model.

Outcome expectations. Outcome expectations are an individual's positive or negative beliefs about the consequences that will ensue after a task completion. Relatively less research around the impact of outcome expectations on dropout behaviors

exists. However, research indicates that outcome expectations may be predictive of high school graduation at the secondary level (Davis et al., $2002_{a)}$ and that self-efficacy is predictive of students' outcome expectations (Byars-Winston et al., 2010; Lent et al, 2003). In a longitudinal study designed to assess the effectiveness of TPB in predicting African American students' high school completion, Davis and colleagues (2002_a) found that students' perceptions of high school graduation outcomes (e.g., "Prepare me for college" or "Give me job training") were the best predictor of high school graduation. Although labeled differently, these perceived outcomes approximate Lent and colleagues (1994) operationalization of outcome expectations.

The SCCT research also supports a direct relationship between outcome expectations and self-efficacy for post-secondary students (Byars-Winston et al., 2010; Lent et al., 2003). In a study designed to predict persistence among 328 college students enrolled in an introductory engineering class, Lent and colleagues found that self-efficacy accounted for 58% of the variance in outcome expectations. Moreover, Byars-Winston and colleagues used SCCT to predict persistence among a sample of racially diverse undergraduate students enrolled in science and engineering fields. The researchers found a positive association between self-efficacy and outcome expectations; explaining 5 to 7% of the variance in outcome expectations. Furthermore, outcome expectations had a direct impact on engineering and biology students' stem degree goals.

Based on this evidence, the researcher will use the SCCT-based model to assess a direct path between outcome expectations and graduation promise and between self-

efficacy and outcome expectations, to determine whether these relationships hold true for a Black high school sample.

Contextual factors. Contextual factors (i.e., distal and proximal) are integral to SCCT. Background contextual (i.e., distal) factors hinder or facilitate learning experiences, which are the sources of self-efficacy (Lent et al., 1994; Swanson & Fouad, 2010). Proximal factors are those contextual factors that occur temporally to the performance attainment (e.g., graduation). Findings related to the path whereby context affects performance attainments are mixed and varied. Research findings implicate context as an indirect or direct determinate of attainment outcomes (e.g.; Lent et al., 2003). Therefore, the dissertation researcher specified several paths to and from the context variable in the model.

Below, is a summary of findings that helps to justify the dissertation researchers' inclusion of school context in the SCCT-Based Model of Black High School Students' Graduation Promise. SCCT researchers have found that context may mediate outcomes through its impact on self-efficacy (e.g., Lent et al., 2003). Qualitative researchers have proposed that school context may afford or disavow Black students' adoption of promotive academic identities (Nasir, 2012). Moreover, Byrd and Chavous' (2005) research demonstrated that school context, namely school climate, may mediate the relationship between racial identity and Black students' beliefs or attitudes relative to school and their academic outcomes. School climate, specifically racial school climate, has implications for Black students and is an important variable in this model.

School climate has implications for Black students' achievement and achievement-related variables (e.g., Cornell et al., 2016; Mattison & Aber, 2007). The author will outline three studies below that provide evidence for the importance of school climate. Mattison and Aber surveyed African and European American students to assess the association between school racial climate and high school students' achievement and discipline outcomes. They operationalized racial school climate as perceptions of racial fairness, cultural sensitivity, equitable school policies and practices, and experiences of racism. White and Black students who reported positive perceptions of school climate reported fewer suspensions and higher grades. Black students self-reported more negative perceptions of racial school climate, associated with poorer academic and discipline outcomes.

The researchers only found an interaction effect, whereby a higher perception of "a need for change" in school climate predicted lower grades for White students. Mattison and Aber concluded that racial school climate may matter more for White students' academic outcomes. Study limitations temper this conclusion. Moreover, Mattison and Aber observed less variance in Blacks students' "need for change" responses and nonrandom attrition among this group. Researchers could conduct similar studies to address these limitations. These results support the claim that racial school climate has important implications for Black and White students' academic and discipline outcomes.

Cornell et al. (2016) conducted a quantitative study using multilevel multivariate modeling to assess the impact of authoritative school climate on White, Black, Hispanic,

Asian, and American Indian middle and high school students' academic engagement, grades, and educational expectations. Authoritative school climate addresses two dimensions: disciplinary structure and student support. High student support and disciplinary structure characterize authoritative school climates, whereas low support and high structure characterize authoritarian schools. At the student and school level, student support and disciplinary structure explained 34 and 72% of the variance in engagement, respectively. Students in schools with high support and structure reported higher engagement.

To a lesser degree, school climate was a significant and positive predictor of grades and educational aspirations. The researchers did not disaggregate the data, so specific claims relative to race are not possible. These findings suggest that various dimensions of school climate have implications for students' engagement, grades, educational aspirations, and discipline outcomes. Given the empirically supported associations between engagement and dropout behavior (Archambault, Janosz, Morizont, & Pagani, 2009), there is little surprise that researchers have found that school climate domains predict students' dropout behaviors.

School climate also has implications for students' dropout or graduation behaviors (Jia et al., 2016; Lee & Burkham, 2003; Thapa et al., 2013). Jia et al. (2016) found direct associations between school climate and dropout rates. Jia and colleagues sampled White, Black, and Hispanic students to assess the complex relationship between authoritative school climate (i.e., disciplinary structure, academic expectations, and student support) and dropping out. Student support perceptions moderated the association between

teachers' educational expectations and dropout rates. Schools with high student support and high expectations had significantly higher graduation rates than schools with high student support and low expectations. This pattern was not evident for schools characterized by low support. The findings suggest that high student support and high expectations predict graduation beyond school-level and demographic controls, such as school enrollment and free and reduced lunch percentages. Researchers have found that Black students are more likely to perceive less support and lower expectations from teachers; these are critical findings for this population (Noguera, 2008_b).

Contrastingly, Lee (2010) did not find that Black students' dropout rates differed significantly relative to school climate type: authoritative or authoritarian. Lee surmised that cultural differences in climate perception or the relatively small proportion of Black students who participated in the study may have contributed to this finding. In addition to the associations found between school climate and achievement or attainment variables, researchers have found that students' demographic characteristics or their racial identity (Byrd & Chavous, 2005) have implications for students' school climate perceptions.

Findings generally suggest that students of color perceive school climate (e.g., Koth et al., 2008; Mattison & Aber, 2007; Shukla et al., 2016) and racial school climate (e.g., Borrero et al., 2012; Herring, 2013; Watkins & Aber, 2009) less favorably than other student groups. Koth and colleagues found that students of color perceived their environment as less safe and reported lower levels of academic motivation even after controlling for classroom and school level factors. Based on these findings, the

researchers delineated the need for educators to raise mutual understanding of culturally-linked expectations in schools when attempting to increase positive school climate.

Similarly, Shukla et al. (2016) called for school climate differentiation relative to important cultural factors, like how teachers differentiate instruction relative to students' educational level. Shukla and colleagues surveyed 47,631 high school students from diverse backgrounds, finding that Black students represented the highest proportion of students in the negative climate latent class. Relatively lower discipline structure, academic expectations, respect for students, willingness to seek help, and academic engagement characterized this latent class. While the researchers reported a small effect size, the results corroborate previous research. Perceptions of school climate are not culturally homogenous (Shukla et al., 2016).

Therefore, educators must consider how cultural factors shape Black students' school climate perceptions and needs. Cultural considerations increase in importance when educators and researchers consider that, in addition to more negative perceptions of school climate, Black students also self-report lower grades and higher discipline infractions compared to their majority counterparts (e.g., Lee, 2003; Mattison & Aber, 2007; Shukla et al., 2016). Mattison and Aber found that Black students perceived racial school climate more negatively than White students and reported lower grades and more suspensions or detentions. Compared to their White counterparts, Black students were eight times more likely to report suspension and two times more likely to report receiving detention (p. 9). Similarly, Shukla and colleagues found that Black students represented a relatively small percentage of students who self-reported experiencing a positive school

climate. This is particularly troubling because students in that group also reported significantly higher grades and educational aspirations.

Researchers have not empirically explored the association between Black students' negative perceptions of school climate, relative to their White counterparts' perceptions, and oftentimes worse self-reported academic and discipline outcomes. Research that explores this association might assist in uncovering how school climate affects Black students and has implications for outcomes. Noguera (2003) posited that considering "how environmental and cultural forces influence the way in which Black males come to perceive schooling and how these perceptions influence their behavior and performance in school" is critical (p. 433). Understanding why these associations exists is important in addressing the high school graduation gap. The researcher will assess the interrelationships among the variables in the SCCT-Based Model of Black High School Students' Graduation Promise to explore this association. The model includes direct path between school climate and the following variables, self-efficacy, scholar-identity, and graduation promise.

Graduation promise. Goal mechanisms constitute interests, goals, actions, and performance attainments. Lent et al. (1994) defined performance as "levels of accomplishments" and "behavioral persistence" (p. 98). Given this construal, researchers may use SCCT to understand and conceptualize students' trajectory toward high school graduation through the latent variable, graduation promise. The dissertation researcher will assess graduation promise using important academic markers outlined in the dropout literature: grades, attendance, disciplinary citations, and retentions (Blount, 2012; Burrus

& Roberts, 2012; Rumberger & Lim, 2008; Suh et al., 2007). Moreover, this variable is aligned with Ladson-Billings' (1995) call for a more strength-based perspective when examining educational gaps. Allensworth (2005) created a dropout indicator using grades, attendance, and credit earned (i.e., retention) and found an 85% accuracy rate in prediction. Therefore, the dissertation researcher will use a measurement model with those academic markers to approximate Black students' graduation promise as a latent variable.

Relative to graduation promise academic markers, disparities in suspension rates exist for Black males relative to their female and White counterparts. For instance, in North Carolina, during the 2014-2015 school year Black males received 233 suspensions per 100,000 students, whereas Black females received 69 suspensions per 100,000 students (NC State Board of Education, 2016). For both genders, these rates were higher than any other ethnic group. Given these statistics, the dissertation researcher will also assess any structural differences in the graduation promise measurement model respective to gender membership.

Chapter Summary

In Chapter Two, the dissertation researcher detailed the literature and findings that warrant an exploration relative to the fit of the SCCT-Based Model of Black High School Students' Graduation Promise. In this chapter, the author defined the high school graduation gap in the context of school reform, summarized and critiqued the dropout literature reviewed, and proposed an SCCT-based model to understand and address an educational gap that persists.

The present study addresses several gaps in the dropout literature base. First, this study considers variables that are unique to the cultural experience of African American students within the school system. Second, this study promotes a strength-based perspective, given that the model explores those variables that promote or predict Black students' graduation promise. This frame is aligned with Ladson-Billings' (1995) recommendations and avoids the promotion of deficit-perspectives that further stereotypical or marginalizing narratives regarding students of color. Third, this study uses a quantitative methodology to examine the qualitative proposition that school context may facilitate or hinder Black students' construction of academic or scholar identities. Quantitatively testing the theoretical propositions of academic identity affordance (e.g., Borrero et al., 2012; Nasir, 2012) within the school context allows for an assessment of the generalizability of these qualitative findings. If supported, this proposition would have implications for how researchers, educators, and school counselors address the high school graduation gap. Finally, this study will assess whether the proposed model (Figure 2) can explain the relationship between Black students' relatively negative perceptions of school climate and lower self-reported academic outcomes, honoring the recommendation for examining interrelationship among variables (Pharris-Ciurej et al., 2012).

CHAPTER III

METHODOLOGY

Introduction

Per changes recommended by the dissertation committee, Appendix A includes the Chapter One Addendum that outlines a rationale for the main study dissertation research questions and corresponding methodology outlined below. The author will assess the psychometric properties of the Black Scholar Identity (BSI) scale (Gray, 2016) to test the SCCT-based model proposed and justified above, in future studies.

Research Questions and Hypotheses

In this study, the researcher will examine the psychometric properties of the Black Scholar Identity (BSI) scale (Gray, 2016) for the purposes of eventually testing the SCCT-Based Model of Black High School Students' Graduation Promise proposed in Chapter One and Two. This model diagrams the hypothesized influence of Black students' perception of school climate, relative to their racial identity, on those students' beliefs about themselves (i.e. scholar identity), their capabilities (i.e., high school completion self-efficacy), and consequences for graduating from high school (i.e., high school completion outcome expectations). The model also hypothesizes how those beliefs and perceptions impact academic outcomes associated with graduation promise and conversely dropout risk. The research questions below outline how the

dissertation researcher will assess the structural and external criterion validity and reliability of the BSI scale (Gray).

RQ 1: Is the factor structure of the scholar identity scale consistent with Whiting and Kennedy's (2016) proposed eight-factor structure, based on a CFA?

Hypothesis 1: The CFA will yield an eight-factor structure.

RQ 2: Does the overall scale demonstrate acceptable reliability or internal consistency? Do the subscales demonstrate acceptable reliability or internal consistency?

Hypothesis 2: The factor rho coefficient will be within an acceptable range for the overall scale and each subscale.

RQ3: Does the Black Scholar Identity (BSI) scale have convergent and discriminant validity?

Hypothesis 3: The researcher hypothesizes that the BSI will have convergent validity with the Future Aspirations and Goals (FG) subscale of the Student Engagement Instrument (SEI) (Appleton & Christenson, 2004). Participants' mean scores on BSI will be positively associated with the FG subscale. The researcher hypothesizes that the BSI will have divergent or discriminant validity with the Fear of Negative Evaluation (FNE) subscale of the Social Anxiety Scale for Adolescents (SAS-A) (La Greca & Lopez, 1998). Participants' mean scores on the BSI will have a lower and negative or non-significant correlation with the mean scores on the FNE, relative to the FG subscale.

RQ4: Does the Black Scholar Identity Scale have external criterion validity?

Hypothesis 4: The BSI subscales will be positively associated with GPA and negatively associated with grades (higher scores represent lower grades)?

Participants

Participants will include at least 200 Black, ninth and tenth grade public school students whose parents participate on online Qualtrics panels (https://www.qualtrics.com/). The researcher will select participants based on stratified sampling selection according to socioeconomic status and predetermined eligibility criteria: grade-level, self-identified race, and public-school attendance.

Mvududu and Sink (2013) recommended a variable to participant ratio ranging from 3:1 to 20:1, when conducting a CFA. They identified a 10:1 ratio as ideal. The Black Scholar Identity scale includes 52 items. Aligned with the researchers' recommendations, an N of at least 156, at the lower limit, is necessary.

The dissertation researcher is including information below regarding the online Qualtrics panel. The researcher received this information through email attachment from a Qualtrics research services consultant. Nationally, the online Qualtrics panel is 66% female and 35% male. Across all age groups and household income levels, 17% of the available sample is Black; compared to 65%, White; 2%, Asian; 8%, Hispanic; 5%, Other; and 5%, who declined to answer this question. By comparison, the 2010 Census data provides the following race/ethnicity summary, 72.4% White, 12.6% Black, .9% American Indian an Alaskan Native, 4.8% Asian, .2% Native Hawaiian and Pacific

Islander, and 16.3% Hispanic or Latino. Only 2% of the available Qualtrics sample is 13 to 17 years of age. Most of the sample—79%— self-reported a household income of $74,999 or less. According to 2015 U.S. Census Data, the median income was approximately $54,000 and the mean was $75,558 for that year.

Qualtrics recruits the participants for the online panel through various sources including, website intercept recruitment, member referrals, targeted email lists, gaming sites, customer loyalty web-portals, and social media. Qualtrics "typically" validates members' names, addresses and dates of birth through third-party verification measures. Qualtrics distributes incentives to participants upon survey completion.

Procedures

Before the primary investigator administered the survey, an expert with instrument development experience will review the items and suggest revisions. Please see Appendix B for modifications made to the BSI (Gray, 2016) items after consultation with an instrument development expert. Upon reviewing and revising the items, the dissertation researcher will submit the Institutional Review Board (IRB) application to conduct the dissertation study. Once the researcher receives approval, she will contact Qualtrics to begin survey administration for phase one to assess the construct validity and reliability of the BSI scale (Gray).

Qualtrics will administer the survey to panelist who are parents/guardians of Black high school students in the ninth or tenth grade. Qualtrics estimated that survey administration would take three to five business days to garner 200 participant responses. On average, response rates range from 5 to 12 percent. While the researcher is unable to

verify respondents' veracity, Qualtrics will re-administer the scale if the researcher recognizes statistically confounding response patterns (e.g., violating speed checks).

Parents or guardians will receive and affirm consents (Appendix C) and students will read assents (Appendix D) electronically before beginning the BSI survey (Gray, 2016). Parents will also have access to an electronic copy of BSI example items (Appendix E). Parents who consent to the study and designate that they have a Black ninth or tenth grader who attends public school, will answer seven deidentified demographic questions about their students. Questions pertain to students' school (e.g. school size) and academic (e.g., average grades and GPA) characteristics. Parents will answer a household income question that Qualtrics will use as a quota for stratified sampling. See Appendix F for the complete survey administration.

Once parents have consented and answered the deidentified questions, the students will be able to review the electronic assent form, before beginning the survey. Participants will answer BSI (Gray, 2016), FNE (La Greca & Lopez, 1998) and FG (Appleton & Christenson, 2004) items before answering four demographic questions: race or ethnicity, age, grade-level, and gender. Students will answer two screener questions before beginning the survey: *I am a Black or African American student who was in the ninth or tenth grade during the 2016-2017 school year* and *I will answer these survey questions on my own*. Qualtrics will remove cases that do not satisfy the screener questions. The dissertation researcher will also include quality checks: a speed check (i.e., ½ median time) and two attention checks (i.e. *Please choose "Neutral" for this question).* Qualtrics will remove those participants that do not satisfy the quality check

parameters. Upon completion of the survey, the participants will a receive newsletter/resource page, which will provide information about scholar identity and ways to promote graduation promise (Appendix G).

Once 200 viable participants have completed the questionnaires, the researcher will close the survey for data analysis. The researcher will modify the scale according to findings from the CFA and possible exploratory factor analysis (EFA). Revisions will help ensure that the survey is an appropriate length for the population of interest and that the scale is appropriately valid and reliable.

Data Management and Considerations

The dissertation researcher will receive the data through the UNCG Qualtrics License portal. As participants complete the survey, this information is available online. The researcher will store this data under her UNCG Qualtrics account. Once the researcher has downloaded the data; she will store this de-identified data in UNCG Box. Only those committee members involved in data analysis will have access to the UNCG Box account.

Qualtrics will only charge the researcher for survey data that is usable. Therefore, the researcher will examine the data, assessing for any missing data or erroneous response patterns (e.g., repetitive responses). The researcher will remove those responses from the data pool and request that Qualtrics re-open survey administration, if necessary.

Instrumentation

The participants will complete one scale (i.e., BSI; Gray, 2016), two subscales (i.e., FG; Appleton & Christenson, 2004 and FNE; La Greca & Lopez, 1998), and one

demographic questionnaire. Minor's parents/guardians will also answer a short questionnaire regarding their child (e.g., school grades, GPA, and course enrollment) and their child's school (e.g., school size and student demographics). The demographic questionnaire will assess the students' age, school grade, gender, and racial/ethnic group. See Appendix F for student and parent surveys. The researcher received permission to use the SEI (Appleton & Christenson, 2004) and SAS-A (La Greca & Lopez, 1998) for the purposes of conducting the dissertation study (See Appendix H).

The dissertation researcher will include validity and quality checks throughout the scale to ensure the integrity of the results. The author included two inattentive checks (i.e., *Please choose "Neutral" neutral for this question*) on the survey. The first inattentive check will occur after item 10 and the second will occur after item 52 of the BSI scale (Gray, 2016). The dissertation researcher will also include screeners (e.g., *My child was a ninth or tenth grade public school student during the 2016-2017 school year and under the age of 18*) and a quota item (i.e., *What is your household income*) to ensure that the participant pool is diverse and control for socioeconomic status which researchers (e.g., Witte et al., 2013) have identified as predictive of achievement and attainment outcomes. The dissertation researcher will also use a speeding check (i.e., 1/3 of the median time) to ensure that participants are answering items thoughtfully. When respondents do not satisfy the quota, validity, and quality checks, Qualtrics will immediately close their survey.

Black Scholar Identity Scale

The Black Scholar Identity (BSI) scale (Gray, 2016) assesses Black students' view of themselves "as academicians, as studious, as competent and capable and as intelligent or talented in school settings" (Whiting, 2006, p. 48). Scholar identity comprises Black students' beliefs or attitudes, thoughts, actions and feelings. The 52-item scale measures eight of the nine factors Whiting and Kennedy (2016) proposed: *self-efficacy, future orientation, willingness to make sacrifices, internal locus of control, self-awareness, achievement>affiliation, academic self-confidence, race consciousness*, and *masculinity/femininity*. The author will not include the *masculinity/femininity* factor due to expert feedback regarding the gender binary assumptions necessary to assess this subscale. The scale includes one reverse scored item (i.e., I have a hard time taking personal responsibility for my school performance). See Table 1 for abbreviated definitions of each factor and an example item. The dissertation researcher will average items across the scale to create a composite score for scholar identity. Students with higher average scores on the scale have a higher scholar identity.

The scale assesses Black students' beliefs/attitudes, actions, emotions and thoughts relative to scholar identity using a 5-point Likert scale from 1: *Strongly Disagree* to 5: *Strongly Agree*. The prompt for the BSI reads, "*The statements below include beliefs, actions, thoughts, and feelings. For each of the statements that follow, indicate how much you agree or disagree with the statement based on your own beliefs, actions, thoughts, and feelings. Please, respond as honestly as possible."*

Table 1

Black Scholar Identity Factor Definitions and Example Item

Factor	Definition	Example Item
Self-Efficacy	Belief in ability to accomplish a given task	"I am confident in my ability to be a skilled student- a scholar."
Future Orientation	Aspirations and goals related to education	"I think about how my current decisions will influence my future academic achievements."
Willing to Make Sacrifices	Sacrifices are necessary to reach academic goals	"I am willing to make sacrifices to reach my academic goals."
Internal Locus of Control	Personal responsibility for academic results	"I take responsibility for the areas of my school work where I have control."
Self-Awareness	Ability to appraise view of self and others' view of self	"I am aware of my academic strengths and weaknesses."
Achievement>Affiliation	Achievement motivated, school takes precedent over popularity or friendships	"I put school work first, even before my social life."
Academic Self Confidence	Comfort and sense of power in school settings	"I am confident in academic settings."
Race Consciousness	Awareness of historical and social realities of being Black in our society. Take pride in being Black	"I can be myself as a Black person and also be a scholar-skilled student."
Masculine/Feminine*	Perception that one can be both masculine/feminine and a scholar	"Being a scholar does not mean that I am less of a man or woman."

Note. *=This subscale was removed based on expert feedback from the review panel.

Future Goals and Aspirations (FG) Subscale

Future Goals and Aspirations (FG) is an 8-item subscale of the Student Engagement Instrument (SEI) (Appleton & Christenson, 2004). Engagement is "energy in action" and "the connection between the person and activity" (p.428**).** Researchers have conceptualized engagement as a multidimensional construct with cognitive, affective, academic, and behavioral aspects. The SEI approximates students' affective or psychological and cognitive dimensions of engagement. There are five subscales—Teacher-Student Relationships (TSR), Control and Relevance of School Work (CRSW), Family Support for Learning (PSL), Future Goals and Aspirations (FGA), and Peer Support for Learning (PSL). Researchers have used the scale with Black high school populations (e.g., Reschly et al. 2014).

The FG subscale used in the present study and the Control and Relevance of School Work (CRSW) approximate cognitive engagement, according to Appleton's model. The FG subscale measures students' future goals and aspirations in education. Respondents use a 5-point Likert-scale (i.e., 1: *Strongly Disagree* to 5: *Strongly Agree*) to identify how much they agree with an item. Higher scores on the subscale indicate higher future goals or aspirations; this is also true for the full scale. An example item of the FG subscale is, *my education will create many future opportunities for me.*

The SEI has construct validity and appropriate reliability. Appleton and Christenson constructed the scale after reviewing the literature and the Check & Connect intervention model (see Christenson et al., 2008). Exploratory and confirmatory factor analyses findings confirm the five-factor measurement model, indicating structural

validity (Appleton, Christenson, Kim, & Reschly, 2006, $\chi^2\ (485) = 2576.336, p < .001, CFI = .967, TLI = .964, RMSEA = .067$; Betts, Appleton, Reschly, & Christenson, 2010, $\chi^2\ (373) = 1{,}603, p < .001, CFI = .96,\ RMSEA = .04\ RMSEA < .05\ p = 1.00$; Reschly, Betts, & Appleton, 2014, $\chi^2\ (476) = 761.78, p < .01, CFI = .90, TLI = .89, RMSEA = .05$). Despite promising findings, researchers have observed correlated error variances between items from the FG, CRSW, and TSR subscales and one item with complex structure (Betts et al., 2010; Reschly et al., 2014). The correlated error variances might indicate the existence of unanalyzed factors that explain the unexplained associations between the items. Reliability estimates are appropriate, ranging from .70 - .88 across multiple studies (Reschly et al., 2014). Moreover, Betts et al. (2010) found measurement invariance across grades 6 to 12 among a predominately White sample in South Carolina and Minnesota; the sample was 9 percent Black ($\chi^2\ (3{,}778) = 7{,}026.03, p < .001, BIC = 129{,}291, CFI = .90\ NCS = 1.86, RMSEA = .05$).

The scale and subscales have predictive, convergent/discriminant, concurrent, and external criterion validity (Lovelace et al., 2014; Reschly et al., 2014; Reschly, Huebner, Appleton, & Antaramian, 2008). The SEI is negatively associated with impeding and maladaptive dimensions of the Motivation-Engagement Scale (MES) (Reschly et al, 2014). The scale has a positive correlation with MES factors measuring cognitive and behavioral engagement. Reschly et al. (2014) found positive correlations between at least one of the SEI subscales and all behavioral variables—homework completion, grades, office referrals, suspensions, and fights— measured among a predominately Black sample in the rural Southeastern United States. The FG subscale was the only factor

significantly associated with all five variables, including grades. As students' future goals and aspirations relative to school increased, their grades also increased (r = - .27, p < .05), indicating a small effect size (Sink & Stroh, 2006).

Lovelace et al. (2014) found evidence of concurrent and predictive validity, among a diverse sample of middle school and ninth grade students. Students with higher reading and math test scores reported higher PSL and FG; this finding was clinically significant. Relative to concurrent validity, students with a speech language impairment—found to have lower dropout risk than those diagnosed with an emotional behavioral disorder— self-reported higher TSR, PSL, and CRSW. This finding was educationally significant. Scores on the SEI also predict high school completion and dropout; the odds ratio for the effect of each SEI subscale on on-time graduation and dropout were significant at the p < .001 level (p. 517). The researchers found the strongest association among those outcome variables and FG, the subscale used in the present study. Relative to criterion validity, Reschly et al., 2008 found that positive emotions at school were associated with higher self-reported student engagement (future goals and aspirations, r= .37 p<.01).

Fear of Negative Evaluation (FNE) Subscale

Fear of Negative Evaluation (FNE) is an 8-item subscale of the 22-item (4 filler items) Social Anxiety Scale for Adolescents (SAS-A) (La Greca & Lopez, 1998). La Greca and Lopez developed the scale through a modification of the Social Anxiety Scale for Children—Revised (SASC-R). La Greca and Lopez grounded the SAS-A in a social anxiety model that includes social evaluative anxiety, social avoidance, and distress

components. A factor analysis confirmed the hypothesized structure of the scale. In addition to the FNE subscale, the SAS-A has two additional subscales: Social Avoidance and Distress—New (SAD-New) and Social Avoidance and Distress—General (SAD-G).

The FNE subscale assesses adolescents' "fears, concerns, or worries regarding negative evaluation from peers" (La Greca & Lopez, 1998, p. 86). Participants respond on a 5-point Likert scale according to how much an item is "true for you" (i.e., 1: *Not at All* to 5: *All the Time*). Researchers or practitioners acquire scores by adding items across each subscale. FNE subscale scores range from eight to forty. Higher scores indicate higher social anxiety and specifically fear or worry relative to negative peer evaluation. An example item of the subscale is, *I worry about what other kids think of me* (La Greca & Lopez).

Research findings support the validity and reliability of the SAS-A and specifically, the FNE subscale (Inderbitzen-Nolan & Walters, 2000; Ingles, La Greca, Marzo, Garcia-Lopez, & Garcia-Fernandez, 2010; La Greca & Lopez, 1998; Myers, Stein, & Aarons, 2002). Moreover, studies (e.g., Erath, Flanagan & Bierman, 2007; La Greca & Harrison, 2005; Storch & Masia-Warner, 2004; Storch, Masia-Warner, Crisp, & Klein, 2005) using the scale support its usefulness in understanding various constructs (e.g., peer acceptance, peer victimization). Reliability estimates are appropriate across studies. SAS-A internal consistencies range from .76 to .93 and FNE reliabilities range from .89 to .92 across the studies. These internal-consistency estimates may not generalize to the sample in the present study, because the studies included relatively few participants who self-identified as Black or African American.

La Greca and Lopez confirmed the 3-factor structure of the scale using exploratory (i.e., principal-axis factor analysis with varimax rotation) and confirmatory factor analyses ($\chi^2\ (132) = 34104, p < .01, GFI$ .91, average standardized residual = .062. The SAS-A factors explained 60 percent of the variance in the data among a predominately White sample of 250 high school students—31.6% Hispanic and 15.2% African American. However, one FNE item (i.e. *I worry abou*t being teased.) had a cross loading on a second factor. Indebitzen and Walters (2000) also confirmed the three-factor structure of the SAS-A scale ($\chi^2\ (132) = 1551.83, p < .001, CFI = .94\ GFI = .94$) and confirmed the distinctiveness of each factor using interscale correlations. They conducted a CFA with a sample of junior-high (i.e., Grade 6, 7, and 8) and senior high (i.e., Grades 9 and 11) students. The sample was predominately Caucasian (4.2% African American) and participants' parents/guardians were predominately white-collar professionals. Ingles et al. (2010) confirmed the three-factor, structure with correlated factors of the SAS-A scale among a Latino high school sample, confirming measurement invariance across gender and age. Myers et al. (2002) found that exploratory and confirmatory factor analyses findings (i.e., $\chi^2\ (132) = 1551.83, p < .001, CFI =$ .94 $GFI = .94$) supported the original 3-factor structure; however, the EFA retained fewer items among a predominately-White sample (1% Black) of 728 high school students in San-Diego, California. Myers et al. only retained six items from the original 8-item FNE scale. Moreover, the EFA retained different items than those retained on the original SAD-N and SAD-G subscales (See La Greca & Lopez, 1998). For instance, the item, I *am quiet when I'm with a group of people* originally loaded on the SAD-N factor;

however, loaded on the SAD-G/GSSF in the Myers et al. study. The FNE subscale accounted for 47% of the variance in SAS-A scores compared to the SAD-N/NSSF subscale (i.e., 11%) and the SAD-G/GSSF subscale (i.e., 9%) (Myers et al.). These results justify the sole use of this subscale for the present study.

Researchers have confirmed the convergent, divergent, and criterion validity of the SAS-A (Inderbitzen & Walters, 2000; La Greca & Lopez, 1998; Myers e al., 2002). Relative to convergent and divergent validity, Inderbitzen-Nolan and Walters found that the SAS-A scores were positively correlated with the Revised Children's Manifest Anxiety Scale (RCMAS) (r =.58, p <.001) and the Children's Depression Inventory (CDI) (r =.36, p <.001), to a lesser extent. Importantly, the FNE had the strongest association with the RCMAS. Myers et al. (2002) found significant differences in SAS-A scores relative to the number of anxiety symptoms participants endorsed. The researchers observed higher SAS-A scores when participants endorsed more symptoms of anxiety. These findings were consistent for the original and revised SAS-A. Moreover, the scale and subscales were positively associated with the Negative Emotionality Scale (NES), which measures the tendency to experience negative affect. Relative to criterion validity, La Greca and Lopez conducted Pearson correlations and hierarchical regressions to assess the associations between social anxiety and social functioning: self-perception, social support, and friendship. They found that adolescents with higher self-reported anxiety felt less accepted and supported by their peers and female participants with higher SAS-A scores reported having fewer friends.

Grade Point Average and Average Grades

The dissertation researcher will ask parents or guardians to answer seven questions relative to their child's school environment and achievement using multiple choice items. Relative to grades, the dissertation researcher will ask parents, *On average, your child's grades are.* Response options will include, A's (90-100), B's (80-89), C's (70-79), D's (60-69), and F's (Below 60). The average grades variable is reverse scored, with higher values indicating lower grades. Relative to GPA, parents will respond to an open-ended question: *If you know your child's approximate Grade Point Average (GPA),* please type it below. *GPAs normally rage from 0 to 4. GPAs can be as high as 5.0 if your child is enrolled in classes (e.g., AP) where grades are weighted differently. Please leave this item blank if you are unsure.*

Data Analysis

Prior to factor analyses and bivariate correlation analysis; the dissertation researcher will conduct data screening by assessing for multivariate normality, univariate normality, data outliers, missing data, and item properties. Maximum likelihood estimation method of CFA assumes multivariate normality. Nonnormality could result in Type I error due to low standard error estimates (Kline, 2011). Moreover, covariance matrices can be sensitive to outliers. The author will calculate descriptive statistics for each item: means, standard deviations, skew, and kurtosis. Skew and kurtosis are indicators of univariate and multivariate normality.

The researcher will use SAS to conduct data screening. Univariate normality is assessible using, skew, kurtosis, P-P plots, and Shapiro-Wilk *W* assessments. In SAS,

variables with normal distributions have skewness and kurtosis of "0." Typically, skewness and kurtosis observations between -2 and +2 are acceptable respective to normality (George & Mallery, 2010). Data that closely approximates a linear pattern in a P-P or Q-Q plot is a second indicator of univariate normality. P-P and Q-Q plots are useful when assessing for outliers. Univariate outliers can be an indication that an item has an extreme value (Kline, 2011). When an observation is more than three standard deviations beyond the mean, it is potentially an outlier or extreme. The Shapiro-Wilk is a statistical test for normality (Shapiro & Wilk, 1965). The test statistic *W* is the square of the Pearson correlation coefficient between the sample statistics and the population statistics when the population is normally distributed (Henderson, 2006). A *W* close to 1.0 suggests univariate normality, while a *W* below 1.0 suggests non-normality. When the test statistic is significant, the univariate normality null hypothesis is rejected.

Item-total statistics, including missing data statistics, are also useful when assessing the quality of each item (Hathcoat, Sanders, & Gregg, 2016). Missing values that do not exceed 5% on a given variable or item are acceptable when arbitrary (e.g., missing at random (MAR) or missing completely at random (MCAR)) (Kline, 2011). The researcher will use a dummy variable to assess the frequency and percentage of missing data. The researcher will also conduct cross-tabs, chi-square tests, and t-tests to assess for significant differences between participants who answered a given item and those who declined. The researcher will calculate inter-item correlations and corrected item-total correlations using SAS. The corrected item-total correlation is the association (-1, +1) between each item and the total score after removing the item from the total. Values

below .3 may suggest a problematic item and may constitute grounds for removal (Hathcoat et al., 2016). Moreover, the dissertation researcher will determine grounds for removal based on any projected change in subscale Cronbach's alpha coefficients and the significance ($p<.01$) of inter-item correlations with other items in the subscale. The dissertation researcher will remove items that when deleted lead to an increase in subscale Cronbach's alpha coefficient and insignificantly correlated with other subscale items.

The author will use D_i^2 or the Mahalanobis distance (D) test and Q-Q plot to assess multivariate normality and identify outliers (Mahalanobis, 1936). Mahalanobis distance is an indicator of the distance in standard deviation units between a set of scores for an individual case and the sample means for all variables, while correcting for intercorrelations (Kline, 2011). If the largest D_i^2 statistic exceeds the chi-square critical value where degrees of freedom equal the number of variables, the multivariate normality assumption is unsupported. The dissertation researcher will use the multivariate Q-Q plot of u_i and v_i to assess for any outliers and extreme values (Rencher, 2002). Multivariate outliers can be an indication of extreme scores on two or more variables or that the pattern of scores for one case differs from the norm in the sample (Kline, 2011). The dissertation researcher will analyze and potentially remove items or cases with unacceptable statistics from the BSI Scale (Gray, 2016). The researcher will use these statistics to clean the data before conducting analyses to answer the research questions. If the normality assumption does not hold the researcher will transform the data using a method recommended by Kline (2011).

The researcher will use CFA to test Whiting's theorized structure of scholar identity. The researcher will use Lisrel 9.2 to conduct a CFA that will assess whether the indicators or items load on their corresponding factors with standardized path loadings that are greater than or equal to .7 and significant. The researcher will also assess model fit using appropriate indices: maximum likelihood chi-square, Root Mean Square Error of Approximation (RMSEA), Confidence Interval for RMSEA, the Comparative Fit Index (CFI) and the Root Mean Square Residual (RMR). A non-significant maximum likelihood chi-square suggests that there is model fit. The chi-square test is sensitive to sample size (Bollen, 1989), so the researcher will also consider other fit indices. A RMSEA of .05 to .08, a RMSEA confidence interval where the upward limit is <.1, a CFI that is .9 or higher (Bentler, 1990; Hu & Bentler, 1998; in Appleton et al., 2006; Jackson, Gillaspy, & Purc-Stephenson, 2009) and a SRMR close to zero (Kline, 2011) are ideal for model fit.

Aligned with Kline's (2011) recommendations and Chapter Three procedures, the researcher will assess the fit of a single factor model first before assessing the eight-factor model. The researcher will use a chi-square difference test (i.e.,χ_D^2) to compare and determine the most appropriate model. If the single and eight-factor model indices are not suggestive of model fit, the researcher will inspect the modification indexes and correlation of item residuals to determine any necessary re-specifications. If the suggested re-specifications are not interpretable using theory, the researcher will conduct an EFA.

If the data does not fit the eight-factor model and the model is not interpretable with re-specifications, the researcher will conduct an EFA. EFA is appropriate when the research goal is to uncover a parsimonious representation of the relationships among indicators (Fabrigar, Wegener, MacCallum, & Strahan, 1999). The dissertation researcher will test assumptions necessary to conduct an EFA: sufficient items per factor, sufficient correlation among scale items, and multicollinearity (Leech, Barrett, & Morgan, 2015). Multicollinearity occurs when there is excessive correlation among items or factors. The dissertation researcher will use SPSS to test the assumptions above using Kaiser-Meyer-Olkin Measure of Sampling Adequacy, Bartlett's Test of Sphericity, and the correlation matrix determinant.

The researcher will use SAS to conduct an iterated principal factor method with oblique rotation with the oblimin method. Oblique rotation is useful with correlated factors (Matsunaga, 2010). The researcher hypothesizes correlated BSI factors. The iterated principal factor method is less sensitive to Heywood cases (i.e., when the variance explained by the common factor is one or greater than one) and does not require multivariate normality. Fabrigar et al. cited disadvantages when using this method—arbitrary mechanical rules (e.g., Kaiser Eigenvalue rule) and a less formal statistical foundation than maximum likelihood. However, Fabrigar does recommend the scree plot test, commonly used in the iterated principal factor method.

The researcher will use the scree plot (Fabrigar et al., 1999), 80-85% variance explained rule, and the Kaiser correlation matrix eigenvalues greater than "1" rule (Gorsuch, 1983) to determine the number of factors. The dissertation researcher will

retain items with factor loadings greater than .4 and determine if the factors retained are interpret-able using the literature. The dissertation researcher will use Lisrel to assess reliability of the factors using the factor rho coefficient (i.e., $\hat{\rho}_{x_i x_i} = \frac{(\sum \hat{\lambda}_i)^2 \hat{\phi}}{(\sum \hat{\lambda}_i)^2 \hat{\phi} + \sum \hat{\theta}_{ii}}$). The equation estimates the ratio of explained variance over total variance according to CFA parameters: unstandardized indicator factor loadings, factor variance, and unstandardized indicator error variances (Kline, 2011). The rho coefficient is a more accurate estimate of reliability than Cronbach's alpha. Reliability assessments of at least .7 are generally acceptable (Vogt & Johnson, 1993).

Finally, the researcher will use SPSS to assess convergent, discriminant, and external criterion validity. The researcher will determine the strength and significance of the bivariate correlation between the BSI scale (Gray, 2016) and the FG subscale of the SEI (Appleton & Christenson, 2004) and the FNE subscale of the SAS-A scale (La Greca & Lopez, 1998), using SPSS. The researcher will also assess the bivariate correlation between the BSI subscales and grades and GPA. Effect sizes will be assessed for associations among all variables by reporting "r," with the following interpretation,$|.1|, small$; $|.3|, medium$; and $|.5|, large$ (Cohen, 1992; Sink & Stroh, 2006).

Pilot Study

Purpose

The purpose of this pilot study was to complete three of the six-step test construction process (Netemeyer, Bearden, & Sharma, 2003). Those four steps included,

literature review, *item creation*, and *face or content validity assessment*. The dissertation researcher will not conduct a quantitative pilot study before conducting the main study, per Netemeyer et al.'s recommendation. The final two steps include *item revision* for grammar, clarity, and *reliability and validity analyses*. The dissertation researcher will consult with an instrument development expert after conducting the pilot study to complete final item revision and will complete *reliability and* validity *analyses* during the main study. As proposed in Lowery, Borders, & Ackerman (2016) the researcher will meet with a consultant with instrument development experience to assess the statistical appropriateness (e.g., response bias) of the items.

In step one, *literature review*, the researcher alongside her dissertation committee, identified a hypothesized theoretical model (i.e., SIM, Whiting, 2006; Whiting & Kennedy, 2016) to create the BSI scale (Gray, 2016). The researcher determined that Whiting's Scholar Identity Model (SIM) (Whiting, 2006; Whiting & Kennedy, 2016) would be most appropriate because the model is grounded in Bandura's Social Cognitive Theory, identity development, and a strength-based perspective. Moreover, Whiting and Kennedy (2016) applied the model through practice during a summer institute geared toward Black males. Whiting proposed that scholar identity is a construct with nine factors: *self-efficacy*, *future orientation*, *internal locus of control*, *willing to make sacrifices*, s*elf-awareness*, *achievement > affiliation*, and *academic self-confidence*, *race consciousness*, and *masculinity*. The dissertation researcher will not assess *masculinity/femininity* in this study due to feedback from one expert who noted the gender binary assumption inherent in the subscale items.

In step two, *item construction*, the researcher and her dissertation committee generated an initial item list (n=59) based on Whiting and Kennedy's (2016) operationalization of each factor in the SIM. The dissertation committee reviewed the items. The dissertation researcher worded the items both positively and negatively and elected to use two different Likert scale ratings: a four-point Likert scale without a neutral response (i.e., *strongly disagree* to *strongly agree*) to score items that assessed students' thoughts or beliefs and a four-point Likert scale (i.e., never to always) to score items to assess students' feelings and actions. The items went through various revisions until the dissertation researcher's advisors approved the scale for face and content validity assessment.

In step three, *face and content validity assessment*, the researcher conducted a focus group with young students and an expert review panel with faculty to determine the appropriateness and face or content validity of the BSI scale (Gray, 2016) for a sample of African American students in ninth and tenth grade. The primary investigator paralleled Scottham et al.'s (2008) focus group protocol.

Research Questions

The primary investigator explored three research questions in the pilot study:

RQ 1: Does the scholar identity scale have face and content validity among experts who have conducted research with or regarding African American high school students?

RQ 2: How do high school students who are current or former participants in Boys & Girls Clubs of Winston-Salem understand what scholars feel, think, do and believe?

RQ 3: Does the scholar identity scale have face and content validity among Black students in high school who are current or former participants in Boys & Girls Clubs of Winston-Salem?

Methods and Procedures

IRB approval was not necessary to conduct the focus group and expert review panel. See Appendix I for an email from Melissa Beck, Assistant Director of the Office of Research Integrity, outlining that IRB approval is not required for the panel and focus group.

The researcher asked experts and students to review the scale during two separate phases of the pilot study. First, the researcher emailed at least three African American researchers who have conducted research with or regarding African American students to recruit their participation (Appendix J). Once participants agreed to assess the scale, they were sent instructions: an excel spreadsheet and a factor matrix (Lowery et al., 2016). Experts determined which items corresponded with each of the factors, assessed whether the identified factors captured the construct, assessed whether any of the items were redundant and assessed the appropriateness and clarity of the items for a Black ninth and tenth grade sample (See Appendix K).

The respondents rated appropriateness and clarity on a scale from 1, Not *at All Appropriate, Not at All Clear to* 4: Very Appropriate, Very Clear. Items with average

appropriateness or clarity below 2.5 were removed from the scale or modified. Initially, the researcher planned to exclude those items from the scale that expert reviewers placed in the appropriate factor matrix cell. However, due to limited agreement among the experts, the researcher decided to postpone making decisions about inclusion or exclusion based on factor analyses findings. The principal investigator will consider adding additional items to the scale based on expert and focus group participants' recommendations.

Next, the researcher recruited ninth and tenth grade participants for the focus group through Boy & Girls Clubs. This focus group did not qualify as human subject's research because the principal investigator did not request identifying information and the focus group did not qualify as human subjects' research. The dissertation researcher contacted the executive director of the Boys & Girls Clubs, sending the BSI scale (Gray, 2016), focus group protocol, and parental permission form. Upon executive director approval, the researcher spoke with a unit director of a local Boys & Girls Clubs. The unit director recruited participants for the study based on the researchers' communicated criteria and provided the primary investigator with a list of parent emails. The researcher electronically distributed the parent permission forms (See Appendix L), overview of the study, and recruitment emails (See Appendix M) to the all six parents who communicated interest in the study. There was a 100% response rate; all the parents granted their student permission to participate in the study.

The study incentive included pizza and a $20 VISA gift card, which the researcher administered upon concluding the focus group. After receiving

parental/guardian approval, the principal investigator conducted a 90-minute focus group to have students define scholar in their own words, articulate the actions, thoughts or beliefs, and feelings of Black students they would identify as a scholar, and assess content or face validity of the scale based on this understanding. See Appendix N for focus group protocol.

Participants

Participants included three content experts and six Black male and female high school students who were current or former members of the Boys & Girls Clubs. The content experts included one Black male and one Black female Counselor Educator and one Black male professor in Curriculum Instruction and Special Education. All of the experts had experience conducting research with or around Black students' secondary experiences.

There were six focus group participants. Approximately 67% (4) of the participants were female. All self-identified as either Black or African American. There were two ninth grade, two tenth grade, and two eleventh grade participants. They ranged in age from 14 to 17, with a mean age of 15.17 (SD = 1.17). All attended public schools; one of the students attended early college.

R**esults**

Research question one. Does the scholar identity scale have face and content validity among experts who have conducted research with or regarding African American high school students?

Three experts agreed to participate in the expert review panel. All three participants completed the item table (Appendix K*)*. Only two participants completed the factor matrix (Appendix K*)*. After two reminder emails, the researcher terminated the data collection phase and moved to data analysis. Given the operationalization of scholar identity, the researcher wanted to assess the appropriateness, clarity, factor-item agreement, and breadth of the initial items list. The researcher designed the scholar identity scale to approximate Black students' beliefs or thoughts, actions and feelings. Therefore, the researcher asked the experts to designate whether the item assessed an action, thought, feeling, or belief. In accordance with the operationalization of the construct, the scale assesses all four.

The researcher calculated the mean on appropriateness and clarity for each item. Any items with ratings below 2.5 for appropriateness and clarity were examined and modified as needed. After averaging, only one item (i.e., "I understand the importance of adapting to environments while remaining true to myself whether people look like me or are different from me) fell below the 2.5 threshold. The researcher removed this item from the survey. The experts advised approximately 20 item modifications based on wording and validity concerns. The experts advised that the researcher remove approximately 10 items from the scale based on redundancy, construct inappropriateness, developmental inappropriateness, the perceived cultural incompetence of certain items, and potential for response bias. After the researcher completed the modifications and exclusions, the final scale was N=52, excluding the demographic items.

Experts had low agreement about the placement of the items on the factor matrix. Table 2 includes a numerical representation of factor item agreement. The *willingness to make sacrifices, race consciousness,* and *masculinity/femininity* factors had the most agreement. At least one of the researchers indicated that all the items designated to operationalize *willingness to make sacrifices* approximated that factor. For the *race consciousness* factor, at least one the researchers selected all but two of the items intended to approximate that construct. The researcher removed *masculinity/femininity* factor items due to one expert's feedback that the items suggest a gender binary and contain exclusionary language. The experts did not have any agreement relative to the items operationalized according to Whiting's (2006) and Whiting and Kennedy's (2016) conceptualization of the *self-efficacy* factor. This was not surprising given Whiting's (2006) departure from how Bandura (1986) operationalized self-efficacy. The dissertation researcher is already including a domain-specific measure of self-efficacy; therefore, she may remove these items. The factor-item agreement was also low for the *self-awareness, achievement>affiliation,* and *future orientation* factors.

The experts determined that most of the items were clear and appropriately captured the scholar identity construct for this particular sampling frame; however, the researchers demonstrated limited partial or full factor-item agreement.

Table 2

Black Scholar Identity Factor-Item Agreement

Factor	# Intended Items	Partial Agreement	Full Agreement
Self-Efficacy	6	0	0
Future Orientation	6	1	2
Willingness to Make Sacrifices	4	2	2
Internal Locus of Control	10	6	1
Self-Awareness	7	2	1
Achievement>Affiliation	7	2	0
Academic Self-Confidence	10	4	3
Race Consciousness	8	3	3
Masculinity/Femininity	2	0	2

Research question two. How do high school students who are current or former participants in Boys & Girls Clubs of Winston-Salem understand what scholars feel, do, and think or believe?

To gauge participants' understanding of the scholar construct, the researcher asked the participants about words that come to mind when they hear the word scholar. The participants generated several words including, pioneer, stress, leader, motivation, honor roll, dedication, and financial problems. A complete list of the words generated is in the Appendix O. When asked if the researchers' definition of scholar identity captured their understanding, the participants noted that students can be as successful as they choose, they only need drive and to apply themselves. The students stated that the definition needed to be broader and they noted important factors such as, motivation and

family environment that Whiting (2006) and Whiting and Kennedy (2016) do not capture in their definition.

The researcher asked the six participants to walk around the room, without talking and write down—on four separate pieces of paper— what scholars, feel, think or believe, and do. Appendix O includes those descriptors and words that the students generated relative to what scholars think or believe, feel, and do. These findings demonstrate that the six participants in the focus group understood the word "scholar" in accordance with how the researcher is operationalizing the construct. Taken together, these findings suggest that the focus group participants understood the "scholar" construct as defined by the researcher for the purposes of this dissertation study.

Moreover, in generating ideas about what scholars feel, think, and do, the participants captured some of Whiting and Kennedy's (2016) proposed factors. For instance, under *what scholars think*, one of the participants wrote, "school comes first." This coincides with the *achievement>affiliation* factor. The participants noted what scholars do; the students wrote, "math app, conference with teachers, use classmates, online academy, and compare homework with peers" in reference to times when they are confused, unsure or face difficulties. This coincides with Whiting and Kennedy's *internal locus of control* factor. The students communicated variance around their willingness to seek assistance, actively. At least one participant stated that getting advice or feedback is not something that scholars do. Relative to what scholars feel, the participants noted, "confident" and "accomplished." This coincides with Whiting and Kennedy's conceptualization of the *academic self-confidence* factor. One participants' written

response that scholars think, “It will all pay off in the long run” coincides with Whiting and Kennedy’s *future orientation* factor.

Relative to the *racial consciousness* factor, at least one participant stated that he or she was more comfortable being themselves when working with another Black peer and that they did not want to let the African American community down [if they did not do well]. The students communicated mixed experience regarding racial unfairness. One female participant stated that she had never had a teacher who had been unfair. One male student stated that some Black teachers have higher expectations for Black students.

Although there was mirroring between what the students shared regarding what scholars feel, think, and do and Whiting, and Kennedy’s (2016) conceptualization of scholar identity, the students captured ideas that are not present within the current SIM. For instance, the participants generated ideas around their parents’ expectations of perfection, feelings of obligation, and stress that the SIM model does not explicitly capture. The participants also communicated that learning and teaching styles may contribute to academic performance, this perspective is representative of an external locus of control, rather than the *internal locus of control* factor Whiting and Kennedy proposed. Overall, these results suggest that the SIM model captures Black students’ experience of what scholars think or believe, feel, and do; however, the model did not capture every dimension of this construct for the focus group participants.

Research question three. Does the scholar identity scale have face and content validity among Black high school students who are current or former participants in Boys & Girls Clubs?

To assess the face and content validity of the scale among Black high students who are current or former participants in Boys & Girls Clubs, the researcher asked the participants to organize the items according to culturally appropriate language, redundancy, and whether the dissertation researcher needed to include, change, or remove items. The participants reviewed 39 of the 52 items. The participants did not review 13 items due to time constraints. Of those items reviewed, the participants designated 24 items in the green (i.e., keep) category, 4 items in the red (i.e., remove) category, and 11 items in the yellow (i.e., modify/unsure) category. Based on their feedback, the researcher modified the item: "I believe effort is just as important as ability in being successful academically" to read, "I believe effort is more important than ability in being successful academically." The researcher modified one additional item to reflect participant feedback relative to wording.

The researcher noted the participants' reactions to items categorized as "yellow." For instance, the participants were opposed to the wording of the item, "I blame the test, assignment, or teacher, when I have not done something well" and noted that the item did not capture different learning styles or teaching styles that might explain poor performance along with the teacher not explaining concepts or assignments properly or clearly. In response to related items, "I make time to study and complete school assignments" and "When there are multiple things important to me; I choose to do things that will help me be successful in school," the respondents communicated some disagreement. For both items, the participants noted the importance of balance in scholars' lives. Specifically, the participants noted the importance of taking time for

themselves, and family. One of the participants stated that if there is a funeral and school assignments, they will attend the funeral. One student also expressed the importance of balance because there was a time when school was his only focus. The researcher did not remove these items from the scale; however, these findings demonstrate the importance of balance and contextual factors, relative to scholar identity, for these focus group participants.

Like one of the expert review panelist, the Black teenage participants categorized the three-reverse scored, negatively worded, and racialized items, as "red." Those items included, "Being a scholar is the same things as 'acting white' or selling out," "I down play or minimize my academic skills," and "At school, I feel inferior, or less than students from different backgrounds." The participants verbalized and visually expressed strong reactions to these items during the focus group. Students' conversations while discussing these items suggest that these notions or ideas do exist among their social group. For instance, one of the students stated that people ask him, "Why he talks so proper." The participants also stated that people have stereotypes about success and that Black people cannot be successful. Indicatively, one student drew a picture during the norming stage of the focus group with an afro displayed alongside an image of computer code. In discussing this picture, the participant specifically referred to debunking racial stereotypes.

Despite the students' agreement that these items reflect experiences or ideas that exist for Black scholars, the items may have also engendered response bias given their strong reactions. Therefore, the researcher will reword these items (e.g., "I can be myself

as a Black person and be a scholar") with assistance from a consultant with instrument development experience to reduce response bias.

Feasibility for Further Study

The results of this pilot study indicate that of those items reviewed, the majority capture Black high school students' understanding of what it means to be a scholar. Based on the participants' feedback, the researcher has already modified two items and will reword at least three items to reduce response bias with assistance from an instrument development consultant. Based on findings from the expert review panel and focus group, the researcher can conclude that the scale has face and content validity. However, additional items that capture Black scholars' stress, feelings of obligation, and desire not to disappoint their race may be necessary to improve the validity of this scale, in the future. The limited factor-item agreement is concerning. The dissertation researcher revised the scale with consultation from a researcher with instrument development experience, after conducting the expert review panel and focus group. A table displaying the original and revised items, after expert review, is available in Appendix B. The dissertation researcher revised the items to address measurement error concerns and control for response bias. For example, all items except for one item begins with "I" in order to increase readability. Each item was also assessed to make sure it measured only one idea or construct and avoided double-barreling. Given the low agreement among expert reviewers and modifications made to the BSI scale items (Gray, 2016), the researcher will conduct an EFA if the data does not fit the model after

conducting the CFA—assessing various fit indices (e.g., Comparative Fit Index, CFI) and analyzing modification indexes.

Limitations

While generalizability was not the aim of this pilot study, one limitation exists due to how the researcher recruited participants for the focus group. First, the participants were current or former members of the Boys & Girls Clubs. Therefore, these students' may share commonalities in perspective or experience. Moreover, parents who agreed and demonstrated interest in their child's participation may have been different from those parents who declined participation when approached by the unit director. The unit director who completed the recruitment conducted a convenience sample to reach parents. The parents with children who participated may be more engaged in the Boys & Girls Club, which might also correlate with their school involvement. Parental involvement has implication for students' academic outcomes; therefore, this is potentially a confounding variable. Taken together, this would suggest that the sample might not have captured a substantially full scholar identity continuum. Therefore, this might limit the breadth of focus study findings.

Second, relative to the focus group, the participants were not able to review every item in the scale. The participants did not classify 13 scale items due to time constraints. This limits the conclusions that the researcher can draw from the findings. Finally, relative to the expert review panel, there was limited factor-item agreement and there was only a 66% response rate for the factor-item matrix.

Despite these limitations, the researcher will use the findings from the focus group, expert review panel, item-level analyses, factor analyses findings as a form of triangulation to make decisions about the BSI scale (Gray, 2016) and to assess validity and reliability.

Chapter Summary

In this chapter, the author outlined the study methodology including, participant recruitment, procedures, and data analysis. The dissertation researcher will test the construct validity of the BSI scale (Gray, 2016) using Lisrel 9.2 to run a CFA and possibly SAS to run an EFA, if the data does not fit Whiting's (2006) proposed model. The researcher will assess convergent, discriminate, and external criterion validity using SPSS to run Pearson Product Moment Correlations between the BSI scale and subscales and respective instruments (i.e., FNE and FG) and variables (i.e., GPA and average grades). In Chapter Three, the author also outlined the pilot study methodology including, participant recruitment, procedures, and data analysis and pilot study results. The expert reviewers and student focus group participants provided evidence for the face and content validity of the BSI scale (Gray). The dissertation researcher will consider experts' low factor-item agreement and students' proposals in analyzing and interpreting results

CHAPTER IV

RESULTS

In Chapter Three, the author detailed the dissertation procedures to test the psychometric properties of the BSI scale (Gray, 2016). In this chapter, the dissertation researcher will report results of the data analyses outlined in Chapter Three. This chapter includes participant demographics, univariate and multivariate normality summaries, item-level analysis, and validity and reliability assessments. Moreover, the chapter includes hypothesis testing results for the four research questions.

Description of Participants

Two hundred and five participants provided responses that satisfied the screener questions, household income quota item, and quality check items stipulated in Chapter Three. Four hundred and nineteen participants did not satisfy those parameters. Table 3 includes a breakdown of quality/validity checks and screener percentages. The dissertation researcher did not request that Qualtrics record dropouts (i.e., those who began, but did not complete the survey); those numbers are not available. The author removed three participants because they provided unrealistic ages (i.e., 25, 32, and 34) for the sampling frame.

The SAS and Lisrel 9.3 programs automatically removed three items list-wise due to missing data on the BSI (Gray, 2016) and FNE (La Greca & Lopez, 1998) and FG

(Appleton & Christenson, 2004) subscales. The dissertation researcher did not attempt to impute missing values because participants with missing data accounted for 2 percent of the total sample. Missing data percentages below five percent are generally negligible, when missing at random (MAR) (Kline, 2011). The missing data sample was too small to a determine MAR or missing completely at random (MCAR).

Table 3

Screener and Quota Frequencies

Screener/Quota	Freq.	%
Attention Check 1	33	7.88
Attention Check 2	11	2.63
Grade Level Screener	222	52.98
Parent Consent	16.95	71
Race/Ethnicity Screener	24	5.73
HHI Quota Overage	40	9.55
Quality Check	5	1.19
Student Assent	4	.95
Total	419	100

After reviewing the Mahalanobis distance statistics for outliers, the researcher removed six additional participants due to inconsistent and repetitive response patterns. The normality and multivariate normality report below includes a more detailed description regarding data changes based on those deletions. The final sample included 194 Black or African American high school students. The response rate was 31.6% excluding those participants who began the survey, but dropped out.

The mean age was 15.09 (*SD* = .877). Participants ranged in age from 13 to 18. One hundred and twelve participants (57.7%) reported enrollment in ninth grade during

the 2016-2017 school year. Seventy-one (36.6%) participants reported they were tenth graders during the same school year. Eleven participants (5.7%) reported enrollment in the eleventh and twelfth grade; these respondents did not fit the original sampling frame. The researcher decided to retain these participants because scholar identity is not a construct exclusive to ninth and tenth grade students.

All respondents, except one, self-identified as Black or African-American. This participant self-identified as White; however, her parent or guardian endorsed a Black or African-American racial identity at the beginning of the survey. Therefore, the dissertation researcher did not remove this participant from the analysis. Thirty additional students (15.5%) endorsed a biracial or multiracial identity. One percent self-identified as Asian, 4.6% identified as Hispanic or Latino, .5% identified as Middle-Eastern, 3.6% identified as Native American, and 6.2% identified as White or Caucasian. Seventy-three (37.6%) self-identified as male and 121 (62.4%) self-identified as female.

The dissertation researcher implemented stratified sampling according to participants' self-identified household income (HHI). The mean HHI was 3.16 or approximately $50,000 to $74,999. Parents or guardians making $25,000 to $49,000 comprised 24.7% of the sample and those reporting $200,000 or more comprised 3.6% of the sample.

Responses spanned several regions (i.e., north and southeast, mid and southwest, and west) of the United States. This data is available because Qualtrics automatically records respondents' latitude and longitude using GeoIP Estimation. On their website, Qualtrics purported that GEOIP estimates approximate locations based on the IP address.

The company claims 99.8% accuracy on a country level, 90% accuracy on a state level in the US, and 83% accuracy for U.S. cities. Table 4 includes a summary of participant demographics and Table 5 includes a summary of respondents' location.

Table 4

General Demographics

Gender	**Freq.**	**%**	**Household Income (HHI)**	**Freq.**	**%**
Male	73	37.6	$0 - $24,999	35	18
Female	121	62.4	$25,000 - $49,999	48	24.7
Total	194	100	$50,000 - $74,999	36	18.6
Race/Ethnicity	**Freq.**	**%**	$75,000 - $99,999	26	13.4
Black/African-American	193	99.5	$100,000 - $149,999	30	15.5
White/Caucasian	12	6.2	$150,000 - $199,999	12	6.2
Asian	2	1	$200,000 +	7	3.6
Hispanic/Latino	9	4.6	Total	194	100
Middle-Eastern	1	.5	**School Grade**	**Freq.**	**%**
Native American	7	3.6	9th	112	57.7
			10th	71	36.6
			11th	6	3.1
			12th	5	2.6
			Total	194	100

Table 5

Respondent Location Percentages

State	Percentage	State	Percentage
Alabama	3.9	Michigan	4.4
Arizona	2.0	Minnesota	1.0
Arkansas	0.5	Mississippi	2.0
California	3.4	Missouri	1.5
Colorado	1.5	New Jersey	4.4
Connecticut	2.0	New York	5.9
Delaware	1.0	North Carolina	5.4
Florida	7.8	Ohio	2.9
Georgia	10.2	Oklahoma	0.5
Honolulu	0.5	Oregon	0.5
Illinois	3.9	Pennsylvania	2.9
Indiana	2.9	South Carolina	2.0
Kansas	1.5	Tennessee	2.9
Kentucky	0.5	Texas	10.7
Louisiana	4.4	Virginia	1.5
Maryland	2.4	Washington	0.5
Massachusetts	1.5	Washington, DC	1.5

Note. Percentages are rounded and may not sum to 100%

The dissertation researcher also asked the parents or guardians about their child's school characteristics and school performance. One hundred and forty-six (74.8%) participants provided GPA data. The mean GPA was 3.54 (SD=.68). The lowest GPA was 1.08 and the highest GPA was 5.0. Most of the parents self-reported that their child made B's on average (45.9%), 79 parents (40.7%) reported A's, 25 reported C's (12.9%), and 1 parent (.5%) reported their child made D's on average. The researcher conducted Chi-square assessments to determine whether there were differences between participants whose parents provided or declined to provide GPA data. The missing data variable differed by gender$\chi^2(1, N = 194) = 7.433, p = .006$). Males had higher frequencies of missing GPA data than expected if the variables were independent. The computed

missing data variable also differed by school locale$\chi^2(3, N = 194) = 9.195, p = .027$). Parents who endorsed "unsure" (versus those who selected a school locale) regarding their child's school size had higher frequencies of missing data on the GPA variable than expected if the variables were independent. These significant Chi-square analyses demonstrate that the GPA descriptive statistics might differ had more participants provided response. Readers should review findings relative to the GPA variable with caution.

Most of the parents/guardians (*n* = 104, 53.6%) reported that their child attended a school of average size (i.e., 854 students). Sixty-three parents (32.5%) reported their child attended schools above average in size, 17 (8.8%) reported below average, and 10 (5.2%) parents were unsure. In terms of locale, most of the students attended schools in urban (42.4%) or suburban (42.4%) areas. Thirty-four students attended school in a rural area, according to parent report. Most of the students (*n* = 136, 70.1%) attended schools where the school staff (e.g., administration and teachers) was not predominately Black or African American. Approximately 35% of the parents indicated "traditional" as their students' highest course level, about 30% indicated "honors" and 24% selected "advanced placement." Only 7.2% of the sample selected "career/technical education" as their child's highest course level. One parent who selected "other" typed "gifted" as their child's highest course level (see Table 6).

Table 6

Student and School Demographic Information

School Characteristics					
Locale	**Freq.**	**%**	**Demographics- Black Students**	**Freq.**	**%**
Rural	34	17.5	0% - 25%	41	21.1
Urban	80	41.2	26% - 50%	56	28.9
Suburban	80	41.2	51% - 75%	44	22.7
Total	194	100	76% - 100%	38	19.6
Size	**Freq.**	**%**	Unsure	15	7.7
Below Avg.	17	8.8	Total	194	100
Average	104	53.6	**Demographics- Black Staff**	**Freq.**	**%**
Above Avg.	63	32.5	0% - 25%	89	45.9
Unsure	10	5.2	26% - 50%	47	24.2
Total	194	100	51% - 75%	38	19.6
			76% - 100%	10	5.2
			Unsure	10	5.2
			Total	194	100
Student Characteristics					
Avg. Grades	**Freq.**	**%**	**Highest Course Level**	**Freq.**	**%**
A's (90-100)	79	40.7	Traditional	68	35.1
B's (80-89)	89	45.9	Honors	58	29.9
C's (70-79)	25	12.9	Advanced Placement	46	23.7
D's (60-69)	1	.5	Career/technical Education	14	7.2
Total	194	100	Other	2	1
			Unsure	6	3.1
			Total	194	100

The dissertation researcher ran Chi-square tests to assess the independence of course level, school size, staff demographics, and student demographics with school locale to assess whether this sample's data replicated trends found in the literature (e.g., Griffin & Allen, 2006; Rust, 2016). Researchers have found that urban schools often have higher proportions of Black students, larger school populations, and fewer advanced courses.

The Chi-square tests between school locale and school staff demographics, $\chi^2(8, N = 194) = 23.366,\ p = .003$ and school locale and student demographics,

$\chi^2(8, N = 194) = 32.971,\ p = .000$ were significant. These findings suggest that the percentages of Black school staff and Black students differed by school locale. Parents endorsed that Black school staff comprised 76%-100% of staff demographics at higher frequencies or rates in urban schools (70%) than at suburban (0%) or rural schools (30%). Predominately Black schools occurred at higher frequencies in urban areas than expected if the student demographic and school locale variables were independent. The Chi-square test cannot confirm the statistical significance of these results; however, the dissertation researcher may conclude that school locale and staff demographics and school locale and student demographics variables are dependent. The course level frequencies $\chi^2(10, N = 194) = 13.5,\ p = .197$ and school size frequencies $\chi^2(6, N = 194) = 9.506,\ p = .147$ did not differ by school locale.

The dissertation researcher also ran Chi-square tests to assess the independence of course level and school locale with HHI. Researchers have found that students from higher socioeconomic statuses, regardless of race, enroll in higher level courses and may attend more affluent schools (e.g., Rust, 2016). The author ran Chi-square tests for school demographics and size with HHI; however, these tests were not significant and many of the cell counts were less than five. The school locale frequencies differed by HHI, $\chi^2(12, N = 194) = 25.706, p = .012$. Students whose parents endorsed an HHI of less than $50,000 had higher percentages of students who attended urban schools than those with a higher HHI. The course level percentages also differed by HHI, $\chi^2(30, N = 194) = 45.664, p = .033$. However, there were 27 cells with expected counts less than five. Parents who self-reported an HHI between $100,000 and $149,000 reported that

their student took an Advanced Placement course (28.3%) at a higher frequency than students did from lower and higher household incomes. Children, whose parents self-reported household incomes less than $50,000 comprised 57% of students whose highest course level was Traditional or Regular. Contrastingly, children whose parents self-reported household incomes greater than $100,000 comprised approximately 45% of students whose highest course level was Advanced Placement (AP).

Item-Level Analysis

Univariate Normality

See Table 7 for item means (*M*), standard deviations (*SD*), skew, kurtosis, and Shapiro-Wilk (*W)* indices. Means ranged from 2.75 to 4.87. Lower means indicate that participants *Strongly Disagree* with an item while higher means indicate that participants *Strongly Agree.* Most of the means are around four, indicating that many participants espoused *Agree.* Item Q37 is reverse scored. Item standard deviations range from .4 to 1.33. Items were clustered around the mean with minimal variation in participants' responses from the item means.

Relative to normality indices (i.e., skew, kurtosis, and Shapiro-Wilk (*W)*), there were several concerning items. Skew and kurtosis indices between -2/+2 are appropriate for normal distributions (George & Mallery, 2010). Italicized items in Table 7 exceeded acceptable skew and kurtosis values; six items violated acceptable ranges. Moreover, the items have significant Wilk's (*W)* values (Douglass, 2007; Park, 2003). Therefore, the null-hypothesis that the item distributions are associated with a truly normal distribution was rejected. The dissertation researcher removed items with non-normal skew and

kurtosis indices from the data, except items Q1, Q2, Q10, and Q20. The author elected to retain these items due to their acceptable item-total correlations and significant ($p < .01$) inter-item correlations with other items in their respective subscales.

Table 7

Item-Level Descriptive Statistics

Item	M	SD	Skew	Kurtosis	Shapiro-Wilk (*W*)
1	*4.25*	*.95*	*-1.49*	*2.25*	*.75**
2	*4.31*	*.83*	*-1.45*	*2.8*	*.75**
3	3.84	.95	-.47	-.37	.87*
4	4.45	.87	-1.57	1.85	.68*
5	4.22	.83	-1.03	.63	.78*
6	4.28	.78	-.94	.47	.78*
7	4.48	.71	-1.28	1.20	.71*
8	4.23	.78	-.76	.07	.80*
9	*4.32*	*.89*	*-1.65*	*3.02*	*.72**
10	*4.56*	*.68*	*-1.95*	*5.26*	*.64**
11	4.46	.70	-1.11	.63	.72*
12	4.12	.84	-.71	-.13	.82*
13	4.31	.72	-.79	.20	.78*
14	4.41	.63	-.73	.11	.75*
15	3.72	1.02	-.26	-.92	.88*
16	2.75	1.33	.29	-1.06	.89*
17	4.18	.87	-.79	-.23	.81*
18	4.07	.88	-.91	.74	.83*
19	4.53	.72	-1.45	1.43	.67*
20	*4.53*	*.67*	*-1.53*	*3.30*	*.68**
21	4.32	.80	-1.26	1.71	.76*
22	4.25	.80	-.73	-.31	.80*
23	*4.87*	*.40*	*-3.10*	*9.49*	*.37**
24	4.39	.76	-1.08	.52	.75*
25	4.13	.84	-.68	-.24	.82*
26	3.91	.89	-.35	-.71	.86*
27	4.44	.81	-1.68	3.12	.69*
28	*4.53*	*.78*	*-2.15*	*5.69*	*.63**
29	4	.95	-.83	.17	.84*
30	4.19	.90	-.85	-.03	.80*
31	4.18	.87	-1.02	.97	.81*
32	3.35	1.33	-.32	-1.10	.89*
33	4.06	.82	-.62	-.12	.83*
34	4.22	.81	-.84	.20	.80*

35	3.73	1.17	-.48	-.91	.86*
36	4.53	.65	-1.28	1.47	.70*
37	3.30	1.32	-.30	-1.08	.89*
38	3.96	1.03	-1.07	.84	.82*
39	4.25	.75	-.90	1.13	.79*
40	4.24	.84	-.95	.25	.79*
41	4.03	.98	-.82	-.14	.82*
42	3.86	.99	-.59	-.37	.86*
43	3.75	.98	-.61	-.18	.87*
44	4.15	.78	-.87	1.11	.81*
45	3.86	1.02	-.56	-.55	.86*
46	4.51	.68	-1.23	1.06	.70*
47	3.74	1.09	-.42	-.84	.87*
48	3.44	1.23	-.22	-1.03	.89*
49	3.70	1.05	-.38	-.70	.88*
50	4.22	.85	-1.11	1.07	.79*
51	4.25	.78	-.86	.32	.79*
52	3.43	1.13	-.18	-.89	.90*

Note. Bolded items= Removed Items; Italicized items=Skew/Kurtosis Violations; Asterisk=Significant Shapiro-Wilk Statistic

Multivariate Normality

The author used the D_i^2 or the Mahalanobis distance (D) test and Q-Q plot as indicators of multivariate normality and possible outliers (Mahalanobis, 1936). The Q-Q plot suggested a normal distribution due to the linear pattern of the data (Figure 3). Mahalanobis distance is an indicator of the distance in standard deviation units between a set of scores for an individual case and the sample means for all variables, while correcting for intercorrelations (Kline, 2011). The dissertation researcher used, $\chi^2_{(52,194)} = 78.62$, $p < .01$ to identify outliers. The dissertation researcher removed six individual case outliers progressively due to repetitive response patterns and inconsistent responding, and then reassessed multivariate statistics. See Figure 3 and 4 for a comparison between the multivariate Q-Q plot before and after outlier removal. The data points are less dispersed after removing the outliers.

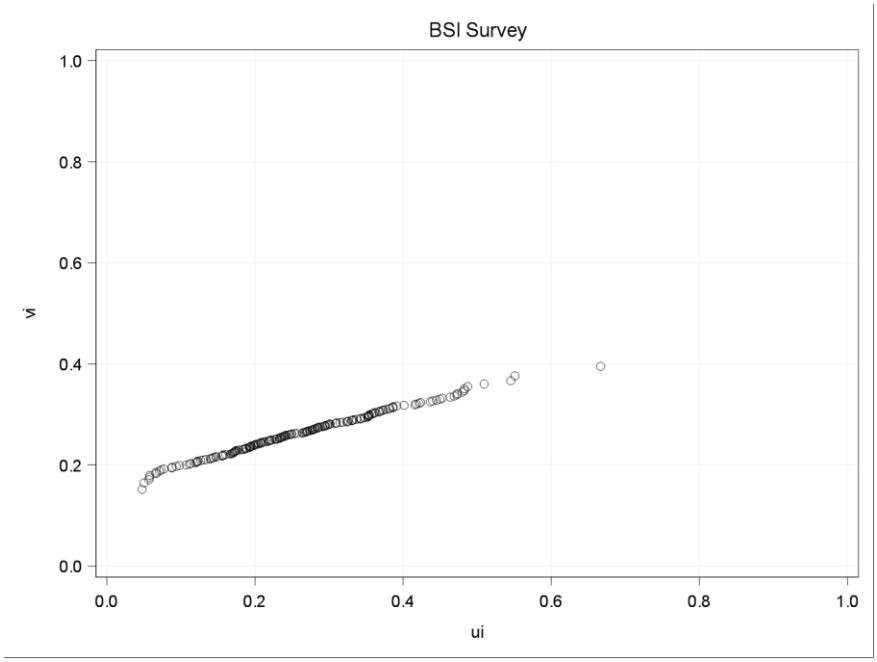

Figure 3. Multivariate Q-Q Plot for the BSI 42-Item Scale. Plots that are approximately linear with no visible outliers approximate a normal distribution.

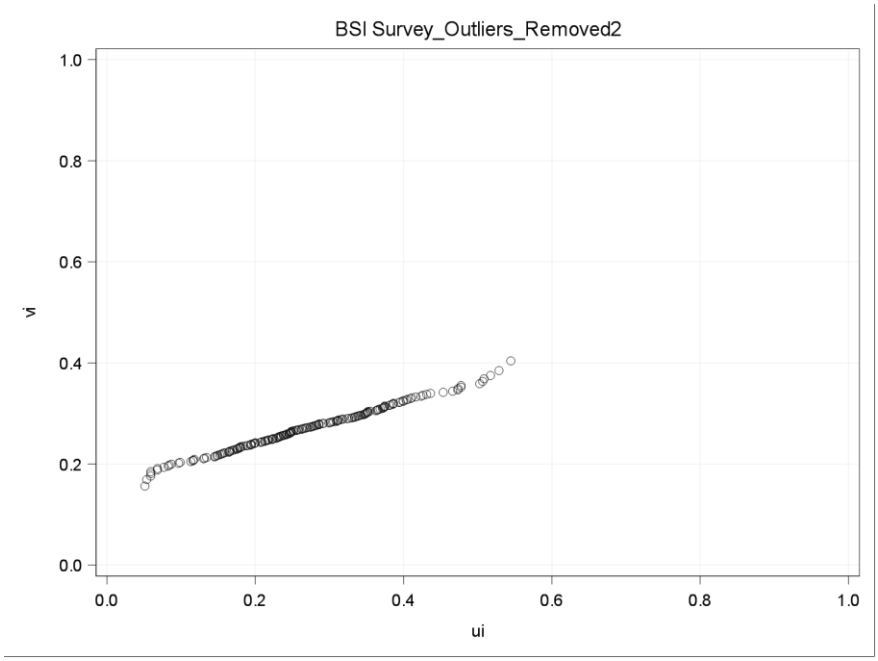

Figure 4. Multivariate Q-Q Plot BSI 42-Item Scale-—Outliers Removed. Plots that are approximately linear with no visible outliers approximate a normal distribution.

Subscale Analysis

Univariate Normality

The dissertation researcher also analyzed the factor distributions after removing questionable items and cases. The factors included, *self-efficacy* (SE), *future-orientation* (FO), *willing to make sacrifices* (WMS), *internal locus of control* (ILC), *self-awareness* (SA), *achievement > affiliation* (AA), *academic self-confidence* (ASC), and *race consciousness* (RC). See Table 8 for subscale means (*M*), standard deviations (*SD*), skew, kurtosis, and Shapiro-Wilk's (*W)* statistics. On average, participants scored approximately four on all factors, indicating relatively high self-reported scholar identity. The skew and kurtosis indices were within the acceptable range (George & Mallery, 2010). The Wilk's (*W*) statistics were all significant, although in a more acceptable range relative to the items indices.

Douglass (2007) noted that the Shapiro-Wilk's (*W*) test is sensitive to negligible violations with large sample size. Generally, Wilk's statistics between .95 and 1.0 demonstrate adequate normality, indices between .9 and .95 are concerning, and .9 and below are serious concerns (Douglass). The WMS, AA, and ASC subscales had adequate normality. The SE, ILC, and SA subscales approached adequate normality while the FO and RC subscales met the criteria for "concerning". RC approached serious concern. See Figures 5 through 12 for a visual depiction of subscale distributions.

Table 8

Subscale Descriptive Statistics

Factor	M	SD	Skew	Kurtosis	Shapiro-Wilk (*W*)
Self-Efficacy	4.07	.67	-.70	.25	.942*
Future Orientation	4.27	.62	-.97	.74	.907*
Willing to Make Sacrifices	3.91	.72	-.18	-.73	.951*
Internal Locus Control	4.29	.53	-.57	-.04	.949*
Self-Awareness	4.03	.68	-.56	-.02	.948*
Achievement>Affiliation	4.18	.56	-.55	.01	.959*
Academic Self Confidence	3.96	.65	-.08	-.80	.967*
Race Consciousness	4.43	.53	-1.13	1.41	.891*

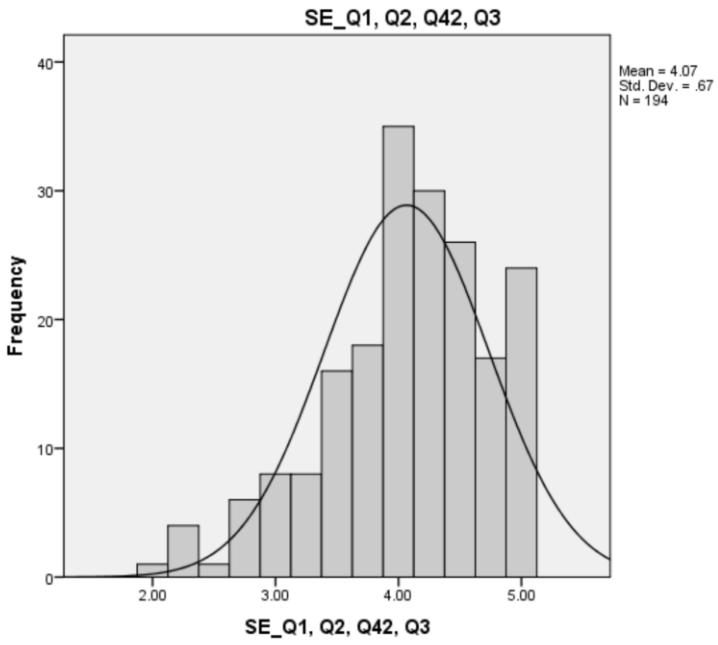

Figure 5. *SE Factor Distribution of the BSI 42-Item Scale*. Trend line approximates a normal distribution.

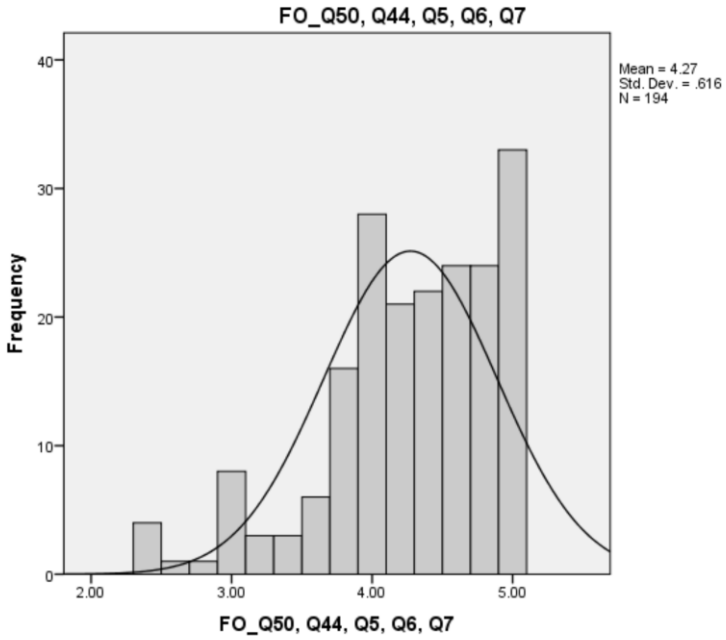

Figure 6. FO Factor Distribution of the BSI 42-Item Scale. Trend line approximates a normal distribution.

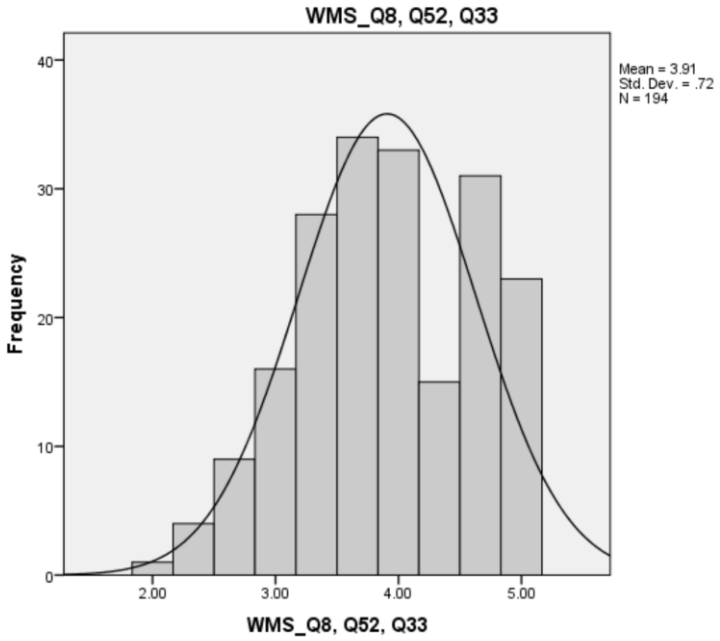

Figure 7. WMS Factor Distribution of the BSI 42-Item Scale. Trend line approximates a normal distribution.

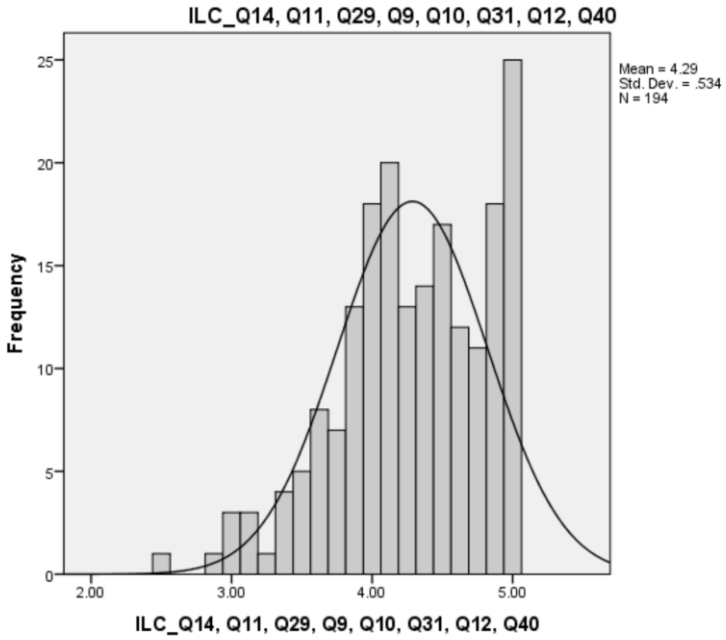

Figure 8. *ILC Factor Distribution of the BSI 42-Item Scale*. Trend line approximates a normal distribution.

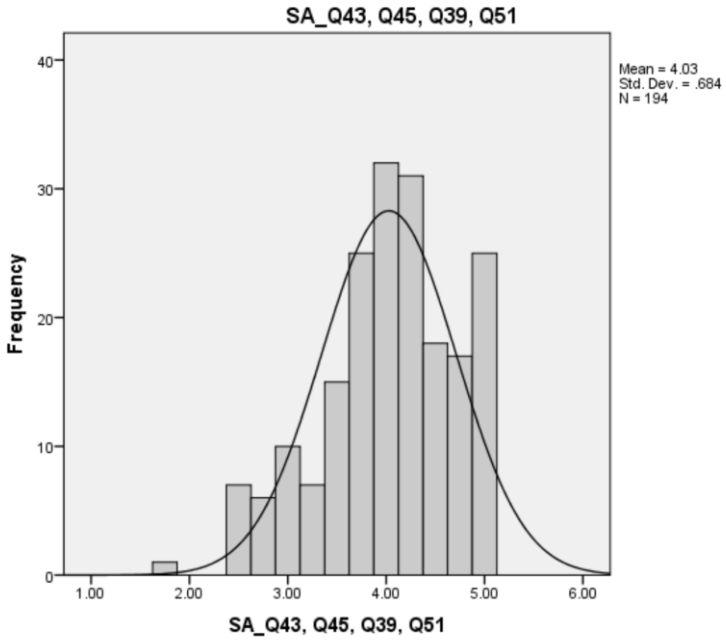

Figure 9. *SA Factor Distribution of the BSI 42-Item Scale*. Trend line approximates a normal distribution.

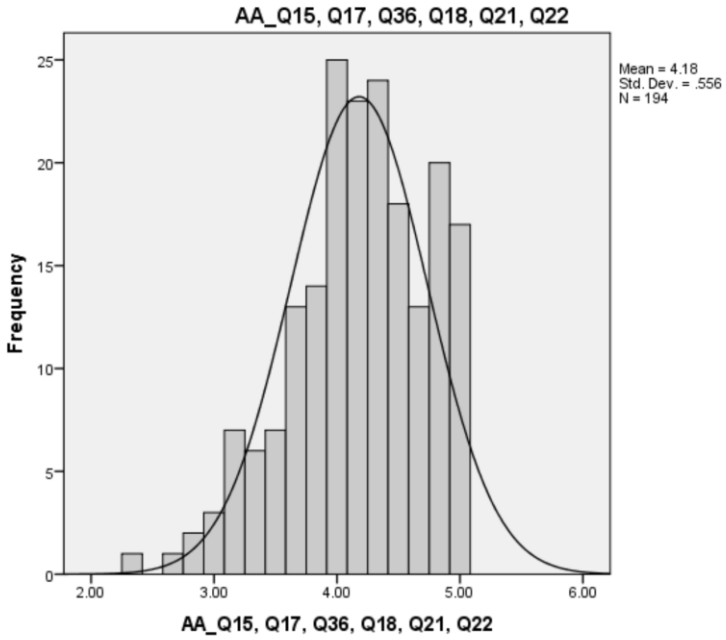

Figure 10. *AA Factor Distribution of the BSI 42-Item Scale*. Trend line approximates a normal distribution.

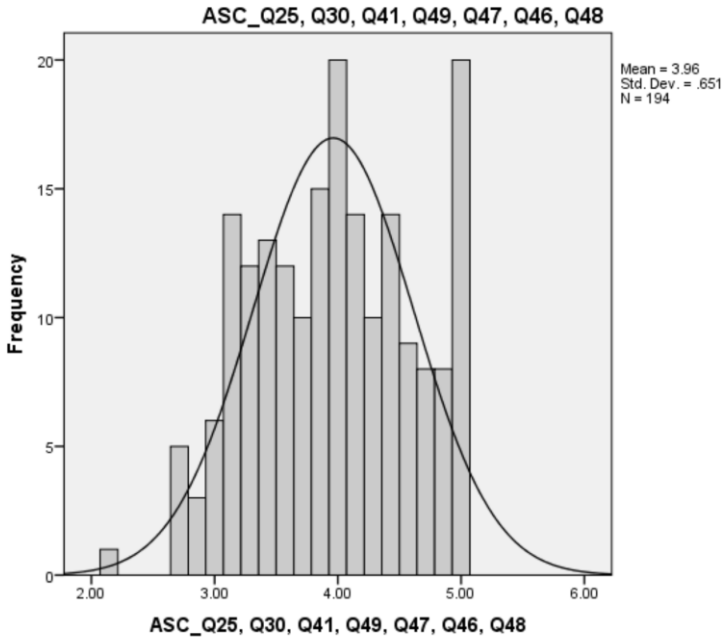

Figure 11. *ASC Factor Distribution of the BSI 42-Item Scale*. Trend line approximates a normal distribution.

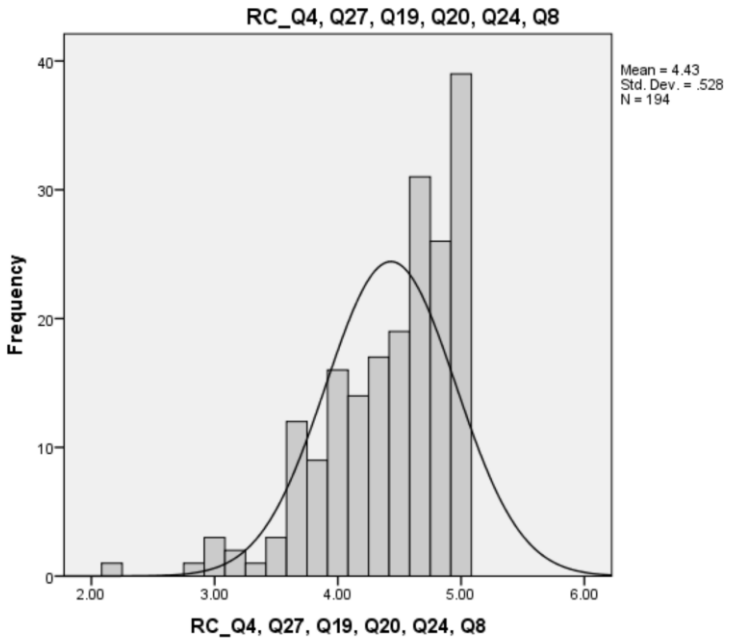

Figure 12. *RC Factor Distribution of the BSI 42-Item Scale*. Trend line approximates a normal distribution.

Multivariate Normality

The author used D_i^2 or the Mahalanobis distance (D) test and Q-Q plot to assess multivariate normality and identify outliers (Mahalanobis, 1936). The Q-Q plot suggested a normal distribution due to the linear pattern of the data (Figure 13). Mahalanobis distance is an indicator of the distance in standard deviation units between a set of scores for an individual case and the sample means for all variables, while correcting for intercorrelations (Kline, 2011). The dissertation researcher used $\chi^2_{(8,194)} = 20.09$, $p < .01$ to identify outliers. The dissertation researcher retained all cases after assessing the distance statistics.

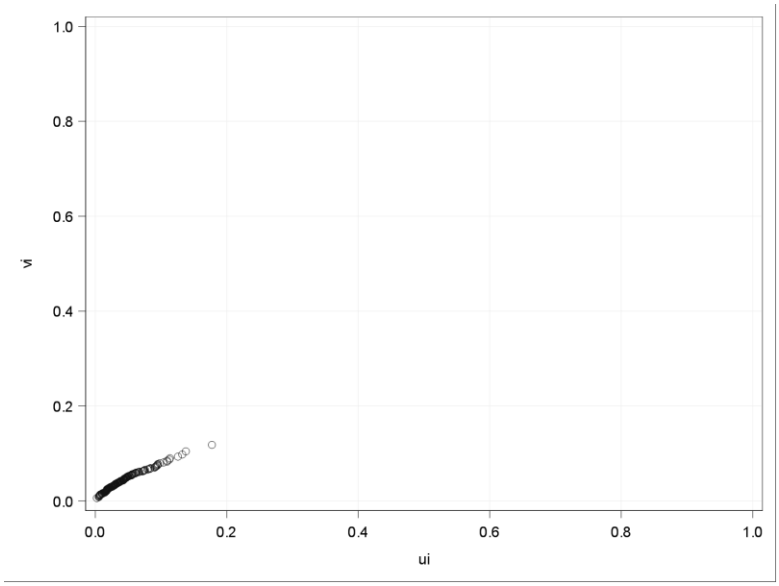

Figure 13. *BSI Subscale Multivariate Normality Q-Q plot, Outliers Removed*. Plots that are approximately linear with no visible outliers approximate a normal distribution.

Item-Subscale Correlations and Inter-Item Correlations

The dissertation researcher removed ten items from the scale due to insignificant ($p > .01$) inter-item correlations, item-subscale correlations lower than .3, and/or projected increase in internal-consistency indices upon item removal. See Table 9 for corrected item-total correlations and Cronbach's alpha (if deleted) statistics. Table 9 also outlines internal consistency estimates. All but two subscales (i.e., SE and WMS) had acceptable internal consistency estimates. Those two subscales approached an acceptable reliability estimate.

Table 9

Item-Level Analysis

SE			**FO**			**WMS**			**ILC**		
	α=.687			α=.837			α=.678			α=.814	
Item	CICT	α Delete	Item	CICT	α Delete	Item	CICT	α Delete	Item	CICT	α Delete
1	.502	.601	5	.673	.794	8	.429	.665	10	.427	.829
2	.456	.633	*6*	*.687*	*.790*	*33*	*.578*	*.490*	11	.687	.723
3	*.514*	*.593*	7	.638	.805	52	.520	.585	12	.586	.806
42	.416	.406	44	.635	.804				14	.620	.804
4	**.313**	**.687**	50	.569	.825				29	.454	.833
									31	*.701*	*.785*
									40	.632	.798
									9	**.286**	**.779**
									37	**.224**	**.814**
SA			**AA**			**ASC**			**RC**		
	α=.766			α=.738			α=.789			α=.800	
Item	CICT	α Delete	Item	CICT	α Delete	Item	CICT	α Delete	Item	CICT	α Delete
39	.531	.731	15	.522	.689	25	.367	.787	4*	.445	.797
43	.535	.731	*17*	*.588*	*.667*	30	.559	.754	19	.618	.756
45	*.618*	*.619*	18	.414	.719	41	.391	.785	*20*	*.631*	*.756*
51	.614	.691	21	.359	.732	46	.502	.769	24	.514	.778
13	**.203**	**.606**	22	.452	.707	*47*	*.690*	*.724*	27	.613	.755
16	**.082**	**.681**	36	.552	.689	48	.563	.755	34	.541	.773
32	**.245**	**.616**	**23**	**.278**	**.738**	49	.580	.749	**28**	**.326**	**.733**
						26	**.315**	**.766**	**38**	**.210**	**.778**
						35	**.309**	**.789**			

Note. Bolded=Item removed from the BSI scale. Asterisk=Item was moved from another factor. Italicized=item value used to determine factor scale in Lisrel 9.2. CICT= Corrected Item-Total Correlations

BSI Scale Analysis

The overall score distribution on the BSI-Original (i.e., 52 items) and BSI-Final (i.e., 42 items) scales were normally distributed (see Tables 10 and 11 and Figures 14 and 15). Averages for both were approximately four suggesting that most respondents endorsed a relatively high scholar identity. See Table 12 for BSI-Final quantiles. On the

final scale, the lowest scholar identity score was 2.64 and the highest score was 5.0. The standard deviation for the final scale (i.e., .505) was slightly larger than the original scale statistic (i.e., .463). The skewness and kurtosis indices were within acceptable ranges (George & Mallery, 2010). Both distributions had a slight, negative skew. The Wilk's statistics were insignificant for the original $W = .978$, $p = .0037$ and final scale $W = .971$, $p = .0005$, suggesting that the univariate normality null hypothesis should not be rejected. Both scales were approximately normal.

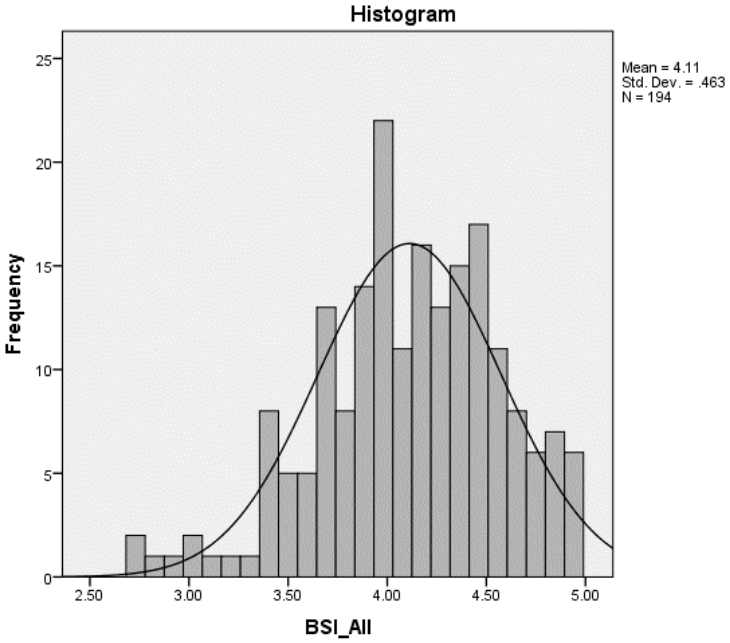

Figure 14. BSI 52-Item Scale Normal Distribution. Trend line approximates a normal distribution.

Table 10

52-Item BSI Scale Statistics

M	SD	Skew	Kurtosis	Range
4.11	.463	-.485	.214	4.16

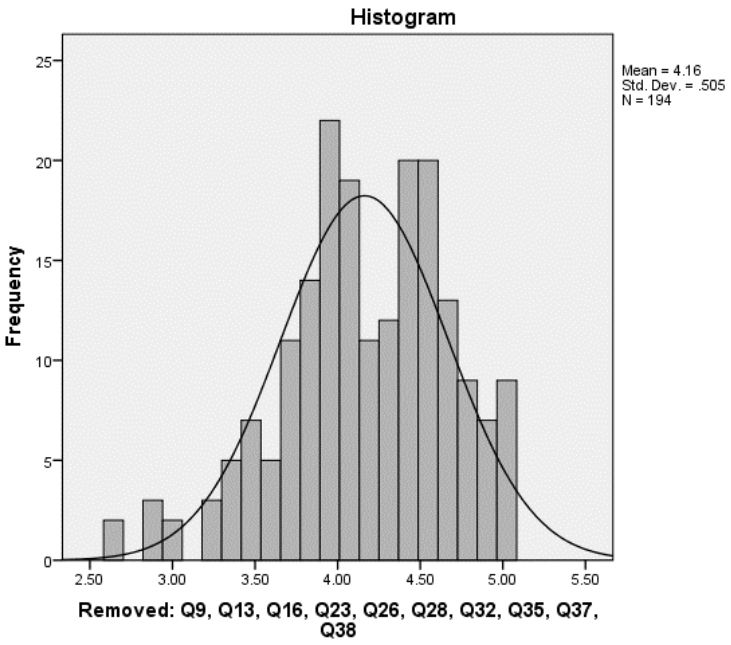

Figure 15. BSI 42-Item Scale Normal Distribution. Trend line approximates a normal distribution.

Table 11

42-Item BSI Scale Statistics

M	SD	Skew	Kurtosis	Range
4.16	.505	-.541	.175	2.35

Table 12

BSI-Final Quantiles

Quantile Level	Quantile
100%	5.0
99%	5.0
95%	4.93
90%	4.79
75%	4.52
50%	4.17
25%	3.83
10%	3.5
5%	3.29
1%	2.64
Min	2.64

Hypothesis Testing

Hypothesis One: Factor Analyses

To analyze the overall fit of the model as prescribed by Whiting's Scholar Identity Model (SIM) (Whiting & Kennedy, 2016), the dissertation researcher conducted a CFA using Lisrel 9.2 to test the one-factor model and second-order, 8-factor model as outlined in Chapter Three. The author tested both models with 42 items. The one-factor model did not fit the data. Lisrel 9.2 produced an error message that the Phi matrix—variance of the independent latent factor, BSI— "may not be identified." The relatively small sample relative to the number of indicators (i.e., 42) may have contributed to the error message. In reviewing the model fit indices, the data poorly fit the model. Given the error message, the author elected not to report the one-factor model fit indices.

The second-order, 8-factor model did not fit the data per several model fit indices (e.g., maximum likelihood method chi-square significance test) (Table 13). The model fit

indices constituted poor fit. The Chi-square test, RMSEA and CFI indices fell outside the general rules for acceptable fit (e.g., Schreiber, Stage, King, Nora, & Barlow, 2006). Moreover, the modification indexes suggested more than 30 correlated indicator errors. Also, the PSI matrix—dependent latent variable error covariances and variances— was not positive definite. This may have been due to the correlation between the Self-Awareness factor and BSI, which exceeded one. The error term for the Self Awareness factors was negative which suggested that the model explained more than 100 percent of the variability in the factor. This suggests that there was more variability hypothesized by the model than present in the data. The completely standardized solutions ranged from .417 to .782, with several items loadings < .7. Finally, the model only explained at least 50 percent of the variability in eight items. Therefore, the dissertation researcher conducted an EFA to identify a parsimonious representation of the data using SAS before conducting another CFA using Lisrel 9.2.

Table 13

Model Fit Indices, Second-Order, 8-Factor, 52-Item Model

Model	χ^2	**Df**	**CFI**	**RMSEA**	**90% CI RMSEA**	**SRMR**
	1839.697***	811	.751	.081	.08; .09	.076

Exploratory factor analysis. To examine the factor structure of the items for the 42-Item BSI Scale (Gray, 2016), the dissertation researcher conducted an EFA using principal-axis factor analysis with oblique rotation (i.e., oblimin method) to allow the factors to correlate. Overall, the data satisfied most of the EFA test assumptions, using

SPSS. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was .919, which is above the recommended .7 for reliable EFA modeling (Leech et al., 2015). This finding suggested that there were sufficient items for each factor. Moreover, the Bartlett's Test of Sphericity was significant, $\chi^2 = 4585.261, \text{df} = 861, p = .000$, indicating sufficient correlations greater than zero among items for factor analysis modeling. However, the correlation matrix determinant (i.e., $6.654E^{-12}$) was small compared to the recommended value (i.e., .00001), which can indicate excessive multicollinearity (Leech et al.). Therefore, two of the three test assumptions were satisfied. The results for the parsimonious model are below.

In alignment with the Scholar Identity Model (SIM), the dissertation researcher limited the extracted factors to eight using the SAS option, *nfactors=8*. The dissertation researcher also ran the EFA without limiting the extracted factors and 9 factors were extracted; however, the highest factor loading was .299 on the ninth factor. Therefore, the dissertation researcher will only report the results from the EFA with limited factor extraction. The dissertation researcher used several criteria to assess factor extraction and factor-item pairings: scree plot, 80-85% variance explained rule, and the Kaiser correlation matrix eigenvalues greater than "1" rule (Gorsuch, 1983). The dissertation researcher assessed the item-pairings to ensure the factors were theoretically meaningful.

The test yielded eight factors with eigenvalues greater than one (Table 14). The factors accounted for 62.6% of the variability in the data. There was a steep decline (i.e., elbow rule; Rencher, 2002) in the scree plot after the first factor (Figure 16). The first factor accounted for 36.43% of the variance. The ninth factor had an eigenvalue slightly

above one, 1.03; however, the dissertation researcher removed this factor because only one item loaded significantly. Taken together, these results supported an eight-factor model.

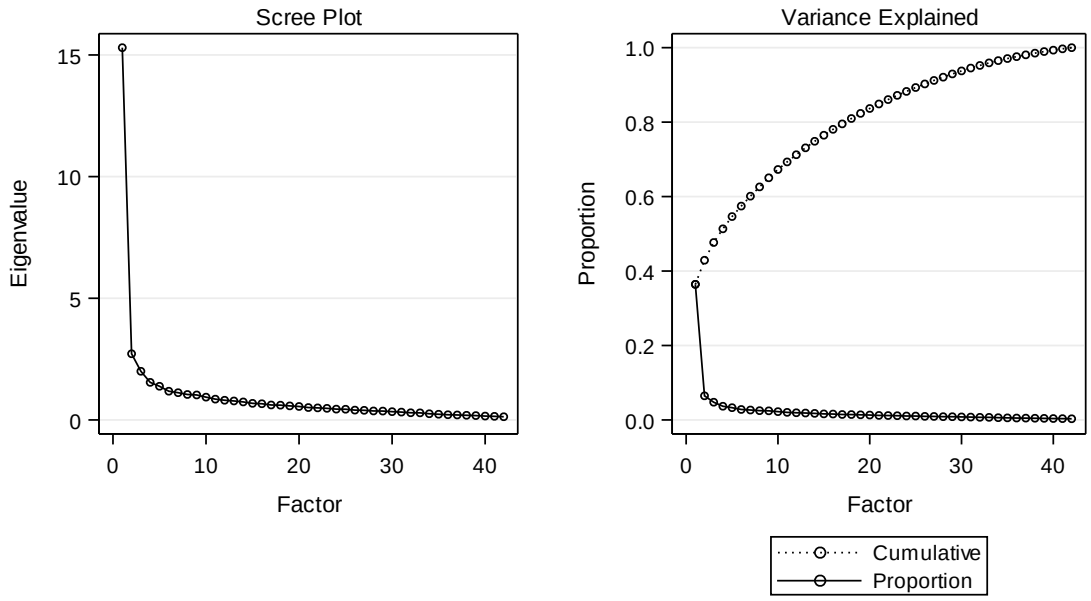

Figure 16. BSI 42-Item Exploratory Factor Analysis Scree Plot. "Elbow" in the graph on the left indicates suggested factor extraction. Graph on the right outlines the proportion of and cumulative variance explained as additional factors extracted.

Table 14

Exploratory Factor Analysis Eigenvalues and Variance Explained

	Eigenvalue	Percent of Variance	Cumulative Percent
1	15.30	0.36	36.4
2	2.72	0.06	42.9
3	2.00	0.05	47.7
4	1.54	0.04	51.3
5	1.38	0.03	54.6
6	1.18	0.03	57.4
7	1.12	0.03	60.1
8	1.05	0.02	62.6
9	1.03	0.02	65.0
10	0.94	0.02	67.3
11	0.85	0.02	69.3
12	0.81	0.02	71.2
13	0.78	0.02	73.1
14	0.74	0.02	74.9
15	0.68	0.02	76.5
16	0.67	0.02	78.1
17	0.61	0.01	79.5
18	0.61	0.01	81.0
19	0.58	0.01	82.4
20	0.55	0.01	83.7
21	0.51	0.01	84.9
22	0.50	0.01	86.1
23	0.48	0.01	87.2
24	0.44	0.01	88.3
25	0.44	0.01	89.3
26	0.40	0.01	90.3
27	0.40	0.01	91.2
28	0.37	0.01	92.1
29	0.36	0.01	93.0
30	0.34	0.01	93.8
31	0.32	0.01	94.5
32	0.29	0.01	95.2
33	0.29	0.01	95.9
34	0.25	0.01	96.5
35	0.23	0.01	97.1
36	0.21	0.01	97.6
37	0.20	0.00	98.1
38	0.19	0.00	98.5

	Eigenvalue	Percent of Variance	Cumulative Percent
39	0.18	0.00	99.0
40	0.16	0.00	99.3
41	0.15	0.00	99.7
42	0.13	0.00	100.0

Items with factor loadings greater than .4 were retained on each factor (Costello & Osborne, 2005). Several items did not load onto any factors. The dissertation researcher removed these items from the BSI Scale; the items are un-bolded in Table 15. Twenty-seven of the forty-two items loaded on one of the eight factors. Only two items loaded on EFAFac7; therefore, the dissertation researcher removed this factor and items (i.e., *I ask for help with my academic work when I need help* and *I seek support from others to address my academic weaknesses*) from the scale. The BSI-revised scale (Brunson, 2017) included 25 items (Appendix P). Of those items, only two did not meet the parameters for simple structure. Those two items (i.e., *I make time each day to complete school assignments* and *I can be a skilled student or scholar because I work hard to achieve my academic goals*) had loadings on an additional factor that exceeded the .32 cutoff (Mvududu & Sink, 2013). The dissertation researcher assessed the communalities—"proportion of the variance in the measured variable accounted for by the common factors" (Fabrigar et al., 1999, p. 275). The communalities for the 25 retained items ranged from .42 to .83, *median* = .58 (see Table 15**)**. All communalities exceeded the .2 cutoff (Young & Pearce, 2013), indicating that the items are associated with the scholar identity construct and are predicted by the common factors, appropriately (Fabrigar et al., 1999). Although, not robustly (Mvududu & Sink, 2013).

Table 15

Exploratory Factor Analysis Loadings and Communalities

	Rotated Factor Matrix								Comm.
	1	2	3	4	5	6	7	8	
Q1	.12	-.10	-.00	.09	-.03	.25	.01	**.56**	.53
Q2	.24	-.02	-.09	.12	-.01	.04	.06	**.48**	.44
Q3	.36	.11	.10	-.2	.11	.15	.08	.17	.43
Q4	.07	.0	.25	.10	.31	-.11	-.12	.17	.32
Q5	**.69**	-.0	.03	.07	-.04	.01	.08	.09	.63
Q6	**.63**	.04	.11	.06	-.07	.02	-.06	.20	.60
Q7	**.59**	-.0	-.01	.09	.12	.08	-.05	.16	.59
Q8	**.43**	.01	.26	-.10	-.27	.01	.06	-.06	.53
Q10	.13	.09	-.05	**.57**	.17	-.05	-.02	-.02	.49
Q11*	**.42**	-.09	.10	.33	.10	.10	.02	.15	.68
Q12	.24	-.0	.04	.22	-.02	.12	.18	.19	.44
Q14	.17	.01	.13	.28	.17	.04	.18	.04	.45
Q15	.17	-.14	**.50**	.02	.05	.09	.31	-.05	.62
Q17	-.02	-.04	**.54**	.19	-.02	.0	.05	.04	.54
Q18	.36	.19	-.03	.21	.04	-.04	.12	-.09	.34
Q19	.0	-.02	.12	.33	.19	-.04	.10	.30	.49
Q20	.04	-.02	.13	**.52**	.25	-.03	.10	.01	.58
Q21	.06	.16	-.01	-.07	.19	-.12	.15	.38	.33
Q22	.12	.20	.10	.0	.24	-.13	.12	.15	.32
Q24	.03	.06	-.01	**.65**	-.08	.14	-.02	.14	.54
Q25	.12	.10	.13	.21	-.07	.01	.09	**.53**	.62
Q27	-.12	-.03	.09	.24	**.51**	.06	.0	.19	.54
Q29	-.07	.07	-.01	.01	-.04	-.0	**.76**	.10	.59
Q30	.05	.25	.08	-.01	.23	.03	.27	.06	.42

Q31	.37	-.07	.23	.10	.05	.06	.31	.03	.64
Q33	-.0	.12	**.54**	.05	.0	.19	.12	-.04	.55
Q34	-.02	.02	.23	.36	.05	-.06	.33	.09	.50
Q36	.11	.02	-.1	.14	**.76**	.18	.04	-.05	.83
Q39	.19	.17	-.06	.19	.14	.32	.13	-.14	.47
Q40*	.06	-.0	.10	.10	-.1	**.43**	.38	.18	.67
Q41	-.07	-.04	.19	-.02	.15	**.61**	.17	.15	.71
Q42	.07	.18	.31	-.18	.14	.33	.02	.13	.52
Q43	.20	.18	-.02	-.04	-.01	.14	**.40**	-.10	.42
Q44	.16	.14	.13	.17	.08	**.51**	-.11	.10	.63
Q45	.31	-.07	.15	-.11	.1	.35	.31	-.21	.62
Q46	.13	.24	-.11	.05	**.45**	.22	.04	-.09	.50
Q47	-.06	**.80**	-.06	.0	.11	.07	-.04	.11	.68
Q48	.05	**.84**	.03	.02	-.17	-.02	.02	-.03	.70
Q49	-.06	**.64**	.14	.04	.04	-.04	.08	-.08	.52
Q50	.12	.11	**.42**	.18	.03	.25	-.0	-.05	.55
Q51	-.0	.17	.26	.08	.19	.33	.18	-.04	.60
Q52	.10	.19	**.68**	-.08	-.18	.03	-.03	.02	.56

Note. Unbolded items were removed from the scale due to loadings <.4 on EFA factors. Items with an *asterisk did not satisfy simple structure and had loadings on more than one factor >.32.

The dissertation researcher labeled the factors of the BSI-Revised (Brunson, 2017) scale by revisiting the SIM literature, general scholarly literature, and conferencing with the dissertation committee. See Table 16 below for the new factor labels and factor items. The factors include, *academic goal orientation* (AGO), *academic pride-school* (AP-S), *academic prioritizing* (AP), *Black student resilience* (BSR), *academic pride-personal* (AP-P), *internal locus of control* (ILC), and *scholar self-efficacy* (SSE).

Table 16

Exploratory Factor Analysis Factor Descriptions

EFA Factor Label	Items
Factor 1: Academic Goal Orientation	Q5 I have an academic plan to reach my goals Q6 I know what it takes to reach my future academic goals Q7 I believe that my hard work now will help me reach my academic goals Q8 I am willing to make sacrifices to reach my academic goals Q11 I can be a skilled student or scholar because I work hard to achieve my academic goals
Factor 2: Academic Pride—School	Q47 I tell my peers when I do well in school Q48 I tell my teachers when I do well in school Q49 I tell others about my academic strengths
Factor 3: Academic Prioritizing	Q15 I put school work first, even before my social life Q17 I care more about reaching my academic goals than being popular Q33 I choose to do things that will help me be successful in school, even when there are other things important to me Q50 I think about how my current decisions will influence my future academic achievement Q52 I turn down activities that my friends participate in so that I can achieve my academic goals
Factor 4: Black Student Resilience	Q10 I continue to try to do well in school despite negative attitudes toward Black students Q20 I try to do well in school despite the limitations that society places on Black people Q24 I will reach my goals despite unfair treatment at school.

Factor 5: Academic Pride—Personal/Familial	Q27 I can be myself as a Black person and be a scholar-skilled student Q36 I feel pride when I accomplish my academic goals Q46 I tell my parents/guardians when I do well in school
Factor 6: Internal Locus of Control	Q40 I make time each day to complete school assignments Q41 I work hard on my academic assignments without being pushed by others Q44 I set realistic academic goals
Factor 8: Academic/Scholar Self-Efficacy	Q1 I am confident in my ability to be a skilled student-a scholar Q2 I know what it takes to be a skilled student- a scholar Q25 I am confident in academic settings

Confirmatory factor analysis—Revised model. In analyzing the overall fit of the BSI revised model, the dissertation researcher conducted a CFA using Lisrel 9.2. Before conducting the maximum likelihood CFA, the researcher conducted univariate and multivariate normality tests. The 25-item scale did not violate any univariate or multivariate normality assumptions. See Appendix Q for a summary of univariate and multivariate normality assessments and item-analyses.

The dissertation researcher hypothesized that the 7-factor model would fit the data. Based on several fit indices, the researcher concluded that the data marginally fit the model. The author assessed various fit indices: maximum likelihood Chi-square, Root Mean Square Error of Approximation (RMSEA), Confidence Interval for RMSEA, the Comparative Fit Index (CFA), and the Root Mean Square Residual (RMR). A non-significant maximum likelihood chi-square suggests model fit. The Chi-square test is sensitive to sample size (Bollen, 1989), so the researcher also considered other fit indices. A RMSEA of .05 to .08 (Steiger & Lind, 1980), a RMSEA confidence interval where the

upward limit is < .1, a CFI that is .9 or higher (Hu & Bentler, 1999) and a SRMR close to zero (Kline, 2011) are ideal for model fit. Taken together, the fit indices analyses suggest marginal fit (see Table 17**)**.

Table 17

Confirmatory Factor Analysis Model Fit Indices

Model	χ^2	**Df**	**CFI**	**RMSEA**	**90% CI RMSEA**	**SRMR**
	547.28**	268	.88	.073	.065;.082	.07

In a model with reasonable fit, we would expect that indicators would have relatively high standardized loadings on the respective factor (e.g., > .7), the estimated correlations between the factors would not be overly high (e.g., < .9 in absolute value) and that the model would explain the majority (i.e., R^2 > .5) of variance in indicators (Mvududu & Sink, 2013). The indicators loaded on the factor significantly (p < .05), meaning that the loadings were significantly different from zero. The completely standardized loadings ranged from .610 to .868 (Table 18**).** Ten items or indicators had factor loadings slightly below .7, ranging from .610 to .699 on six of the seven factors, excluding ILC. All items exceeded the loading cutoff on the ILC subscale. All factors loaded significantly on the independent latent variable BSI; the t-value estimates exceeded the critical value (i.e., t > 1.96). The dependent latent variable factor loadings ranged from .415 to .915. All factor loading estimates exceeded .7, except the AP-S factor loading.

Table 18

Confirmatory Factor Analysis Loadings and Correlations

Primary and Secondary Factor Loadings								
	AGO	AP-S	AP	BSR	AP-P	ILC	SSE	
Factor Loading	.90*	.42*	.82*	.79*	.76*	.92*	.79*	
Indicator								
Q5	.774*							
Q6	.743*							
Q7	.738*							
Q8	.649*							
Q11	.817*							
Q47		.841*						
Q48		.834*						
Q49		.653*						
Q15			.760*					
Q17			.698*					
Q33			.723*					
Q50			.715*					
Q52			.610*					
Q10				.656*				
Q20				.775*				
Q24				.677*				
Q27					.675*			
Q36					.868*			
Q46					.668*			
Q40						.741*		
Q41						.743*		
Q44						.775*		
Q1							.699*	
Q2							.688*	
Q25							.740*	

Standardized Factor Correlations								
Factors	AGO	AP-S	AP	BSR	AP-P	ILC	SSE	BSI
AGO	1							
AP-S	.373	1						
AP	.741	.342	1					
BSR	.706	.326	.647	1				
AP-P	.684	.316	.626	.597	1			
ILC	.823	.380	.754	.718	.695	1		
SSE	.715	.330	.654	.624	.604	.726	1	
BSI	.9	.415	.824	.785	.760	.915	.794	1

Note. Asterisks indicate significant estimates

The correlations among the factors did not exceed .9, which provides preliminary evidence for discriminate validity between the factors, suggesting that the latent factors represent unique constructs. The between-factor correlations ranged from .326 to .823. The lowest bivariate correlations existed between AP-S and the other subscales. The highest bivariate correlations existed between ILC and AGO. Two factors were highly correlated with the exogenous latent variable, BSI—AGO (i.e., .9) and ILC (i.e., .915).

The model explained at least 50 percent of the variability in all items except 10: Q8, Q49, Q17, Q52, Q10, Q24, Q27, Q56, Q1, and Q2. These items also had relatively low completely standardized loadings (i.e., < .7). The model explained at least 50 percent of the variability in all factors—AGO (i.e., R^2 = 80.9%), AP (i.e., R^2 = 67.9%), BSR (i.e., R^2 = 61.7%), AP-P (i.e., R^2 = 57.8%), ILC (i.e., R^2 = 83.7%), SSE (i.e., R^2 = 63.1%)—except, AP-S (i.e., R^2 = 17.2%). See Figure 17 for a visual representation of the model.

Measurement errors and standardized residuals provide insights around model specification (Brown, 2015; Schreiber et al., 2006). Modification indexes provide an approximation for how much the chi-square fit statistics would decrease if the fixed or constrained parameter was freely estimated. The dissertation researcher observed 10 correlated measurement error pairs between indicators in analyzing the modification indexes (Table 19). Also, the modification indexes proposed several new paths from dependent latent variables (e.g., BSR) to indicators. The largest modification index was for a new path between BSR and Q11 (i.e., *I can be a skilled student or scholar because I work hard to achieve my academic goals),* with a decrease of 20.23 in χ^2.

Table 19

Modification Indexes: Items with Correlated Measurement Error

Pair	BSI Item	BSI Item
1 Same	Q5 I have an academic plan to reach my goals	Q6 I know what it takes to reach my future academic goals
2 Across	Q48 I tell my teachers when I do well in school	Q52 I turn down activities that my friends participate in participate in so that I can achieve my academic goals
3 Same	Q15 I put school work first, even before my social life	Q50 I think about how my current decisions will influence my future academic achievement
4 Same	Q15 I put school work first, even before my social life	Q17 I care more about reaching my academic goals than being popular
5 Across	Q17 I care more about reaching my academic goals than being popular	Q20 I try to do well in school despite the limitations that society places on Black people
6 Across	Q50 I think about how my current decisions will influence my future academic achievement	Q44 I set realistic academic goals
7 Across	Q52 I turn down activities that my friends participate in participate in so that I can achieve my academic goals	Q36 I feel pride when I accomplish my academic goals
8 Across	Q17 I care more about reaching my academic goals than being popular	Q27 I can be myself as a Black person and be a scholar-skilled student
9 Same	Q1 I am confident in my ability to be a skilled student-a scholar	Q25 I am confident in academic settings
10 Same	Q1 I am confident in my ability to be a skilled student-a scholar	Q2 I know what it takes to be a skilled student-a scholar

Standardized residuals are a z-score and constitute the standard deviations that exist between the fitted residuals and zero-value residuals associated with perfect fit (Brown, 2015). Researchers commonly use +/- 1.96 ($p < .05$) to identify standardized residual that exceed the zero-value residual. Values beyond +/- 1.96 indicate localized areas of ill-fit. Standardized residuals ranged from -5.571 to 3.217. Seven residuals fell below -1.96 and 10 residuals exceeded 1.96.

Positive standardized residuals that exceed the critical value indicate that the model may underestimate associations among two indicators, suggesting that additional parameters are necessary to better account for covariance among indicators. The largest positive standardized residuals existed between Q50 and Q49 (i.e., 2.69) and Q46 and Q47 (i.e., 3.217) Conversely, negative standardized residuals that exceed the critical value suggest overestimated indicator relationships (Brown, 2015). The largest negative standardized residuals existed between Q36 and Q48 (i.e., -5.57) and Q36 and Q52 (i.e., -2.649).

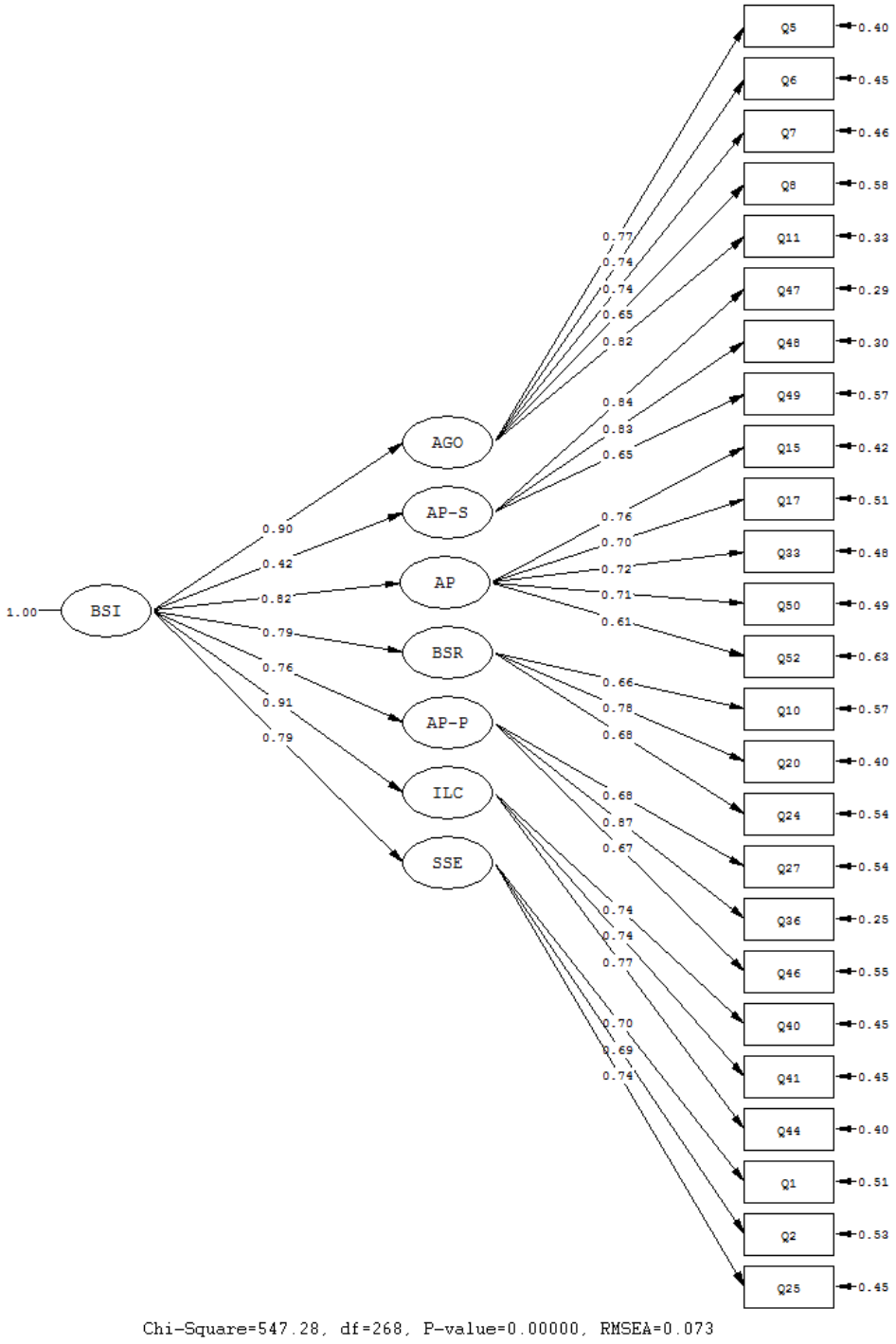

Figure 17. Confirmatory Factor Analysis Model Diagram for the BSI-Revised Scale. Path loadings are completely standardized solutions. Indicator disturbances indicate the proportion of variance not explained by the model. Chi-square and RMSEA model fit index parameters below the model.

Hypothesis Two: Reliability Assessment

The factor rho coefficient equation, $\hat{\rho}_{x_i x_i} = \frac{(\sum \hat{\lambda}_i)^2 \hat{\phi}}{(\sum \hat{\lambda}_i)^2 \hat{\phi} + \sum \hat{\theta}_{ii}}$,was used to assess internal consistency for the entire scale and BSI subscales because Cronbach's Alpha may over or underestimate reliability estimates (Kline, 2011). This equation is appropriate when a researcher does not allow the error terms or disturbances to correlate (Kline, 2011).

The BSI full-scale and subscale reliability estimates exceeded .7 (see Table 20). Subscale reliability estimates ranged from .743 to .861. The appropriate full-scale reliability estimate (i.e., $\hat{\rho}_{x_i x_i} = .891$) indicates adequate intercorrelation among factors and that the factors are measuring the same construct. The appropriate subscale reliabilities suggested consistency or stability among items and that responses were based on more than random error (Vogt & Johnson, 1993). The findings supported the fourth hypothesis.

Table 20

BSI-Revised Scale and Subscale Reliability: Rho Factor Coefficients

Factor	BSI	AGO	AP-S	AP	BSR	AP-P	ILC	SSE
$\widehat{\boldsymbol{\rho}}_{\boldsymbol{x_i x_i}}$	.89	.86	.83	.82	.74	.77	.79	.75

Hypothesis Three: Convergent and Discriminant Validity

The dissertation researcher assessed the bivariate correlations between the BSI-Revised scale (Brunson, 2017) FG and FNE subscales using Pearson's product-moment to demonstrate convergent and discriminant validity, respectively. See Table 21 for

descriptive statistics for both variables. Aligned with hypothesis three, the researcher found a positive association between the BSI-Revised and the FG subscale, $r\ (192) = .724, p < .0001$. The scales shared 52 % of their total variance. All the BSI subscales were significantly correlated with the FG subscale. The AGO factor had the highest correlation $r\ (192) = .674, p < .001$. AP-S had the lowest correlation $r\ (192) = .267, p = .0002$. Overall, the associations between the BSI scale and FG subscale constituted large effect sizes or practical significance. The association between the AP-S subscale and FG subscale constituted small effect size (Cohen, 1992; Sink & Stroh, 2006). See Table 22 for the correlation matrix.

The dissertation researcher found a negative and significant correlation between the FNE and BSI subscales in alignment with hypothesis three $r\ (192) = -.288, p < .0001$. Although significantly related, the relationship was relatively weaker than the association identified between the BSI and FG subscale. The subscales were significantly correlated ($p < .05$) with FNE, except the AP-S subscale r (192) = -.095, p =.186. All other associations constituted small practical significance. These findings provide preliminary grounds for the convergent and discriminant validity of the BSI scale (Table 22), aligned with the hypotheses.

Table 21

FNE and FG Subscale Psychometric Statistics

Subscale	M	SD	Skew	Kurtosis
FG α=.840	4.55	.53	-1.35	1.72
FNE α=.928	19.42	8.0	.48	-.32

Table 22

Pearson Product Moment Correlations—Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12
1	1											
2	-.22**	1										
3	.22**	-.17*	1									
4	-.29***	.09	-.72***	1								
5	.72***	-.29**	.22**	-.36***	1							
6	.67***	-.19**	.15	-.29***	.84***	1						
7	.27**	-.10	-.05	-.04	.56***	.28***	1					
8	.58***	-.24**	.25**	-.34***	.82***	.61***	.38***	1				
9	.52***	-.17*	.17*	-.29***	.68***	.57***	.24**	.42***	1			

10	.57***	-.24**	.22**	-.20**	.71***	.56***	.32***	.45***	.57***	1		
11	.63***	-.29***	.21*	-.39***	.82***	.66***	.32***	.69***	.47***	.56***	1	
12	.53***	-.30***	.21*	-.35***	.69***	.61***	.18*	.44***	.52***	.41***	.56***	1

Note. 1=FG, 2=FNE, 3=GPA 4=Avg. Grades 5= BSI, 6=AGO, 7=AP-S, 8=AP, 9=BSR, 10=AP-P, 11=ILC, 12=SSE *=p<.05 **=p<.01 ***=p<.0001. Correlations are correlated to the nearest hundredth.

Hypothesis Four: External Criterion Validity

Bivariate correlations between parent-reported GPA (discrete variable) and parent-reported average grades (ordinal variable) were assessed using Pearson's product-moment to demonstrate external criterion validity. See Table 23 for descriptive statistics for both variables. The BSI scale was associate with GPA, $r\ (144) = .222, p < .01$ and students' average grades, $r\ (192) = -.363, p < .0001$. Both relationships were in the expected direction. As students' self-reported scholar identity increased, average grades and GPA increased. The associations between BSI and GPA and average grades constituted small and medium practical significance, respectively (Cohen, 1992; Sink & Stroh, 2006).

The BSI factors—excluding AP-S, *r* (192) = -.036, *p*=.614—were not associated with average grades, significantly. The BSI scale, ILC, *r* (192) = -.399, *p* <.0001; SSE, *r* (192) = -.345, *p*<.0001, and AP, *r* (192) = -.338, *p* <.0001 subscales met the criteria for medium practical significance with average grades (Sink & Stroh, 2006). ILC had the highest bivariate correlation with average grades**.** The subscale explained approximately 15.9% of the variability in average grades.

Two factors were not associated with parent-reported GPA, significantly: AGO, *r* (144) = .148, *p* = .074 and AP-S, *r* (144) = -.047, *p* = .576. The association between AGO and GPA approached significance, *p* < .05. GPA and AP had the highest correlation among all subscales, *r* (144) =.250, *p* =.0024, AP explained approximately 6.3% of the variability in GPA. This association constituted small effect size (Sink & Stroh, 2006). The insignificant findings and relatively low associations between GPA and the BSI

subscales may be due in part to the large proportion of missing data with this variable and the violation of normality assumptions (i.e., kurtosis). However, GPA was highly correlated with average grades, as expected r (144) = .714, p < .0001. Average grades explained nearly 50 percent of the variability in GPA. Overall, these findings provide preliminary evidence for the external criterion validity of the BSI-Final scale.

Table 23

Grades and Average GPA Psychometric Statistics

	M	SD	Skew	Kurtosis	Valid Responses
Grades	1.73	.698	.514	-.477	194
GPA	3.54	.678	-.872	2.060	146

Chapter Summary

In this chapter, the dissertation researcher tested the four research questions by assessing the hypotheses justified in the Chapter One Addendum and detailed in Chapter Three. In the first research question, the author hypothesized that the eight factor SIM model would produce adequate fit to the data in the sample. The findings did not support the hypothesis. Aligned with the predetermined contingency plan, the dissertation researcher conducted an EFA to assess factor extraction. Eight factors were extracted from the data; seven of those factors were retained—*academic goal orientation*, *academic pride—school*, *academic prioritizing*, *academic pride—personal*, *internal locus of control*, *Black student resilience* and *scholar self efficacy*. Fit indices assessed after conducting a CFA for the seven factor BSI model, indicated marginal fit.

The dissertation researcher hypothesized appropriate (i.e., $\hat{\rho}_{x_i x_i}$ >.7) estimates of full-scale and subscale reliability. Hypothesis two was supported. The subscale and full-scale estimates exceeded the cut-offs. BSI scale reliability was .891. For research question three, the researcher hypothesized convergent and discriminant validity, whereby the BSI scale and subscales would have a significant, positive association with FG and a relatively lower and potentially insignificant association with FNE. The evidence provided preliminary support for the convergent and discriminant validity of BSI.

In research question four, the author assessed of external criterion validity of the BSI scale and subscales by examining their associations with parent-reported average grades and GPA. The dissertation researcher found significant associations between average grades and the full scale and all subscales, excluding the AP-S subscale. The significant associations constituted small and medium practical significance. The dissertation researcher observed fewer significant associations between GPA and the BSI scale and subscales. Overall, the results support hypothesis four.

CHAPTER V

DISCUSSION

The author reported the results of the initial Black Scholar Identity (BSI) scale (Gray, 2016) validation study in Chapter Four. The purpose of this chapter is to provide a discussion of the results grounded in previous literature and outline implications and study limitations. The author has divided the chapter into sections: summary of results, findings in context, study limitations, and research and practice implications.

Summary of Results

Participants

The dissertation researcher sought 200 Black ninth and tenth grade students for this study via stratified sampling with a Qualtrics Online Panel data pool. Although 205 high school students and their parents or guardians participated; the dissertation researcher used 194 (i.e., 112 ninth, 71 tenth, 6 eleventh, and 5 twelfth grade students) survey responses. The initial participant to item ratio (i.e., 194 to 52 or 3.7 to 1) approximated the minimum ratio recommendation when conducting factor analyses (Mvududu & Sink, 2013). However, the final participant to item ratio was 194 to 25 or 7.8 to 1. This ratio approximates the ideal ratio (i.e., 10:1) proposed by the authors.

Relative to location and household income, the sample was relatively diverse. Participants resided in various states across the United States and spanned every region of

the country; thirty-three states, including the District of Columbia. The highest proportion of students came from Texas and Georgia. Approximately 62% percent of the sample was female and 38% male. The majority (i.e., 99.5%) of the students identified as African American and 15.5% identified as biracial or multi-racial.

The sample also included a range of household incomes. Parents self-reported household income ranged from $200,000+ to 0-$24,999. Approximately, 25% of the parents reported a household income between 25 and 50 thousand. Only about 4% of the parents reported incomes over $200,000. Moreover, 41% of the participants attended schools in both suburban and urban environments and 17.5% attended rural schools. The schools that students attended varied in the proportion of Black students. Approximately 50% of the students attended schools that were between 25-75% African American or Black.

In-depth exploration into the characteristics of the sample mirrored previous findings and statistics. Holcomb-McCoy et al. (2016) cited that 30% of all Black male students live in urban areas and potentially attend urban schools (p. 1). Furthermore, research trends indicate that urban schools have higher proportions of students of color or those from lower socioeconomic backgrounds (Griffin & Allen, 2006; Rust, 2016). This trend held true for this study. Students whose parents endorsed an HHI of less than $50,000 had higher percentages of students who attended urban schools than those with a higher HHI. Also, parents who reported that their child attended an urban school endorsed a predominately Black student body at higher frequencies.

Trends found in the literature did not hold for course level frequencies and school size. For instance, Griffin and Allen (2006) cited that urban schools are more likely underfunded, have larger class sizes, have access to fewer or outdated resources, and lack rigorous course opportunities. In running a Chi-square analysis, the dissertation researcher did not find significant frequency differences in the school size or highest course level taken across school locale. These findings are promising and suggest that within this sample, Black students have opportunities to enroll in rigorous courses regardless of their school locale.

These finding support Rust's (2016) claim that researchers and educators have ascribed narrow metaphors to urban schools that do not capture their nuanced cultural and structural realities. For instance, Rust purported that many urban schools do not lack resources and have high rates of achievement. It is notable that most of the parents—nearly 54%--reported that their child's highest course level was honors or advanced placement. These findings suggest that most respondents in this study take rigorous course work, which may positively influence enrollment in competitive universities and favorable post-secondary opportunities (e.g., Conger et al. 2009).

Notably, parents who reported a lower household income—a socioeconomic status proxy— made up more than 50% of the Traditional/Regular class enrollment. Whereas, parents who reported a household income greater than $100,000 made up nearly half of the Advanced Placement class sample enrollment. Previous research corroborates these findings. Several researchers have identified socioeconomic status as a

covariate/predictor of achievement (e.g., Sirin, 2005) and attainment (e.g., Witte et al., 2013) outcomes.

Instrumentation

The author used the Black Scholar Identity (BSI) scale (Gray, 2016), Fear of Negative Evaluation (FNE) subscale (La Greca & Lopez, 1998), and Future Goals and Aspirations (FG) subscale (Appleton & Christenson, 2004) in this study. Relative to the BSI-Revised scale (Brunson, 2017), the dissertation researcher found evidence of construct validity for a second-order, seven-factor model, with this sample. Importantly, little variability existed for the BSI-Revised (Brunson) scores. This may have been due to the racial homogeny of the sample or similarities among the sampling frame. For instance, participants may have shared similarities due to their parents' participation on a Qualtrics online panel. Moreover, most of the sample performed well in school, with approximately 86 percent of the parents reporting that their child's average grades were A's or B's. This descriptive data suggests that this may have been a high performing and school achievement-oriented sample, which might explain the limited BSI score range (i.e., 2.44 to 5.0). Factor rho coefficients and Cronbach's alpha coefficients were appropriate for the scale and subscales, indicative of substantial reliability.

Hypothesis One: Factor Analyses

Exploratory factor analysis. In the initial confirmatory factor analysis, the researcher assessed if the data fit the model according to Whiting's (2006, 2016) proposed Scholar Identity Model (SIM). The data did not fit the second-order, 8-factor CFA model with 52 indicators. While Whiting has assessed and implemented the model

with Black male students, researchers have not quantitatively tested the model (see Irby, 2015 for a qualitative assessment of the SIM model) and its generalizable implications for Black high school students. This along with the dissertation researchers' own interpretation of each construct based on Whiting's theoretical explanations may explain the poor fit. Due to the poor fit of the 8-factor model, the researcher conducted an EFA, with limited factors. The BSI-Revised (Brunson, 2017) scale contains seven factors and 25 items that satisfied EFA criteria. The dissertation researcher revisited the SIM literature, general scholarly literature, and conferenced with the dissertation committee to label the BSI factors: *academic goal orientation* (AGO), *academic pride-school* (AP-S), *academic prioritizing* (AP), *Black student resilience* (BSR), *academic pride-personal* (AP-P), *internal locus of control* (ILC), and *scholar self efficacy* (SSE). See Table 24 for example items.

Factor operationalization. Below is a brief description of each factor of the BSI model, scholarly literature that supports the researchers' operationalization, and a comparison with SIM model factors. The BSI-Revised (Brunson, 2017) factors approximate some of Whiting's (2006, 2016) SIM factors. Whiting's (2016) current SIM model factors included, *self-efficacy* (SE), *future orientation* (FO), *willing to make sacrifices* (WMS), *internal locus of control* (ILC), *self-awareness* (SA), *achievement>affiliation* (AA), *academic self-confidence* (ASC), and *race consciousness* (RC). Whiting included a ninth factor (i.e., *masculinity*) that the dissertation researcher did not include in this study.

*Academic prioritizing***.** The items of the AP factor assess whether students prioritize their academic success, achievement, or goals. The factor approximates the WMS and AA factors of the SIM. According to the SIM model, Black students with scholar identities prioritize school by sacrificing to attain academic goals or foregoing some social experiences to succeed academically (Whiting & Kennedy, 2016). Black students who prioritize academics likely identify with school. Therefore, this factor seems negatively related to the theoretical proposition, disidentification (e.g., Osbourne, 1997) and positively related to the "accommodation without assimilation" (Mehan et al., 1994) construct. Osbourne and others (e.g., Steele & Aronson, 1995) purported that students who do not identify with school are more likely to engage in behaviors that do not promote success. Contrastingly, Mehan et al. (1994) purported that Black students may identify with school while maintaining their cultural and social identities. The AP factor approximates students who, regardless of rationale, prioritize and identify with school while maintaining other identities (e.g., social). An example AP item is, *I choose to do things that will help me be successful in school, even when there are other things important to me*. The *academic prioritizing* factor had the highest correlation with GPA, explaining approximately 6% of the variance.

Black student resilience. The BSR factor assesses Black students' academic resilience or persistence despite societal limitations or unfair treatment at school. The BSI-Revised (Brunson, 2017), BSR factor approximates one element of the SIM factor, RC. Whiting and Kennedy (2016) proposed that Black students with racial consciousness are aware of disparities that exist in their environment, persist despite those disparities,

and engage with a diverse group of peers. The BSR factor assesses students' persistence despite disparities. Whiting and Kennedy wrote that Black students with race consciousness, "refuse to be constrained by social injustices based on gender, socioeconomic status, and race or ethnicity" (p. 205). The BSR subscale items assess whether students continue to pursue academic success despite unfair treatment or negative attitudes toward the Black community. These items approximate with how researchers have defined resilience in the literature. Williams and Portman (2013) defined educational resilience as a student's capacity to recover or achieve in school "despite exposure to personal and environmental adversities" (p. 14). An example item of the BSR factor is, *I continue to try to do well in school despite negative attitudes toward Black students.*

Internal locus of control. The ILC factor assesses the behaviors that Black students engage in when promoting and accepting control for their own academic success. The ILC factor approximates the ILC, ASC, and FO SIM factors. Researchers have operationalized locus of control as "whether individuals attribute outcomes to their own actions or to circumstances beyond their control" (Anderson, Turner, Heath, & Payne, 2016). The researcher surmises that students who have an internal locus of control attribution (i.e., attribute outcomes to their own actions) are more likely to engage in goal setting and academic assignment completion. Anderson and colleagues reported associations between locus of control and academic outcomes. The ILC subscale honors Rotter's (1975) claim that locus of control focuses on control over reinforcement (i.e., goal attainment and outcome) rather than environment. For instance, the items emphasize

student control relative to actions or behaviors implicated in academic outcomes. The items do not assess students' control relative to the school environment. Although the ILC subscale differs from Rotter's Internal-External scale, Rotter measured students' attributions relative to a range of situations (as cited in Kormanik & Rocco, 2009). An example item of the ILC subscale is, *I make time each day to complete school assignments.* The *internal locus of control* factor had the highest correlation with average grades, explaining approximately 16% of the variable variance.

The inclusion of the ILC and BSR factors honor an important balance that students of color and other marginalized populations may need to exercise. Namely, how to recognize and address or overcome barriers while acknowledging and exercising agency where possible to find success within a given environment.

Academic goal orientation. The AGO subscale assesses Black students' proximal, performance-approach, and academic goal setting behaviors relative to goal creation, planning, activity, and goal attainment. The factor is most related to the Future Orientation factor of the SIM model. Lent et al. (1994) defined a goal as "a determination to engage in a particular activity or to effect a particular future outcome" (p. 85). According to the authors, goals have a self-regulatory function and assist individuals in guiding, organizing, and directing their behaviors in the presence or absence of self-regulatory behaviors. Goals range in their degree of specificity and proximity. Researchers have implicated goal setting in the social cognitive, motivation, and task value literature (Eccles & Wigfield, 2002). Eccles and Wigfield seemed to propose that goal setting is a catalyst for motivation (i.e., intrinsic value and ability beliefs).

Researchers have found that goal setting has implications for students' performance attainments, achievement, and motivation (Eccles & Wigfield; Wang & Eccles, 2013; Lent et al.). An AGO examples items is, *I can be a skilled student or scholar because I work hard to achieve my academic goals*.

Academic/scholar self-efficacy. The SSE factor assesses students' self-efficacy relative to claiming a scholar identity in academic settings. The dissertation researcher originally designated these items as indicators of SE and ASC SIM factors. The educational literature around self-efficacy is expansive. Self-efficacy refers to a person's beliefs (i.e., perceptions and cognitions) about their capabilities or abilities to organize and complete a given task or performance attainment (Bong & Skaalvik, 2003; Lent et al., 1994). Self-efficacy is a domain-specific construct; a person's beliefs may vary across context and task.

Researchers have indicated that school environments may influence Black students' construction of scholar identities (e.g., Nasir, 2012). For instance, Nasir noted that school environments, through their practices and structures, may encourage or discourage students from adopting a scholar identity. Scholar identity is a malleable construct that school staff, families, and Black students may shape and facilitate. Therefore, students or others may have beliefs or perceptions relative to their ability to construct or claim these identities within a school context. The items in the scale approximate how researchers operationalize self-efficacy in the literature and mirror the wording of self-efficacy items (i.e., "I am confident in my ability," "I know what it takes,") (Bandura, 1997). A SSE example item is, *I am confident in my ability to be a*

skilled student-a scholar. The *scholar self-efficacy* factor had the second highest correlation with average grades, explaining approximately 12% of the variable variance.

Academic pride. There are two academic pride factors: *academic pride-school* (AP-S) and *academic pride-personal/familial* (AP-P). *Academic pride-school* assesses whether Black students share their academic successes and strengths with people at school or in other environments. This subscale approximates indicators from the ASC factor of the original scale. *Academic pride-personal/familial* assesses whether Black students engage in "accommodation without assimilation," whereby these students experience personal pride when they succeed academically and share that pride with their family unit. These items were indicators of ASC, RC and AA original scale factors.

Relative to the AP-P factor, Noguera (2008$_b$) and others (e.g., Mehan et al., 1994) purport that Black students may adopt multiple identities that allow them to succeed academically and maintain their cultural identities. The item, *I can be myself as a Black person and be a scholar-skilled student,* counters the notion that academic and cultural identities need be exclusive, challenging Fordham and Ogbu's (1986) oppositional resistant representation theory. In other words, this item and the BSI scale (Brunson, 2017) provide a counter-narrative for the notion that Black culture and academic success are not synonymous or cannot exist in tandem. Unfortunately, this is a narrative that is well-cited in the literature and one that the dissertation researcher has observed and experienced in her own life. The researcher is hypothesizing that respondents who rated this item higher embrace academic success as a facet of their Black identity and cultural reality.

Relative to the AP-S subscale, the item, *I tell my parents/guardians when I do well in school* is consistent with research findings that parental-involvement is critical to Black students' academic success (e.g., Hines et al., 2014). The researcher is hypothesizing that those students with involved parents are more likely to share their academic successes and pride. The AP-S scale seems to capture the ideal that Black students who construct scholar identities often find friend groups that support their academic endeavors (Nasir, 2012), and that positive teacher-student relationships are essential to Black student achievement (Noguera, 2008_b). The dissertation researcher hypothesizes that Black students who have positive relationships with their teachers would be more likely to communicate their academic pride with them. Importantly, the correlation between the factor and GPA and average grades was insignificant.

While the BSI factors differ from Whiting's (2006, 2016) SIM factors, there are some similarities. For instance, the *academic prioritizing* factor subsumes the *willingness to make sacrifices* and *achievement>affiliation* factors of the SIM. This could be because making sacrifices relative to school and caring about achievement more than friendship requires a general form of academic prioritizing. In addition, The *Black student resilience* factor captures one element of the SIM factor, *racial consciousness*. The dissertation researcher removed five items created to operationalize the RC factor due to poor item-level statistics or low loadings observed through EFA analysis. Overall, the BSI-Revised (Brunson, 2017) factors some facet of all the SIM (Whiting & Kennedy, 2016) factors.

Table 24

BSI-Revised Factors and Example Item

Factor Name	Example Item
Academic Goal Orientation (5 Items)	I can be a skilled student or scholar because I work hard to achieve my academic goals
Academic Pride—School (3 Items)	I tell my peers when I do well in school
Academic Prioritizing (5 Items)	I put school work first, even before my social life
Black Student Resilience (3 Items)	I try to do well in school despite the limitations that society places on Black people
Academic Pride—Personal/Familial (3 Items)	I feel pride when I accomplish my academic goals
Internal Locus of Control (3 Items)	I set realistic academic goals
Academic/Scholar Self Efficacy (3 Items)	I am confident in academic settings

Confirmatory factor analysis. After conducting the EFA and removing items, the author hypothesized that the seven-factor model would yield adequate fit to the data. See Appendix P for the BSI-Revised (Brunson, 2017) scale with completely standardized loadings, reliability estimates, and standard errors. The model fit indices were indicative of marginal fit. In all, these findings provide preliminary evidence relative to the structural validity of scholar identity for a Black ninth and tenth grade population. Below, is an overview of important considerations relative to BSI factor and item findings.

***BSI factors*.** The model explained at least 50% of the variance for the subscales, excluding AP-S. The AP-S factor functioned least favorably, within non-significant correlation with average grades and a slightly negative correlation with GPA. This

finding may be due to the reality that Black students sharing their academic success with teachers and students is not associated with higher achievement. While Noguera (2003_b) and Nasir (2012) noted the importance of peer influence on Black students' academic success, these scale items may not capture where and how peer influence contributes to outcomes. For instance, Nasir found that Black students who adopted a scholar identity often had a peer group that was supportive of their academic endeavors while facilitating other cultural aspects of their identities. So, the item *I tell my peers when I do well in school* could be modified or items could be added to better capture those findings.

Moreover, Noguera noted the importance of teacher support and high expectations; however, the AP-S item (i.e., *I tell my teachers when I do well in school*) may not capture the important elements of the teacher-student relationship that Noguera found. Also, aligned with the "acting white" (Fordham & Ogbu, 1986) proposition, Black students—especially Black males—who do well in school may feel uncomfortable openly broadcasting their academic orientation due to the cultural implications (Noguera, 2003_b). Although, the dissertation researcher believes that the "acting white" narrative my further hegemonic narratives that an academic orientation functions counter or in opposition to Black culture and cultural history. These are false narratives that segments of our society and Black students have adopted which may contribute to deficit perspectives and disparities.

BSI items. The model explained at least 50% of the variability in 15 items of the 25-item BSI-Revised scale (Brunson, 2017). Although, in assessing the modification indexes, the dissertation observed 10 correlated measurement error pairs. These findings

might point to an unanalyzed factor that may explain the associations among the indicator disturbances or errors. Moreover, the dissertation researcher observed significant negative and positive standardized residuals among indicators. For instance, additional model parameters may assist in understanding the association between the items, *I tell my teachers when I do well in school* and *I feel pride when I accomplish my academic goals.* This is also true to the following item pair, *I feel pride when I accomplish my academic goals* and *I turn down activities that my friends participate in so that I can achieve my academic goals*. The model overestimates that associations between the following pairs, *I think about how my current decisions will influence my future academic achievement* and *I tell others about my academic strengths* and *I tell my parents/guardians when I do well in school* and *I tell my peers when I do well in school.* The modification indexes and residuals may also be due to model misspecification. Additional studies could improve the BSI model, such that it more accurately captures Black students' scholar identity.

Hypothesis Two: Reliability Assessment

The dissertation researcher observed appropriate factor rho coefficients for the BSI-Revised scale (Brunson, 2017) and subscales. The BSI-Revised scale had an internal consistency of .891. Subscale reliabilities ranged from .743 to .861. Given the high internal consistency coefficients across the scale and subscales, the 25-items seem to measure the scholar identity construct.

Hypothesis Three: Convergent and Divergent Validity

The author established evidence for convergent validity by correlating the BSI-Revised scale with the FG (Appleton & Christenson, 2004) subscale. FG is an 8-item

subscale that measures students' cognitive engagement relative to their future goals and aspirations in education.

The dissertation researcher selected this subscale because Sink and Stroh (2006) found that the FG subscale was the only factor of the Student Engagement Instrument (SEI; Appleton & Christenson, 2004) significantly correlated with all five academic outcomes—homework completion, grades, office referrals, suspensions, and fights—measured in their study. Moreover, Reschly et al. (2008) found that FG was the most robust predictor of students' on-time graduation or dropout, compared to all SEI subscales.

The significant, positive correlation found between the two measures in this study indicate that the BSI-Revised scale (Brunson, 2017) is associated with a variable that researchers have already implicated in understanding important academic markers associated with academic attainment outcomes (e.g., Blount, 2012; Rumberger & Lim, 2008; Suh et al., 2007). Moreover, researchers have implicated engagement as an important construct in understanding students' dropout behaviors. The researcher also found significant associations between the BSI-Revised subscales and FG. Notably, the AP-S subscale had the lowest and the AGO factor had the highest correlation with FG. These findings provide preliminary evidence for the potential importance of this construct in understanding Black students' graduation promise.

The author found evidence of discriminant validity by correlating the BSI-Revised Scale (Brunson, 2017) and subscales with the FNE subscale of the SAS-A (La Greca & Lopez, 1998). The researcher found a significant, negative correlation between

the BSI-revised scale and subscales and the FNE. As hypothesized, this association was smaller than that observed with the FG subscale. These findings indicate that Black students with higher average scholar identity scores are more likely to endorse less fear of negative evaluation from others. These findings are consistent with previous research. Researchers have noted a link between social anxiety and academic achievement (e.g., Storch Masia-Warner, Dent, Roberti, & Fisher, 2003), specifically high school completion (e.g., Duchesne, Vitaro, Larose, & Tremblay, 2008).

Hypothesis Four: External Criterion Validity

The dissertation researcher assessed the practical implications of the BSI-Revised (Brunson, 2017) scale by assessing the scales' external criterion validity. The author hypothesized that the BSI-Revised scale and subscales would have a significant, positive association with GPA and a significant, negative association with average grades (reverse scored). As Black students' scholar identity increased, their average grades and GPA also increased. The associations between average grades and the BSI scale and subscales reached medium practical significance. The association between AP-S and average grades was not significant; the correlation was small (i.e., r = -.036). The associations between GPA and the BSI scale and subscales only reached small practical significance. The associations between two subscales—AGO and AP-S— and GPA were not significant. As the author noted in Chapter Four, the insignificant findings relative to GPA may have been due to variable psychometrics. Overall, these findings provide preliminary evidence for the external criterion validity of the BSI-Revised scale relative to students' academic success as measured by their grades and GPA.

Importantly, GPA is an academic marker for graduation promise (e.g., Blount, 2012; Rumberger & Lim, 2008; Suh et al., 2007). Therefore, these findings also warrant further research into whether the BSI-Revised scale is associated with other academic markers—disciplinary citations, attendance, and retention—implicated in students' "graduation promise."

Findings in Context

Scholar identity is a construct that qualitative researchers have implicated in Black students' academic performance and attainment (e.g., Nasir, 2012; Whiting & Kennedy, 2016). The results of the present study supported these findings. Black students who reported higher average scholar identity had higher parent-reported grades and GPA.

Researchers have also claimed that students construct scholar identities within environments, and that certain school environments are more conducive to Black students constructing scholar identities (Nasir, 2012). The unique historical and cultural experiences of Black students within the U.S. educational system warrant quantitative investigation into these propositions. Moreover, research indicates that black students are more likely to rate school climate less favorably (e.g., Lee, 2003; Mattison & Aber, 2007; Shukla et al., 2016) when also reporting higher discipline referrals and lower grades. The dissertation researcher did not find evidence that researchers have investigated these links. The results of the present study provide quantitative researchers with a measure of scholar identity to investigate these theoretical propositions and unanalyzed associations.

Finally, researchers have sought to understand the high school graduation gap that disproportionally impacts students of color and those from low socioeconomic

backgrounds. Dropout researchers have made great strides in understanding this socially-consequential problem; however, important cultural and contextual considerations are useful in understanding the high school graduation gap relative to Black students. For instance, researchers have implicated racial identity, scholar identity, and racial school climate as important variables when promoting Black students' academic performance and attainment (e.g., Chavous et al., 2003; Nasir & Saxe, 2003, Whiting, 2006; Whiting & Kennedy, 2016). The BSI-Revised scale provides a means whereby researchers may begin to investigate important associations and propositions.

Limitations

Several strengths underlie this study: (1) a national sample, that increases the generalizability of the findings; (2) the sampling procedures, including the quality checks and screenings; (3) psychometrically sound instruments; and (4) stratified sampling according to household income, an identified covariate relative to student attainment (e.g., Witte et al., 2013).

However, the main study also has important limitations that the dissertation researcher acknowledges. First, it is important to note limitations relative to the recruitment process. The researcher cannot verify that respondents are within the sampling frame. Qualtrics provides some protections for this; however, this is an important limitation. In addition, participants who elected to participate in the online Qualtrics panels may differ from the population of interest in unique ways that might present confounding variables. Although, the similarities between the 2010 and 2015 Census data statistics and the Qualtrics panel participants allay some of these concerns.

There are also limitations relative to the BSI-Revised (Brunson, 2017) scale. Although the dissertation researcher used Whiting's (2006) SIM model to create the BSI scale, a more in-depth analysis of the literature to assist in factor operationalization was warranted. The item creation method, outlined in Chapter Three, may have contributed to the inadequate model fit indices observed when the dissertation researcher ran the first CFA. A literature review to properly define and operationalize important constructs in the SIM Model: *internal locus of control*, *self-efficacy*, *academic goals*, and *race consciousness* could have been helpful. This process would have allowed the dissertation researcher to properly word the items in alignment with how researchers have operationalized each construct.

Relative to item construction, the dissertation researcher could have been more intentional in conducing the pilot study to receive student feedback relative to item-wording and appropriateness. Due to time constraints during the focus group, the author was unable to receive student feedback for each item of the scale. The dissertation researcher did receive feedback from an instrument development expert to address item wording and control for test effects, but the researcher could have also conducted a second focus group to receive more detailed feedback from students who matched the sampling frame.

There was also little variability in the BSI-Revised scale (Brunson, 2017) scores in this study. The Likert-scale format may have contributed to this limitation. Sink (2017) suggested that youth respondents are less likely to select Likert Scale options below the

midpoint. Therefore, future studies using the BSI-Revised scale might use a Likert scale that spans from 1 to 7, rather than 1 to 5, to increase variability (Mvududu & Sink, 2013).

Alternatively, researchers might also employ a Too Little/Too Much (TLTM) scale (Kaplan & Kaiser, 2006). Instrument developers proposed this scale relative to leadership scales (as cited in McKibben, 2015), but the scale may also be useful in the educational literature. This is a bi-directional scale where participants would rate their scholar identity along a continuum of -4 to 4 with "0" considered as ideal. Responses below the ideal range from -1 (barely too little) and -4 (much too little) and overused behaviors range from +1 (barely too much) and +4 (much too much). The author believes this approach would prove useful for this population because one focus group participant cited that his/her intense focus on school became a detriment rather than an asset, at one point.

Either change, 7-point Likert or TLTM scale, might contribute to more variability among participants' responses. This might be likely because the author observed items where a large proportion of students selected "5" or strongly agree. Additional options at the high-end of the scale might increase variability. This change might also contribute to more favorable normality statistics. As a caveat, most of the sample was academically successful, which may have contributed to limited scale variability. This may warrant additional studies with a more academically diverse sample before making changes to the scale structure.

The author would also like to note important statistical limitations. First, there is a possibility for Type I error due to several statistical analyses run. Type I error occurs

when a researcher rejects a true null hypothesis (e.g., incorrectly citing a significant association between two items). The dissertation researcher conducted three factor analyses and several Pearson's product moment correlations, which may have increased the likelihood of gaining favorable or statistically significant findings. Relative to the second CFA, the researcher found 10 measurement errors when assessing the modification indexes. These findings might be indicative of an unanalyzed latent factor, which may explain some variability among those pairs (Kahn, 2006). Many of the standardized residual estimates were also concerning, suggesting a need for revised model specifications. Finally, the dissertation researcher only used an anxiety and engagement subscale, which limits the conclusions that the dissertation researcher may make relative to associations between scholar identity and anxiety and engagement constructs.

Implications

Research

The study findings have implications for research. First, the BSI-Revised (Brunson) scale will provide researchers with an opportunity to quantitatively assess qualitative researchers' propositions that school contexts may facilitate or hinder Black students' scholar identity construction. This study provided preliminary evidence for the structural, convergent, divergent, and external criterion validity of the BSI-Revised scale (Brunson, 2017); however, future studies are necessary to confirm the veracity of these findings and address scale weakness.

For instance, the BSI scale variance was low. Due to the relatively low variability in the BSI data, future studies are necessary to assess the psychometrics of this scale with a more diverse sample, relative to academic orientation and performance. Although, these findings do provide a baseline for how "scholar identity" operates among an academically oriented sample. This is informative for researchers, educators, and student support personnel interested in advancing and highlighting academic success in the Black community. The findings honor Ladson-Billings (2007) call for more strength-based research addressing and exploring educational gaps.

Also, ten of the twenty-five items did not have loadings >.7 and the variability explained by the model was less than 50% for those items. These results may have been due in part to the low variance within the current sample or procedures used for item construction. Future studies are necessary to ensure that item construction is grounded in sound and systematic operationalization. In addition, future studies are necessary to explore the correlated measurement errors found, when consulting the modification indexes. These findings suggest that there may be unanalyzed factors that explain this association. Finally, researchers may explore the nonsignificant associations observed between *academic pride-school* and GPA and average grades. In the future, researchers could help to uncover those unanalyzed factors, revise items, or add items so that the AP-S factor is more aligned with constructs of interest in the scale. Standardized residual findings reported in Chapter Four may assist in identifying areas of the model where the researcher may add, remove or re-specify model parameters.

The dissertation researcher cautions researchers or practitioners from using this scale without considering contextual factors because research (e.g., Nasir, 2012) has shown that environmental factors may facilitate or discourage Black students' construction of scholar identities. Moreover, the dissertation researcher did not construct this scale as a comparative measure for assessing differences in scholar identity between different cultural groups. Both uses would violate the spirit that undergirded scale construction.

Important qualitative questions have also surfaced based on these and previous research findings. The dissertation researcher believes that an investigation into Black students' academic narratives and the socialization that contributes to those narratives could provide insights into how educational gaps have persisted. Based on the current purview of the literature, academic narratives (i.e., accommodation without assimilation, Mehan et al., 1994; disidentification, e.g., Griffin, 2002; Osbourne, 1997; and oppositional representation, Fordham & Ogbu, 1986) exist that describe Black students schooling experiences. The dissertation researcher has found little evidence relative to how and under which conditions Black students encounter those narratives and the process whereby students come to claim those narratives as their own. Such research could be illuminating and provide additional knowledge around ways that school communities, families, and society may facilitate or hinder Black students' scholar identity construction.

School Counselors and Educators

School counselors and educators may use these findings to promote Black high school students' academic performance, given the associations found, in the present study, between scholar identity and average grades and GPA. The BSI scale factors are malleable. Educators, counselors, and other support personnel may facilitate Black students' scholar identity through the services that schools provide. The BSI-Revised scale has seven malleable factors: *Black student resilience* (BSR), *academic prioritizing* (AP), *academic pride- school* (APS), *academic pride-familial* (AP-F), *internal locus of control* (ILC), *academic goal orientation* (AGO), and *scholar self efficacy* (SSE). Previous research findings and counseling theories and techniques can be facilitative in promoting and maintaining Black students' scholar identity.

Beyond these factors, the relationships that educators and school personnel have with Black students are paramount (Noguera, 2003_b). Black students, like most students, need to feel validated, heard, and trusted before responding to any services. Counselors and educators may use general helping skills (e.g., reflections and validation) to develop relationships with Black students built upon unconditional positive regard, authenticity, and trust. Moreover, while Black scholars may need supports in certain areas, it is important that we acknowledge and build upon strengths these students already possess.

Aligned with a Solution-Focused Brief Therapy and strength-based counseling approach, educators and counselors can explore, acknowledge, and build upon Black students' strengths and problem exceptions to promote academic success that is student-led, defined, and determined. For instance, a student may exhibit *scholar self efficacy*, but

may need additional assistance relative to an *academic goal orientation* (e.g., academic goal setting). Finally, the Black community is not a monolith; educators and student services staff must identify each Black students' unique needs, assets, and cultural realities and recognize that students' needs (e.g., mental health or financial) may expand far beyond the limits of the BSI factors.

Below is a description of strategies that educators and school counselors may employ to facilitate Black students' scholar identity. School districts across the country often use frameworks or approaches such as Multi-Tiered Systems of Support (MTSS) and Response to Intervention (RtI) to offer students' data-informed services, systematically and collaboratively. MTSS and RtI incorporate a tiered system to thoughtfully target students according to their needs and promote students' academic success. The MTSS framework consists of three tiers: Tier 1 (i.e., Core Services), Tier 2 (i.e., Supplemental Services), and Tier 3 (i.e., Intensive Supports).

Given the associations found between BSI and achievement outcomes, educators and student services support personnel (e.g., school counselors) may incorporate strategies that promote growth within the BSI factors to facilitate Black students' scholar identity and potentially influence their academic outcomes. The dissertation researcher will use this framework to outline various school services at the whole school, group, and individual level to facilitate Black students' construction of a scholar identity. School counselors and educators may use attendance, achievement, retention and disciplinary data to identify which tier is most appropriate for a student.

Tier one services: whole-school. School counselors may offer core-services to promote Black students' scholar identity. School counselors at all levels may use classroom guidance curriculum to promote students' *academic goal orientation* and *internal locus of control*. While high school counselors go into the classroom less frequently than elementary or middle school counselors, they can implement a ninth-grade orientation to assist students in goal setting (e.g., SMART goals) and developing the skills and habits that will facilitate school success. For instance, Student Success Skills (Lemberger, Brigman, Webb, & Moore, 2012; http://studentsuccessskills.com/) is an evidence-based model that assists students in developing cognitive, social, and self-management skills.

General educators can promote students' *academic pride* and general scholar identity through culturally responsive practices and school policies. Research (Cornell et al., 2016; Skiba & Losen, 2015) indicates that a disciplinary gap exists, wherein students of color disproportionately receive discipline citations relative to their majority counterparts. Educators may address these trends using restorative justice practices. Relationship-building, socio-emotional learning, and structural interventions characterize restorative justice practices (Skiba & Losen). School counselors and other educators may be instrumental in implementing practices, such as peer mediation programs (e.g., Burrell, Zirbel, & Allen, 2003; Whiston & Quinby, 2009). Importantly, school administration and whole-school buy-in are necessary to implement these practices. Additionally, school counselors can provide psychoeducation around socio-emotional learning skills (e.g., conflict resolution), aligned with a restorative justice approach.

These services can facilitate a safe and affirming school climate for all students, including Black students.

School counselors and educators may use various whole-school strategies to advance Black students' *academic prioritizing, academic goal orientation,* and *scholar self-efficacy* through whole-school services such as college tours and career fairs. For instance, Black students' participation in these activities might advance their *scholar self-efficacy* because college or career exposure may impact students' beliefs about their ability to be a scholar or feel more confident in academic settings. By participating in these events, college attendance and different career opportunities become more of a reality. These services might be extremely important for first-generation students who might not have family members or guardians who can provide social capital or knowledge around college attendance. When coordinating these services in a culturally responsive manner, school staff need to ensure that they provide students with diverse college and career experiences and models. School counselors with limited time to plan or coordinate real-time college tours or career fairs might connect students with programs that offer these services or coordinate classroom guidance opportunities for students to explore college or careers virtually.

School counselors may also facilitate students' *scholar self-efficacy* or *academic prioritizing* by removing barriers (e.g., college costs) that students perceive relative to post-secondary opportunities or academic attainment. For instance, school counselors might organize a workshop for parents and students that provide psychoeducation relative to college or community college financing options. Events and organizations often exist

in the community that can assist school counselors in offering these opportunities for their students.

Study findings demonstrate that *academic pride-familial* is implicated in students grades and GPA. The dissertation researcher has hypothesized that family involvement may facilitate Black students *academic pride-familial*. Research supports family involvement in promoting students' academic and attainment success (Bryan & Henry, 2012). Therefore, educators and school counselors can promote Black students' scholar identity by coordinating and promoting school-family-community partnerships. Student support services staff may promote family involvement by abandoning false narrative that parents of color or those from a low socioeconomic background do not care, adopting a strength-based approach with families, coordinating inclusive events that consider non-traditional family dynamics or guardian work-schedules, meeting guardians or families in their own environments, and engaging parents in the learning process (Bryan & Henry, 2012; Henderson & Mapp, 2002). Ongoing core services include developing positive teacher-student relationships (Lee, 2003), culturally specific curriculum (Booth & Washington, 2016), and high expectations for all students, including Black students (Noguera, 2003$_b$).

Tier two services: group. While core instruction may suffice for some students, other students may benefit from Tier 2 services. School counselors and educators may use data (e.g., discipline) to identify Black students who might benefit from these services. School counselor group level services might include individual sessions and group interventions. Importantly, school counselors and educators could modify many of

the Tier 1 services to serve students' Tier 2 needs. For instance, a school counselor could provide a small group of students with psychoeducation around *internal locus of control* or an *academic goal orientation* (e.g., goal setting). Students who qualify for Tier 2 services would receive more intensive and habitual interventions.

Scholars and experts (e.g., Steen, Kotsoeva, & Kotsoev, 2016) recommend that school counselors develop support or psychoeducational groups for Black students that are culturally responsive and promote conversations around career development and post-secondary opportunities. The opportunities here are limitless and might promote several of the BSI factors, including *Black student resilience*, *academic prioritizing*, and *scholar self-efficacy*. Below is one Tier 2 service example founded in the dissertation researchers' own ideas based on her experience as a school counselor. Aligned with Steen and colleagues' recommendation, school counselors could develop a student-centered, strength-based, and empowerment group where African American students have an opportunity to interact with Black professionals from various career sectors (e.g., engineering, military, pharmacy, and human services). These interactions could occur in person or virtually due to school setting parameters. School counselors might have students formulate questions they want to ask each professional and then have a processing session after each interview or meeting. During these processing sessions, the school counselor might facilitate a discussion around how the students might apply lessons learned from each discussion to their own academic or personal lives. Such a group might provide Black students with some models of excellence who share similarities with them that extend beyond racial lines and can provide them with possible

road maps for success. This model may increase their self-efficacy through vicarious learning. The groups are student-centered so that Black students can ask these professionals questions that are relevant to their own lives and cultural experiences. Importantly, these groups may function best if gender homogenous because research indicates that Black males have a different school experience than their female counterparts.

Tier three services: individual. Tier 3 services might incorporate elements of Tier 1 and 2 services, but provide more intensive supports. School counselors and educators often implement Tier 3 services on an individual basis. School counselors may use their counseling theories or techniques (e.g., Motivational Interviewing and Cognitive Behavioral Therapy (CBT)), skills (i.e., broaching and advocacy), and approaches (i.e., mentoring and partnerships) to assist Black students construct scholar identities. Often, Black students who qualify for Tier 3 services may be those with low attendance, possible retention(s), and high disciplinary citations; all academic markers of low graduation promise or high dropout risk, at the secondary level.

School counselors may use counseling theories, such as CBT, to advance students' *scholar self-efficacy*. Bandura (1986) conceptualized self-efficacy as a belief or a perception. CBT is a counseling theory that focuses on how our thoughts shape our emotions and behaviors, which has implications for our consequences or outcomes. School counselors may use CBT to identify Black students' scholar-related beliefs and assist them in altering those thoughts when detrimental to their academic success. Motivational Interviewing (Miller & Rollnick, 2013) is an evidence-based technique that

might be helpful in advancing students' *academic prioritizing.* This technique emphasizes motivating individuals for change through MI spirit—collaboration, evoking, autonomy, and compassion. A complete enumeration of this technique is beyond the scope of this dissertation. Although, school counselors may use evocative techniques, such as listening for change talk, to promote students' academic motivation. School counselors can do this by listening for Black students' reasons for academic engagement. DARN CAT is an acronym that outlines change talk as theorized by Rollnick and Miller—Desire, Ability, Reason, Need, Commitment, Activation, and Taking steps. Once school counselors have evoked this change talk, they can assess how important these changes are, the student's confidence in engaging academically, and help students formulate a plan. *Motivational Interviewing in Schools* (Rollnick, Kaplan, & Rutschman, 2016) is a text that outlines how teachers and counselors may use these techniques in a school environment.

For some Black students, cultural variables are essential to understanding their achievement orientation and academic outcomes (e.g., Chavous et al., 2003; Nasir & Saxe, 2003, Whiting, 2006; Whiting & Kennedy, 2016). Therefore, acknowledging Black students' cultural realities is integral in providing services. For instance, school counselors can use their broaching skills. Broaching is a "counselor's ability to explore the contextual dimensions of race, ethnicity, and culture with [students] during the counseling process" (as cited in Day-Vines, McPherson, & Shorter, 2016). This skill is important in gaining Black students' trust. Moreover, the skill is useful in assessing the meaning that Black students attribute to their race, relative to academic identities or

orientations. When counselors or educators identify students exhibiting disidentification behaviors, practitioners may assist in raising students' racial consciousness and providing them with real-life examples that help them recognize the Black cultural tradition of academic success. Broaching is also critical because Black students may feel more seen and heard once a counselor or educator acknowledges and expresses interest in their cultural realities.

Advancing Black students' scholar identity, namely *Black student resilience,* might also require school advocacy relative to disproportionate disciplinary practices. When school counselors or other educators notice these disparities, they may advocate by bringing this data to their administration's attention, facilitating discussion around the issue and its impact, and proposing necessary changes. Acknowledging and addressing these cultural barriers, may facilitate Black students' resilience. There is much that educators and student services support personnel may do to create an environment that is conducive for Black students' scholar identity construction. Importantly, these strategies do not address all students' needs.

Chapter Summary

The purpose of this study was to develop a measure of Black Scholar Identity to investigate the dissertation researcher's proposed SCCT-Based Model of Black High School Students' Graduation Promise. In the dissertation study, the researcher assessed the validity (i.e., structural, convergent, divergent, and external criterion) and reliability of the BSI scale (Gray, 2016). Based on the data, a seven-factor model of scholar identity marginally described the data. The author found appropriate estimates for the full scale

and subscales reliability. In addition, the author found evidence of convergent, discriminant, and external criterion validity. This study provides preliminary evidence that supports the use of the BSI with Black ninth and tenth grade students.

This study bridges a crucial gap in the literature. Although, researches have used engagement (e.g., e.g., Archambault et al., 2009$_a$; Fall & Roberts, 2012; Neild et al., 2009) and other constructs (e.g., motivation; Fan & Wolters, 2014) to explore students' persistence or dropout choices, relatively few researchers have considered variables that might assist in understanding Black students' unique academic experiences or addressing the persistence of educational disparities. Given the opportunity and achievement gaps that disproportionately impact Black students, educators and school counselors need to understand Black students' unique experiences and what it means for Black students to espouse a scholar identity. This scale may provide some clarity in this regard. Educators and school counselor educators have a measure that may aid in understanding and promoting Black students' academic success and attainment.

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APPENDIX A

CHAPTER ONE ADDENDUM

To test the hypothesized SCCT-Based Model of Black High School Students' Graduation Promise, a valid and reliable measure of scholar identity was necessary. Therefore, the researcher created the scale using Whiting's (2006, 2016) Scholar Identity Model (SIM) and completed a preliminary investigation of the psychometric properties of the Black Scholar Identity (BSI) scale (Gray, 2016) for the main dissertation study. Assessing the validity and reliability of the BSI (Gray) is the main purpose of this dissertation study. Qualitative (e.g., Nasir, 2012) and quantitative (e.g., Byars-Winston et al., 2010; Mattison & Aber, 2007) propositions and findings provide support for the model and justifies an investigation into the construct validity and reliability of the BSI. Chapter Two, however, was written as if the original study (proposed model) and research questions would be investigated; that chapter was not revised to reflect the revised narrower focus of the actual study.

The dissertation researcher tested the structural validity of the scale by conducting a CFA to assess whether the data from 200 ninth and tenth grade Black public-school students approximated Whiting's (2006 2016) proposed Scholar Identity Model (SIM). As mentioned in Chapter Three, the researcher hypothesized that the data would approximate an eight-factor model. The researcher excluded Whiting's ninth factor (i.e., masculinity) because the factor presupposes a gender binary, which may marginalize certain identities.

The researcher also assessed the convergent and divergent or discriminate validity of the scale using two psychometrically sound scales: the Student Engagement Instrument (SEI) (Appleton & Christenson, 2004) and the Social Anxiety Scale for Adolescents (SAS-A) (La Greca & Lopez, 1998). The dissertation researcher elected to use an engagement instrument to assess convergent validity because researchers have implicated this construct as an important variable in dropout prevention (e.g., Fall & Roberts, 2012). Given the dissertation researcher's interest in testing a model of high school completion, the BSI scale (Gray, 2016) needs to be associated with other variables implicated in high school completion or dropout literature. The dissertation researcher hypothesized that the Future Goals and Aspirations (FG) subscale of the SEI would have a positive and significant association with the BSI scale (Gray). Moreover, it was hypothesized that the Fear of Negative Evaluations (FNE) subscale of the SAS-A would have a non-significant or relatively small and significant negative correlation with the BSI scale (Gray).

In addition to convergent and divergent validity, the researcher assessed the external criterion validity through an investigation of the association between scholar identity and grades and GPA. Criterion validity approximates the utility of the construct and provides an indication around the measure's usefulness in explaining or predicting another variable (Kline, 2011). The researcher hypothesized that parent reported grades and GPA would increase as participants average BSI (Gray, 2016) total and subscale scores increased. The researcher also assessed the reliability of the scale and subscales. Reliability of internal-consistency reliability measures the degree to which responses are

consistent across the entire measure or the degree of homogeneity in response patterns (Kline, 2011). The researcher hypothesized that the subscale and total scale would have adequate reliability/inter-correlation estimates (i.e., ≥ .7) (Kline). All of these changes to the original and much larger intention of the study are explained in detail in Chapter Three, Four, and Five.

APPENDIX B

BSI ITEM MODIFICATIONS

Item	**BSI Item—Post Revisions**	**BSI Item—Prior to Revisions**
	Self-Efficacy	
Q1	I am confident in my ability to be a skilled student-a scholar	I am confident in my ability to be a skilled student-a scholar
Q2	I know what it takes to be a skilled student-a scholar	I know what it takes to be a scholar
Q42	I seek out new academic challenges that interest me	I seek out academic challenges that interest me
Q4	I believe that all Black students are capable of being skilled students-scholars	I refuse to believe in the stereotypes that Black student are not capable of being scholars
Q3	I like academic challenges	Academic challenges do not discourage me from being successful in school
	Future Orientation	
Q50	I think about how my current decisions will influence future academic achievements	I think about how my current decisions will influence future academic achievements
Q44	I set realistic academic goals	I set realistic academic goals
Q5	I have academic plans to reach my goals	I have a few options or ways that I can reach my goals
Q6	I know what it takes to reach my future academic goals	I understand how important my academic work, including my grades, school attendance, and enrollment in challenging courses, is for reaching my future goals
Q7	I believe that my hard work now will help me reach my academic goals	I believe that my hard work now will help me reach my academic goals later even if I miss out on opportunities now

Willing to Make Sacrifices		
Q8	I am willing to make sacrifices to reach my academic goals	I recognize that some sacrifices are necessary for me to reach my academic goals
Q52	I turn down activities that my friends participate in so that I can achieve my academic goals	I give up some experiences (e.g., social media) and social activities (e.g., parties) that my friends participate in so that I can achieve my academic goals
Q33	I choose to do things that will help me be successful in school, even when there are other things important to me	When there are multiple things important to me, I choose to do things that will help me be successful in school.
Internal Locus of Control		
Q14	I take responsibility for the areas of my school work where I have control	I have control over my education
Q11	I can be a skilled student or scholar because I work hard to achieve my academic goals	I can be a scholar because I am willing to work hard to achieve my academic goals
Q29	I ask for help with my academic work when I need help	I ask for help when I need help with academic work
Q9	I am responsible for my school performance	I am responsible for how well I perform in school
Q10	I continue to try to do well in school despite negative attitudes toward Black students	The stereotypes that adults or peers may hold about Black students do not discourage me from seeing myself as a scholar
Q31	I challenge myself to do well in school	When I do poorly on academic work, I challenge myself to do better the next time
Q12	I experience academic success even when I face challenges	I believe that I can experience academic success even when I face challenges
Q40	I make time each day to complete	I make time to study and complete

	school assignments	school assignments
Q37	I have a hard time taking personal responsibility for poor school performance (reverse scored)	I blame the test, assignment, or teacher when I have not down something well
	Self-Awareness	
Q13	I am aware of my academic strengths and weaknesses	When I think about my school work, I am aware of my strengths and my weaknesses
Q43	I seek support from others to address my academic weaknesses	I got to tutoring for classes that I am not doing well in
Q45	I spend additional time studying for classes that I am not doing well in	I address my weaknesses as a scholar by seeking support (e.g., tutoring, asking for help, extra time studying)
Q16	My clothes or the way I talk may be perceived negatively by others at school	My typical model of dress or style of speech may be perceived negatively by adults or students at school
Q39	I listen to advice from teachers about who I can do better in school	I listen to advice from others about who I can do better in school
Q32	I change how I talk or act in school settings to be successful	I "code switch" to be successful in school settings
Q51	I think about my performance in school, what I am doing well and what I can improve	I reflect on my performance in school, what I am doing well and what I can improve
	Achievement>Affiliation	
Q15	I put school work first, even before my social life	School comes first, before my social life
Q17	I care more about reaching my academic goals than being popular	I am less concerned about being popular (e.g., having friends at school, on Instagram, and Snapchat) than reaching my academic goals
Q36	I feel pride when I accomplish my academic goals	I feel pride when I accomplish my academic goals
Q18	I believe that teacher feedback on my	I believe that feedback on my

	academic work improves my skills	academic work improves my skills
Q21	I like socializing with peers and doing well in school	In school, I like socializing with peers and doing well academically
Q22	I have friends who want me to do well in school	I have friends who want me to do well in school
Q23	I have family members who want me to do well in school	
	Academic Self Confidence	
Q25	I am confident in academic settings	I am comfortable and confident in academic settings
Q30	I celebrate my academic successes	I downplay or minimize my academic skills
Q41	I work hard on my academic assignments without being pushed by others	I put effort and hard work into my academic work without my guardians or teachers pushing me to do so
Q26	I believe effort is more important than ability to be successful academically	I believe effort is more important than ability in being successful academically
Q35	I feel equal to students from other racial backgrounds at school	At school, I feel inferior or less than students from different backgrounds
Q49	I tell others about my academic strengths	I tell others about my academic skills, abilities, and strengths
Q47	I tell my peers when I do well in school	I tell my peers about that pride I feel when I do well in school
Q46	I tell my parents/guardians when I do well in school	I tell my parents/guardians about the pride I feel when I do well in school
Q47	I tell my teachers when I do well in school	I tell my teachers about the pride I feel when I do well in school
	Race Consciousness	
Q19	I feel comfortable being Black and being a scholar or skilled student	I am comfortable being a Black scholar

Q20	I try to do well in school despite the limitations that society places on Black people	Limitations that society places on Black people will not keep me from doing well in school
Q24	I will reach my goals despite unfair treatment at school	Unfair treatment in school will not prevent me from reaching my academic goals
Q27	I can be myself as a Black person and be a scholar	Being a scholar is the same things as "acting White" or selling out
Q28	I am aware of the unfairness that exists in the United States for Black people	I am aware of the unfairness that exists in the United States for Black people
Q38	I interact with a diverse group of students at school	At school, I interact with a diverse group of students from various backgrounds
Q34	I continue to work toward my academic goals even when I feel unfairly treated by teachers	Unfair treatment in school will not prevent me from reaching my academic goals

APPENDIX C

PARENT CONSENT FORM: BSI VALIDATION STUDY

Introductions

My name is Crystal Gray. I am a Black female from Winston-Salem, North Carolina. I am requesting your son or daughter's participation in an online survey to learn whether the Black Scholar Identity (BSI) Scale accurately depicts the behaviors, feelings, and thoughts or beliefs of African American or Black students who identify as skilled students or scholars. African American or Black students have scholar identity when they view themselves "as academicians, as studious, as competent and capable, and as intelligent or talented in school settings" (Whiting, 2006, p. 48).

What are some general things you should know about research studies?

Your child's participation is voluntary and permission is required for them to participate. A hard-copy of the parental consent form is available for download below.

What is the study about?

The purpose of this study is to determine what it means for African American or Black students to identify as a scholar.

Why are you asking my child?

Your child is being asked because he or she is an African-American or Black public school student enrolled in the ninth or tenth grade, under the age of 18, and the child of a Qualtrics Online panel participant.

What will you ask my child to do if I agree to let him/her be in this research project?

Your child will complete an online Black Scholar Identity (BSI) survey outside of regular school hours. I will also ask your child to answer a few questions about their future goals and peer relationships. It is important that your child complete these questions on his or her own. The survey will take between 15-20 minutes. Example items of the BSI scale are available for your review at the link provided below.

I will ask you to answer seven questions about your child (e.g., school grades and course enrollment) and their school (e.g., school size and demographics) if you decide to provide consent.

What are the risks to my child?

The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses minimal risk to participants. Your child may choose not to respond to any question they do not wish to answer.

Are there any benefits to society as a result of my child taking part in this research?

This study will potentially advance educators' and researchers' ability to educate diverse groups.

Are there any benefits to my child for taking part in this research study?

Those children who complete the survey will receive a resource page (i.e., At Promise Newsletter) that contains information and tips for excelling in school. Also, participants in this study may benefit by contributing to research.

Will my child get paid for being in the study? Will it cost me anything for my child to be in this study?

There are no costs to you or your child for participating in this study. You will receive an incentive from Qualtrics for participating in this study. Incentives vary according to your agreement with Qualtrics.

How will you keep my child's information confidential?

All information obtained in this study is strictly confidential unless disclosure is required by law. I will store the survey data on a password protected file under UNCG Box without any names or contact information. I will not use any names when the data are disseminated. I cannot promise absolute confidentiality during the online survey. I will encourage your child to close their browser and clear their browsing history after completing the survey.

What if my child wants to leave the study or I want him to leave the study?

You have the right to refuse to allow your child to participate or to withdraw him or her at any time, without penalty. If your child does withdraw, it will not affect you or your child in any way. If you or your child chooses to withdraw, you may request that any data which has been collected be destroyed unless it is in a de-identifiable state (i.e., no names are attached).

What about new information/changes in the study?

If significant, new information related to the study becomes available which may impact your willingness to allow your child's participation, this information will be provided to you.

What if I have questions?

If you have any questions, please do not hesitate to contact the main researcher: Crystal Gray, cngray@uncg.edu. You may also contact my Dissertation Co-Chairs Dr. Laura Gonzalez, lmgonza2@uncg.edu, and Dr. L. DiAnne Borders, borders@uncg.edu, with any questions or concerns. The Office of Research Integrity at UNCG is also available for inquiries at (855) 251-2351. You may ask questions at any time during this project.

Voluntary Consent by Participants' Parent/Legal Guardian:

By clicking "yes" after reading through this consent, you are agreeing that you have read it or it has been read to you, you fully understand the contents of this document, and consent to your child taking part in this study. Also that, the researcher has answered all of your questions concerning this study. By electronically signing this form, you are agreeing that you are the legal parent or guardian of the ninth or tenth grade public school student who will participate in this study.

Parent Consent Form Link

http://tinyurl.com/parentconsent-BSI

Black Scholar Identity Scale Example Items

http://tinyurl.com/BSI-Examples

APPENDIX D

STUDENT ASSENT FORM: BSI VALIDATION STUDY

Why am I here?
In this study, we want to learn what it means to be a scholar for Black students. I would like you to share this information by completing a survey. You are being asked to be in the study because you are a Black student who was a public school student in ninth or tenth grade during the 2016-2017 academic year. In a research study, only people who want to take part are allowed to do so.

What will happen to me in this research study?
If it is okay with you and you agree to join this study, you will be asked to complete an online survey and answer some questions. Your parent or guardian has already answered some questions about you and your school. For example, I asked about how you perform in school and the size of your school.

How long will I be in the research study?
Answering the questions in the survey will take approximately 15-20 minutes.

Can anything bad happen to me?
There are very small risks if you decide to participate in this study. I want to let you know that your responses will be kept confidential. This means that I will protect your information so that others are unable to view your responses I will also make sure that others, including myself, do not know who took which survey. If you feel uncomfortable responding to any of the questions, you are not required to answer those.

What if I do not want to be in this research study?
You do not have to be a part of this project. It is up to you. You can even say okay now, but change your mind later. No one will be upset with you if you change your mind.

What about my confidentiality?
The researcher will do everything possible to make sure the information you provide is kept confidential. No identifying information will be collected on the survey. I cannot promise confidentiality when you are taking the survey. Make sure you close your browser and clear your browser history after completing the survey.

Will I be paid for being in this study?
Your parent or legal guardian will receive some form of incentive from Qualtrics for participating in this study. You will receive a resource page (i.e., At Promise Newsletter) after completing the survey that will give information and tips about doing well in school.

Do my parents know about this research study?
Your parent or legal guardian has given you permission to participate in this study by completing the electronic consent form.
What if I have questions?
If you have any questions, please do not hesitate to contact the main researcher: Crystal Gray, cngray@uncg.edu. You may also contact my Dissertation Co-Chairs Dr. Laura Gonzalez, lmgonza2@uncg.edu, and Dr. L. DiAnne Borders, borders@uncg.edu, with any questions or concerns. The Office of Research Integrity at UNCG is also available for inquiries at (855) 251-2351. You may ask questions at any time during this project.
Assent
This study has been explained to me. I am assenting to this study by choosing to complete this online survey. If I choose not to assent, I am not required to complete the survey and I may choose not to participate at any time.

APPENDIX E

BLACK SCHOLAR IDENTITY EXAMPLE ITEMS

Factor	Definition	Example Item
Self-Efficacy	Belief in ability to accomplish a given task	"I am confident in my ability to be a skilled student- a scholar."
Future Orientation	Aspirations and goals related to education	"I think about how my current decisions will influence my future academic achievements."
Willing to Make Sacrifices	Sacrifices are necessary to reach academic goals	"I am willing to make sacrifices to reach my academic goals."
Internal Locus of Control	Personal responsibility for academic results	"I am responsible for my school performance"
Self-Awareness	Ability to appraise view of self and others' view of self	"I am aware of my academic strengths and weaknesses."
Achievement>Affiliation	Achievement motivated, school takes precedent over popularity or friendships	"I put school work first, even before my social life."

Academic Self Confidence	Comfort and sense of power in school settings	"I am confident in academic settings."
Race Consciousness	Awareness of historical and social realities of being Black in our society. Take pride in being Black	"I can be myself as a Black person and be a scholar."

APPENDIX F

BSI VALIDATION STUDY: SURVEY ADMINISTRATION

Start of Block: Parent Consent_BSI

My child was a ninth or tenth grade public school student during the 2016-2017 school year and under the age of 18?
❍ Yes
❍ No

My child identifies as Black or African American?
❍ Yes
❍ No

I am the parent or legal guardian of the child who will participate in this study. I have read the consent form and I consent to my child's participation in this study.
o Yes
o No

What is your household income?
o $0 to $24,999K
o $25,000 to $49,999
o $50,000 to $74,999
o $75,000 to $99,999
o $100,000 to $149,999
o $150,000 to $199,999
o $200,000+

We care about the quality of our data. In order for us to get the most accurate measures of your opinions, it is important that you thoughtfully provide your best answers to each question in this survey.

Do you commit to thoughtfully provide your best answers to each question in this survey?
o I will provide my best answers
o I will not provide my best answers
o I can’t promise either way

End of Block: Parent Consent_BSI

Start of Block: BSI_Parent Questions

Please answer the questions below. These questions will help me learn a bit more about your child's school environment.

Once you answer the seven questions, your child will be able to access the Black Scholar Identity survey questions. Please have your child complete the survey questions on their own and outside of regular school hours. Your child must complete the survey to receive the Qualtrics incentive.

What is the approximate size of your child's school? The average student enrollment in the United States was approximately 854 students in 2009-2010.
- o Below Average
- o Average
- o Above Average
- o Unsure

What area best describes the location of your child's school?
- o Rural
- o Urban
- o Suburban

What percentage of your child's school (i.e., the student-body) is Black or African-American, according to your best estimate?
- o 0% - 25%
- o 26% - 50%
- o 51% - 75%
- o 76% - 100%
- o Unsure

What percentage of the school staff (e.g., administration, teachers, etc.) is Black or African-American, according to your best estimate?
- o 0% - 25%
- o 26% - 50%
- o 51% - 75%
- o 76% - 100%
- o Unsure

What is the highest course level that your child is enrolled in at school?
- o Traditional/ Regular
- o Honors: more intense and faster paced than typical college preparatory courses. Their content varies from school to school.

o Advanced Placement (AP): college-level courses offered at many high schools.
o Career/Technical Education (CTE): teach both technical skills and academic concepts used in the work place.
o Other _____
o Unsure

On average, your child's grades are
o A's (90- 100)
o B's (80 - 89)
o C's (70 - 79)
o D's (60 - 69)
o F's (Below 60)

If you know your child's approximate Grade Point Average (GPA), please type it below. GPAs normally range from 0 to 4. GPAs can be as high as 5.0 if your child is enrolled in classes (e.g., AP) where grades are weighted differently. Please leave this item blank if you are unsure.
_____

End of Block: BSI_Parent Questions

Start of Block: Message: Child Portion

Thank you for allowing your child to participate in this survey. The next section includes a student assent form and survey questions. Please make sure that your child answers the survey questions on their own.
End of Block: Message: Child Portion

Start of Block: Student Assent Form

I am a Black or African American student who was in ninth or tenth grade during the 2016-2017 school year.
❍ Yes
❍ No

I will answer these survey questions on my own.
❍ Yes
❍ No

End of Block: Student Assent Form

Start of Block: BSI

The statements below include beliefs, actions, thoughts, and feelings. For each of the statements that follow, indicate how much you agree or disagree with the statement based on your own beliefs, actions, thoughts, and feelings. Please, respond as honestly as possible.

The options include:

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree.

Q1 I am confident in my ability to be a skilled student- a scholar.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q2 I know what it takes to be a skilled student- a scholar.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q3 I like academic challenges.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q4 I believe that all Black students are capable of being skilled students-scholars.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q5 I have an academic plan to reach my goals.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q6 I know what it takes to reach my future academic goals.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q7 I believe that my hard work now will help me reach my academic goals.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q8 I am willing to make sacrifices to reach my academic goals.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q9 I am responsible for my school performance.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Please choose "Neutral" for this question.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q10 I continue to try to do well in school despite negative attitudes toward Black students.

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q11 I can be a skilled student or scholar because I work hard to achieve my academic goals.

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q12 I experience academic success even when I face challenges.

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q13 I am aware of my academic strengths and weaknesses.

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q14 I take responsibility for the areas of my school work where I have control.

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q15 I put school work first, even before my social life.

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q16 My clothes or the way I talk may be perceived negatively by others at school.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q17 I care more about reaching my academic goals than being popular.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q18 I believe that teacher feedback on my academic work improves my skills.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q19 I feel comfortable being Black and being a scholar or skilled student.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q20 I try to do well in school despite the limitations that society places on Black people.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q21 I like socializing with peers and doing well in school.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q22 I have friends who want me to do well in school.

❍ Strongly Disagree
❍ Disagree
❍ Neutral
❍ Agree
❍ Strongly Agree

Q23 I have family members who want me to do well in school.
❍ Strongly Disagree
❍ Disagree
❍ Neutral
❍ Agree
❍ Strongly Agree

Q24 I will reach my goals despite unfair treatment at school.
❍ Strongly Disagree
❍ Disagree
❍ Neutral
❍ Agree
❍ Strongly Agree

Q25 I am confident in academic settings.
❍ Strongly Disagree
❍ Disagree
❍ Neutral
❍ Agree
❍ Strongly Agree

Q26 I believe effort is more important than ability to be successful in school.
❍ Strongly Disagree
❍ Disagree
❍ Neutral
❍ Agree
❍ Strongly Agree

Q27 I can be myself as a Black person and also be a scholar-skilled student.
❍ Strongly Disagree
❍ Disagree
❍ Neutral
❍ Agree
❍ Strongly Agree

Q28 I am aware of the unfairness that exists in the United States for Black people.
❍ Strongly Disagree

- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q29 I ask for help with my academic work when I need help.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q30 I celebrate my academic successes.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q31 I challenge myself to do well in school.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q32 I change how I talk or act in school settings to be successful.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q33 I choose to do things that will help me be successful in school, even when there are other things important to me.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q34 I continue to work toward my academic goals even when I feel unfairly treated by teachers.

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q35 I feel equal to students from other racial backgrounds at school.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q36 I feel pride when I accomplish my academic goals.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q37 I have a hard time taking personal responsibility for poor school performance.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q38 I interact with a diverse group of students at school.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q39 I listen to advice from teachers about how I can do better in school.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q40 I make time each day to complete school assignments.
- ❍ Strongly Disagree

- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q41 I work hard on my academic assignments without being pushed by others.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q42 I seek out new academic challenges that interest me.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q43 I seek support from others to address my academic weaknesses.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q44 I set realistic academic goals.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q45 I spend additional time studying for classes that I am not doing well in.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q46 I tell my parents/guardians when I do well in school.
- ❍ Strongly Disagree
- ❍ Disagree

- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q47 I tell my peers when I do well in school.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q48 I tell my teachers when I do well in school.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q49 I tell others about my academic strengths.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q50 I think about how my current decisions will influence my future academic achievements.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q51 I think about my performance in school, what I am doing well and what I can improve.
- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Q52 I turn down activities that my friends participate in so that I can achieve my academic goals.

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

Please choose "Neutral" for this question.

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neutral
- ❍ Agree
- ❍ Strongly Agree

End of Block: BSI

Start of Block: Future Aspirations and Goals (FG) subscale of Student Engagement Instrument (SEI

Below are questions to learn about your experiences while attending school. Please answer each item as honestly as you can.

Please choose how much you agree with each statement by selecting from,

Strongly Agree
Agree
Neither Agree nor Disagree
Disagree
Strongly Disagree

My education will create many future opportunities for me.

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neither Agree nor Disagree
- ❍ Agree
- ❍ Strongly Agree

Going to school after high school is important.

- ❍ Strongly Disagree
- ❍ Disagree
- ❍ Neither Agree nor Disagree
- ❍ Agree

❍ Strongly Agree

I plan to continue my education following high school.
❍ Strongly Disagree
❍ Disagree
❍ Neither Agree nor Disagree
❍ Agree
❍ Strongly Agree

School is important for achieving my future goals.
❍ Strongly Disagree
❍ Disagree
❍ Neither Agree nor Disagree
❍ Agree
❍ Strongly Agree

I am hopeful about my future.
❍ Strongly Disagree
❍ Disagree
❍ Neither Agree nor Disagree
❍ Agree
❍ Strongly Agree

End of Block: Future Aspirations and Goals (FG) subscale of Student Engagement Instrument (SEI

Start of Block: Fear of Negative Evaluation (FNE) subscale of the Social Anxiety Scale for Adolescents

This is not a test, there are no right or wrong answers. Please answer each item as honestly as you can.

For each item, select HOW MUCH YOU FEEL something is true for you:

Not at all
Hardly ever
Sometimes
Most of the time
All the time

I'm afraid that others will not like me.
❍ Not at all
❍ Hardly ever

- ❍ Sometimes
- ❍ Most of the time
- ❍ All the time

I worry about what others think of me.
- ❍ Not at all
- ❍ Hardly ever
- ❍ Sometimes
- ❍ Most of the time
- ❍ All the time

I worry about what others say about me.
- ❍ Not at all
- ❍ Hardly ever
- ❍ Sometimes
- ❍ Most of the time
- ❍ All the time

I worry that others don't like me.
- ❍ Not at all
- ❍ Hardly ever
- ❍ Sometimes
- ❍ Most of the time
- ❍ All the time

I worry about being teased.
- ❍ Not at all
- ❍ Hardly ever
- ❍ Sometimes
- ❍ Most of the time
- ❍ All the time

I feel that others are making fun of me.
- ❍ Not at all
- ❍ Hardly ever
- ❍ Sometimes
- ❍ Most of the time
- ❍ All the time

I feel that peers talk about me behind my back.
- ❍ Not at all
- ❍ Hardly ever
- ❍ Sometimes

❍ Most of the time
❍ All the time

If I get into an argument, I worry that the other person will not like me.
❍ Not at all
❍ Hardly ever
❍ Sometimes
❍ Most of the time
❍ All the time

End of Block: Fear of Negative Evaluation (FNE) subscale of the Social Anxiety Scale for Adolescents

Start of Block: Non-Identifiable Demographic Information

Thank you for completing the survey. There are only four more questions that will ask you for non-identifying information about yourself. Please respond honestly.

What is your age?
_____

What grade were you enrolled in during the 2016-2017 school year?
❍ 9th
❍ 10th
❍ 11th
❍ 12th

What is your gender?
❍ Male
❍ Female
❍ Transgender
❍ Other (type here) _____

Which group or groups do you consider yourself as a part of? (Mark all that apply)
❑ Asian (Chinese, Japanese, Korean, Indian, etc.)
❑ Black/African American
❑ Hispanic/Latino (Mexican, Puerto Rican, Cuban, etc.)
❑ Middle Eastern (Arab, Chaldean, Persian, etc.)
❑ Native American/ American Indian
❑ White/Caucasian
❑ Other group (type your groups(s) here)
_____

Thank you for participating in this survey! Please copy and paste the link into your url box in order to access the resource page/newsletter.

You will not receive credit for completing the survey if you are redirected before seeing the "end of survey" message.

Link to resource page/newsletter:
https://drive.google.com/file/d/0Byw2-Wtr4D2JVUpBdFE2aS01U2M/view?usp=sharing

End of Block: Non-Identifiable Demographic Information

APPENDIX G

GRADUATION PROMISE RESOURCE PAGE

"At Promise" Newsletter

African American Students' Graduation Promise

Volume I, Issue 1 Crystal Gray cegray@uncg.edu 4/9/2017

Purpose

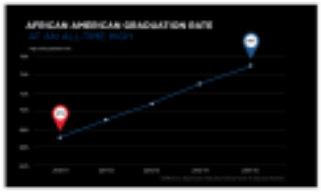
- Thank parents and their students for participation in this study
- Outline African American students' accomplishments
- Outline ways that African American students may adopt a scholar identity
- Outline the role of schools, parents, communities, and students in ensuring African American and Black students' graduation promise at the secondary level and beyond

Inside this issue:

Black Scholar Magic!

Our community is excelling and on the rise. Below are some important statistics:

- Nationally, Black students' high school graduation rates rose from 67 to 75 percent between 2010 and 2015
- Nationally, the immediate college enrollment rates for Black students rose from 56 to 63 percent between 2000 and 2015



(Garunay, 2016)

Promoting our students' graduation promise and scholar identity in the ninth and tenth grades is important to promote "black scholar magic."

Scholar Identity

There are eight key characteristics or traits that students with a scholar identity may adopt.

Self-Efficacy

- Believe in your academic abilities
- Find ways to challenge yourself in school

Future Orientation

- Set academic goals for the future
- Have plans for the future, this will help you stay focused

Willingness to Make Sacrifices for school success

- There are occasions where you will need to sacrifice other interests

Internal Locus of Control

- Identify what you can control and make changes when necessary
- When uncertain, ask for help
- Avoid blaming others for your challenges

Achievement >

Affiliation

- Ask for and accept feedback related to school work
- Value both school success and popularity/friendships

Self Awareness

- Be honest with yourself when you need to make improvements in school
- Learn your academic strengths and weaknesses

Academic Self Confidence

- Know that you are a strong student and demonstrate confidence in academic settings

Race Consciousness

- Have racial awareness and value diversity
- Recognize that you can be Black and academically successful, at the same time

Schools & Communities

Research indicates that schools and communities may promote or hinder Black students' academic achievement, scholar identity, and graduation promise.

Below are examples of ways that schools have hindered Black students' educational success.

- Disproportionate disciplinary practices that lead to higher proportions of Black students receiving suspensions
- Tracking and other structural practices that can limit Black students' academic options
- Low expectations and minimal support from teachers

Schools may also promote Black students' educational success. As a parent, you can ensure that your scholar's school personnel engage in these behaviors.

- Engage in school family community partnerships
- All school staff must have high expectations for all students
- School counselors may collaborate with the community to coordinate or implement mentor programs
- School counselors may provide important opportunities, resources, and information to help students excel in high school and prepare for postsecondary opportunities (e.g., college/university, military, etc.)
- School counselors may monitor school and student data to prevent and address risk factors
- Engage in restorative justice practices (e.g., peer mediation programs) rather than zero-tolerance policies (e.g., suspensions)
- Monitor and address achievement gaps
- Teachers must create supportive relationships with all students
- Create a college-going school culture

Parents & Students

Students with graduation promise often have (1) high attendance rates, (2) passing grades, (3) few suspensions, and (4) few grade retentions. Parents and their scholars can promote graduation promise.

Parents

- Communicate high expectations. Notice what your scholar is doing well and let them know, listen when things are not going well, and help them solve their problems
- Seek out educational resources (e.g., tutoring, academic support programs, etc.)
- Expose your child to role models who demonstrate that strong, smart, and African American are words that go together
- Help build your scholar's mental muscles. Let them know that even LeBron James and Steph Curry practice the fundamentals!
- Have open communication with your scholar about difficult emotions (e.g., anger, anxiety, sadness, etc.) related to school
- Communicate with the school

Parents are an essential and irreplaceable member of their Black scholar's team!

Black Scholars

- Link up with peers who want to excel in school
- Find at least one adult (e.g., school counselor) who you can trust and who provides you with support
- Get involved at school. Participate in an extracurricular activity
- Attend school regularly. Miss less than 10% of the school year

Selected References

1. Garunay, M. (2016, October 17). Re: As graduation rate reaches new high, one student shares his story [Web log post]. Retrieved from https://www.whitehouse.gov/blog/2016/10/17/graduation-rate-reaches-new-high-one-student-shares-his-story
2. Harper, S. R. (2012). Black male student success in higher education: A report from the National Black Male College Achievement Study. Philadelphia: University of Pennsylvania , Center for the Study of Race and Equity in Education. Retrieved from https://works.bepress.com/sharper/43/

APPENDIX H

SCALE PERMISSIONS

Student Engagement Instrument & Related Files

Thank you for your interest in the Student Engagement Instrument (SEI). Please access the materials below.

Terms of Use

The SEI is free to use for research or practice purposes. You may not use it for purposes resulting in profit. We ask that you report any de-identified data findings if and when you conduct research using this instrument to us at checkandconnect@umn.edu. If you have any questions, please contact Eileen Klemm at klem0027@umn.edu or 612-624-0731.

Download SEI

For Secondary School Students

- Student Engagement Instrument (PDF) (validated for use with students in grades 6-12)
- SEI Administration, Scoring, and Results (PDF)

Suarez, Jeanette Padreda <jpsuarez@miami.edu> Fri, Jul 7, 2017 at 11:19 AM
To: Crystal Gray <cngray@uncg.edu>

Hello Crystal,

In order to obtain the manual:

a) You must send a letter or email, indicating in writing that you understand that the scales are copyrighted and that you will not publish norms, alterations, or translations of the instrument without Dr. La Greca's written permission or collaboration.

b) You must also send her a check or money order for $15.00, payable to the Department of Psychology, along with your mailing address.

Our mailing address is:

University of Miami

Attn: Dr. Annette La Greca

5665 Ponce de Leon Blvd

Coral Gables, FL 33146

Please allow up to two weeks for processing. The manual is only available by mail.

Best,

Jeanette

APPENDIX I

FOCUS GROUP: MELISSA BECK EMAIL

Spartan

Crystal Gray <cngray@uncg.edu>

IRB Question

Melissa Beck <mdbeck@uncg.edu> Fri, Nov 11, 2016 at 11:47 AM
To: Crystal Gray <cngray@uncg.edu>

Hi Crystal,

Great, as long as this school does not fall under WS/Forsyth county school district, a letter from the principal will be fine.

For feedback on the scale, IRB review would not be required as this phase would not meet the definition of human subjects research according to the federal regulations.

However, the portion of the study involving data collection with the children would require review by the IRB. What level of review would be determined once the application is submitted, however, research involving children typically falls under the expedited review category, so I would suggest completing a full application.

If you have any additional questions, please let me know.

Thank you,
Melissa
[Quoted text hidden]

APPENDIX J

EXPERT REVIEW PANEL RECRUITMENT EMAIL

I am reaching out to you because you are an expert in the field and you have also conducted research with or regarding African American students or more broadly around multiculturalism and diversity. My name is Crystal Gray and I am a third-year doctoral student at UNC-Greensboro. I am writing to ask for your assistance in one phase of my dissertation study.

I am currently completing my pilot study before I move forward with the full study.

As part of my process, I have created a scale, the Black Scholar Identity scale, based on Gilman W. Whiting's (2006, 2016) conceptualization of scholar identity. For my pilot study, I am conducting an initial psychometric assessment of the scale.

I am writing to request that you serve as a content expert in reviewing the items, thus addressing the
face and content validity of this scale. The scale currently has 62 items.

Participation would entail answering the following questions,

1. Do the items look like they approximate scholar identity for ninth and tenth grade African American students?
2. Which items correspond to the factor matrix based on the nine factors Whiting proposed for this construct?
3. Which items would you exclude, add or change (e.g., the wording) in the scale?
4. Are the items appropriate and clear? For each item, I will ask that you rate the appropriateness (1: not all appropriate to 4: very appropriate) and clarity (1: not at all clear to 4: very clear)
5. Would you classify the item as assessing a belief/attitude, thought, feeling or behavior?

Please email me by **Monday, December 12** to let me know if you are willing and able to participate. If you agree to participate I will send you more information and details including, a definition of scholar identity according to how Whiting (2006, 2016) defined and wrote about the construct, the scholar identity items, a factor matrix with definitions, an excel spreadsheet that should streamline the process, and answer any follow up questions you have. I wholeheartedly appreciate you taking time to read this email.

I understand that the holidays are approaching, please let me know what a realistic timeline would be for you. **Als0, if you are unable to participate and know of someone who might be interested, please let me know and I will reach out to them.**

Purpose of Full Study

The purpose of this dissertation study is to test a model that explores how Black ninth and tenth grades students' experience of the racial school climate, relative to their racial identity, has implications for their ability to adopt a scholar identity, believe that they can graduate from high school, and believe they may experience positive consequences as a result. I will consider how the aforementioned variables and relationships impact Black students' graduation promise relative to academic markers (e.g., attendance, discipline citations, grades, and retention) previously identified in the literature (Blount, 2012; Burrus & Roberts, 2012; Suh, Suh & Houston, 2007). Black students experience "graduation promise" when they experience limited dropout risk. Dropout risk occurs when factors within students' background or environment exist that may be indicative of a higher probability of school failure (Suh, Suh, & Houston, 2007). Common academic markers of high school dropout risk include suspension, low academic achievement, retention and poor attendance (Blount, 2012; Suh et al., 2007).

Expert Review Panel Instruction Email

Thank you for agreeing to participate as an expert reviewer for my pilot study. The items listed below are attached to this email. I have also included instructions. Let me know if you have any questions.

Scholar identity: Black students with scholar identity view themselves "as academicians, as studious, as competent and capable and as intelligent or talented in school settings" (Whiting, 2006, p. 48). Scholar identity comprises Black students' beliefs or attitudes, thoughts, actions and feelings.

Attachments & Instructions

1. **Factor Matrix:** this includes a definition of Whiting's (2016) scholar identity factors with definitions.

a. Please use the factor matrix to identify specific items that you would place under each factor.

b. You can place the item numbers in the cell beside the corresponding factor. Use the item table attached to determine the item number.

c. There a miscellaneous row to include items that you do not believe belong with one of the proposed factors

2. **Item Table:** Includes each item numbered along with columns for each of the areas I would like you to assess.

a. Appropriateness: Is the item appropriate for assessing the scholar identity of Black ninth and tenth grade students? (1: not at all appropriate to 4: very appropriate).

b. Clarity: Is the wording clear when thinking about a Black ninth or tenth grade student? (1: not at all clear to 4: very clear)

c. Keep, Exclude, Modify: Please indicate whether you think this items should be kept, excluded or modified. For example: You might suggest that an item be excluded if the item is redundant. You might modify an item if the wording or clarity could be improved (If you select to modify the item, please indicate how you would modify the item.)

d. Does the item assess an action, thought, feeling or attitude/belief?

Thank you again,

APPENDIX K

EXPERT REVIEW PANEL MATERIALS

Factors/Definitions	Items
Self-Efficacy: "People's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, and motivate themselves and behave….Self efficacy is the belief in one's self to accomplish a given task with the full knowledge and comprehension of the requirements for completion" (Whiting, 2016, p. 198).	
Future Orientation: Scholars who have aspirations or goals tend to stay focused and prepare for success. Scholars think about the present and the future, especially how current behaviors and decisions influence future achievements. Assesses the relationship between conscious goals, intentions and task performance. "[Students] with future targets are not overly concerned about immediate gratification and short term passing interests and ephemeral goals. These students set realistic goals; likewise, they recognize the importance of a high grade-point average, excellent school attendance, and participation in challenging courses as helpmates to reaching their dreams" (Whiting, 2016, p. 200).	
Willing to Make Sacrifices: Scholars understand that some sacrifices are necessary in order to reach academic goals. Scholars are more likely to relinquish some aspects of social life and other distractions to reach those goals they desire.	
Internal Locus of Control: Scholars "take responsibility and live with the results" (Whiting, 2016, p.201). Scholars are aware of their responsibility and also school/social injustices. They are optimistic. Scholars with an internal locus of control are less likely to blame low achievement, failure or mistakes on their teachers, families, and/or peers. "[Scholars] are optimistic, even when faced with poor results; these students believe they can do well because they (a) have experienced success in the face of challenges, (b) planned for the	

difficult (time consuming) work, (c) made the time to study and prepare for the examination, and (d) are willing, when uncertain and vulnerable to ask for help" (Whiting, 2016, p. 201).	
Self-Awareness: Scholars are able to do an honest appraisal and understand their strengths and limitations. Scholars do not allow their limitations distract them from learning. They find ways to address their weaknesses. Self-awareness is not only an appraisal of the self, but also "how you are viewed by others and how you contribute to that view" (Whiting, 2016, p. 202). Self-awareness also includes effort, etiquette, sincerity, and self-control.	
Achievement>Affiliation: Scholars are achievement motivated and "seek attainment of realistic but challenging goals and academic advancement" (Whiting, 2016, p. 202). For scholars, the need for achievement is stronger than the need for affiliation. The number of friends or popularity does not define their identity. Scholars understand that academic achievement will take them far.	
Academic Self-Confidence: Scholars feel confident and powerful in academic settings. Scholars do not feel a need to negate or minimize their achievements.	
Race Consciousness: Scholars are comfortable in their Black skin while being aware of limitations that society may try to place on them. Scholars do not subscribe to these limitations and seek to understand their "racialized beings." They are aware socially and historically. They also understand the importance of adapting to different environments and interacting with a diverse group of people.	
Masculinity/Femininity: Masculinity/femininity is defined as possessing the qualities of being a man or woman. Scholars are able to be both masculine/feminine and academically successful.	
Miscellaneous: For items that do not seem to fit within the factors above	

Expert Panel Item Review Table

Item	Appropriateness (1: not at all appropriate to 4: very appropriate)	Clarity (1: not at all clear to 4 very clear)	Keep, Exclude, Modify (Please indicate how you would modify)	Action, Thought, Feeling, or Belief

APPENDIX L

FOCUS GROUP PARENT/GUARDIAN PERMISSION FORM

Introductions

My name is Crystal Gray. I am a Black female from Winston-Salem. I am currently a third-year doctoral student at The University of North Carolina at Greensboro (UNCG) and I am a licensed School Counselor. I am working on my dissertation study. I decided to pursue this study because I believe in Black student success. I want to further the idea that Black students can and do excel in school and discover ways that schools may encourage excellence. Therefore, I endeavor to create a Black Scholar Identity Scale. I am requesting your son or daughter's participation in a focus group to learn whether or not this scale accurately depicts the behaviors, feelings, thoughts and beliefs of Black students who identify as scholars (e.g., successful students)

What are some general things you should know about research studies?

Research studies are designed to obtain new knowledge. Your child is being asked to take part in a focus group that I will lead. Your child's participation is voluntary and permission is required for them to participate. Details are discussed in this permission form. You will be given a copy.

What is the study about?

This is a research project. The purpose of this study is to determine what it means for ninth and tenth grade Black students to identify as a scholar. It is the researcher's hope that your students' participation in this study will help in promoting Black students' academic success.

Why are you asking my child?

Your child is being asked because he or she is an African-American high school student who participates in the Boys and Girls Club program. I will document responses to focus group questions in a research journal. I will not associate your child's names with unique/individual responses. I will also note which items your child and the other participants wish to keep or exclude from the survey.

What will you ask my child to do if I agree to let him/her participate in the focus group?

Your child will participate in a focus group at the Boys and Girls Club location. The focus group will last 90 minutes and will be held afterschool on **Tuesday, January 31st from 5:00 pm – 7:30 pm**. Your child will talk with other Black students about what it means to be a scholar and will assist in modifying a survey I am creating for the purposes of the research project.

What are the risks to my child?

The Institutional Review Board at UNCG has determined that participation in this focus group would not meet the definition of human subjects' research. Therefore, the project does not require approval. I am asking participants for their name and signature to disperse gift cards. Their names will not be associated with their responses in any way. Beyond this information, I am not asking participants personal information about themselves only questions that will assist in validating the Black Scholar Identity survey. For instance, your child will be asked to think about a Black peer who they would identify as a scholar and comment on what the person thinks, does, feels and believes.

Are there any benefits to society as a result of my child taking part in this research?

Research in this area may provide numerous benefits for professional school counselors, educators, and researchers in understanding Black student success. If you and your child decide to participate, your child will engage in a research project designed to inform educational leaders about characteristics of Black scholars. Therefore, this study will potentially advance educators' and researchers' ability to educate diverse groups.

Are there any benefits for my child taking part in this research study?

Participants in this study may benefit by contributing to research that experts in the field will use to encourage Black student success. Your student may also gain from a thoughtful discussion about what successful Black students think, feel, believe and do.

Will my child get paid for being in the study? Will it cost me anything?

There are not costs to you or your child for participating in this study. Your child will receive pizza and a $15 VISA gift card for their participation in this focus group.

How will you keep my information confidential?

For the focus group, no identifying information will be asked or collected in relation to your child's responses.

What if my child wants to leave the focus group or I want him to leave the study?

You have the right to refuse to allow your child to participate or to withdraw him or her at any time, without penalty. If you child does withdraw, it will not affect you or your child in any way and will not impact his/her Boy and Girls Club participation. If you or your child chooses to withdraw, you may request that any data which has been collected be destroyed unless it is in a de-identifiable state.

What about new information/changes in the study?

If significant new information related to the study becomes available which may impact your willingness to allow your child's participation, this information will be provided to you.

What if I have questions?

If you have any questions, please do not hesitate to contact the main researcher: Crystal Gray, cngray@uncg.edu, or (336) 772-2027. You may also contact my Dissertation Co-Chairs Dr. Laura Gonzalez, lmgonza2@uncg.edu, and Dr. L. DiAnne Borders, ldborder@uncg.edu, with any questions or concerns. The Office of Research Integrity at UNCG is also available for inquiries at (336) 256-1482. You may ask questions at any time during this project.

Voluntary Permission by Participant:

Your child is under 18; therefore, I do require a signature providing your permission. Once you provide permission, if your child agrees to participate in this focus group, his/her signature is not required. By signing below, you are agreeing that you are the legal parent or guardian of _____ and you provide them permission to participate in a focus group.

_____ _____

Participant's Parent/Legal Guardian Signature Date

_____ _____

Participants' Parent/Legal Guardian Printed Name Date

What type of pizza does your son or daughter prefer?

_____

Does your child have any allergies or dietary restrictions?

_____

APPENDIX M

FOCUS GROUP RECRUITMENT EMAIL

Good Morning,

I appreciate your willingness to participate in this focus group!
My name is Crystal Gray. I am a Black female from Winston-Salem. I am currently a third-year doctoral student at The University of North Carolina at Greensboro (UNCG) and I am a licensed school counselor. I am working on my dissertation study. I decided to pursue this study because I believe in Black student success. I want to further the idea that Black students can and do excel in school and discover ways that schools may encourage excellence.

I have tentatively scheduled the focus group for **Tuesday, January 31st from 5:00 - 7:30 pm**. The focus group will be held at the. Please respond to this email letting me know if your child will participate on the date/time listed above. Also, let me know if you have any scheduling conflicts and we can change the date to accommodate everyone. Your child will receive a $15 gift card and enjoy some pizza for participating. Please include any dietary restrictions or pizza preferences on the permission form.
I have attached a parent/guardian permission form to this email that I will need signed and returned by the date of the focus group. You can also sign the form before the focus group and return it to me electronically. Let me know if you have questions.

Best,
Crystal

Focus Group Recruitment Reminder Email

Good morning,
Thank you to everyone who has responded. As a reminder, please let me know if your child can participate by tomorrow. I want to make sure I have enough food and the correct number of gift cards for participants. You do have to turn in the permission form until the day of the focus group. I will have extras printed if needed. Let me know if you have any questions.

Best,

APPENDIX N

FOCUS GROUP PROTOCOL

The researcher will use a focus group protocol similar to Scottham, Sellers, and Nguyen (2008). The goals of the focus group will be for participants to (a) gather information about the age and community appropriateness, (b) assess the readability of the items (c) assess any redundancy and (d) ensure that the items capture the participants understanding of a scholar.

1. Like Scottham and colleagues, the researcher will first define the goals and norms of the focus group. The researcher will also use a similar question to assess the students understanding of scholar. The researcher will ask "What does being a scholar mean to you." This open discussion will be a basis for the participants creating their own definition of scholar.
2. The researcher will then ask the participants, "Visualize someone a Black peer who represents your understanding of a scholar. What does that person think, feel, believe, have awareness of and do inside and outside of school." The responses will be written where all of the focus group participants have access to this information.
3. The researcher will then share the scholar identity definition provided by Whiting (2006, 2016). The researcher will ask the participants, "Does this definition match your understanding of scholar identity? What would you change about this definition to make it more accurate?" The researcher will record any changes that the participants suggest.
    a. Scholar Identity Definition: Black students construct scholar identities when they view themselves “as academicians, as studious as competent and capable and as intelligent or talented in school settings” (Whiting, 2006, p. 48)
4. Next, the researcher will provide the participants with a definition of each factor used to measure scholar identity. Like Scottham and colleagues, the researcher will ask the participants to think of examples from their own or their peer's life that coincides with that domain. The researcher will ask participants to, "Share an example from your own life or a peer's life that is an example of this factor." The researcher will ask this to assess students' understanding of the domain and how relatable the domain is to their understanding. The researcher will also ask, "What changes, if any, would you make to these domains?"
5. The researcher will give the participants the items to review. The teens will have an opportunity to discuss the items together. The researcher will ask questions to assess whether the language is culturally appropriate; if there are items that need to be changed, removed or added; and if any of the items are redundant. Participants will sort into green, yellow, and red pile.

a. Can you understand what is being asked? What would you change to make it more understandable?
b. Does the item match your definition or thoughts about what it means to be a Black scholar?

APPENDIX O

FOCUS GROUP IMPLEMENTATION NOTES

Scholar Identity	Written and Verbal Responses
What words do you think of when I say the word, "scholar"?	• Pioneer • Goals • Achievement • People • Financial problems (needed scholarships to get into college) • Honor roll • Integrity • Hard-working • Dedication • Stress • Leader • Motivation • Success • Struggle • Crosby scholars • Education • Intelligence • Academic • Future • College • Focus • Determined
How do scholars feel?	• Stressed • Smart • Confident • Pressured • Obligated • Accomplished • Tired but keep going • Frustrated • Pride (reason for not asking for feedback, advice or help) • "bootless cries" • Alone
What do scholars think/believe?	• Did I do this right • They will be successful

	• Hard work and dedication will give them success • Believe that education is key • School comes first • They will dropout • Letting AA community down (if they do not do well) • Parents expect perfection • Nobody is perfect: thought in reaction to parent's expectations • They won't be able to live up to or handle unspoken responsibility • They'll be judged by peers • It will all pay off in the long run
What do scholars do?	• Help others/community • Study • Stress • Extracurricular activities • Work hard • Have a job • Give up/bounce back • When stressed: video games, sleep, cry, talk to dad • When confused or unsure or things are difficult: math app, conference with teachers, use classmates, using Black peers (student stated that there is more comfort to be self when working with Black peers) online academy, compare homework with peers….some students stated that getting feedback and getting advice is not something that scholars do

APPENDIX P

BLACK SCHOLAR IDENTITY SCALE-REVISED

Stem: *The statements below include beliefs, actions, thoughts, and feelings. For each of the statements that follow, indicate how much you agree or disagree with the statement based on your own beliefs, actions, thoughts, and feelings*

Response scale: 1 (*Strongly Disagree*) to 5 (*Strongly Agree*)

Subscale and Items	**Dissertation**	
BSI Scale $\hat{\rho}_{x_i x_i} = .891$	Completely Standardized Estimate	Standard error
Academic Goal Orientation ($\hat{\rho}_{x_i x_i} = .861$)		
Q5 I have an academic plan to reach my goals	.774	
Q6 I know what it takes to reach my future academic goals	.743	.084
Q7 I believe that my hard work now will help me reach my academic goals	.738	0.076
Q8 I am willing to make sacrifices to reach my academic goals	.649	.085
Q11 I can be a skilled student or scholar because I work hard to achieve my academic goals	.817	.074
Academic Pride-School ($\hat{\rho}_{x_i x_i} = .828$)		
Q47 I tell my peers when I do well in school	.841	.085
Q48 I tell my teachers when I do well in school	.834	

Q49 I tell others about my academic strengths	.653	.075
Academic Prioritizing ($\hat{\rho}_{x_i x_i} = .822$)		
Q15 I put school work first, even before my social life	.760	.138
Q17 I care more about reaching my academic goals than being popular	.698	.115
Q33 I choose to do things that will help me be successful in school, even where there are other things important to me	.723	.110
Q50 I think about how my current decisions will influence my future academic achievement	.715	.113
Q52 I turn down activities that my friends participate in so that I can achieve my academic goals	.610	
Black Student Resilience ($\hat{\rho}_{x_i x_i} = .743$)		
Q10 I continue to try to do well in school despite negative attitudes toward Black students	.656	.115
Q20 I try to do well in school despite the limitations that society places on Black people	.775	.120
Q24 I will reach my goals despite unfair treatment at school	.677	
Academic Pride-Personal/Familial ($\hat{\rho}_{x_i x_i} = .774$)		
Q27 I can be myself as a Black person and be a scholar-skilled student	.675	.104
Q36 I feel pride when I accomplish my academic goals	.868	
Q46 I tell my parents/guardians when I do well in school	.668	.087

Internal Locus of Control ($\hat{\rho}_{x_i x_i} = .794$)		
Q40 I make time each day to complete school assignments	.741	.088
Q41 I work hard on my academic assignments without being pushed by others	.743	
Q44 I set realistic academic goals	.775	.081
Academic/Scholar Self Efficacy ($\hat{\rho}_{x_i x_i} = .751$)		
Q1 I am confident in my ability to be a skilled student-a scholar	.699	
Q2 I know what it takes to be a skilled student-a scholar	.688	.108
Q25 I am confident in academic settings	.740	.112

I suggest using the following citation, Brunson, C. N. (2017). *Black Scholar Identity Scale-Revised.*

APPENDIX Q

BSI-REVISED NORMALITY ASSESSMENTS

Item-Subscale Correlations and Inter-Item Correlations

The dissertation researcher conducted an item level analysis for the BSI-revised scale. See Table 25 for internal consistency estimates, Cronbach's alpha estimates, and inter-item correlations.

Table 25

BSI-Revised Item-Level Analysis

AGO			**AP-S**			**AP**			**BSR**		
α=.859			α=.816			α=.824			α=.745		
Item	CICT	α Delete	Item	CICT	α Delete	Item	CICT	α Delete	Item	CICT	α Delete
5	.730	.816	47	.704	.712	15	.671	.773	10	.565	.667
6	.703	.823	*48*	*.726*	*.689*	*17*	*.609*	*.792*	20	.592	.638
7	.677	.830	49	.589	.823	33	.664	.780	24	.561	.678
8	.572	.856				**50**	**.598**	**.796**			
11	.712	.822				52	.588	.806			

AP-P			**ILC**			**SSE**		
α=.761			α=.793			α=.753		
Item	CICT	α Delete	Item	CICT	α Delete	Item	CICT	α Delete
27	.554	.743	40	.630	.726	1	.587	.670
36	.706	.565	*41*	*.664*	*.699*	2	.624	.626
46	.543	.733	44	.633	.729	25	.543	.713

Note. Bolded=Item removed from the BSI scale. Asterisk=Item was moved from another factor. Italicized=item value used to determine factor scale in Lisrel 9.3

Subscale Analysis

Univariate Normality

The dissertation researcher analyzed the factor distributions of the BSI-revised scale. The factors included, Academic Goal Orientation (AGO), Academic Pride-School (AP-S), Academic Prioritizing (AP), Black Student Resilience (BSR), Academic Pride-Personal (AP-P), Internal Locus of Control (ILC), and Scholar Self Efficacy (SSE). See Table 26 for subscale means (*M*), standard deviations (*SD*), skew, kurtosis, and Shapiro-Wilk's (*W)* statistics. Subscale averages ranged from 3.63 to 4.49. The skew and kurtosis indices were within the acceptable range (George & Mallery, 2010).

Generally, a significant Wilk's test statistic is indicative of a normality assumption violation. However, Douglass (2007) noted that the Wilk's test is sensitive to negligible violations with large sample size. Generally, Wilk's statistics between .95 and 1.0 demonstrate adequate normality, indices between .9 and .95 are concerning, and .9 and below are serious concerns (Douglass, 2007). The AP-S, AP, and SSE subscales have Wilk's statistics indicative of or approaching adequate normality. The AGO and ILC subscales are concerning and BSR and APC are serious concerns relative to normality. Figure 18 through includes a visual of subscale distributions.

Table 26

BSI-Revised Subscale Descriptive Statistics

Factor	M	SD	Skew	Kurtosis	Shapiro-Wilk (*W*)
AGO	4.34	.61	-1.04	.86	.89*
AP-S	3.63	.96	-.17	-.88	.948*
AP	3.92	.72	-.45	-.40	.962*
BSR	4.49	.57	-1.20	1.52	.824*
AP-P	4.49	.59	-1.05	.67	.816*
ILC	4.14	.73	-.82	.46	.906*
SSE	3.87	.78	-.64	.37	.943*

Note. * Indicate significant Shapiro-Wilk's test statistic.

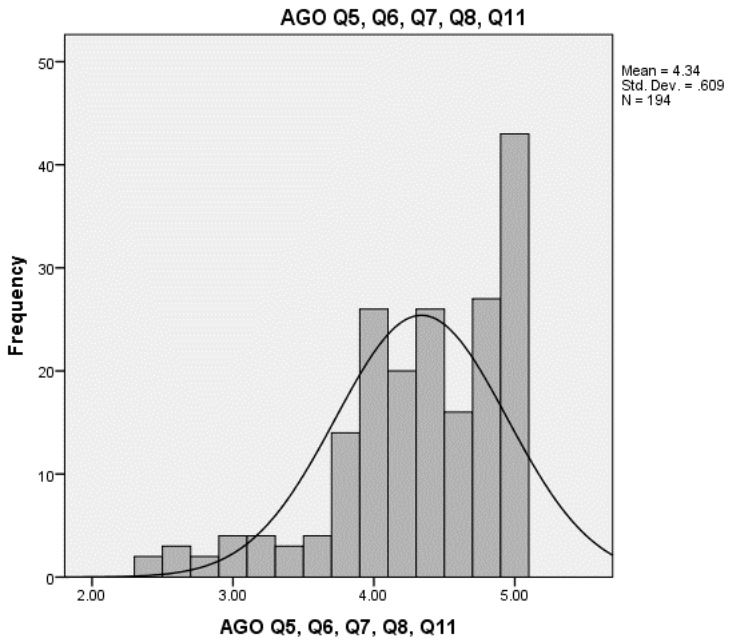


Figure 18. AGO Factor Distribution of the BSI-Revised Scale. Trend line approximates a normal distribution.

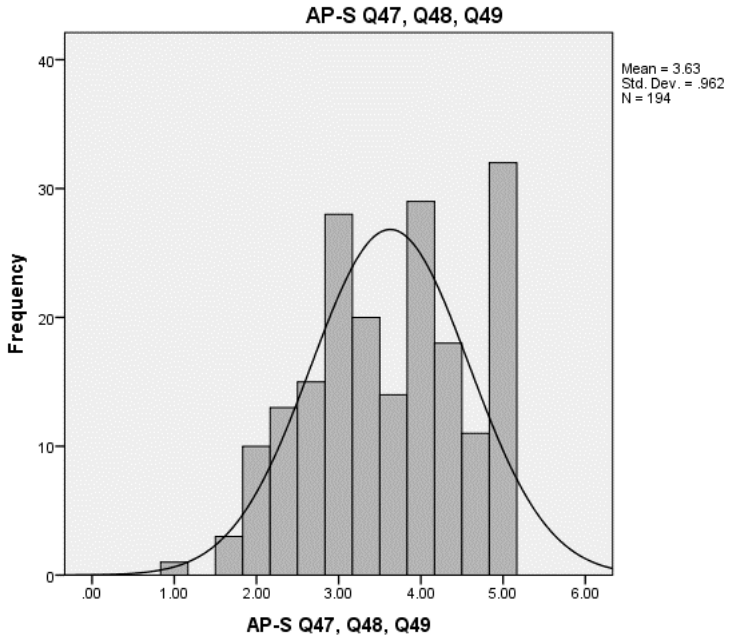


Figure 19. *AP-S Factor Distribution of the BSI-Revised Scale*. Trend line approximates a normal distribution.

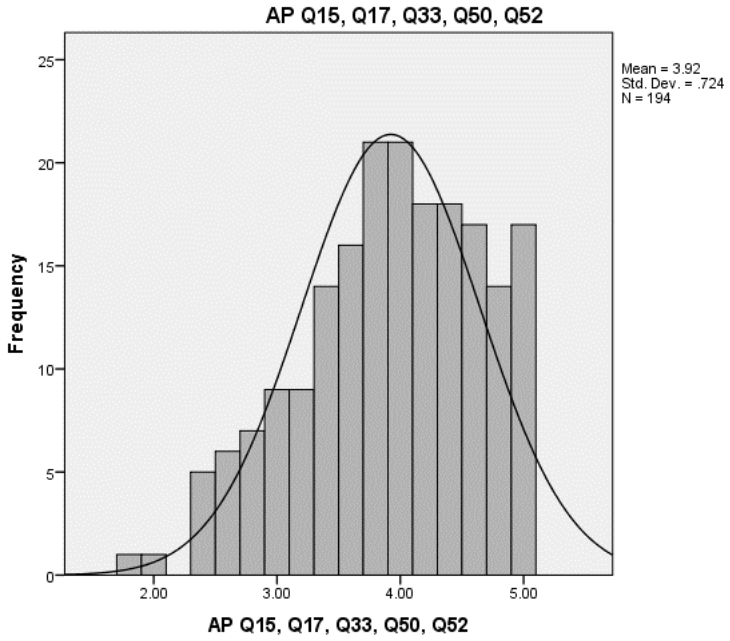


Figure 20. *AP Factor Distribution of the BSI-Revised Scale*. Trend line approximates a normal distribution.

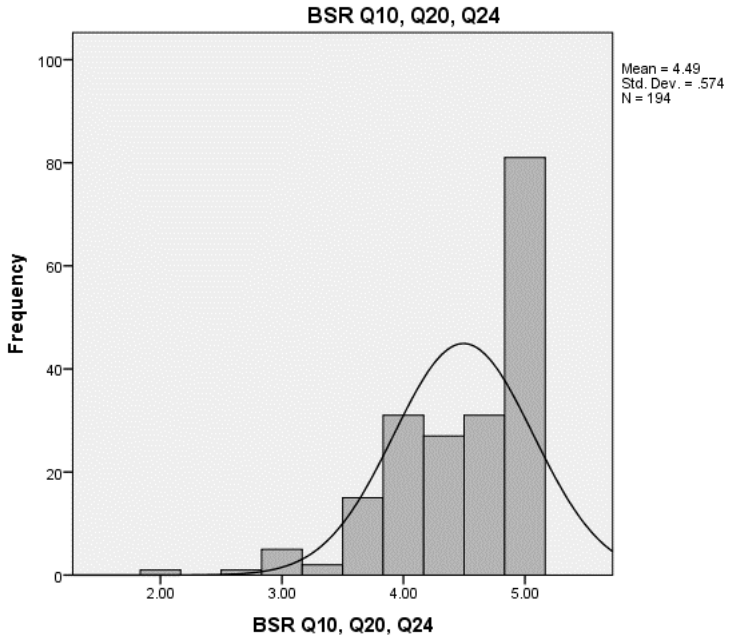


Figure 21. *BSR Factor Distribution of the BSI-Revised Scale*. Trend line approximates a normal distribution.

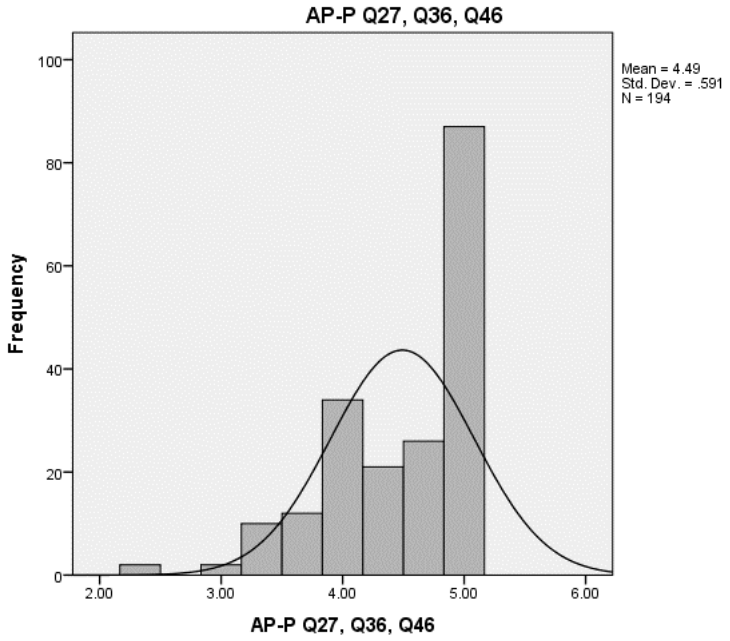


Figure 22. *AP-P Factor Distribution of the BSI-Revised Scale*. Trend line approximates a normal distribution.

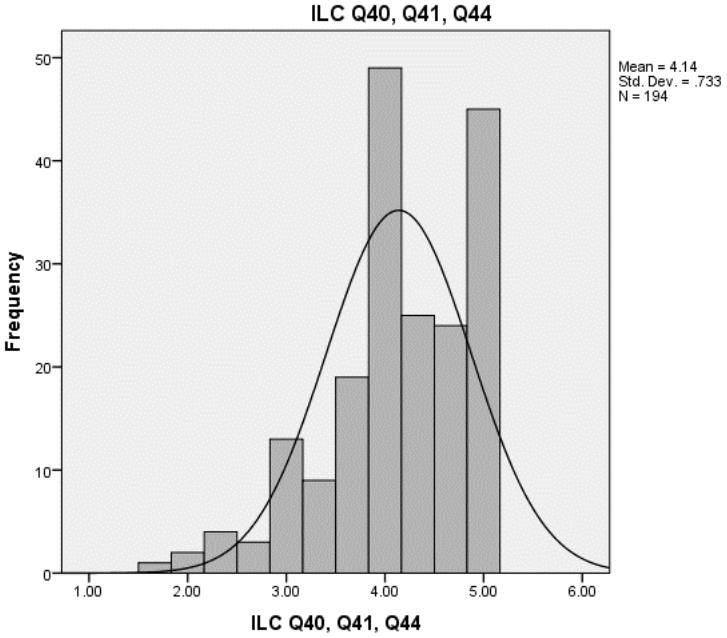


Figure 23. *ILC Factor Distribution of the BSI-Revised Scale*. Trend line approximates a normal distribution.

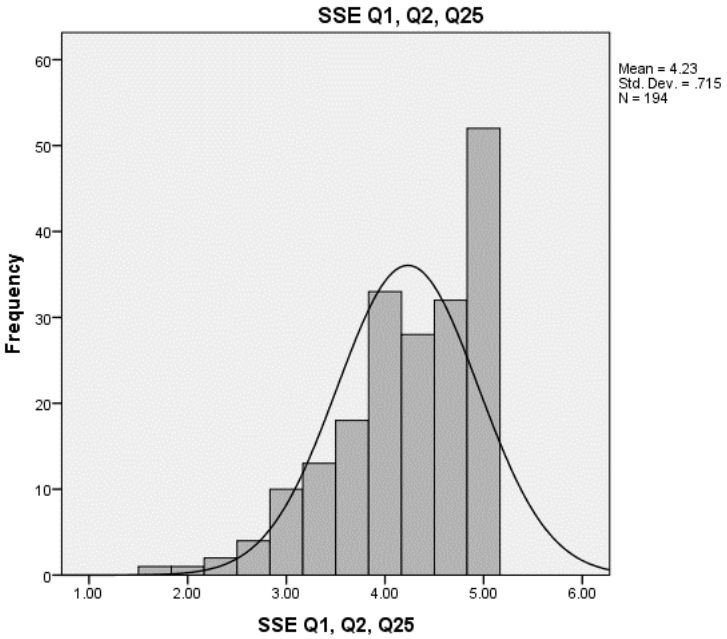


Figure 24. *SSE Factor Distribution of the BSI-Revised Scale*. Trend line approximates a normal distribution.

BSI Scale Analysis

The overall score distribution on the BSI-Revised (25-items) (Brunson, 2017) is normally distributed (see Figure 25). Averages for both are approximately four suggesting that most respondents endorsed a relatively high scholar identity. See Table 27 for BSI-Revised (Brunson) quantiles. On the BSI revised scale, the lowest scholar identity score was 2.44 and the highest score was 5.0. The standard deviation for the BSI revised was .515. The skewness and kurtosis indices are within acceptable ranges. The distribution has a slight, negative skew The Wilk's statistics are insignificant for the BSI revised scale (Brunson) W= .969, p=.0003, suggesting that the null-hypothesis is not rejected. The BSI-Revised scale is approximately normal. See Table 28 for normality statistics.

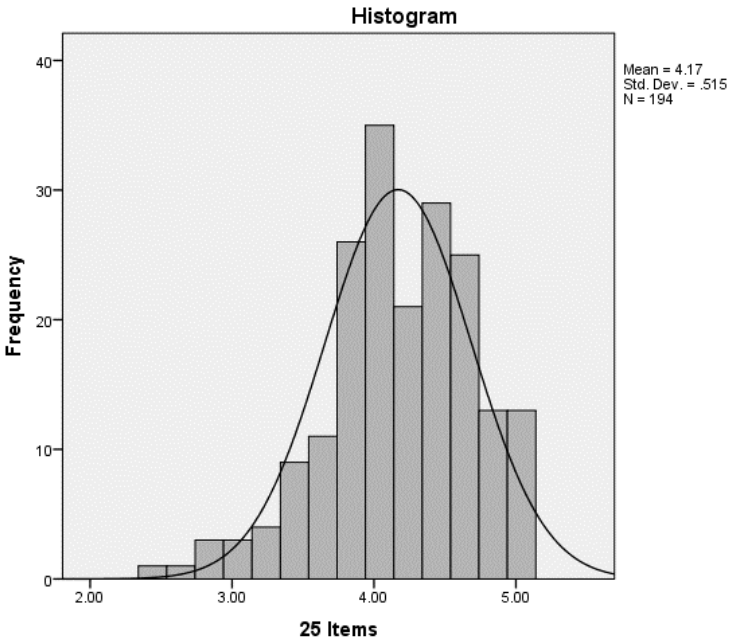


Figure 25. *BSI-Revised Scale Distribution*. The trendline approximates a normal curve.

Table 27

BSI-Revised Quantiles

Quantile Level	Quantile
100%	5.0
99%	5.0
95%	4.96
90%	4.84
75%	4.56
50%	4.18
25%	3.84
10%	3.52
5%	3.28
1%	2.68
Min	2.44

Table 28

BSI-Revised Normality Statistics

BSI-Revised					
M	**SD**	**Skew**	**K**	**Range**	**Wilk's**
4.17	.515	-.583	.346	2.56	.970

Multivariate Normality

The D_i^2 or the Mahalanobis distance (D) test and Q-Q plot were used to determine multivariate normality and assess for outliers (Mahalanobis, 1936). The Q-Q plot suggested a normal distribution due to the linear pattern of the data (Figure 26). Mahalanobis distance is an indicator of the distance in standard deviation units between a set of scores for an individual case and the sample means for all variables, while correcting for intercorrelations (Kline, 2011). The dissertation researcher used

$\chi^2_{(27,194)}$=46.96, p<.01 to identify outliers. The data produced 14 potential outliers. The researcher reviewed the data; however, did not find any irregular response patterns. The data points of the Q-Q Plot (Figure 26) approximate a line with little dispersion. Overall, the data does not violate the multivariate normality assumption.

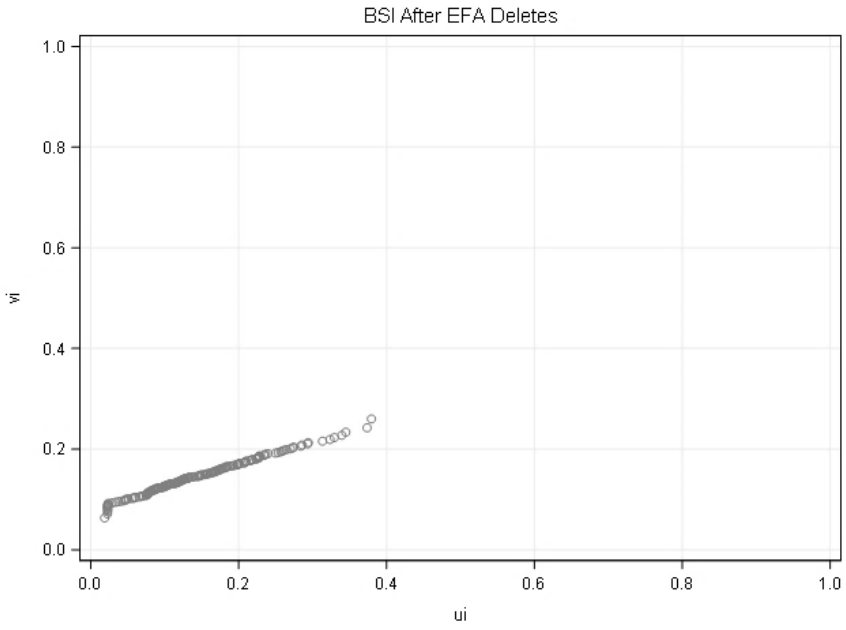


Figure 26. BSI-Revised Scale Multivariate Normality Q-Q Plot. A linear pattern with no visible outliers approximates multivariate normality.