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THE RELATIONSHIPS BETWEEN NONCOGNITIVE CHARACTERISTICS AND STUDENT ENGAGEMENT: A SEQUENTIAL EXPLORATORY MIXED METHODS STUDY

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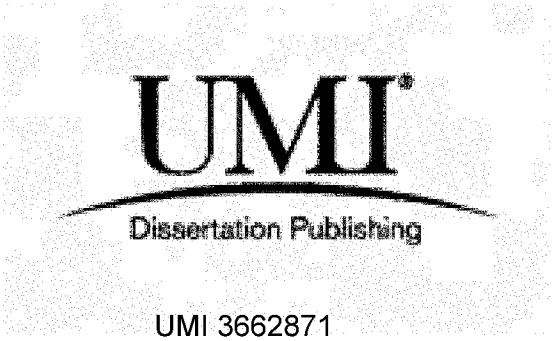

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ABSTRACT

The purpose of this study was to explore the perceptions of students of color at an urban commuter university as they relate to the constructs utilized within the engagement literature and to the noncognitive student characteristics literature. Data were collected using the following instruments: William Sedlacek's Noncognitive Questionnaire (NCQ), items from the Beginning College Student Survey of Engagement (BCSSE), items from the National Survey of Student Engagement (NSSE), and individual and small group interviews. The key findings of this study revealed that noncognitive characteristics assisted students in (a) internalizing messages, (b) understanding systemic processes, and (c) identifying motivating factors. These findings underscore the importance of moving away from a monolithic understanding of engagement to a more complex consideration of the ways in which students interact with the campus environment. Furthermore, this study showed the importance of providing incoming students with the opportunity to build on noncognitive personal skills, experiences, and characteristics—assets that are not measured by traditional college entrance requirements such as high school grades or standardized test scores and that often have not been seen as being directly related to academic success. This can be accomplished through the development of curricular and co-curricular experiences that include comprehensive programs and activities as

they pertain to internalizing key messages, determining motivators, and understanding systemic processes.

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I would like to dedicate this research to my mother who continually reinforced in me that success is a result of my hard work, my motivation, and my drive. You have shown me the importance and value of hard work.

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I would like to take the opportunity to acknowledge Cohort 4, the Center for Research on Educational Access and Leadership (C-REAL), my family members, friends, and loved ones. Trusting the process was difficult at times, and it was all of you that kept me engaged and moving forward. I owe special thanks to Jim, Futoshi, Ken, Yvette, E.J., and Corey. All of you kept me grounded and focused on what was and is important. Thank you to Crystal, Dr. P, Dr. Hoffman, Dr. Franklin, Dr. Oropeza, Dr. Currie, Dr. Schulz, and Dr. Hunter. Each of you encouraged and provided assistance and guidance along the way and for that I am grateful.

CHAPTER 1

INTRODUCTION

With high school grade inflation on the rise and students over-preparing for standardized tests, it has become increasingly difficult to ascertain which students are adequately prepared for college (Nord et al., 2011; Pryor, Hurtado, DeAngelo, Blake, & Tran, 2009; Pryor, Hurtado, Saenz, Santos, & Korn, 2007). Further complicating the issue, student engagement research has focused primarily on the experiences of White students—often White males—ages 18-24 (Pascarella & Terenzini, 2005). The United States Census Bureau (2012) showed that there were approximately 2.7 million more women than men attending college. Additionally, in the same report, the number of non-Hispanic, White students enrolled in college decreased by 1.1 million. As such, current theories of engagement (Kuh, 2001, 2003, 2009) and ensuing practices of providing impactful campus-based experiences (Carini, Kuh, & Klein, 2006; Greene, 2005; Harper & Quaye, 2009; Kinzie, Cruce, Shoup, & Gonyea, 2006; Porter, 2006) do not adequately reflect these students or their experiences.

Traditional predictors of first-year retention such as high school GPA and standardized test scores have been further examined through theories and constructs such as student engagement and involvement (Carini et al., 2006; Kuh, Cruce, Shoup, Kenzie,& Gonyea, 2008; Pascarella & Terenzini, 1991, 2005). Yet, retention rates have not improved. It is possible that these constructs,

as currently conceived, lack validity in their application with diverse populations of students. Given that engagement practices specifically consider the interactions of students and institutions, it is important to take into account the characteristics of each in order to promote engagement broadly. Variables other than the traditional predictors of first year success such as high school grade point average and standardized test scores need to be studied so the role they play in the student engagement can be better understood. Additionally, with increased numbers of women and students of color attending college, their experiences must also be understood if research and theory are to inform practices targeting these students. A lack of research and understanding of the students who are attending college and of the practices that influence their learning and success has played a part in first to second year retention rates plateauing at 53.4 percent at four-year public institutions (ACT, 2012).

Pascarella and Terenzini (1991) acknowledged the vast amount of research that has analyzed the role cognitive and noncognitive factors play in college students' development. However, Habley, Bloom, and Robbins (2012) recognized that while there is a wide base of research to draw from, there still is no unifying theory or understanding for what mix of student attitudes and behaviors are directly correlated with student success. Further complicating this, students from non-dominant groups in higher education have different experiences in higher education that influence their success (Winkle-Wagner, 2010). As such, there is no clear understanding of the noncognitive experience and characteristics that affect student engagement.

Though the terms "engagement" and "involvement" have often been used interchangeably (Wolf-Wendel, Ward, & Kinzie, 2009), the focus of this study was on engagement, a concept that emphasizes connections between student behaviors and institutional practices. Kuh (2009) defined student engagement as "the time and effort students devote to activities that are empirically linked to desired outcomes of college and what institutions do to induce students to participate in these activities" (p. 683). However, while an increased focus has been placed on engagement (Porter, 2006; Schuetz, 2008; Umbach & Wawrzynski, 2005), there is no clear understanding of the relationship between students' noncognitive characteristics and the likelihood that students will be engaged during their first semester of college. This is especially relevant to the study of engagement and engagement-informed practice because of the construct's emphasis on connections between students' behaviors, which are influenced by their noncognitive characteristics (Sedlacek, 1983; Tracey & Sedlacek, 1984), and institutional practice. This study specifically considered the connections between noncognitive characteristics and engagement for students of color at a large, public, broad access commuter institution in Southern California. This connection is an important piece of the student engagement puzzle (Habley et al., 2012; Habley & McClanahan, 2004; Habley et al., 2010). This chapter provides the foundation for this mixed methods study investigating the relationships between students' noncognitive characteristics and their first semester engagement at a large, public, broad access four-year institution in Southern California.

. The chapter describes the background of the problem, followed by the statement of the problem, the research questions, the significance and scope of the study, and the key terms used. The chapter concludes with an overview of the organization of the dissertation.

Background of the Problem

Engagement

The focus of this study was on student engagement and the noncognitive characteristics that play a role in students' decisions to engage with the college campus. Practitioners are aware that student engagement has an impact on student performance. However, there is not a clear and complete understanding of the factors that contribute to and influence student engagement.

While the factors that contribute to student engagement is a relatively new field of study, the broader topic of engagement has been discussed since the 1600s. Berger and Lyon (2005) noted that institutions such as Harvard, William and Mary, and Yale routinely competed with local industries to keep students engaged and, therefore, enrolled in their institutions. Those institutions, along with institutions today, understand that if students are not engaged with the university, they will not remain enrolled. Currently, engagement is often measured using the National Survey of Student Engagement (NSSE) (Kuh, 2003), which originally was organized around five benchmarks: (a) academic challenge, (b) active and collaborative learning, (c) student-faculty interaction, (d) supportive campus environment, and (e) enriching educational experiences. Though the NSSE has recently shifted from five benchmarks to 10 engagement

indicators, this study utilized the five benchmarks reflecting the practice at the time of data collection.

Before proceeding, it is important to address briefly the related constructs of engagement, involvement, and integration. Wolf-Wendel et al. (2009) traced the development and use of these three terms as formal constructs within higher education scholarly literature. They suggested that engagement is rooted in institutional best practices (e.g., Kuh, Schuh, & Whitt, 1991) and efforts to measure the amount of time and effort students devote to learning activities (e.g., Pace, 1984), and that it tends to emphasize institutional practices as well as student behaviors. Involvement also refers to time and effort—specifically "the amount of physical and psychological energy that the student devotes to the academic experience" (Astin, 1984, p. 297). Thus, both the engagement literature and the involvement literature speak of time and effort as central concepts. Although Astin included institutional policies and practices as one of his five postulates regarding involvement, use of involvement as a construct in recent scholarly literature has placed greater emphasis on student behavior than on institutional practices that facilitate student behaviors. Additionally, the involvement literature tends to emphasize co-curricular involvement, although Astin's (1984) original work was clearly inclusive of student time and energy in class as well as outside the classroom. Thus, in comparing these two, the engagement literature places greater emphasis on institutional practice both in and out of class while the involvement literature places greater emphasis on student actions and efforts, especially when they are related to the co-curriculum.

Integration is a third concept that is often associated with engagement and involvement (Wolf-Wendel et al., 2009). The works of Tinto (1975, 1993) have had the most significant influence on the use of this term. According to Wolf-Wendel et al. (2009), integration is, "based on perceptions of student fit with their campus and, by extension, perceptions of interactions reflect the values and norms of the institution and its culture" (p. 416). Thus, in contrast to engagement and involvement, integration has more to do with student perceptions rather than their actual behaviors. Similar to engagement and involvement, integration has both academic and social components. Throughout the rest of this dissertation, my emphasis will be on engagement. However, given the overlap of these three within the scholarly literature, I will draw on scholarly and empirical literature related to all three, and I will retain the language used by the authors as they relate to the three constructs.

While I will provide a full review of engagement literature in Chapter 2, a few highlights are relevant here as related to the background of the problem addressed in this study. For example, Coghlan, Fowler, and Messel (2009) found that when comparing third-year students, those who remained enrolled at their institution were more involved in their first and second years than those who left. Additionally, students who are engaged academically and socially are more likely to achieve higher rates of retention and persistence to completion (Borglum & Kubala, 2000; Braxton & McClendon, 2001; Carini et al., 2006). In their review of the literature pertaining to how college affects students, Pascarella and Terenzini (2005) found that the amount of time and energy a student exerts is positively

connected with retention and persistence. Similarly, Habley et al. (2012) found that the more effort students put into studying and other activities, the more successful they were in school. However, even with the attention student engagement has received, the retention and graduation rates at a variety of institutions have either plateaued or declined in recent years (ACT, 2012). Therefore, a new approach to understanding the factors that contribute to student engagement is needed.

Noncognitive Student Characteristics

Sedlacek (2005) defined noncognitive characteristics as those "relating to adjustment, motivation, and student perceptions, rather than the traditional verbal and quantitative (often called cognitive) areas typically measured by standardized tests" (p. 178). Habley et al. (2012) found that a substantial portion of student engagement and success is contingent on psychosocial factors, or noncognitive characteristics, such as personality traits, attitudes, and behaviors. While noncognitive factors are rarely measured and assessed in the traditional methods of testing student readiness, Sedlacek (2005) proposed that certain noncognitive characteristics were essential and recommended the use of measures to understand the motivation, readiness, and perception of students. Unlike the traditional cognitive predictors of engagement and academic performance (e.g.,grade point average and standardized test scores), noncognitive variables relate to broader dimensions such as personality, attitudes, and values (Sedlacek, 1988).

The literature defines noncognitive variables in a variety of ways. Sackett, Schmidt, Ellingson, and Kabin (2001) identified extracurricular activities as noncognitive variables. Sedlacek (2004a) defined noncognitive variables as they pertain to "Sternberg's experiential or contextual intelligence" (p. 3). Sternberg (1985) suggested three different types of intelligences: (a) componential intelligence, which leads to success on standardized tests; (b) experiential intelligence, which allows one to apply known information across multiple contexts; and (c) contextual intelligence, which refers to being able to adapt as one's environment changes (Sedlacek, 1983, 1988, 2003). In addition, researchers have found that noncognitive factors play a role in academic success. These factors include different sources and forms of support (Nora, 2004; Nora & Cabrera, 1996), student finances (Olivas, 1986; St. John, Cabrera, Nora, & Asker, 2001), student involvement (Astin, 1993), and academic and social integration (Milem & Berger, 1997; Tinto 1993, 2012). One can conclude that while researchers have studied noncognitive variables of students for some time, the depth and importance of this branch of educational psychology has yet to be fully integrated into mainstream research on student success in higher education.

In an effort to coalesce and better understand the role of noncognitive characteristics, Sedlacek and Brooks (1976), Tracey and Sedlacek (1984, 1988, 1989), and Sedlacek (2004b) identified eight noncognitive characteristics that are related to student success: positive self-concept, realistic self-appraisal, understanding racism, preference for long-term goals, positive leadership

experience, presence of a strong support person, community involvement, and nontraditional knowledge. Sedlacek (2004b) found these variables to be predictors of first year grade point average, retention, and completion.

Problem Statement

The problem this study addressed is the lack of understanding of the relationship that exists between students' noncognitive characteristics and their first semester engagement during in college. Research has primarily considered the relationship between student engagement and student success as an outcome for White males, ages 18-24 who attend residential institutions. Additionally, the engagement relationship is primarily explained using cognitive ability as measured by high school grade point average and standardized test scores. There is a dearth of research and, subsequently, an understanding of engagement for students of color at non-residential institutions. Furthermore, the relationship between these students' noncognitive characteristics and engagement is not clearly understood. Also unknown is students' perceptions of the value and importance of noncognitive characteristics on their engagement and success. Understanding students' perceptions of noncognitive characters on their engagement is especially important as institutional practices must be mindful of the characteristics, perceptions, and behaviors of students of color and other non-majority populations if they are to generate practices informed by theory and research.

With established academic admission standards in place that correlate with success, there are additional factors that can help further explain a student's

ability to be successful. Research shows that one such component is the student's level of engagement (Harvey, Drew, Smith, 2006; Kuh, 2001; Fischer, 2007; Pascarella & Terenzini, 2005; Tinto, 2012). This connection between engagement and success was found across student groups and held true for minority and majority students (Greene, 2005; Kuh, Kinzie, Cruce, Shoup, & Gonyea, 2006). Furthermore, students' engagement in the first year has been found to establish the relationships and structure needed to build their academic and social support systems (Tinto, 1993, 2012). However, as mentioned above, retention and graduation rates have not increased as the understanding of the relationship between academic performance and student engagement have increased. This likely reflects practices informed by theory and scholarship that is not inclusive of the experiences, perceptions, and behaviors of students of color and other populations of students who have historically not been well-served by colleges and universities in the United States.

Purpose Statement and Research Questions

The purpose of this study was to explore the perceptions of students of color at an urban commuter university as related to the constructs utilized within the engagement literature and within the noncognitive student characteristics literature. The following research questions informed the design of the study:

1. What are the noncognitive and engagement profiles of study participants, as measured by the Noncognitive Questionnaire (NCQ), the Beginning College Survey of Student Engagement

(BCSSE), and the National Survey of Student Engagement (NSSE)?

2. How do students perceive the relationship between their noncognitive characteristics and engagement in regard to their first semester performance?
3. Utilizing interview data to contextualize the profiles of students, what additional information is provided to better understand students' experiences and the relationships between noncognitive variables and engagement?

Given the focus on practice as related to the study's purpose, the research design of this study was a sequential exploratory mixed methods design. Descriptive statistics and participant demographic data from the first research question were used to develop profiles of the noncognitive characteristics, intended engagement, and actual engagement of study participants. To address the second research question, I utilized qualitative data to explore students' perceptions of the interconnections between noncognitive characteristics and engagement. Finally, quantitative and qualitative data were combined to provide a contextualized understanding of the relationship between noncognitive characteristics and engagement. This was done with the intent of generating findings that will inform educational practice.

Significance of the Study

By having a clear understanding of the relationship between noncognitive variables and student engagement, institutions will have the ability to better

assess students' likelihood of achieving academic success. This new understanding has the potential to support institutions in offering meaningful programs and services to meet the needs of students. Similarly, having a better understanding of the noncognitive-engagement relationships for students attending a commuter institution will provide more insight to the types of programs and opportunities that will enable students to be successful at non-residential institutions. Furthermore, the addition of the students' voices will allow for a clear understanding of the specific role noncognitive characteristics play in engagement. Finally, student affairs professionals, senior administrators, and researchers will have a better understanding of the relationships between noncognitive characteristics and student engagement.

Scope of the Study

This study attempted to provide a better understanding of the relationship between noncognitive factors and student engagement. Furthermore, students' perceptions of the relationship were provided. Additionally, student demographic variables were included for study participants who all were first year, freshman students from a public four-year university located in Southern California.

Assumptions of the Study

The study relied on the following assumptions of participants and methodology. First, I assumed that participants had adequate representation and experience with all eight of the noncognitive variables under study. Additionally, I assumed that all students were adhering to engagement practices as defined by the literature. Furthermore, I assumed the qualitized and qualitative

data would assist in providing sufficient data to develop rich, in-depth, and multi-dimensional profiles of study participants. Finally, I assumed that the participants understood all survey questions and they responded to them truthfully.

Study Delimitations

This study sought to understand the relationship between students' noncognitive factors and first semester engagement at a university and to understand students' perception of this relationship. Consequently, only data from first year students at a single four-year public institution in Southern California were included in this study. Delimiting to a single institution allowed me as the researcher to interpret student perceptions regarding engagement as related to the specific context of the single institution.

Furthermore, the institution type is an important delimitation. The institution is classified as a comprehensive, master's degree granting, primarily non-residential institution. As a result, while there may be similarities in noncognitive characteristics and engagement data, results cannot be generalized to include students at other types of institutions. Additionally, studying this single campus was germane to the unique population of primarily first generation students of color. As such, including a broader set of institutions would have led to the loss the uniqueness of this sample population.

Because the focus of this research was to understand the relationships between pre-college noncognitive characteristics and engagement, no data were collected or analyzed regarding noncognitive skills gained while in college. In addition, because the study included only students from one public four-year

university who did not participate in a summer bridge program, which could have influenced engagement, the results cannot be generalized to other students at the same institution.

Finally, the focus of this study was delimited to student engagement. As such it did not aim to address the outcomes of student engagement such as academic performance as measured by grade point average or persistence.

Study Limitations

This study was limited to data collected in the fall 2013 semester from students enrolled at a public four-year university in Southern California. Furthermore, this study was limited to subjects who were first-year freshman students. Student engagement was measured over the first half of the semester, so additional research is needed to understand the long-term impact of noncognitive characteristics.

In order to collect quality noncognitive and pre-college engagement data, I required participants to complete the study during the first 10 to 12 weeks of their semester in college. The first survey exceeded 120 questions and, in reviewing the data, it was apparent this was an issue as a number of students submitted partially completed surveys. The second survey used to collect data on first semester engagement was presented to students approximately four weeks after they completed the first survey. Because of prior response rate issues related to the length of the survey, I shortened the second survey and secured a response rate of approximately 50%. Finally, I was concerned that holding interviews around midterms and a holiday break would affect participant turnout, so I used

strategic and persistent communication in order to mitigate this problem. The result was that approximately 50% of the students who completed both surveys participated in the group and one-on-one interviews. Like other studies that utilize surveys, missing data and self-report errors were identified as additional limitations. Likewise, potential errors due to participants providing answers they perceived to be socially right or acceptable were also a potential limitation. To minimize this, I administered the survey early in the semester and communicated that students' identities would not be revealed to professors or administrators at the institution. Additionally, approximately half of the students who completed both surveys chose not to be included in the qualitative sample. While this may be viewed as a function of their engagement, their missing voices are also a limitation.

Finally, there was the potential for the sample to lack significant levels of diversity. Of the 14 participants, only two identified as male. In addition, all but one of the participants identified as a student of color. Although the variables of the NCQ were designed to limit the effects of race, having a diverse population is beneficial when analyzing the results of different ethnic groups.

Definition of Key Terms

Through this dissertation, I sought to understand the relationships between students' noncognitive characteristics and engagement. As noted previously, while the concepts of involvement and integration are referenced in this study, they are only used as they are related to the central contrast of

engagement. In this section, terms relating to the concepts of noncognitive characteristics and engagement are presented.

Engagement. "Student engagement represents the time and effort students devote to activities that are empirically linked to desired outcomes of college and what institutions do to induce students to participate in these activities" (Kuh, 2009, p. 683). As noted by Wolf-Wendel et al. (2009), engagement places strong emphasis on institutional practices that facilitate higher levels of student involvement.

Noncognitive characteristics. These are personal attributes and characteristics "relating to adjustment, motivation, and student perceptions, rather than the traditional verbal and quantitative (often called cognitive) areas typically measured by standardized tests" (Sedlacek, 2005, p. 178).

Noncognitive experiences. Experiences that facilitate the development of noncognitive characteristics are referred to in this study as noncognitive experiences.

Noncognitive variables. This is a set of measures of noncognitive characteristics included in the NCQ (Tracey & Sedlacek, 1984, 1988).

Students of color. Study participants who identified themselves as African American, Asian American, Hispanic, Latino, Latina, or Native American are collectively referred to as students of color.

Organization of the Dissertation

In Chapter 1, I have introduced the background, problem, purpose, and significance of the study. Chapter 2 presents a critical review of the literature

pertaining to student engagement and noncognitive variables. Chapter 3 contains the research design, including data collection and data analysis procedures for the quantitative and qualitative strands of the study. Chapter 4 provides the findings of the study. Finally, in Chapter 5 I present interpretations of the findings, discuss implications and conclusions, and set out recommendations for practice.

CHAPTER 2

REVIEW OF THE LITERATURE

This chapter begins with a summary of the literature pertaining to the field of student engagement followed by a review of student persistence models and the role student engagement plays in each. Next, the role of student ethnicity and engagement are examined, followed by a brief review of the literature pertaining to commuter students and engagement. Research detailing the voice of the student as it pertains to engagement is also presented. The chapter will conclude with a review of the literature addressing the use of noncognitive variables related to engagement and desired student outcomes. As this study seeks to understand the relationships between students' noncognitive characteristics and engagement, student engagement (Kuh 2001, 2003, 2009) is the primary focus.

Student Involvement and Student Engagement

There has been a growth in the literature on student involvement (Astin, 1984, 1993, 1999), engagement (Kuh, 2001, 2003, 2009), and integration (Tinto, 1975, 1993, 2012) in higher education. As discussed in Chapter 1, an unintended side effect of this growth is that these three terms are often used interchangeably, which can result in confusion about what is meant by each term. It is important to have a clear understanding of the definitions and concepts of the terms since each one adds a unique and valuable understanding regarding student success (Wolf-Wendel et al., 2009).

This opening section is organized in such a way as to show that while the concepts of student involvement and student engagement differ philosophically, students' understanding of the terms is interchangeable. As such, in reviewing the engagement and involvement literature, authors and findings are often presented side by side for these two fields. However, carefully attention was given to delineate the contribution of researchers to their respective field of study. In light of the philosophical differences, this study is primarily concerned with engagement because of the emphasis it places upon institutional practice.

When discussing student engagement, researchers consistently refer to it as involving the amount of time and energy students spend on their curricular and co-curricular activities in college (Chapman, 2003; Kuh, 2001, 2003; Kuh, Kinzie, Schuh, & Whitt, 2005; Pascarella & Terenzini, 1991, 2005). According to Kuh (2001), time on task, the level of academic challenge, and participation in other educationally purposeful activities, directly influence students' overall educational experience and the quality of their learning. Kuh, Schuh, and Whitt (1991) have devoted considerable attention to institutional characteristics and practices that have been shown to stimulate higher levels of student involvement in learning and academic success. The work of Kuh and his associates, among others, has contributed to the association of engagement with institutional practices and, most recently, to what the American Association of Colleges and Universities (AAC&U) has termed "high impact practices" (Kuh, 2008). Kuh further suggested that the activities in which students participate should be assessed systematically. Systematic assessment can assist both students and

faculty in identifying the activities and behaviors students and faculty could change in order to maximize engagement.

Avendano (2003), and more recently Lundberg (2010), found that in order for student engagement to be effective, commitment was needed from both the student and the institution. Both were required to exert the necessary energy and to engage in activities that promote involvement. Avendano added support to literature that posits that the extent and the quality of engagement is dependent on the range and depth of involvement by faculty and students (Kuh, 2001).

Astin (1984, 1993, 1999) reasoned that an involved student allocates significant time to studying, spends time on campus, participates in student groups and organizations, and has frequent interactions with faculty and other students. Hu and Kuh (2002) expanded on Astin's description of student engagement by postulating that the quality of effort students apply to these activities also play a significant role. Kuh et al. (2005) added that in addition to the amount of time and effort students spent on activities, the ways in which the institution provide and organize resources to encourage student participation is an important factor in student engagement.

Hu and Kuh (2002) concluded that the most pertinent factor in development and learning in college is student engagement or involvement. In addition, they found that students who are involved in effective educational activities are typically engaged in their college experience. Other researchers have found that student involvement (Astin, 1993, 1999; Pascarella & Terenzini, 1991, 2005) and student engagement (Kuh, 2001, 2003, 2009; Kuh et al., 2005)

are correlated to important student success outcomes such as satisfaction, grades, retention, and persistence. Additionally, Kuh (2001) found that student engagement had positive effects on persistence to the second year of college and on the grades of freshmen and seniors. Furthermore, researchers found that students still enrolled in their third year of college had been involved more than the students who left the institution (Coghlan et al., 2009).

Numerous researchers have determined that the more students are engaged and involved, the more likely they are to persist and graduate (Astin, 1984, 1993, 1999; Borglum & Kubala, 2000; Braxton & McClendon, 2001, Carini et al., 2006, Kuh et al., 2005). Kenny, Kenny, and Dumont (1995) found the more engaged students are, the more likely it is that they show behavioral involvement in activities and exhibit positive emotions while involved. Finally, a number of researchers found that engagement in college has a positive and direct effect on gains in student development and learning (Graham & Gisi, 2000; Morgan & Streb, 2001).

Engagement (Kuh, 2001, 2003, 2009) and involvement (Astin, 1984, 1993; Pascarella & Terenzini, 1991, 2005) arise from a variety of environmental factors such as student-faculty interaction (Astin, 1984, 1993; Kuh, 2001, 2003); active learning opportunities (Chickering & Gamson, 1987; Johnson, Johnson, & Smith, 1991; Kuh, 2003); and student-peer relationships (Astin, 1975, 1991, 1993, 1999; Chickering, 1972). Increased involvement as a result of these factors leads to increased rates of student success as measured by student retention and persistence (Astin, 1984, 1993, 1999). Additionally, these are the types of social

and academic engagement opportunities researchers found to be important in helping freshman students feel connected to their institution (Kuh, 2001, 2003, 2009; Kuh et al., 2008).

Research has demonstrated that institutions of higher education that state clear expectations for students, provide staff and faculty committed to student success, and promote participation are the types of environments where students do best (Astin, 1984, 1991, 1993; Graham & Gisi, 2000; Kuh, 2001, 2003, 2009; Morgan & Streb, 2001). These findings highlight the importance of activities that take place in and out of the classroom. Students being involved in these curricular and co-curricular activities promote deep learning and positive outcomes.

In a study that sought to identify retention predictors of first-year students, Fike and Fike (2008) studied 9,200 first-time college students. A majority of the sample was female (56%), Caucasian (66%), and the average age was 19 years. The researchers found that parents' education, number of semester hours enrolled in and dropped during the first fall semester, financial aid, and participation in student support services programs had a positive effect on student persistence levels. However, as in previous studies, the factors that lead to engagement for students of color attending a commuter-based institution were not addressed.

Persistence Models and the Role of Engagement

According to Pascarella and Terenzini (2005) a great deal of research on retention, persistence, and other student success measures are rooted in the

research findings of Spady (1970), Tinto (1975, 1988, 1993), Bean (1980), Bean and Metzner (1985), Pascarella and Terenzini (1980, 1983, 2005), and Astin (1975, 1993). Researchers have referred to student retention and persistence in a variety ways; the terms used include student mortality (Durkheim, 1951; McNeely, 1937); educational suicide (Spady, 1971); college dropouts (Summerskill, 1962; Tinto, 1975); student attrition (Pantages & Creedon, 1978; Sexton, 1965; Tinto, 1993); college retention (Berger, 2002; Braxton & Mundy, 2002) and student persistence (Bean, 1980; Pascarella, 1980; Pascarella & Terenzini, 1979).

McNeely (1937) conceptualized the modern era of college and university retention as student mortality. Knoell and Medsker (1964) expanded on the literature in their finding that success depended on more than just the student. Contributing factors in their study included the attributes of the student, the institution, the environment of the institution, and the available extracurricular activities offered to the student. The interplay of student involvement and the college environment is consistent with the factors that have been shown to contribute to student engagement.

Spady (1971) utilized Durkheim's (1951) sociological study on suicide as a theoretical framework to understand students' decision to de-enroll from college. The researchers analyzed the match between the expectations, previous background, and ability of the student and the student's interaction with the environment of the university. He found that positive interaction with the institution's environment led to improved social interactions for the student, which

would result in a greater probability of persistence. Alternatively, negative social interactions led to students de-enrolling and effectively committing educational suicide.

Bean and Metzner (1985) asserted that while previous studies have included nontraditional students, the inclusion of nontraditional students focused primarily on their dropout rate. Furthermore, according to Bean and Metzner (1985), "No theoretical model has been available to guide attrition research on the nontraditional student enrolled in institutions of higher education" (p. 486). The persistence model developed by these researchers was built on previous models of student persistence (Pascarella, 1980; Spady, 1971; Tinto, 1975). Bean and Matzner (1985) used three defining variables (age, enrollment status, and residence) and four background variables (educational goals, high school performance, ethnicity, and gender) to examine 16 previous studies, resulting in a study population of more than 40,000. Their analysis showed that residential students were more socially integrated than commuter students. Furthermore, they found a direct correlation between the age of the student and their desire to be involved in social activities on campus. The research performed by Bean and his associates provided the foundation for Astin as he sought to provide a clearer picture on the factors that affect student retention.

Astin (1984) found that interaction with one's peer group had a profound effect on academic and personal development. Furthermore, he found a direct correlation between the time students spent interacting with their peer group and positive effects on leadership skills, academic performance, solving problems,

thinking critically, and awareness of other cultures. Astin found that faculty involvement was second to peer group interaction in the academic and personal development of students. He found significant positive correlations between faculty interaction and the following variables: (a) students' grade point average, (b) degree attainment, (c) post-graduate academic endeavors, (d) hours spent studying, (e) retention, (f) graduating with honors, (g) enrollment in graduate school, (h) standardized test scores, and (i) all self-reported increases in cognitive and affective skills. Furthermore, he found that the strongest affects of academic involvement were on the academic development of the student and the student's preparation for graduate school. Additional activities that contributed to student's academic involvement included cultural awareness, study abroad, and internship programs.

Building on previous concepts and models of student attrition, Tinto (1975) asserted that the process of deciding to withdraw from higher education occurred over time and the decision to remain enrolled in school was related to how well the student became integrated into the academic and social systems of the institution. A key component of this developing model was the concept of integration and the patterns of interaction between the student and other members of the institution during the first year of college (Tinto, 2006).

Tinto (1993) found that students were more likely to withdraw if they did not succeed academically, were not able to identify educational and career goals, and were unable to incorporate themselves into the academic and social environment of the institution. He concluded that the acceptance of students'

past norms and behavior patterns by new group members dictated their ability to move through each phase of the acceptance process. As such, students whose backgrounds and experiences did not readily fit with the dominant culture may have difficulty adjusting to the new environment.

Building on previous models of persistence and attrition (Spady, 1970; Tinto, 1975), Pascarella and various research partners sought to strengthen the previous body of research (Pascarella, 1980; Pascarella & Terenzini, 1979). The authors acknowledged Tinto's work as "a major theoretical advance in attrition research" however they identified several limitations in its scope (Pascarella, Smart, & Ethington, 1986, p. 48). Limitations included that the research focused on students enrolled at large residential four-year institutions, and the research focused on students' data over a short period of time. Furthermore, even with the development of Tinto's model, Pascarella and his associates asserted that the field of attrition research was fragmented, which made it difficult to develop broad generalizations about persistence and attrition.

To better understand the affects of student-faculty interaction on persistence, Pascarella and Terenzini (1979) conducted a longitudinal study at Syracuse University with a total sample size of 1,008 randomly selected freshmen. They found that the frequency of informal student-faculty interaction was significantly correlated to first-year persistence.

In a review of approximately 35 quantitative studies on student persistence and attrition, Pascarella (1980) found there was a positive correlation between "amount of student informal, non-class contact with faculty and such

educational outcomes as satisfaction with college, educational aspirations, intellectual and personal development, academic achievement, and freshman to sophomore year persistence in college" (Pascarella, 1980, p. 564). The researcher found that this association remained even when students' entering characteristics were not controlled. Based on his findings, Pascarella (1980) developed a model of student and faculty interactions that focused on factors under the control of the institution. According to Pascarella, properly managing these factors increases students and faculty interactions outside of the classroom.

In conclusion, research shows that students' level of engagement has a positive effect on educational outcomes. Furthermore, while ethnic background does not predict student engagement, engagement practices for students of color do look different than it does for white students. A further discussion of the factors that lead to engagement for students from different ethnic groups follows.

Ethnicity and Engagement

Researchers rarely ask students, especially students of color and economically disadvantaged backgrounds, about their perceptions of the classroom learning environment and the relationship between these perceptions and their schooling experiences (Howard, 2003; Nieto, 1994; Waxman & Huang, 1997). Socio-cognitive theory supports the contention that understanding the perspectives and beliefs held by diverse student populations in regard to their own learning experiences is imperative for understanding their experiences with academic engagement within the classroom. It follows that if traditional student

engagement studies that focus on Caucasian students are performed on predominantly White residential campuses, in order to understand engagement for diverse populations, research must be performed on campuses that are representative of students who come from diverse ethnic groups.

The effect of student engagement on college success has been studied in-depth. As such, the outcomes associated with student engagement are numerous. Anaya (1996) identified cognitive development as a worthwhile outcome. Additionally, a number of researchers found that persistence to complete college was directly related to student engagement (Braxton, Milem, & Sullivan, 2000; Tinto, 1993). Finally, a number of studies found that student engagement was associated with the accumulation of social capital, psychological development, and self-identity (Evans, 2010; Harper, 2004; Harper & Quaye, 2009).

While a number of these studies controlled for race or ethnicity (authors' terms) to verify that the conclusions held true regardless of students background, research has found that students of color encounter different challenges to engagement that limit their ability to participate in meaningful development and learning (Feagin, Vera, & Imani, 1996; Hernandez, 2000; Turner, 1994). For example, Sirin (2005) found that the socioeconomic status (SES) of the students' residential area and school had a significant impact on their academic success.

Prior to enrolling in college, a number of Hispanic and African American students encounter a variety of disparities (social, economic, and racial) that affect their access to higher education and their engagement (Nelson, Bridges,

Morelon-Quainoo, Williams, & Salinas Holmes, 2007). Research has shown that students from these groups are more likely to attend subpar high schools that are in high poverty areas (Miller & Garcia, 2001; O'Brien & Zudak, 1998; Orfield, Bachmeier, James, & Eitle 1997). Furthermore, it was found that African American and Hispanic students were more likely to attend high schools where the majority of the students came from low socioeconomic areas (Hoffman, Llagas, & Snyder, 2003). While African American students were less likely to take advanced foreign language classes than their Hispanic peers, of the students who advanced to postsecondary education, both Hispanic and African American students were found to be less academically prepared than their Caucasian peers. This disparity in pre-college experiences resulted in collegiate success being more difficult for these groups (Hoffman et al., 2003). Further complicating the college engagement picture for some Hispanic and African American students is the effect of being a first-generation college student.

This status has more of a pronounced effect for Hispanic students than it does for their African American peers (Dayton, Gonzalez-Vasquez, Martinez, & Plum, 2004). Dayton et al. (2004) found that while first generation African American students receive community and familial support to attend and complete college, the same is not always true for first generation Hispanic students. The researchers identified that for Hispanic students the cultural expectation of family as a primary concern to be a significant barrier that resulted in low expectations for the student and a desire for them to attend an institution that is relatively close to the family's home. This dynamic, often resulted in first

generation students from Hispanic backgrounds having a difficult time maintaining family obligations and actively engaging with the college environment (Dayton et al., 2004; Ortiz, 2004).

In addition to the aforementioned issues affecting first-generation Hispanic students, there are a number of other factors that obstruct the success of Hispanic students., including lack of trust in institutional support infrastructures, fear of being perceived as academically inadequate, doubts of being ready for college, being intimidated by the college system, and difficulty in transitioning to college (Rendon, 1994). The issues encountered by Hispanic first generation students and the SES factors faced by both African American and Hispanic students provide additional barriers to success and engagement when they enroll in college.

Berkner, He, and Cataldi (2002) found that students from Hispanic and African American groups were less likely to graduate within six years from a four-year institution than their Caucasian peers. In their study on retention and persistence, Swail, Redd, and Perna (2003) suggested that specific issues affecting engagement in college for Hispanic and African American students were high school academic preparedness, commitment to educational goals, academic and social integration, and access and availability of sufficient financial aid (Swail, Redd & Perna, 2003). These results mirror the findings of other researchers who have sought to understand the engagement of students from diverse groups (Hurtado, Milem, Clayton-Pedersen, & Allen, 1999; Hurtado &

Ponjuan, 2005; Swail, Cabrera, & Williams, 2005; Terenzini, Yaeger, Bohr, Pascarella, & Nora, 1997).

Student engagement research overwhelmingly focuses on the practices and behaviors of students attending residential colleges and universities. What follows is an examination of the factors that contribute to the engagement of students attending commuter campuses.

Commuter Students and Engagement

Jacoby (2000) found that commuter students are the overwhelming majority of students attending college. However, while there are more students commuting to campus rather than living on campus, there is scant research available on this student population (Pascarella, 2006). This group of students encounters specific and unique challenges that are neither as apparent nor well documented as those faced by their residential colleagues (Krause, 2007).

Commuter students are those who do not live in housing owned and operated by the college or university. Gianoutsos (2011) identified three variables commonly used in studying commuter groups: (a) dependent or independent students, (b) traditional-aged or non-traditional aged students, and (c) part-time or full-time student. Hamcke Wicker (2004) used these traits to present eight different profiles of commuter students: (a) dependent, traditional, full-time; (b) dependent, nontraditional, full-time; (c) dependent, traditional, part-time, (d) dependent, nontraditional, part-time, (e) independent, traditional, full-time; (f) independent, non-traditional, full-time; (g) independent, traditional, part-time, and (h) independent, nontraditional, part-time.

Early research regarding commuter students expressed the importance of differentiating between the residential and commuter student when theorizing their experiences (Pascarella, Duby, & Iverson, 1983). Chickering (1974) postulated that commuter students come to college with lower GPAs, attend college for vocational preparation, and encounter more financial and interpersonal issues. Furthermore, Chickering and Reisser (1993) stated that commuter students attend colleges based on college's proximity to their residence rather than on the academic merit of the institution. Furthermore, because of the lower cost of attendance, they attend community colleges rather than four-year institutions.

The notion that commuter students were more apathetic and disinterested in campus life than their residential peers was thoroughly refuted by Jacoby and Garland (2005). Additionally, Keeling (1999) stated that commuter students were actually "reinvented" students who were more complex with multiple identities that could be addressed through a variety of campus and co-curricular activities. Furthermore, research shows that social involvement for commuter students plays a significant role in the quality and depth of their experiences in college (Pascarella & Chapman, 1983).

More recently, researchers have sought to address the needs and analyze the experiences of commuter students on college campuses (Jacoby & Garland, 2005; Kuh, Gonyea, & Palmer, 2001). Tinto (1997, 2000) ascertained that first-time, first-year commuter students have fewer options and opportunities to integrate into the campus community. Astin (1999) found that lack of integration

is one of the factors that negatively affect the degree attainment rate of commuter students. Counelis and Dolan (1974) identified work and familial obligations as additional factors that affect commuter students. The multiple responsibilities that commuter students have and the demands of those responsibilities requires them to make choices about where they will spend time and, thus, can impede on their ability to engage with the campus environment (Gianoutsos, 2011).

Tenhouse (2002) found that because opportunities for on-campus social opportunities were limited, it was particularly difficult for first-year commuter students to find their fit on campus. A full-time commuter student will have a minimum of twelve hours a week (based on twelve units) to interact with their peers. While interactions with peers do take place in an academic classroom setting, there is little opportunity for commuter students to interact with their peers outside of the classroom. In comparison, residential students have the opportunity to interact with peers in dining halls, study lounges, recreational or intermural activities, and at on-campus after hours social events (Gianoutsos, 2011). In his peer group study, Astin (1993) found that positive interaction between students resulted in outcomes such as increased critical thinking, cultural awareness, and academic and leadership development. With that in mind, it stands to reason, that if first year commuter students have fewer opportunities for positive interactions, they will have fewer opportunities to develop the outcomes related to academic success.

In addition to limited time to interact with other students, commuter students also have fewer opportunities to interact with faculty members. Unless faculty office hours are scheduled directly before or after a class, commuter students must make additional trips to the campus to meet with faculty outside the classroom. Because, informal interaction between faculty and commuter students is less likely to take place, developing meaningful relationships will be more difficult (Gianoutsos, 2011; Tenhouse, 2002). Informal interactions with faculty outside of the classroom are connected to academic performance as well as to the intellectual and personal development for residential students (Pascarella & Terenzini, 1991, 2005).

While the differences between commuter and residential students have been well documented, there are also similarities in regard to engagement. Kuh, Gonyea, and Palmer (2001) found while commuters may have less time and more non-academic responsibilities, they do put in the work required for their coursework. Additionally, they found commuter students were just as likely as residential students to: (a) work harder than they thought they could to meet an instructor's standards; (b) work with other students on projects during class; (c) ask questions or contribute to class discussions; (d) discuss ideas from readings with others outside of class; (e) write long papers (20 pages or more); and (f) read on their own for personal enjoyment or academic enrichment.

When comparing the commuter experience to the residential experience one is often depicted as favorable and the other as less than favorable, with the commuter experience taking the brunt of the negativity. However, with the

majority of students in the United States living off campus, the commuter engagement experience is one that needs to be better understood. The perspective that the residential experience is more favorable can prevent institutions from fully providing the deep learning experiences associated with student engagement to commuter students, which results in the continued marginalization of this student group (Wicker, 2004). Engagement, as defined by the literature, has often been framed as monolithic in nature and as a result, institutions have attempted to engage commuter students utilizing the same methods they use to engage residential students. Because of this research on the engagement practices and experiences of students attending a commuter institution is needed.

Although examining the experiences of commuting students was not central to the purpose of this study, the study was set at an urban institution where the majority of student commuted. Also of importance to this study was understanding students' perspective on the relationship between engagement and noncognitive variables. Through their experiences as adolescents, students develop noncognitive characteristics that play a part in their engagement decisions (Gurin, Dey, Hurtado, Gurin, 2002). The following presents a discussion of noncognitive variables related to engagement.

Student Perspectives of Engagement

There is a lack of peer reviewed published studies that provide students' perspective on engagement. Therefore, this section draws from research by Lester, Leonard, and Mathias (2013) that pertains to transfer students and other

students who participated in a first-year learning community at a four-year institution. Lester, Leonard, and Mathias found that transfer students viewed social engagement as a broad activity that occurred both on and off campus. Utilizing interview data form 31 students, the study sought to understand how transfer students at a four-year residential institution perceived their social and academic engagement. Study participants recognized the importance of engagement on campus and also understood the value of the support structures outside of the college environment. Students engaged on campus through conversations with faculty members and student affairs professionals. Support structures outside of school that participants identified included family, mentors, colleagues, church, and community-based groups. Another finding from this study showed that students "viewed academic engagement as a strict focus on academic activities, . . . meaningful faculty connections, . . . as well as academic challenge and learning" (Lester et al., 2013, p. 215). However, it should be noted, while study participants saw the importance of faculty interaction, the majority? did not interact with faculty members outside of the classroom setting. Another notable finding from this study was that students categorized academic engagement as being more beneficial, and thereby important, than social engagement. The value of social engagement was only recognized if the social activity was directly linked to an academic activity or class. This finding showed the students saw the value in co-curricular programming.

In studying the enduring qualities of learning communities at a large public residential institution, Ward and Commander (2011) sought to identify and

understand the engagement practices that the students (n = 24) identified as being important and salient to their college experience. While their study collected quantitative and qualitative data, only the voices of the student are presented here. Students noted that being able to engage with their professor in their first year of college helped them understand the importance of doing so throughout their academic career. While students noted the initial meeting may have been stressful, those feelings quickly subsided, and they utilized office hours frequently. In addition, the professors they interacted with often encouraged them to interact in similar ways with all of their professors.

Another engagement practices identified as important was collaborating with peers. "Such collaboration enhanced study skills and contributed to their networking ability" (Ward & Commander, 2011, p. 69). Another benefit of participating in learning communities identified by the students was the familiarity they gained of the college campus and the resources available to them. Because of these experiences, the students were more motivated to become involved in a variety of university-sponsored activities. Students identified additional benefits such as easing the transition to college, developing friendships and social skills, and aligning their major with career interests and goals.

While these studies provide insight into the engagement practices of some students, it is still not understood how first-year students who primarily identify as students of color and first generation college attendees at a broad access commuter university view engagement and the role that noncognitive variables have on their engagement.

Noncognitive Variables

Unlike cognitive skills such as grade point average or standardized test scores that are used to assess college readiness and ability, a particular set of noncognitive characteristics that can be used to assess student readiness and ability has yet to be identified (Cunha, Heckman, Lochner, & Masterov, 2007). While there are a number of different noncognitive traits, researchers have either combined all relevant noncognitive skills into one factor or developed a laundry list of noncognitive factors that may be effective (Heckman, Stixrud, & Urzua, 2006). Since noncognitive skills that relate to student engagement have not been clearly identified, there is not an understanding of the role they play in student engagement.

Because "noncognitive" is an overarching term that includes a variety of useful characteristics found in the fields of sociology, education, and psychology. The literature defines noncognitive variables in a variety of ways. An overview of noncognitive variables as used in the fields of psychology and education follows.

Noncognitive Variables in Psychology

Over the past 30 years, a model that seeks to explain the role of noncognitive variables in psychology has been developed. This five-factor model purports to define personality traits and is commonly referred to as the big-five model (Barrick, Mount, & Judge, 2001). Factors that make up this model include: emotional stability, conscientiousness, extraversion, agreeableness, and openness (Barrick et al., 2001; Goldberg, 1990; Seibert & Kraimer, 2001). While the model seeks to provide an understanding and the organization of the large

number of differences among individuals, the model does not reduce human nature down to five distinct traits (Goldberg, 1990). Each of the factors consists of sub factors that make up each of the big-five variables. Barrick et al. (2001) provided a categorization of the factors and the sub-factors included for each: (a) extraversion—sociability, dominance, ambition, positive emotion, and excitement seeking; (b) agreeableness—cooperation, trustfulness, compliance and affability; (c) emotional stability—lack of anxiety, hostility, depression and personal insecurity; (d) conscientiousness—dependability, achievement striving, and planfulness; and (e) openness—intellect, creativity, unconventionality and broad-mindedness.

The five-factor model has been used in psychology to explain the relationship of personality traits and life outcomes such as career success and attainment (Seibert & Kramer, 2001) and to investigate self-control in children (Mischel & Ozlem, 2002). Furthermore, the five-factor model categorizes all personality traits in one succinct construct, generalizes across cultures, and remains reasonably stable over time (Judge, Higgins, Thoresen, & Barrick, 1999). While this research was important in determining the relationship of noncognitive variables to personality traits and pertinent life outcomes, the development of understanding the role noncognitive variables play on the specific educational practice of engagement is still needed.

Noncognitive Variables in Education

Educational researchers employ noncognitive variables in a variety of ways such as linking study habits and attitudes to academic performance (Nixon

& Frost, 1990) and as predictors of academic success (Duggan, 2009; Shaughnessy, Spray, Moore, Siegel, 1995). A 2004 study by ACT found that specific noncognitive factors had a positive correlation with retention at colleges and universities. These factors were: academic-related skills, academic self-confidence, academic goals, institutional commitment, social support, certain contextual influences (institutional selectivity and financial support), and social involvement. The same study found that the two variables of academic self-confidence and achievement motivation were most closely correlated to college grade point average. Schmitt et al. (2006) posited that noncognitive variables that measure interests, background experiences, and motivational characteristics may add a broader range of dimensions that reflect the potential of college students, such as those measuring leadership, interpersonal skills, and ethics.

Robbins, Allen, Casillas, Peterson, and Le (2006) found that social activity, emotional control, commitment to college, and social connection offered incremental prediction of retention. Maulding, Peters, Roberts, Leonard, and Sparkman (2012) found that success in college, as defined by student retention, may be related to other variables or combination of variables. Their research found that the noncognitive variables were significant predictors of college retention and completion. Duggan and Pickering (2007) verified that noncognitive factors could be used to predict academic success and persistence.

The aforementioned studies show that while a number of noncognitive variables have a direct effect on a number of outcomes, several aspects of their relationship to student engagement remain unclear. As a result of the multitude

of findings on the cognitive? variables that lead to student success, scholars recognize a need for more focus on nontraditional or noncognitive predictors of college performance (Parker, Duffy, Bond, & Hogan, 2005). The lack of understanding of which noncognitive factors play the greatest role in student success and engagement has led to difficulty in replicating and generalizing studies on the impact of noncognitive factors and to the likelihood that the impact of noncognitive development has been diminished.

Cunha et al. (2007) found that the difficulty involved in defining and measuring noncognitive skills and characteristics is a major factor in their limited use and codification. Noncognitive skills are more difficult to define than cognitive skills because there is no widely used instrument used to measure noncognitive ability for students in higher education. While the SAT, ACT, and high school academic performance give college administrators some indication of how students will perform in college, there is no standardized noncognitive assessment tool currently in use by colleges and universities that can assess a student's readiness for higher education.

Sedlacek's Concept of Noncognitive Variables

In an effort to explain the level of college readiness for a larger population of students, Sedlacek (1998) sought to develop a definitive noncognitive instrument to assess a student's readiness for higher education. Sedlacek (1983, 1988, 2004) found that this tool could be used to accurately predict the performance of a wide variety of students' (athletes, African American students, Hispanic students, Caucasian students, female students) first year performance.

Sedlacek (1998) based his noncognitive variables on "Sternberg's experiential or contextual intelligence" (p. 3). Sternberg (1985) suggested three different types of intelligences: (a) componential intelligence, (b) experiential intelligence, and (c) contextual intelligence. Componential intelligence leads to success on standardized tests; experiential intelligence supports being able to apply known information across multiple contexts; and contextual intelligence refers to being able to adapt as one's environment changes. Based on Sternberg's intelligences, Sedlacek identified eight noncognitive variables that lead to success in higher education. The variables are: positive self-concept, realistic self-appraisal, handling racism, preference for long range goals, leadership experience, presence of a strong support system, community involvement, and nontraditional knowledge. Based on these eight variables, Sedlacek developed the NCQ.

Using the NCQ, Boyer and Sedlacek (1998) found that positive self-concept and the presence of a strong support system had predictive effects on international students' grade point average. Other studies have also found that certain noncognitive variables predicted the success of students in college (Harackiewicz, Barron, Tauer, & Elliot, 2002; Schmitt, et al., 2006).

Schmitt et al. (2006) expanded the list of noncognitive variables identified by Sedlacek to include the following 12 dimensions: (a) knowledge and mastery of general principles, (b) continuous learning and intellectual interest and curiosity, (c) artistic and cultural appreciation, (d) appreciation for diversity, (e) leadership, (f) interpersonal skills, (g) social responsibility and citizenship, (h)

physical and psychological health, (i) career orientation, (j) adaptability and life skills, (k) perseverance, and (i) ethics and integrity.

While research has identified specific noncognitive variables and classified their role in students' readiness for higher education, their relationship to student engagement is unknown. Additionally, while a causal relationship exists between cognitive variables such as high school GPA, and test scores and students' college success, these same scores have demonstrated minimal predictive value to college retention and persistence (Schuh, 1999). For these reasons, additional research on the relationship between noncognitive variables and student engagement is needed.

Chapter Summary

While a clear and communal understanding exists among researchers that student involvement and engagement is necessary in order for student to succeed in college, this research has focused primarily on White students at residential institutions. In fact a number of researchers have criticized and critiqued the research of Astin, Tinto, and Kuh for: (a) ignoring institutional cultures and assuming their concepts are culturally neutral (Tanaka, 2002); (b) aligning their research with cultures and values that only reflect and represent the middle class (Dowd, Sawatzsky & Korn, 2011); and (c) not considering the effort minority (students of color) students must exert to deal with adverse racial interactions (Hurtado & Ponjuan, 2005).

Therefore, while the role of engagement for Hispanic, African American, and commuter students has been studied, there is not a substantial amount of

research that fully explains the relationship between their noncognitive characteristics and engagement. In addition to engagement, it is generally agreed that noncognitive characteristics play a role in the college success of students. Furthermore, present research presents a list of noncognitive variables that contribute to the academic success and engagement of students in higher education. However, the relationships between noncognitive variables and engagement are not known; therefore, there is still no definitive roadmap in regard to the role noncognitive variables play in the student engagement for students of color attending four-year commuter campus. This study sought to understand the relationship between noncognitive variables and student engagement of first-year first-semester students at a four-year, public access, commuter university located in Southern California. Finally, this study specifically seeks to understand the relationships between noncognitive variables and student engagement. As stated at the beginning of the chapter, the terms involvement and engagement are understood and used interchangeably by the participants in the study. Therefore I use both involvement and engagement to refer to student engagement as the term is defined by Kuh (2001, 2003, 2009).

CHAPTER 3

RESEARCH METHODOLOGY

Student engagement has been identified as a predictor of student persistence and academic success (Astin, 1984; Kuh, Schuh, & Whitt, 1991; Kuh et al., 2005). Researchers have determined that psychosocial and noncognitive characteristics also play a role in student success (Habley et.al, 2012; Hunter & Schmidt, 2004; Robbins et al., 2004). While Sedlacek (1983, 1988, 2005) has shown the value of using noncognitive variables to predict the success for students of color, there has been a lack of research on engagement for students of color at non-residential institutions. Research with this population that examines the relationships between students' noncognitive characteristics and engagement will help us to better understand how and why some students succeed academically in college.

The purpose of this sequential exploratory mixed methods study was to explore the perceptions of students of color at an urban commuter university as related to the constructs utilized within the engagement literature and the noncognitive student characteristics literature. This study involved two quantitative surveys consisting of three instruments and one-on-one and small group interviews. Using interview data in combination with the noncognitive and engagement profiles obtained from the surveys provided a deeper understanding

of the relationship between noncognitive characteristics and student engagement. The research questions that guided this study were:

1. What are the noncognitive and engagement profiles of study participants, as measured by the Noncognitive Questionnaire (NCQ), the Beginning College Survey of Student Engagement (BCSSE), and the National Survey of Student Engagement (NSSE)?
2. How do students perceive the relationship between their noncognitive characteristics and engagement in regard to their first semester performance?
3. Utilizing interview data to contextualize the profiles of students, what additional information is provided to better understand students' experiences and the relationships between noncognitive variables and engagement?

This chapter begins by providing an overview of the methodology utilized to conduct this study, including the philosophical underpinnings. Next, the sequential exploratory mixed methods research design is described. This is followed by a presentation of the specific research methods used to carry out this study. This description includes information pertaining to the setting, sample, and data collection methods, including instrumentation, validity and trustworthiness, procedure, data analysis, and the role of the researcher. The chapter concludes with a summary and an overview of the ensuing chapters of the dissertation.

Mixed Methods Research

In an effort to better understand and increase student engagement, researchers have studied a variety of factors by using both quantitative (Hurtado, Milem, Clayton-Pedersen, & Allen, 1998; Kuh & Whitt, 1988; Schein, 2004) and qualitative (Beal & Noel, 1980; Cowart, 1987; Habley & McClanahan, 2004; Habley et al., 2010) research methods. However, several limitations exist within these studies, especially as related to their applications in practice. These studies have provided limited attention to the experience of students of color who attend urban commuter institutions, including their noncognitive characteristics, and the means by which they engage with the institutions. This has limited the ability of commuter institutions to generate practices that are informed by theory and research. My rationale for utilizing a mixed methods design is based on the need to develop effective practices that meet the needs of a diverse student body at a commuter institution. The quantitative portion of the study utilized widely used survey instruments as a means of generating baseline profiles of student participants. In turn, qualitative data gathered from interviews refined and explained those results by exploring the students' views (Creswell, 2009). The qualitative portion aimed to explore students perceptions as related to their profiles and the constructs embedded within the surveys. Thus, the voice of students was used to examine the survey constructs with the goals of better understanding the constructs themselves and the means by which they can be utilized in practice.

Tashakkori and Teddlie (1998, 2003) described mixed methods studies as the combination of qualitative and quantitative methods in a single study. According to Tashakkori and Teddlie (2003), mixed methods studies answer research questions other methodologies cannot. Furthermore, stronger inferences can be made through the combination of quantitative and qualitative analysis. Creswell (2009) stated, "Mixed methods [research] is another step forward [beyond either quantitative or qualitative research], utilizing the strengths of both qualitative and quantitative research" (p. 203).

Creswell and Plano Clark (2011) explained that in situations where "results need to be explained and a secondary method is needed to enhance a primary method" (p. 8) the use of a mixed methods approach is warranted. Researchers who support mixed method research have identified a number of advantages (Creswell & Plano Clark, 2011; Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 2003). According to Creswell and Plano Clark (2011), the strength of this methodology is in the ability of the qualitative strand of research to further explain the findings from quantitative strand. This is especially important in this study given the theoretical reasons for questioning the applicability of the constructs from the surveys to the experiences, perceptions, and behaviors of students of color. Furthermore, Johnson and Onwuegbuzie (2004) provided five rationales for conducting mixed methods research: (a) triangulation of data, (b) complementarity of data, (c) initiation arising out of the need for more clarification, (d) development (using the findings from one strand to further clarify the other); and (e) expansion of research by using multiple

strands. Creswell (2009) and Creswell and Plano Clark (2011) have also identified several limitations of, or challenges in, conducting mixed methods studies, which include difficulties in carrying out both strands of research as well as possessing the requisite methodological expertise in both quantitative and qualitative methods. I mitigated these shortcomings by taking the time to carry out both the qualitative and quantitative portions of the study and by consulting with experts in both quantitative and qualitative methods.

Mixed methods research emanates from the philosophical traditions of pragmatism (Tashakkori & Teddlie 2003), transformative-emancipation (Mertens, 2003; Sweetman, Badiee, & Creswell, 2010), and critical realism (Maxwell & Mittapalli, 2004). While it is important that solutions to educational issues be pragmatic so they may be implemented, a critical perspective is needed so the needs of underrepresented students are met. Hooks (2010) contended that with the decolonization of education, it is necessary to understand differences pertaining to culture and identity. Thus, a critical perspective adds the question of "for whom" to the fundamental question of "what works," that is at the heart of pragmatism.

Tashakkori and Teddlie (2003) recognized the relationship between pragmatism and mixed methods research by arguing: (a) The research question is of more importance than either the methodology or philosophical worldview; (b) there should not be a zero-sum decision between post positivism and constructivism; (c) the unattainable concepts of "truth" and "reality" should be discarded; and (d) practical and applicable research philosophies should dictate

the methodology. A mixed method design is useful in providing "a more complete understanding of a research problem" by collecting and analyzing both quantitative and qualitative data (Creswell, 2012, p. 540). The decision to base mixed methods in this philosophy was further strengthened by the epistemological perspective that research should be practical as the researcher collects data to better understand what works (Creswell & Plano Clark, 2011). When attempting to understand the relationships between noncognitive variables and engagement, utilizing interview data and survey data allowed me as the researcher to collect data that assisted in understanding and presenting a clearer understanding of the problem.

Research Design

This section details the research methods used in this sequential exploratory mixed methods study. Researchers have identified six major mixed method research designs: (a) sequential explanatory, (b) sequential exploratory, (c) sequential transformative, (d) concurrent triangulation, (e) concurrent nested, and (f) concurrent transformative (Creswell, 2009; Tashakkori & Teddlie, 2003). The six mixed methods designs are categorized based on the criteria of: (a) implementation, (b) priority, (c) integration, (d) terms used and (e) philosophical perspective. Implementation refers to which inquiry occurs first, qualitative or quantitative; priority is used to determine which method receives emphasis during the study. Finally, integration specifies the stage in which the methods are integrated (Creswell & Plano Clark, 2011; Tashakkori & Teddlie, 2003).

In order to better understand the relationship between noncognitive variables and student engagement and the perception of their importance as held by the students, the sequential exploratory mixed method design is appropriate. This design is useful in explaining relationships and/or study findings (Hanson, Creswell, Plano Clark, Petska, & Creswell, 2005). The quantitative data and results provide a broad understanding of the research problem. Then, through qualitative data collection, additional analysis allows the research problem to be refined, extended, and further explained (Creswell, 2012). Creswell (2009) argued the strength lies in the straightforward nature of mixed methods, the clear structure of two stages, and the ease of describing and reporting.

For this study, the two inquiries were integrated after the completion of the analysis for each procedure. Profiles of the study participants were created as a result of the concurrent analysis of quantitative and qualitative data. This integration procedure resulted in the formation of an understanding of the relationship between noncognitive variables and student engagement during the first semester of college.

Research Methods

In this section, the research methods used in the present study are presented. Included are the setting, sample, and instrumentation.

Setting

This study took place at a four-year public university in Southern California during the fall semester of 2013. This institution is a major university in the Southern geographical region of Los Angeles County and the north regions of

Orange County. At the time of the study, the total enrollment was approximately 14,670 students and the demographic makeup of the institution was as follows: Hispanic/Latino American, 54.5%; Black/African-American, 17.7%; White, 12.9%; Asian, 11%; American Indian/Alaska Native, 0.3%; Native Hawaiian/other Pacific island, .4% two or more races, 3.2%; unknown, 5.8%; nonresident Alien, 2.4%. . In 2013, the full-time, first time, first year class numbered 1,446 and had an average high school grade point average of 3.09. The setting is unique in that this institution is self-designated as a commuter campus. In addition, students of color are the majority population (87.1%). These characteristics mean that the traditional conversation of student engagement was reassessed in order to better understand the students attending this institution. In the next section, overviews of the survey sample and interview participants are presented.

Survey Sample and Interview Participants

The students were selected on the criteria of not having participated in a summer bridge program provided by the institution for students in need of remediation prior to starting college. As such, these students were academically prepared, so there was minimal risk these students would leave the institution while the study was in progress. This population included full-time, first-time, first year (freshman) students ($N = 612$) who did not participate in a summer bridge orientation program provided at this four-year public institution. The study consisted of the following three data sets with accompanying sample sizes: NCQ ($n = 47$) and BCSSE ($n = 47$); the NSSE ($n = 30$); and interview data from study participants ($n = 14$). The 14 students who participated in both the surveys and

interviews were the basis of this study. This study only utilized data from survey participants who completed both surveys and participated in a follow interview. Table 1 provides the demographic characteristics of study participants.

Table 1

Demographic Characteristics of Study Participants

Pseudonym	Age	Ethnicity	Gender	First Generation
Adam	18	White	Male	Yes
Lupe	18	Hispanic/Latino	Female	Yes
Amber	19	Black/African American	Female	No
Bonnie	20	Black/African American	Female	Yes
Carissa	18	Hispanic/Latino	Female	Yes
Mel	18	Asian American/ Pacific Islander	Female	No
Emily	18	Hispanic/Latino	Female	Yes
Eli	18	Hispanic/Latino	Male	Yes
Raquel	18	Hispanic/Latino	Female	Yes
Eliana	18	Asian American/ Pacific Islander	Female	No
Jayme	18	Hispanic/Latino	Female	Yes
Jenny	18	Hispanic/Latino	Female	Yes
Victoria	18	Hispanic/Latino	Female	Yes
Sarah	18	Black/African American	Female	No

Ethical considerations and issues were taken into account at each phase of the study. Since the research required collecting data and extracting further analysis from people, care was given to provide participants with a safe space to share their experiences and to ensure that no judgment would be passed based on their responses during the interview (Punch, 2005). I took the following steps

to ensure ethical treatment of human subjects: (a) To protect participants identity from those not associated with the research project, I conducted interviews away from areas where students were likely to visit; (b) to develop trust with participants, I spent the first five to ten minutes of the interview session getting to know more about the participants; (c) in order to uphold research integrity, I adhered to the protocol and appropriate methods of recording responses; (d) to provide safeguards against misconduct, I utilized the services of a note taker and informed participants they were free to leave at any point of the interview; and (e) in order to with deal with challenging problems as they arose, I had multiple recording devices (Israel & Hay, 2006). Further ethical considerations included protecting participants' identities by storing data on password protected computers and providing authentic and credible reports (Israel & Hay, 2006).

Instrumentation

This section begins with an overview of each of the instruments used for this sequential exploratory study. Then, each instrument is discussed in depth including the validity and trustworthiness of each.

Quantitative instrumentation. Quantitative data for this study were collected utilizing a survey consisting of three instruments: (a) NCQ, (b) BCSSE, and (c) NSSE. All instruments rely on self-reporting by students. In this situation, the validity and accuracy of responses can be affected in two ways. First, respondents may be unwilling to provide accurate information, and second, respondents may be unable to provide accurate information (Porter, 2011). However, research shows that self-reports are valid under five conditions: (a)

respondents know the information being requested; (b) the questions are not ambiguous; (c) the questions ask about recent activities and behaviors; (d) the questions ask for a thoughtful responses; and (e) the questions are safe in that respondents do not feel threatened or embarrassed by answering (Bradburn & Sudman, 1988; Brandt, 1958; Converse & Presser, 1989; DeNisi & Shaw, 1977; Hansford & Hattie, 1982; Pike, 1999). Students were informed of the general content of the surveys by email prior to completing the surveys. As such, the five conditions were met.

NCQ. The NCQ is designed to assess attributes that are not typically measured by traditional instruments such as the SAT and ACT (Sedlacek, 2004). Furthermore, the NCQ has been shown to predict college readiness as evidenced by grades, retention, and graduation (Sedlacek 1989, 1999, 2003). Concern has risen over the assertion the noncognitive questionnaire is not a valid predictor of student outcomes such as grade point average, college persistence, and credits earned (Thomas, Kuncel, & Crede, 2007). While that may be a valid concern, it is important to draw the distinction between previous studies and the present study. The present study did not make use of the noncognitive questionnaire or student noncognitive characteristics to predict or presuppose their grade point average, persistence, or credits earned. Instead, the present study utilized the instrument to measure students' noncognitive characteristics to better understand their relationship with first semester engagement. This distinction is important because research on this relationship is missing in the field.

Researchers identified eight noncognitive variables that contribute to college students' academic success (Sedlacek & Brooks, 1976). Using these variables, Tracey and Sedlacek (1984) developed the Noncognitive Questionnaire (NCQ). The NCQ was designed to assess students' psychosocial skills in determining a student's readiness for higher education. Tracey and Sedlacek (1988) found this "specific set of noncognitive [variables] related to grade point average and persistence, especially for minority students" (p. 3). The NCQ is made up of eight scales:

1. *Availability of strong support person.* "[The student] seeks and takes advantage of a strong support network or has someone to turn to in a crisis for encouragement" (Sedlacek, 2004a, p. 37).
2. *Community involvement.* "The student participates and is involved in his or her Community" (Sedlacek, 2004a, p. 37).
3. *Knowledge acquired in a field.* The student acquires knowledge in a sustained or culturally related way in any field (Sedlacek, 2004a, p. 37).
4. *Leadership experience.* "The student demonstrates strong leadership in any area of his or her background (church, sports, non-educational groups, gang leader, and so on)" (Sedlacek, 2004a, p. 37).
5. *Positive self-concept.* "The student demonstrates confidence, strength of character, determination, and independence" (Sedlacek, 2004a, p. 37).

6. *Preference for long-term goals.* "The student is able to respond to deferred gratification; plans ahead and sets goals" (Sedlacek, 2004a, p. 37).
7. *Realistic self-appraisal.* "The student recognizes and accepts any strengths and deficiencies, especially academic and works hard at self-development; recognizes need to broaden his or her individuality" (Sedlacek, 2004a, p. 37).
8. *Successfully handling racism.* "Students exhibits a realistic view of the system on the basis of personal experience of racism; committed to improving the existing system; takes an assertive approach to dealing with existing wrongs, but is not hostile to society and is not a "cop-out"; able to handle racist system" (Sedlacek, 2004a, p. 37).

The NCQ instrument (see Appendix A) is a 29-item questionnaire. The first six items document demographic information; two of the next four items are multiple choice questions related to the expected level of academic achievement and the reasons why the student might leave college. The other two questions are open-ended and require students to identify three goals and three accomplishments. The remaining 18 items use a five-point Likert scale, ranging from a score of one (strongly agree) to five (strongly disagree). Most items on the questionnaire are given a point value between 1 and 5 points. Items are then combined for each of the individual constructs and divided by the number of items. For example, the construct Self-Concept combines items #20, #23 and

#28. The total is than averaged for a score on the construct, Self-Concept. This scoring procedure gives an individual score for each construct. Sedlacek (2004a) and Tracey and Sedlacek (1986) found that all multiple-choice items were found to have adequate test-retest reliabilities (two-week estimates ranging from 0.74 to 0.94 for each item with a median value of 0.85). Interjudge agreement on open-ended items ranged from .83 to 1.00. Support for the NCQ's construct validity was found using factor analysis (Tracey & Sedlacek, 1984).

BCSSE. The BCSSE was chosen for use in the study because it provides an understanding of the students' expected level of engagement. When paired with the NSSE, the BCSSE serves as a pre-assessment with the NSSE functioning as a post assessment. Researchers found that validity may be affected if students inflate aspects of their performance or behavior (Converse & Presser, 1989; Porter, 2011). Furthermore, critiques have been levied against the SSE instruments in regard to their lack of representation for culturally diverse students, namely those who identify as Latino, African American, or Asian (Dowd, Sawatzy, & Korn, 2011). I took these critiques into consideration including the finding that the "NSSE survey generally performs well for students from different racial and ethnic backgrounds" (McCormick & McClenney, 2012, p. 36).

The BCSSE is an instrument administered to entering freshman during fall orientation or within the first weeks of the fall semester. The BCSSE is designed to complement NSSE results by providing a clear picture of students' engagement expectations. This instrument collects students' responses

regarding high school academic and co-curricular experiences as well as students' estimation on how many hours per week they expect to spend on similar activities in college. The BCSSE consists of 43 questions categorized into six scales:

1. *High school academic engagement.* Examines educationally relevant behaviors the student was involved in their last year of high school.
2. *Expected academic engagement.* Examines educationally relevant behaviors the student is expected to engage in their first year of college.
3 *Expected academic perseverance.* Examines the likelihood the student will continue on when facing academic difficulty.
4. Expected academic difficul*ty.* Examines the amount of academic difficulty student is expecting to have their year of college.
5. *Perceived academic preparation.* Examines the student's perception of his or her academic preparation for college.
6. *Importance of campus environment.* Examines student's perception that there is a challenging and supportive environment at the institution.

This study utilized the first five scales to determine students' anticipated engagement. The complete survey used for this study is located in Appendix A..

BCSSE data provided information about students' level of certainty during academic adversity, expected levels of academic difficulty in the first year,

perceptions of academic preparation, and value placed on a challenging and supportive campus environment. The item that is unique to BCSSE (not asked on the NSSE) is the item about future academic plans. Survey participants are asked to identify the highest level of academic degree they expect to obtain. For the purposes of this study, five scales from the BCSSE were used to determine students' expected level of engagement and their expectations of the college's academic and social environment.

The National Survey on Student Engagement (NSSE). The NSSE (See Appendix C) assesses students' engagement levels in educational activities that are "highly correlated with many desirable learning and personal development outcomes" (Kuh, 2001, p. 12). The survey consists of five scales:

1. *Level of academic challenge.* Indicators include the amount of time students report spending on academic tasks and developmental emphases of coursework
2. *Active and collaborative learning.* Indicators include students' participation in class, interaction with others in and out of class, and thinking about what they are learning in different settings
3. *Student-faculty interaction.* Indicators include students' interactions with faculty in terms of research, career advising, feedback, course-related discussion, and campus committee/activities interaction.
4. *Enriching educational experiences.* Indicators include Internships, co-curricular activities, community service, international experiences, and senior capstone courses.

5. *Supportive campus environment.* Indicators include positive working and social relations among different groups on campus, including faculty, administrators, and their peers.

The NSSE specifically designed "to assess the extent to which students are engaged in empirically derived good educational practices and what they gain from their college experiences" (Kuh, 2001, p. 2). The complete survey used for this study, is located in Appendix B.

The NSSE is a self-reporting instrument with evidence supporting students' self-reported responses are credible and accurate (Kuh, 2002; Pike, 1999). Approximately 200,000 students from more than 250 four-year degree-granting institutions have participated in BCSSE since 2007 (NSSE, 2009). Additionally, the validity and reliability of the instrument has been verified through a number of technical reports (Kuh et al., 2006). Carini et al., (2006) and Pascarella, Seifert, and Blaich (2010) found a number of logical relationships between items on the NSSE that were consistent with research about ideal educational practices and valued learning outcomes. Kuh (2001) and Ouimet, Carini, Kuh, and Bunnage (2004) utilized interviews and focus groups to analyze how students understood and interpreted the survey items. When survey items regarding collaborative learning benchmarks were examined, little significant differences were found among groups of students and between institutions (Nelson Laird, Korkmaz, & Chen, 2008). Finally, little variation was found in student level data from one year to the next when a test-retest analysis was performed.

Engagement survey limitations. Regarding validity and representation critiques, Kuh (2001) acknowledged the challenges of accuracy and validity. While the SSE team has addressed the critiques, it is important to note, George Kuh, principal developer of the NSSE, recognized and acknowledged additional research and development of the instruments were needed (Wolf-Wendel et al., 2009). Kuh specifically stated, "There are things about NSSE that aren't perfect in terms of its measures—if we were doing it again or we weren't worried about people using it over time we would change things now" (p. 421). As the BCSSE instruments were derived from the NSSE, it should be noted that if given the opportunity, both instruments would be more representative of all student populations. An overview of the instruments and elements contained therein is presented in the following sections.

Qualitative instrumentation. For the qualitative phase of this study, I made use of semi-structured interviews with open-ended questions. This format gave interviewees numerous opportunities to further discuss their perceptions of the role noncognitive characteristics played in their engagement. As this was a study seeking to understand the relationships between noncognitive variables and engagement, questions were asked based on the noncognitive variables used in the NSSE. This was done to gain a better understanding of the roles and effects noncognitive variables had on students' educational experiences. Each question asked study participants to share the effect, if any, that various noncognitive variables played in their first semester engagement:

1. Compared to when you started this semester, where's your confidence level in regard to finishing this year? (positive self-concept)
2. Before you started school this semester, how many years do you plan on taking to graduate? What effect has that had on your first semester involvement academically and socially? (self-appraisal)
3. Do you have a goal you would like to achieve in 3-5 years? What effect has having those goals had on your first semester? (long-term goals)
4. Think of a person who supported or encouraged you to pursue college: What role, if any, did that person play in your ability to be engaged this semester? (support person)
5. What effect, if any, do you think a person's race or ethnicity has on their ability to do well academically and socially in high school? (handling racism)
6. Tell me about a leadership experience in high school and whether or not it has played a role in your performance this semester. (leadership)
7. What was your involvement volunteering or serving the community where you live and have those experiences played a role in how you've done academically and getting involved this semester? (community service)

8. Are we all familiar with the terms street smarts and book smarts? Has what you've learned outside of the classroom, helped you in your classroom performance and being involved on campus? (Non-traditional knowledge)

A copy of the complete interview protocol is included in Appendix D.

Failure to reach potential interviewees should be noted as a limitation in the present study. Based on the completion of the first survey, 47 individuals were eligible for the interviews. However, after the second survey, there were 30 individuals eligible for the interviews. Of the 30 individuals eligible for interviews, 14 students agreed to participate in the interviews. Many individuals who were emailed the invitation to participate in interviews were reluctant to participate. Even when an appointment to conduct an interview was made, some individuals were not available and rescheduled. This difficulty in securing participation led to limited variability in the data as evidenced by the number of male participants (two out of the 14 interview participants). While the gender stratification for the institution for the 2013 fall semester was 62% female and 38% percent male, approximately 50% of the sample of the quantitative strand of the study was female. Consistent gender distribution according to institutional norms would have been would have resulted in approximately eight females and six males. As a result, there is an over representation of females in the current study. Individuals who successfully completed an interview indicated their willingness to cooperate; although some expressed reluctance to commit to one hour; a few

who had been originally reluctant actually spent more time sharing their experiences.

Data Collection Procedures and Management

Permission for conducting this research was obtained through the institutional review boards (IRB) at California State University, Fullerton as well as the institution where the research took place. I filed a research proposal that contained research procedures and participant information. Once received, the boards reviewed the material to determine the extent to which the proposed research placed the subjects at risk (Creswell, 2009). In addition to IRB approval, I also included an informed consent form for participants to sign. Upon receiving IRB approval, I worked with the research site to administer the surveys and conduct the interviews. The first survey was administered within the first few weeks of the fall 2013 semester. The second survey was administered at the approximate halfway point of the fall 2013 semester. Finally, the interviews were conducted toward the end of the 2013 fall semester.

Informed consent was gathered before administering surveys (Appendix E) and before conducting the interviews (Appendix F). The consent form included the following: researcher identification, sponsoring institution identification, participant selection method, the purpose of the research, the benefits of participating, the type and level of participant involvement, the risks to the participants, the confidentiality agreement, the ability for participant to withdraw at any time, and contact information should questions arise (Sarantakos, 2005).

Once IRB approval was obtained from the sponsoring institution and the research site, data collection proceeded as follows. The first survey (NCQ and BCSSE) was distributed during the first few weeks of the fall semester. Second, the NSSE instrument was distributed between the sixth to eighth week of the same semester. Finally, group and one-on-one interviews were conducted between the tenth to twelfth week of participants' first semester at the institution.

As the researcher, my involvement with the data collection was different in each portion of this study. Recent BCSSE and NSSSE policy changes allowed for these surveys to be distributed electronically. Therefore, in conjunction with the research site, the surveys were administered electronically using students' email addresses. Electronic distribution using email addresses had the added benefit of making it easier to distribute the survey and collect the data. As a part of each of the surveys, study participants were asked to provide their school email address. This information allowed for the merging of survey and interview data.

In the qualitative phase of the study, I took a more active role as the facilitator of group and individual interviews. I did not have any prior knowledge or connection to the focus group participants outside of interacting with the participants to collect quantitative data. However, during the qualitative data collection process, I developed additional levels of repertoire and cordiality with study participants (Creswell, 2011). As such, I established clear boundaries establishing my role as investigator and the students' role as study participants (Patton, 2002).

Participant anonymity was protected by numerically coding each of the returned questionnaires. As the principle researcher, I was the only individual who saw the questionnaire responses. Interview participants chose pseudonyms and were referred to as such in the focus groups, interviews, and reported results.

All data collected for this study, including survey files, focus group and interview recordings, and transcripts, were kept in a locked file cabinet and on a password-protected computer. Study participants were notified that while summary findings will be presented to the research community, there would be no way to identify individuals or their responses.

Quantitative Data and Analysis

Quantitative data were examined using descriptive statistical analyses. This data was then qualitized to assist in the formation of comparative profiles of the study participants. While the process of transforming numerical information to verbal data is less common than quantitizing data, researchers have utilized this technique in a variety of studies (Rothert et al., 1997; Teno, Stevens, Spernak & Lynn, 1998). Tashakkori and Teddlie (2003) described a research study in which quantitative cluster analyses was used to identify groups of individuals based on their responses to a set of survey instruments. Qualitizing quantitative data involves using quantitative data to develop narrative profiles that present a summary and description of the study participants. In the present study, these descriptions are based on the individual and scaled responses for the NCQ, the BCSSE and the NSSE. In addition to typology and profile development,

researchers have also used this qualitizing technique to increase legitimation (Daley and Onwuegbuzie, 2004; Lincoln & Guba, 1985; Maxwell, 1992; Onwuegbuzie, 2000; Sandlewski, 2001; Teddlie & Stringfield, 1993).

The narrative profiles were drawn from the comparisons of one element of analysis with another. The elements of analysis were each of the eight noncognitive characteristics and the four engagement scales that were the focus of this study. It was the quantitative information that provided the basis for profile development.

The limitations in the quantitative strand of the study include potential oversimplification of study participants as the result of qualitized profiles based on a large number of variables (Tashakkori & Teddlie, 1998). I sought to mitigate these limitations by developing student profiles based on many detailed quantitative data points. In order to determine significant responses, I utilized mean scores and standard deviations. As the NCQ is not an instrument used on a national level, group means served as the baseline for data responses. In regard to the BCSSE and NSSE, national benchmarks served as the baseline for data responses. For all instruments, responses that were one or more standard deviation above the mean or benchmark were deemed to be significant. The qualitized data was also used in conjunction with the qualitative data from the interviews to provide additional insights (Tashakkori & Teddlie, 1998).

Qualitative Data and Analysis

This portion of the study centered on collecting qualitative data through group and one-on-one interviews to assist in understanding the relationships

between students' noncognitive characteristics and engagement. One-on-one interviews are a data collection process in which responses are recorded from one participant at a time (Creswell, 2012).

Study participants who completed both of the surveys were invited to partake in the interviews. There were a total of three group interviews, with two to five participants in each. In addition, five one-on-one interviews were conducted. Group and individual interviews were used to accommodate the availability of the study participants. Interview questions centered on students identifying the role noncognitive factors had on their engagement levels. Consent was obtained through signed forms provided to the participants on the day of the interview. The qualitative data were gathered from interview participants using digital recording devices. For data management, the data collected from the interviews were combined so they could be stored on a single computer. I reviewed the digital recordings for accuracy and used the services of a second party to transcribe the data. The transcription data was uploaded into a secure, password-protected computer using Microsoft Office Software.

Qualitative analysis of the participant interviews began with data transcription by a hired service and by me, the primary researcher. Utilizing grounded theory techniques, the data was analyzed using a constructive method. Analysis began with the initial coding and then the focused coding of data (Charmaz, 2003). When coding, I adhered to the following suggestions: (a) remaining open, (b) staying close to the data, (c) keeping the codes simple and

precise, (d) constructing short codes, (e) preserving actions, (f) comparing data with data, and (g) moving quickly through the data (Charmaz, 2006, p. 49).

Initial codes (n = 634) were developed using words participants provided in the interview. This was done to ensure the codes were representative of the data (Charmaz, 2006). In constructing these codes, the gerund forms of words were used to preserve actions and processes. I identified actions and processes through interacting with the data by asking questions, such as what, how, and when (Charmaz, 2006). Comparisons of data with data, data with themes, and themes with themes were made to discover similarities and differences (Charmaz, 2006).

Additionally, I used this method to sort data, explore codes, and to document and accelerate the analysis of data (Charmaz, 2003, 2006). Memos were written during the initial and focused coding process, dated accordingly, and written informally. This allowed me to record observations, reflections, and questions that emerged while analyzing the data. Titles and raw data were included with each memo in order to assist in defining the codes being explored. Reviewing and organizing the memos guided the development of conceptual themes (Charmaz, 2003, 2006; Strauss & Corbin, 1990, 1998).

Mixed Methods Analysis

Research that utilizes a mixed methods approach allows for recommendations that cannot be drawn by solely using quantitative or qualitative approaches (Tashakkori & Teddlie, 2003). For the present study, quantitative data collected through survey instruments allowed me to develop participant

profiles that presented a picture of the noncognitive and engagement behaviors of the students. Similarly, qualitative data collected through interviews provided an opportunity for students to share their noncognitive experiences and characteristics and the effects they had on their first semester. However, neither strand presented a complete understanding of the relationships between students' noncognitive characteristics and their engagement. As such, I examined both strands of data to interpret how the information addressed the study's mixed methods question (Creswell & Plano Clark, 2011).

After the qualitized development of student profiles using NCQ, BCSSE, and NSSE data, and qualitative analyses of the interviews, I embedded the quantitative data in the qualitative data. In doing this, the students' survey responses were contextualized in accordance to their survey responses in order to present the relationships between noncognitive variables and engagement.

Chapter Summary

In this sequential exploratory mixed methods study, the relationship between students' noncognitive characteristics and their first semester engagement was examined. In the preceding chapter, the methodology of the study was discussed, then the setting and the sample. Next, the survey instruments were discussed, which included, the NQS, the BCSSE, the NSSE, as well as group and one-on-one interviews. The methods used to analyze the quantitative and qualitative data were described as well as the process used to in the mixed methods analysis. In Chapter 4, the results of these analyses are presented.

CHAPTER 4

FINDINGS

The following chapter presents the findings of the sequential exploratory mixed methods study that explored the relationship between noncognitive characteristics and the first semester of engagement of first-time, first semester students. Fourteen students participated in all portions of the study during the Fall 2013 semester. Each research question is discussed with relevant data analyzed and presented.

The chapter begins with the noncognitive and engagement profiles of study participants. In developing the profiles, attention was given to study participants who scored one or more standard deviation above the mean; all scores, benchmarks, and means were rounded. The criteria of one or more standard deviation was given significance because a score falling into this range was more likely to highlight the participants who stood out from group and national benchmarks. After presenting participant profiles, data gathered through qualitative methods is presented.

Qualitative data was collected through three group interviews and five individual interviews. In the analysis of the qualitative data, nine conceptual themes emerged from the more than 600 initial codes. These conceptual themes provide an understanding of the relationships between noncognitive characteristics and first semester engagement.

Findings from the mixed methods analysis are presented following the qualitative findings. These findings were obtained from a process in which interview data gathered from study participants was combined with and contextualized using the quantitative data collected through the three survey instruments. This analysis provided a description of the noncognitive and engagement scales with which the findings converge and diverge with the definitions and understandings of the relationship of noncognitive characteristics and engagement. The chapter concludes with a discussion of the relationships between noncognitive characteristics and first semester engagement.

Participants

Descriptions of each participant are provided using pseudonyms selected by the students. The profiles were developed using data from participants' survey responses. The profiles provide a more nuanced picture of first year students at this broad access university. Information presented includes: year in college, major course of study selected, ethnic background, parents' educational background, noncognitive profile (NCQ), expected engagement profile (BCSSE), and actual engagement profile (NSSE). Academic characteristics of study participants are presented in Table 2, while Tables 3, 4, and 5 respectively summarize the NCQ, BCSSE, and NSSE results for the study participants. Next, the profiles for each of the participants are presented in alphabetical order. The profiles provide an understanding of students' noncognitive experiences and development as well as how their engagement behaviors and activities met their expectations prior to starting at the institution.

Table 2

Academic Characteristics of Study Participants

Student	H.S. Type	Grades in H.S.	SAT Score	AP (Concurrent Courses)	Status (Fall Courses)	Expected College Grades	Paying for School	Major	Highest Educational Level of Either Parent
Adam	Public	B	1530	3 (0)	Full-time (4)	B+	F	Bus. Admin.	Attended College
Amber	Public	B	1420	2 (0)	Full-time (4)	A	F,L	Cellular Bio.	Master's Degree
Bonnie	Public	B	830 (M&W)	2 (0)	Full-time (4)	A-	F,G,S,PTJ	Nursing	High School/GED
Carissa	Public	A	1480	2 (0)	Full-time (4)	A-	L,S,G	Undecided	Attended College
Eli	Public	C	1460	2 (0)	Full-time (4)	B-	F,L,G,S,PTJ	Criminal Justice	Associates Degree
Eliana	Public	A	1600	2 (3)	Full-time (5)	A	F	Accounting	Bachelor's Degree
Emily	Public	B	1360	4 (0)	Full-time (5)	B+	F,S,PTJ	Environ. Bio.	No H.S. Diploma
Jayme	Public	B	1710	4 (0)	Full-time (4)	B+	F,G,S	Undecided	No H.S. Diploma
Jenny	Public	A	1350	2 (2)	Full-time (4)	B+	F,G,S,PTJ	Nursing	No H.S. Diploma
Lupe	Public	B	1055	4 (2)	Full-time (7)	C+	F,L,G,S,PTJ	Mathematics	No H.S. Diploma
Mel	Public	A	1480	4 (0)	Full-time (5)	B+	F,G,S,PTJ	Biology	Bachelor's Degree
Raquel	Charter	B	17 (ACT)	2 (0)	Full-time (4)	B+	F	Biology	No H.S. Diploma
Sarah	Public	B	1340	0 (11)	Full-time (4)	B	F,S,PTJ	Undecided	Bachelor's Degree
Victoria	Public	A	1640	2 (0)	Full-time (4)	A	L,G,S	Education	No H.S. Diploma

Note. F = Family, L = Loans, G = Grants, S = Scholarships, PTJ = Part-Time Job.

Table 3

Noncognitive Questionnaire Scores by Participant

Student	Positive Self Concept	Realistic Self Appraisal	Handling Racism	Long-Term Goals	Support Person	Leadership Experience	Community Service	Knowledge Acquired
Mean	19.14	10.57	17.07	9.50	9.14	8.57	3.86	3.14
St. Dev.	2.11	1.91	1.77	1.79	1.42	1.87	2.11	1.10
Adam	19	9	19	10	10	8	4	3
Amber	21	14	16	10	12	8	7	4
Bonnie	15	9	15	10	10	6	7	2
Carissa	19	10	17	12	7	9	2	2
Eli	17	8	18	9	9	7	3	3
Eliana	22	14	21	12	11	11	5	2
Emily	18	11	15	9	10	10	2	4
Jayme	21	9	16	6	10	10	2	6
Jenny	17	9	19	7	9	8	3	4
Lupe	21	10	18	8	7	8	2	3
Mel	22	11	16	9	10	9	4	3
Raquel	20	11	15	9	10	9	3	3
Sarah	18	10	17	12	11	12	2	2
Victoria	18	13	17	10	11	5	8	3

Note. Scale ranges: Self Concept 7-12, Self Appraisal 4-14, Handling Racism 5-25, Long-Term Goals 4-14, Support Person 3-15, Leadership 3-13, Community Service 2-8, Knowledge Acquired 2-6.

Table 4

Beginning College Survey of Student Engagement Scores by Participant

Student	HS QR	HS LS	EXP CL	EXP SFI	EXP IDO	EXP PER	EXP DIF	PER PREP
2013 BCSSE Mean*	31.96	38.19	38.56	34.20	45.15	44.24	29.08	45.15
Group Mean	37.14	41.43	44.79	24.71	48.43	52.71	25.14	44.14
2013 BCSSE SD*	14.59	13.08	11.29	12.88	13.23	8.98	9.77	8.98
Group SD	11.47	10.60	7.11	10.17	7.52	7.09	10.42	6.68
Adam	44	40	48	33	48	42	33	41
Amber	12	32	36	33	54	58	36	53
Bonnie	32	56	42	18	57	58	27	41
Carissa	28	32	36	36	60	48	33	41
Eli	36	40	42	36	36	60	36	43
Eliana	52	56	60	54	60	60	60	58
Emily	48	48	48	42	48	60	27	45
Jayme	32	40	42	36	42	46	30	39
Jenny	32	16	48	24	45	48	39	41
Lupe	52	40	39	18	48	40	18	34
Mel	24	40	54	36	48	60	42	36
Raquel	40	52	48	45	48	52	45	50
Sarah	40	48	48	45	48	50	24	50
Victoria	48	40	36	30	36	56	42	46

Note. Scales range 0-60; HS QR = Hi gh School Quantitative Reasoning, HS LS = High School Learning Strategies, EXP CL = Expectation for Collaboration Learning, EXP SFI = Expectation for Student-Faculty Interaction, EXP IDO = Expectation for Interaction with Diverse Others, EXP PER = Expectation for Academic Perseverance, EXP DIF = Expectation for Academic Difficulty, PER PREP = Perceived Academic Preparation
*2013 BCSSE Mean and Standard Deviation are for all students at Master's Large institutions (Carnegie Classification).

Table 5

National Survey of Student Engagement Scores by Participant

Student	HOL	RIL	LS	QR	CL	DDO	SFI	ETP	HIP-LC	HIP-WF	HIP-SL
2013 NSSE Mean*	39	36	40	27	30	41	20	41	43%	7%	7%
Group Mean	47	41	43	39	40	42	28	53	43%	7%	7%
2013 NSSE SD*	14	13	14	17	15	16	15	14	43%	7%	7%
Group SD	9	8	9	13	11	12	12	7	42%	7%	7%
Adam	41	45	40	50	30	38	19	48	Yes	No	None
Amber	56	47	45	50	38	60	19	60	No	Unsure	None
Bonnie	60	43	55	25	23	34	15	60	Yes	No	None
Carissa	45	34	30	45	30	45	26	54	Unsure	Unsure	None
Eli	53	41	45	40	38	53	26	54	Unsure	Unsure	None
Eliana	60	60	60	60	60	60	60	60	Yes	No	None
Emily	56	41	45	30	60	26	45	60	Unsure	Unsure	None
Jayme	45	32	30	15	30	30	34	51	Yes	Unsure	None
Jenny	45	30	30	20	38	34	19	39	Unsure	Unsure	None
Lupe	34	39	40	55	53	38	15	48	Yes	Unsure	Some
Mel	34	36	40	35	38	60	26	60	No	No	None
Raquel	49	47	50	35	41	41	26	45	Unsure	Unsure	None
Sarah	45	40	45	40	49	45	30	48	No	No	None
Victoria	41	39	50	45	34	30	26	48	Yes	Yes	None

Note. Scales range 0-60; HOL = Higher Order Learning, RIL = Reflective and Integrative Learning, LS = Learning Strategies, QR = Quantitative Reasoning, CL = Collaborative Learning, DDO = Discussions with Diverse Others, SFI = Student-Faculty Interaction, ETP = Effective Teaching Practices, HIP = High Impact Practice.
*2013 NSSE Mean and Standard Deviation are for all students at Master's Large institutions (Carnegie Classification).

Profiles

Adam. Adam is an 18-year-old Caucasian male student who graduated from a public high school with a B average. In addition, he scored 1530 on the SAT. While in high school, he completed approximately three to four advanced placement (AP) courses. He grew up less than one hour away from the university and has one close friend who also attends the same university. He lives off campus at his parents' home. While his parents did attend college, neither one of them graduated. Adam received financial support to attend college from his family. Adam selected business administration as his major, took four classes during the fall semester, and he expects to earn a 3.5 grade point average. While this was his second choice school, he plans to graduate from the institution.

The self-assessment scores on the NCQ showed that Adam scored approximately one standard deviation above the mean for *handling racism* as well as for *presence of strong support person.* On the handling racism scale, he scored the maximum of five on all but one item, expectation to have a harder time than most students. In regard to the support person scale, he scored high on the items relating to having someone to help him and on his family's desire for him to be in school. Conversely, he scored approximately on standard deviation below the mean on the scale related to *realistic self-appraisal.* All other scores for this participant were within one standard deviation of the mean.

On the BCSSE, Adam had overall scores that were comparable to the 2013 BCSSE national means. His scores for all scales were within one standard

deviation of the mean. Regarding Adam's NSSE responses, he scored more than one standard deviations above the mean for *quantitative reasoning*.

Adam is planning to participate in the high impact learning opportunity of a learning community. He chose not to participate in opportunities to do research with faculty and in service learning.

Amber. Nineteen years old, Amber graduated from a public high school with a B average and identified as African American. She scored a 19 on her ACT and 1420 on her SAT. She completed two AP courses in high school and took four courses her first semester at the institution. She is majoring in cellular and molecular biology, used family finances and loans to pay for school, and planned to earn an A average for the year. She is a full-time student who lives on campus and is definite in her plans to graduate from the institution. Her parents hold master's degrees. She has no close friends from her high school at this institution.

Amber's NCQ self-assessment showed two scales scoring approximately one standard deviation above the mean, *positive self-concept* and *knowledge acquired in a* field. Relating to the self-concept scale, she responded with a top score on each item in the scale. Similarly, her clear identification of goals resulted in a high score for knowledge acquired in a field. In addition, this participant scored nearly two standard deviations above the mean in the following scales: *realistic self-appraisal, positive support person,* and *community service*. Amber scored the maximum on the three items related to self-appraisal,

on two of the three items for support person, and had substantial community leadership experience.

When reviewing her self-assessment scores on the BCSSE, a number of key findings emerged. She scored more than on standard deviation below the mean for *high school experiences in quantitative reasoning* and nearly two standard deviations above the mean for *expected academic perseverance.* In regard to Amber's NSSE responses, she scored more than one standard deviation above the benchmark for *higher-order learning, quantitative reasoning, discussions with diverse peers,* and *effective teaching practices*

Amber does not plan to participate in the high impact learning opportunities of participating in a learning community or in service learning. She has not decided whether or not she will engage in research with a faculty member.

Bonnie. Bonnie graduated from a public high school with a B average and scored 830 on the SAT. She identified as African American and is a first generation college student who is majoring in nursing. She completed two AP courses in high school, enrolled in four courses her fall semester at the institution, and expects to earn an A- average. She receives no direct financial support from her family. As such, she uses loans, grants, scholarships, and money earned from her part-time job to pay for school. She indicated that she probably would not graduate from her current institution because she planned to transfer to a school that would help her better prepare for a career in medicine.

While her family lives relatively close to the institution, less than 1 hour away, she lives on campus in the residence halls.

In reviewing Bonnie's NCQ assessment, it should be noted that she scored approximately one standard deviation below the mean for *realistic self-appraisal, handling racism, and knowledge acquired in a field.* Bonnie scored low on two of the three items for realistic self-appraisal, three of the five items for handling racism, and low on both items for knowledge acquired in a field. She scored more than one standard deviation below the mean for *positive self-concept* (low on four of six items) and *leadership experience* (low on one of three items). Conversely, she scored approximately one standard deviation above the mean for *positive support* person (high on two of three measures) and nearly two standard deviations above the group mean on the scale measuring community service (high on both items).

Regarding Bonnie's BCSSE survey, she scored more than one standard deviation above the national benchmark on two scales, *high school learning strategies* and *expectation for persevering through academic adversity.* She scored more than one standard deviation below the mean score on the measure pertaining to *expected student-faculty interaction.*

When reviewing her self-assessment scores on the NSSE, a number of key findings emerged. She scored more than one standard deviation above the national benchmark for *higher-order learning, learning strategies,* and *experiencing effective teaching strategies.*

Bonnie is planning to participate in the high impact learning opportunity of a learning community, but she does not plan to participate in opportunities to do research with faculty and participate in service learning.

Carissa. Carissa is an 18-year-old Latina who graduated from a public high school with an A average. In addition, she scored 1480 on the SAT. While in high school she completed two AP courses. She grew up less than two hours away from the university, has no close friends who also attended the school, and at the time of the study, lived off campus with friends. While her parents did attend college, neither one of them graduated. Carissa receives financial support from grants, scholarships, and loans to pay for school. She took four classes during the fall semester but had not selected a major. She expected to earn a 3.75 grade point average. While this school was her second choice, she definitely planned to graduate from this institution.

When reviewing the self-assessment scores on the NCQ, a number of key findings emerged. Carissa scored more than one standard deviation above the group mean for *propensity for long-term goals,* scoring high on two of the three items. Conversely, she scored approximately one standard deviation below the mean for *positive support person* (low on two of the three items). *As well as community service,* and *knowledge acquired in a field,* where she scored low on all of the items associated with both scales.

Carissa's BCSSE scores had overall scores that were comparable to the 2013 BCSSE national means. She scored more than one standard deviation above the national benchmark for *interacting with diverse others.* Regarding

Carissa's NSSE responses, she scored approximately one standard deviation above the national benchmark on one scale, *quantitative reasoning.*

Carissa has not decided if she will participate in the high impact learning opportunities of being in a learning community and engaging in research with a faculty member. However, she does not plan to participate in service learning.

Eli. Eli identified as Latino. He graduated from a public high school with a C average and had a combined score of 1460 on the SAT. He plans on being the first in his family to graduate with a bachelor's degree. He is majoring in criminal justice. He completed two AP courses in high school, enrolled in four courses during his first fall semester at the institution, and expects to earn a B- average. He receives financial support from his family and is also using loans, grants, scholarships, and money earned from his part-time job to pay for school. He indicted that he would definitely graduate from the institution. While his family lives relatively close to the institution, less than 1 hour away, he lives on campus in the residence halls.

In reviewing Eli's NCQ assessment, it should be noted that he scored nearly one standard deviation below the mean for *positive self*-concept (high on four of the six items) and *leadership experience* (high on two of three items). In addition, he scored more than one standard deviation below the mean for the scale measuring *realistic self-appraisal,* with low scores on each of the items.

Regarding Eli's BCSSE survey, he scored nearly two standard deviations above the national benchmark for *expectation for persevering through academic adversity.* For all other scales, he was within one standard deviation of the mean.

On his self-assessment scores on the NSSE he scored approximately one standard deviation above the national benchmark for *higher-order learning.*

Eli has not decided if he will participate in the high impact learning opportunities of being in a learning community and engaging in research with a faculty member. However, he does not plan to participate in service learning.

Eliana. Eighteen-year-old Eliana graduated from a public high school with an A average and identified as Asian American. She scored 1600 on her SAT, completed two AP courses and three concurrent enrollment courses in high school. She took five courses her first semester at the university, and plans to earn an A average for the year. She is majoring in business accounting. She is using family finances to pay for school. She is a full-time student who lives off campus. She is certain she will graduate from the institution. Her parents held bachelor's degrees, and she has more than four close friends from her high school at the university.

Eliana's NCQ self-assessment results showed four scales scoring more than one standard deviation above the group mean: *positive self-concept, realistic self-appraisal, handling racism, long-term goals*, and *leadership experience*. For each of these scales, she had a high score on the majority of items. Conversely, she scored approximately one standard deviation below the mean for *knowledge acquired in a field,* where she scored low on both items relating to this scale. Eliana's BCSSE self-assessment scores showed that she was more than one standard deviation above the benchmark for *quantitative reasoning, learning strategies, interacting with faculty, interacting with diverse*

others, persevering through academic adversity, and *perceived academic preparation.* The remaining two scales were nearly (*collaborative learning*) or exactly (*experiencing academic difficulty)* two standard deviations above the national benchmark.

When reviewing her self-assessment scores on the NSSE, a number of key findings emerged. She scored more than one standard deviation above the national benchmark for *higher-order learning, learning strategies, discussions with diverse others,* and *receiving effective teaching practices.* She scored nearly two standard deviations above the national benchmark for *reflective and integrative learning, quantitative reasoning,* and *collaborative learning.* Additionally, she scored more than two standard deviations above the benchmark for *interactions with faculty.*

Eliana has participated in the high impact learning opportunity of being in a learning community. However, she does not plan to conduct research with a faculty member or participate in service learning.

Emily. Emily identified as a Latina and is a first generation college student majoring in environmental biology. She completed approximately five AP courses while in high school. At her public high school, she earned a B average and scored 1368 on her SAT. She is a full-time student taking five courses her first semester with two of the classes being taken online. In order to pay for school, she utilizes a variety of sources, including grants, scholarships, and personal income from a part-time job. She lives more than an hour away from the

school with her parents. She is almost certain she will graduate from the university.

Emily scored nearly one standard deviation above the group mean on three NCQ scales: *positive support person* (high on two of three items), *leadership experience* (high on all three items), and *knowledge acquired in a field* (high on one of the two items). This participant scored approximately one standard deviation below the mean on *handling racism* (low on three of the five items) and *community service* (low on both items). Her self-assessment scores on the BCSSE showed that she scored more than one standard deviation above the national benchmark for *high school experiences in quantitative reasoning* and in *expected academic perseverance.*

Regarding Emily's NSSE responses, she scored more than one standard deviation above the national benchmark on three scales (*higher-order learning, interacting with faculty,* and *effective teaching practices.* She scored more than two standard deviations above the mean score for *collaborative learning.*

Emily has not decided if she will participate in the high impact learning opportunities of being in a learning community and engaging in research with a faculty member. However, she does not plan to participate in service learning.

Jayme. At her public high school, Jayme earned a B average and scored 1710 on her SAT. She completed four AP courses while in high school. She identified as Latina and is a first generation college student. Jayme is a full-time student who is undecided on her major. She took four courses her first semester with none being taken online. She lives more than an hour away from the school

with her parents. She is certain she will graduate from the institution. In order to pay for school, she utilizes a variety of sources such as family income, grants, and scholarships.

Jayme scored more than one standard deviation above the group mean on three NCQ scales: *positive self-concept* (high on 4 of the 6 items), *positive support person* (high on two of three items), and *knowledge acquired in a field* (high on of two items). She scored two standard deviations below the group mean for *long-term goals* and one standard deviation below the mean for *community service.* She scored low on all the items associated with long-term goals and community service. Her self-assessment scores on the BCSSE and NSSE fell within one standard deviation for all the scales.

Jayme has participated in the high impact learning opportunity of being in a learning community. However, she has not decided if she will conduct research with a faculty member. Finally, she does not plan to participate in service learning.

Jenny. Jenny identified as Latina and graduated from a public high school with an A average. She completed two AP and two concurrent enrollment courses in high school .She scored 1350 on the SAT. She is the first in her family to attend college. She is majoring in nursing and enrolled in four courses for the fall semester, and expected to earn a B+ average. She receives financial support from her family as well as from grants, scholarships, and money earned from her part-time job. She believes that she will probably graduate from the institution.

She lives with her family less than one hour away from the school, and she has two close friends from high school at the institution.

In reviewing Jenny's NCQ assessment scores, it should be noted that she scored approximately one standard deviation below the mean for *positive self-concept* (low on four of the six scales) and *realistic self-appraisal* (low on two of the three scales). Conversely, she scored approximately one standard deviation above the group mean for *handling racism* (high on three of the five items) and *knowledge acquired in a field* (low on both items). On the BCSSE survey, she scored nearly two standard deviations below the national benchmark on *high school learning strategies.* In addition, this participant scored nearly one standard deviation above the benchmark for *expected academic difficulty* Her self-assessment scores on the NSSE were within one standard deviation for all scales.

Jenny has not decided if she will participate in the high impact learning opportunities of being in a learning community and engaging in research with a faculty member. However, she does not plan to participate in service learning.

Lupe. Lupe identified as Latina. At her public high school, she earned a B average and scored 1055 on her SAT. She completed four AP courses while in high school as well two college-level courses through concurrent enrollment.. Lupe is a first generation college student majoring in in mathematics. She is a full-time student taking seven courses her first semester, with one course being taken online. She lives more than an hour away from the school with her parents. She is almost certain she will graduate from the university. In order to pay for

school, she utilizes a variety of sources such as loans, family support, grants, scholarships, and personal income from a part-time job.

On the NCQ, Lupe scored approximately one standard deviation above the mean on the scale measuring *positive self-concept*, scoring high on four of the six items. She scored more than one standard deviation below the group mean on the scales measuring *long-term goals* (low on two of three items), *community service* (low on one of two items), and *positive support person* (low on two of three items). Lupe's BCSSE self-assessment score for *quantitative* reasoning was more than one standard deviation above the national benchmark. Conversely, her scores for expectations for *interacting with faculty*, *experiencing academic difficulty,* and *perceived academic preparation* were more than one standard deviation below the national benchmark.

Her self-assessment scores on the NSSE were nearly two standard deviations above the benchmark on *quantitative* reasoning and collaborative *learning*. Her scores for the remaining scales were all within one standard deviation of the benchmark.

Lupe is planning to participate in the high impact learning opportunity of a learning community and has already participated in service learning. She has not decided whether or not she will engage in research with a faculty member.

Mel. Eighteen years old, Mel identified as Asian American and graduated from a public high school with an A average and. She scored 1480 on her SAT and completed four AP courses in high school. Mel is majoring in biology and took five courses her first semester at the institution. She plans to earn a B+

average for the year. She uses family finances, grants, scholarships, as well as her part-time salary to pay for school. Sheis a full-time student who lives off campus with family. She is not sure if she will graduate from the institution. Her parents hold bachelor's degrees, and she has more than four close friends from her high school attending the institution.

Mel's NCQ self-assessment scores showed one scale, *positive self-concept*, scoring more than one standard deviation above the group mean. She scored high on four of the six items on this scale. The scores for all other scales were within one standard deviation. Mel's BCSSE self-assessment scores were more than one standard deviation above the benchmarks for *collaborative learning, persevering through academic adversity,* and *expected academic difficulty*. She scored approximately one standard deviation below the mean for *perceived academic preparation*. On the self-assessment scores on the NSSE, she scored more than one standard deviation above the national benchmark for *discussions with diverse others* and *receiving effective teaching practices.*

Mel does not plan to participate in the high impact learning opportunities of being in a learning community, participating in service learning, or working with a faculty member on research.

Raquel. Raquel is an 18-year-old Latina who graduated from a charter high school with a B average. While in high school she completed approximately two advanced placement (AP) courses. She scored 17 on the ACT. She grew up less than one hour away from the university and has two close friends who also attend the school. She selected biology as her major, took four classes during

the fall semester, and expects to earn a B+ grade average. She currently lives off campus. While her parents attended high school, neither one of them graduated. Raquel receives financial support from her family and is debating whether to take out loans or work part-time in order to pay for school. This school was her first choice and she definitely plans to graduate from the institution.

When reviewing the self-assessment scores on the NCQ, a number of key findings emerged. Raquel scored nearly one standard deviation below the group mean score for *handling racism*, with low scores on the items measuring expecting to try harder than other students and expecting to experience racism. Conversely, she scored approximately one standard deviation above the group mean for *presence of a strong support person*, where she score high on having someone to help and having family support her decision to be in school. Her BCSSE scores were comparable to the 2013 BCSSE national means. However, she scored more than one standard deviation above the group mean for *learning strategies* and her *expectation for academic difficulty*. Regarding Raquel's NSSE responses, she scored within one standard deviation of the national benchmark on all scales.

Raquel has not decided whether or not she will participate in the high impact learning opportunities of being in a learning community and engaging in research with a faculty member. However, she does not plan to participate in service learning.

Sarah. Eighteen years old, Sarah identifies as African American and graduated from a public high school with a B average. She completed 11

concurrent enrollment courses in high school and scored 1340 on her SAT, At the university, she took four courses her first semester and plans to earn a B average for the year. She has not yet decided on a major and uses grant, scholarships, and her part-time salary to pay for school. She is a full-time student who lives off campus. She is not sure if she will graduate from the institution. Her parents held bachelor's degrees, and she has no close friends from her high school at the institution.

Sarah's NCQ self-assessment showed three scales scoring more than one standard deviation above the group mean: *long-term goals* (high on all three items), *support person* (high on two of three items), and *leadership experience* (high on all three items). She scored approximately one standard deviation below the group mean on the scale measuring *community service.* Sarah's BCSSE self-assessment scores were within one standard deviation for all scales. Her self-assessment scores on the NSSE were one standard deviation above the national benchmark for *collaborative learning.* All other scores were within one standard deviation.

Sarah does not plan to participate in the high impact learning opportunities of being in a learning community, participating in service learning, or working with a faculty member on research.

Victoria. Victoria is an 18-year-old Latina who graduated from a public high school with an A average. In addition, she scored 1640 on the SAT. While in high school she completed two AP courses. She grew up less than one hour away from the university, has no close friends who also attended the school, and

lives off campus. While her parents did attend high school, neither one of them graduated. Victoria receives financial support from loans, grants, and scholarships in order to pay for school. She selected English/Education as her major, took four classes during the fall semester, and expects to earn an A average. While this school was her third choice, she definitely plans to graduate from this institution.

When reviewing the self-assessment scores on her Noncognitive Questionnaire (NCQ), a number of key findings emerged. Victoria scored approximately one standard deviation above the mean for *realistic self*-appraisal (high on all three items), more than one standard deviation above the group mean for *presence of a strong support person* (high on two of three items), and two standard deviations above the group mean for *community service* (high on both items). Finally, her score for leadership experience was approximately two standard deviations below the group mean, where she unable to identify any actual leadership experience. The majority of Victoria's BCSSE scores were comparable to the 2013 BCSSE national means. However, her scores for high school experiences in *quantitative reasoning, expectations for persevering through academic adversity,* and *expected academic difficulty* were all more than one standard deviation above their respective benchmarks. Victoria's NSSE scores were more than standard deviation above the national benchmark on one scale, *quantitative reasoning.*

Victoria has participated in the high impact learning opportunity of being in a learning community and plans to conduct research with a faculty member. However, she does not plan to participate in service learning.

Participant Profile Summary

In reviewing the quantitative data for these students attending a broad access institution, a few notable findings emerged. When reviewing the measure, *presence of a strong support person*, 10 of the 14 students scored more than one standard deviation above the group average, while two scored below. While no other category had more than six students scoring one or more standard deviations above the mean, qualitative findings suggest multiple noncognitive characteristics play an important role in student engagement. As will be discussed below, there are underlying factors that show the importance of having a positive self-concept, the presence of a support person, and long-term goals. When reviewing students' student engagement data, half the students scored more than one standard deviation above the mean for expected perseverance through academic difficulty.

While I attempted to find distinctions between groups (i.e. gender, first generation resident, first generation student, major course of study, and family financial support), no clear patterns emerged that would allow for such comparison and analysis. However, patterns among participants did emerge that allowed for a deeper understanding of the relationship between noncognitive characteristics and engagement. As such, the relationship between noncognitive characteristics and engagement as understood by the students is presented first.

Then utilizing quantitative and qualitative data, an analysis is provided based on the patterns that emerged through the clustering of noncognitive and engagement survey responses.

Interview Analysis

Analysis of the interview data produced 634 codes, which were used to develop conceptual themes. Five of the major themes addressed the second research question (see Table 5). Those five major themes included 5 subthemes that help provide an understanding of the relationship students saw between their noncognitive characteristics and first semester engagement. The major themes were: (a) working toward an end goal (college as a means to an end); (b) living up to family expectations (making the family proud), (c) developing independence; (d) understanding how the educational system works; (e) understanding the multiple effects of racism; (f) understanding the value of a support system; (g) developing confidence; (h) balancing self-identity with perceived identity, and (i) internalizing self-reliance. These themes were not dependent on a specific noncognitive characteristic. As such, they emerged across the areas of noncognitive interest and informed the understanding of the relationship between their noncognitive characteristics and first semester engagement.

Working Toward an End Goal

During the interviews, students noted that while having a goal was seen as important, it was the progress they were making toward that goal that gave them drive and the motivation to continue. The participants noted that being in

college took a lot of work and that sometimes the drive or desire to always work hard was missing. When they would experience a lack of motivation, they knew that it was important to keep moving toward their individual goals. For some students, the goal was related to a career, for others it was related to being accepted into graduate school, and for others it was simply doing well. No matter what the goal was, the students noted it was important for them to keep working toward their end goal and to feel that they were making progress. In their estimation, some progress was better than not making any progress.

For Bonnie, a first-generation, African American female student who scored high in expected perseverance during academic difficulty, moving toward her goal of becoming a doctor helped her stay focused, complete assignments on time, and provided meaning to being in school. She believed that hard work now would pay off later and making progress toward her goal keeps her moving forward:

> It actually, for my academics, keeps me focused. Because there are some times where I don't want to do homework, and I have a teacher that loves to assign 12-page papers. There are times where I just don't want to do it, but I know if I miss one, it's an automatic fail. So, sometimes, I just have to bite the bullet and get with it and know it's going to pay off. I have to keep telling myself that.

Jenny, a first-generation Latina student, scored low on positive self-concept, noted that staying focused and working toward her end goal of becoming a psychologist positively affected how she felt about herself. Setting

and reaching the small goals she set on a consistent basis helped her feel better about herself:

> Well, I just feel having goals makes me feel better about myself, even if I just accomplished something small. If it's doing homework, it's studying for a lab test, or whatever it is, I feel even though I'm doing a small goal for the week or for the month, then it's going to take me to a bigger goal. And my biggest goal is becoming a psychologist, so I think that's helpful.

Eli self identified as Latino and as a first generation college student. He scored high in expected academic perseverance and mentioned that having a goal and working toward it was an important factor in helping him stay focused. For him, when times got tough, it was making progress toward his goal of becoming a law enforcement officer that kept him on track:

> I think that just, when something does get tough, you have to do work, and do what you're able to do just to get through it. In the classroom, if I have trouble about my math, I have to get my book, I have to read it, I have to apply the equations, and then I have to get through it.

Lupe, a first generation Latina student, scored low in propensity for long-term goals, used achieving small goals to build confidence in reaching her long-term goals. She consistently "tri[ed] to make a goal whether it's something small." For her, knowing she could put the steps in place to reach her short-term goal, "even though it's small" set her up for success down the road. She believed that by being able to stay focused and achieve smaller, more short-term goals, "[they] will later play a bigger role."

Identifying College as a Means to an End

A number of participants noted that college, while important, was simply another step they needed to complete in order to reach their goal. The concept emerged from the interview data that the journey of undergraduate education had to be undertaken in order them to reach their long-term goals. Adam, a first generation student who self-identified as White, scored low in realistic self-appraisal and was unaware of exactly what he had to do in order to graduate from college. However, he knew that in order to reach his goals, college would play an important role. He addressed this phenomenon aptly when he said:

> Okay, look, if I do this for the next four years I will get to this. And it's nice to have the structured plan somewhat, and you know what you have to do, and you know what needs to be done, and so in that span of four years, you can get it done, and it feels nice to know that.

For him, having a set plan in place took away the guesswork of what he needed to do in order to be successful in college. Participants continually noted that the destination or goal was worth the journey. When reflecting on why she was working so hard, Bonnie, a first-generation, African American female student who scored high on academic perseverance, stated:

> I have had a lot of a workload and sometimes I don't want to do it because these teachers are crazy! Why don't they care that I want free time? But at the same time I was able to remind myself that this is all going toward a great end result so you have to deal with things you don't like to get to what you want.

Similarly, Victoria, a first generation Latina student who scored high on expected academic difficulty and perseverance, did not let the struggle of meeting the daily demands of college keep her from focusing on why she enrolled in school. For her, having a destination made the journey and anything she encountered along the way worth it:

> It gives me a reason to keep going. Sometimes it gets hard but having goals helps me see the bigger picture and think to myself, "It's worth it." Because in the long run, I'm accomplishing something, so it doesn't matter if I struggle on the way up.

Adam, a first generation White student who scored low on realistic self-appraisal had a similar approach to meeting the daily demands of college. Although he was not able to fully assess the gap between where he was and where he wanted to be based on his lived experiences, he knew that having a college degree would provide him more opportunities. Even though it was not always easy for him to see the end goal, he knew that the end result would be worth any difficulty he was currently facing:

> I guess, personally, for me, it is kind of hard to realize that, look, if you get this college degree you will get, I don't want to say paid more, but you will make a better living if you get this degree. It's kind of hard to see that when you're just in the middle of it, like, "Aw, what am I doing?" But once you realize that that's the thing, that's what should be done and that's what needs to be done for you, it is easier to wake up every morning and go to class, as compared to if you didn't know what you were doing.

Emily, a first generation Latina student, and Amber, an African American female student whose mother attended college, both scored high on academic perseverance. They each noted that getting through the undergraduate experience and doing well was what would enable them to reach their goals of being accepted into a graduate program. Staying focused and doing well was simply something that was required if they wanted to reach their destination. Emily, who also scored high in knowledge acquired in a field, shared that doing well would help her:

> I found out that there's a zoology program and it's studying abroad. So If I want to be able to participate in it, I have to have good grades and I have to apply on time so that's my goal.

Similarly for Amber, an African American female student whose mother attended college and who scored high in realistic self-appraisal, doing well in college was key to helping her get into her dream school:

> I really want to get into Keck Medical School. That is my dream medical school to go to and I'm working so hard so I can be able to go there. With my goal of being a pediatrician and going to medical school, they want good grades so that has kind of affected me in my first semester; just make sure I have good grades.

Three students had not decided on a major: Carissa, Jayme, and Sarah. While the other students in the study identified college as a means to an end, these three participants identified college as being beneficial in a unique way. Carissa, a first generation Latina student, scored high in propensity for long-term

goals. She was using her college experience to determine what major she wanted to pursue and to gain experience in a field that interested her:

> Not much because I'm still seeing the same classes even if I would have known. I'm actually getting experience right now in that field because I'm actually in the day care right now, so that's actually kind of helping me. I found it during the semester. So I'm glad I found that because it's actually pushing me a bit more to that field.

On the other hand, Carissa identified not having a specific educational goal as the reason why she was not very motivated:

> It would be a motivation to actually have (educational) goals, like you should do every day. I really haven't had many (educational) goals, so that's why I'm a bit, whatever, this semester.

Similar to Carissa, Sarah, an African American female student whose parents completed college, scored high in long-term goals. She was also using her time in college to determine what she actually wanted to do. She believed college would play a vital role in helping her choose a career and that her goal of earning a bachelor's degree was important:

> For me, I'd have to say that it's kind of pushed me more to really figure out what I really want to do, and also to pick classes that are more in my field instead of picking classes that have nothing to do with what I plan to study.

Jayme, a first generation Latina student who scored low in long-term goals, knew she needed to do well in school to be successful in whatever she decided to do

study. She was still determining the path she wanted to take in school and felt pressured to pick a major:

> I feel rushed to choose classes and choose my major, I guess. I'm just always motivated to do well in my classes just in case I change my major or something. I know there's a good GPA you have to have in a certain major for certain classes.

Additionally, Jayme mentioned that while she knew she had to do well in school, at the time of the interview, it was not a primary concern:

> Well, currently with the music group, it does take part of my time with my classwork so sometimes I have to sacrifice my time and make a time schedule. So that goal right now is into play.

In summary, while some students had not selected an educational goal as identified by a major course of study, these students still had the goal of doing well in college. Next, the role of family and familial expectations is discussed.

Living up to Family Expectations

The participants saw the support and sacrifice of their family as major influences on their decision to pursue a college education. A majority of the participants were first-generation college students, so doing well meant making the family proud and striving for a better life for the entire family. The message regarding the importance of higher education students received from their family was influential. Participants knew that by doing well, their family would be proud of them and that they could pay their parents back for the sacrifices they made.

Making the family proud. The participants had an awareness of the sacrifice and struggle that their parents endured. Students expressed they were attending college for their family as well as for themselves. A number of these students—Eliana, Raquel, Emily, and Jayme—all scored high on the factor *presence of strong support person.*

Eliana, who had siblings in college and self-identified as a Pacific Islander, indicated that being the last person in her family to graduate was important:

> I would say just graduate on time and be the last person in the family to graduate college by earning a degree in business accounting. Because for my parents, they work, and my sisters and I, we go to school to work hard and to succeed in education so that way my parents can be proud of us.

Similarly, for Raquel, a first generation Latina student, it was important to make her family proud and set the example for her younger brothers and sisters. She mentioned that if it was not for setting an example and making her family proud, she might not be in school:

> I think overall it's my family. So I'm the oldest of four children. I'm the one setting the example, "Oh you should do this, and "You should do that." So I think, that, overall, has pushed me to where I am. Or else if I wasn't the oldest, I'd probably be doing something else, I probably wouldn't be here. Who knows?

Emily, a first generation Latina student, noted that since most of her family did not go to college, her success impressed her family and that was motivating for her:

> I have [another] part of family who isn't very involved in school. They're the total opposite of my family. So, when they hear about my success, it's like, "Whoa, you so smart and "You try so hard" So, I think that's one way. . . . I impressed my other side of the family.

Similarly for Jayme, a first generation Latina student, making her family proud was her motivation for doing well in school:

> Well, they're my motivation. I know if I do badly in school, my mom is going to be let down. Even though it's not her future, I'm her child, I know she cares about me and it's nice to hear words of encouragement once in a while. They're always there, and you know they want you to do well in school.

Finally for Jenny, a first generation Latina student who scored high on expected academic difficulty, stated that staying college and doing well is what motivates her and encourages her. Her parents were proud that she went to college, which they shared with their family friends. For Jenny, it makes her happy that they are happy so it gave her the encouragement she needed to stay in college.

Improving the family's situation. Participants identified school as being the way to make a better life for themselves as well as their families. They knew that if they were going to do better for themselves and their families, they would have to graduate college and do better than their parents. This motivation for graduating from college was communicated to the majority of students by their

parents. Four of the five students—Adam, Mel, Bonnie, Jayme, and Eli—scored high on presence of a strong support person. Additionally, Bonnie and Mel scored high in academic perseverance.

For Adam, a first generation White student, even though his father loved his job, he wanted Adam to do better:

> My dad always tells me, "Adam I don't want you being a truck driver." He says, "I love my job, I love what I do, but I don't want you being a truck driver. You can be better than me, and you will be better than me." Just being here right now, I'm already being—trying to become more than what my dad is, and he knows that and he wants me to be more than what he is. Same thing with my mom. Those two really want me to do well so I can help the family.

For Mel, a Pacific Islander student who did not identify as first generation, the message of doing better so she would not have to struggle was a message she had heard since she was a small child:

> They instilled in me since I was a really young kid. They just want me to have a better life than they had because they came from abroad. So, they know what it's like to be poor, and they just want me to have a better life and for my family and for my future.

Similarly, seeing her immediate and extended family struggle to make ends meet while she was a child provided an extra incentive to finish college for Bonnie, a first-generation, African American female student:

> A lot of my family started college and never finished. Now they're

> struggling and always say they wish they would have stayed in college. I don't want to be like, I wish I would have stayed, and then struggle to have to try and come back. I need to do well to help my family. So I might as well just do what I have to do now, because a lot of my family chose not to go to college and they're struggling just to get by.

Jenny, a first generation Latina student, received encouragement from her parent and friends. Her parents wanted her to be able to support her family and "do something better than they did." In addition, when she considered stopping out for a year, it was her friends who said, "No you have to go to school."

Eli, a first generation Latino college student, had a keen understanding that his family was relying on him to succeed so he could help the family. He embraced this responsibility and knew it was the least he could do since his mom sacrificed so much for him:

> But I just remember that growing up—I didn't grow up in an upper class family, so I feel I have to go back to my family and take care of them once I do graduate. She (my mom) was the result of that because she worked day and night, and I guess, seeing her do that made me want to let her rest when I graduated so she can be taken care of. So that motivated me to go into college and pursue my career so I can be successful. When I do feel like I don't want to do anything, I think about my mom and my family and how they helped me and how, if I don't do this, I won't be able to help them in the future. So it's my motivation to get where I want to be. Knowing that I want to help my family when I do graduate, and knowing

> that I want to, in a way, get out of my neighborhood to have a better place for myself and my family has helped me to understand, that in order to do that, I have to get through the university and I have get through the classes. I have to get through the work and I have to excel in those things to be able to do that.

Eli knew that in order to do better for himself and his family, he had to succeed so his family would not have to go back to those bad experiences. He is trusted that college was the way to change the family's situation:

> Like I've been in bad neighborhoods, and I've gone through experiences that make me not want to go back to that and make me want to be a better person and a successful person to not go want to go back to that.

Similarly Jayme, a first generation Latina student, knew doing well in school and graduating meant that she would be able to take care of her mom:

> I'm a first generation college student so that's one of my motivations to go to school to get an education and give them a better life. My mom, she sells tamales out in the streets, so it's a risky job, you know? I would like to take her out of business someday.

The familial expectations the study participants identified were related to improving the family's situation and doing well to make the family proud. When discussing these two motivating factors, students did not mention that these expectations placed any additional pressure on them. In the following section, students' awareness and understanding of the educational system is discussed.

Developing Independence

Student independence refers to students taking the initiative to find a new work-life balance and meet the demands of college life. Whether it was in the form of money or a place to live, all of the students were still receiving some type of financial support from their families. As such, the participants did not mention financial independence. I discussed comments regarding the role of family members in the prior section, and I will extend this in a later section addressing social networks. Here, I focus on other connections that helped participants in the development of independence.

Six participants shared that through leadership experiences, having and working toward goals, and learning outside of the school setting they were able to develop independence. This independence included not only taking on new challenges, but also developing a greater sense of self and taking the initiative to find a new work life balance to meet the demands of college life.

Mel, a Pacific Islander, who did not identify as first generation, scored high on expected collaboration and discussions with diverse others. She noted that being a leader on her high school golf team helped her to relate with people better. "I was a senior; one of the oldest. And they looked up to me." She shared that leadership experience gave her the confidence in herself to interact with new people on the college campus.

Raquel, a first generation Latina student, had high scores in learning strategies and expected academic difficulty. She spent a lot of time in leadership roles at her high school and in volunteering in the community. Her high school

experiences helped her understand the importance of being able to prioritize the important things in her life. For her, learning how to balance her responsibilities in high school gave her the confidence she could do the same in college:

> I feel really confident. I feel like when I came in, I was scared, like how am I going to do it, to get everything done. But now, that the first semester is about to be over, I'm really confident I can like, it's on me. You have time for everything if you learn to manage your time; you'll do it.

Jenny, a first generation Latina student, scored high in knowledge acquired in a field. Her experiences leading and being involved in activities in high school helped her develop a new work-life balance once she got to the university. Having participated in activities in high school that required her to carefully schedule her time, she entered college knowing how to stay organized and on top of her responsibilities:

> I just learned how to organize the things that I have to do. I feel in college they don't tell you, as opposed to high school. They tell you, "You should get a planner, and you should do this." In college they won't tell you that. So I feel I learned outside how to organize dividing time to certain things. That's about it.

Eliana, a Pacific Islander student whose siblings also attended college, scored high on all the engagement scales. Her leadership experiences in high school helped her so much that she was caught off guard by how seamless the transition to college was. Not only was she less stressed than she expected, but she felt surprised at how ready for college she was:

> Well, for me, it feels less stressed out. In the morning I wake up, I go to school and go to my classes, and sometimes I have between a one hour and two hour gap doing homework for the next class, the next day. So I have school, four days a week and I always have time to do the remainder of the work on the three days. Back then, I was your different multi-tasking, over-doer, kind of person. I've been doing a lot of clubs throughout my high school years as a senior, and I was pretty confident in doing some things. . . . I can be my own shadow. As I came to this institution, it changed my life seeing how much I've changed in the past, seeing how I made it this far to be at this school.

Amber, an African American female student whose mother attended college, scored high on perseverance and reported realizing that her volunteer involvement and leadership at her church had a direct effect on how she was able to manage her time in college:

> It caused me to manage my time better because I like to go to different church events and stuff like that. I had to hold that off because of the workload, so that's definitely helped me to manage my time better.

Victoria, a first generation Latina student, scored high in expected academic difficulty and perseverance. She noted her experience volunteering in the community and being a leader helped her understand the value an importance of establishing a strong work-life balance so she could find time for herself and find time to spend with her family:

> Yeah, because when I'm busy, when I have so much work to do for homework, I still find at least five minutes to myself just to relax, and even then, when I relax, I have time to spend time with my family and help them out when they need it. I think it's important to always be there for your family. I feel I've had a little more time because, even though I have more work to do, homework-wise and with classes, I still have extra time, because once I'm done with it, I still have the whole weekend and I can spend it with my family. We can go out and go to the store or something and we don't have to be rushing to get home so I can finish homework. I can just, sit there and just spend time with them.

Understanding the Educational System

An important awareness the participants developed as a result of their noncognitive development and experiences was an understanding of how the educational system works. They noted how different supportive people in their life offered support and how being involved in their community helped them get more information. Many of the participants shared that they received information from family members, teachers, counselors, and peers. For example, Amber, an African American female student whose mother attended college and who scored high in presence of a support person and expected perseverance, turned to her mother for support in understanding financial aid:

> My mom is the financial-type one. She actually went through school herself and so she knows the ins and outs of financial aid and all of that stuff. I come to her asking her different things about it. So she's really

> helped me from my senior year up to now, of course, and will be for a long time.

Victoria, a first generation Latina student who also scored high for having support and expecting to persevere, received information on graduation requirements from teachers she felt comfortable approaching when she had questions. Victoria shared that these teachers were available for support even after she had graduated from high school. For Victoria, having teachers she could confide in helped alleviate the stress and uncertainty of college and helped her prepare a roadmap for completing the requirements for graduation:

> [Once I started college] I asked one of my high school teachers, "How long does it take you to get your degree?" He said, "Four years," and then he said, "You could either combine your credentials with the last year or take an extra year and do it." Well, it helped me decide what classes to take in order to complete the requirements for graduation. It also helped me see what classes that were requirements that actually were useful or interesting.

A interesting finding for Lupe, a first generation Latina student, was that although she scored low on the scale for presence of a support person, she consistently received help and information from a supportive teacher in high school. One possible reason for the low score ion this scale is that she is no longer receiving support from teachers as she did in high school. Furthermore, it appeared that she did not see her family as a source of academic support. Instead, she relied on her own knowledge from previous experiences:

> There was a teacher there, she helped us seniors get the FAFSA, how to apply to college, how to write the essay, if you needed help writing the essay, or her editing. So her help, I always try to imagine her here saying, "Oh, you know, you got to do this, do everything."

Students also identified peers, their same age and older, as being supportive people in their lives. Peers were often instrumental in helping them learn how the educational system worked. For example, Adam, a first generation White student who scored high on presence of a support person, learned information regarding financial aid and registering for classes from his peers:

> I knew nothing about anything with FAFSA or anything that you had to do, aside that tuition cost three thousand dollars; come up with three thousand dollars. I knew there had to be classes because everyone that's going to college has to take classes, but I didn't know what to do. I had certainly -- even though all the stuff is online, you don't know how do to find it. I would say interactions with other college students and definitely friends at high school, people around my age, or people I know that have already gone to college certainly helps.

Similarly, Lupe, a first generation Latina student who scored low on expected interactions with faculty, leaned on her friends to figure out how to register for classes:

> Registering for classes, I had no idea how to do that. I just assumed someone did it for me like back in high school or something like that. Then my friend told me you had to check your enrollment date and pick the

> classes you want. You get to pick what day and time to do the classes. She told me, "This is what you have to do," and I'm like, "Oh, okay, thank you." That was helpful, interacting with a college student here. That was helpful.

Students developed an understanding of the intricacies of the educational system in a variety of ways. One student, learned from her mom who had first-hand knowledge of the financial aid system. Another student learned about FAFSA as a result of volunteering at a number of community-based events. Other students received information regarding registering for classes and other processes through their peers. In the next section, I discuss participants' understanding of the multiple effects of racism.

Understanding the Multiple Effects of Racism

A key finding emerged from the question focusing on encountering and handling racism: Students began to understand the multiple effects of institutionalized racism. They noticed that different students were given different opportunities. Namely, the students who took certain classes and the students who received help from teachers and counselors seemed to vary by race and background.

Lupe, a first-generation Latina student who scored high on positive self-concept, noted a clear discrepancy in the students who were and were not in her advanced placement (AP) classes in high school:

> Well, at our school, there were various groups, but they're mostly Whites and then Latinos. Then when I would be taking my AP class, I knew I was

> doing, I guess, in the better class, because it was mostly Whites or Asians, not to be stereotypical or anything, but that's just how my school is. If I was in my regular English class, I would see mostly Latinos there and everything.

Likewise Jenny, a first generation Latina student who scored high on handling racism, had a similar experience in her high school AP classes. She had a difficult time understanding why the classes were split the way they were in high school, especially since in her college classes she noticed that more ethnic groups were represented:

> For AP classes, it was just for Latinos, and it was just a little bit of African Americans, and it was, different because you were . . . like . . . okay [where is everybody?]. But here (at the university), you see everyone, every type of ethnicity, which is, okay, [because] everyone is here.

Similarly, Amber, an African American student whose mother attended college, noticed the differences in the racial balance of students in her regular classes and her AP classes in high school. Amber, who scored high on positive self-concept, noticed that different racial groups had different expectations placed on them, and she also noticed the different ways in which teachers managed the classroom. She shared that the differential expectations and treatment led to classroom environments that made it difficult to learn:

> But at the same time, if you're from a certain race, then you're kind of stereotyped into doing well or not well. From my race, it's not very often, but you do well in school. I don't know. I don't think it has an effect, but at

> the same time, you kind of—that stereotype. It was very rare that you saw a Black person in AP in my school. It was mostly Whites and Asians. I mean, it was very few. It was a huge difference between AP and the regular core classes. Oh, my goodness, I could not stand being in the core class. So it was, like, more civilized in AP. You sit down, you listen. And in the core classes, it was very rowdy. People don't—they're just there just so they don't get marked absent, really.

Bonnie, a first-generation African American female student, noted that even though she went to a "high school that was very, very diverse," students received differential treatment along ethnic and racial lines, and it affected how hard students worked in the classroom. She noted that Asian and Asian American students were expected to go to college so they received additional assistance. On the other hand, the expectation for African American students was that they would not attend college. Bonnie noted that this had an effect on the learning environment and in addition, the effort expended on schoolwork by each group. Bonnie, who scored below the group mean for handling racism, went on to describe the difference in how African American and Asian American students were treated:

> African American [students] nobody really cared what they did. It seemed like unless you were in AP classes, nobody cared what you did. The Asians, they were in AP classes. They were the kids that got help with scholarships, applying for college, got invited to special events. And you know, I took AP classes, so I was one of the rare African-American

> students. So I did get special treatment because they weren't used to AA students wanting to take AP classes, wanting to go to college, wanting to be in AVID. Most of my African-American friends just did the basics just to graduate and there was nobody there telling them, "Are you going to apply for college?" Nobody was there asking them that or "Do you need help for college?

For a handful of students, not fitting the stereotype they felt was assigned to their race regarding academics caused them to experience backlash from the peers and placed them in the position of having to defend their performance. While they were able to cope, they noted that at times it was difficult. Mel, a Pacific Islander student, scored below the group mean on handling racism and had a difficult time explaining to people why she was not at the top of her class academically. When reviewing Mel's self-concept score in the context of her lived experiences, there was a divergence of findings. While she felt good about herself generally, she did not feel good about herself in relation to her ethnic and racial identity. She tried to reconcile the disconnect between her academic performance and what others expected of her because of her racial identity. She shared:

> I wasn't one to try. So people were like, "Why are your grades so bad? And so eventually, I was like, maybe I should try because maybe I'm failing my culture. Being Asian, people expect you to do well. So I think that's a big factor too. Sometimes there are Asians that don't like school.

Raquel, a first-generation Latina student, also provided scores that showed a divergence pertaining to handling racism and her lived experience. While she scored low on the scale measuring handling racism, she knew she had to work twice as hard to be seen as equal academically to students from other racial groups. Furthermore, she felt as though she had to be the example for her own race:

> Me, being Hispanic, I have to try twice as hard. . . . And make them—show them that [I know] a lot of Hispanics don't go to school. But showing them, I'm not like them; not everyone's the same. There are different people.

Two of the African American study participants determined the best way to deal with being discriminated against by their ethnic group was to find people from other races with whom they could identify. Having experienced numerous direct (being talked about) and indirect (seeing fights) negative interactions with other Black students, Amber, stated, "I barely even hung out with my own race." Sarah, also an African American female student, had experiences that affected how she got involved socially. It was not until her senior year in high school that she was able to overcome the negative attention she received:

> It didn't affect me academically, but it did affect me socially because they say that I was not a Black girl or whatever, because I wasn't acting ghetto, so I didn't want to get involved with things. But then my senior year, I kind of had to let people that would talk about me or whatever, leave them behind, because they don't matter.

As students experienced the racial divides in their high school classrooms, they noted something important. The students began to see people as individuals, understand the value of diversity, recognize that people and cultures are not monolithic, and accept people for who they are. For example, Lupe, a first generation Latina student, shared that she enjoyed the new college environment because, "Coming over here, it's like different, because it's all mixed in, and it's not like the stereotypical thing."

It is important to note that students had a growing awareness and understanding of the multiple effects of racism. This realization came about as a result of their classroom experiences and seeing the different opportunities and support students received based on their racial identity. Additionally, because of these experiences, the participants noted that they began to accept people for who they were regardless of their racial background. Finally, based on their educational experiences, study participants saw racism in the classroom and the ensuing effects as something that affected other students but it did not necessarily affect them. While students may have endured negative experiences based on their racial identity, they did not see their race as a limiting factor in doing well academically. For two students, their response to bias attitudes was to withdraw from those people treating them negatively and to find strength and comfort from other sources.

Internalizing Key Messages

Conceptual themes emerged regarding the internalization of messages that occurred as a result of the development of noncognitive characteristics. The

following internalized messages were identified: understanding the value of a support network, developing confidence, balancing self-identity with perceived and real racial expectations, and internalizing self-reliance/taking control of the learning process. The process of internalizing these messages came as a result of their leadership experience, volunteering in the community, having consistent support, having a clear understanding of self, handling and seeing different forms of racism, having and working toward long term goals, and having an understanding of what skills and knowledge they needed to reach their goals.

Understanding the Value of a Support Network

All participants identified strong people who gave them consistent support. However, what emerged from the conversations was the importance of understanding the value of those people who provided support. A number of students realized "it wasn't all about them" and that "others' sacrifices" had allowed them to pursue higher education. This realization encouraged students to do well academically. Bonnie, a first-generation African American female student, noted that even though her parents were going through their own difficulties, they still found time to support her.

> They have helped me a lot. It's had a huge effect on me because I respected them more because they were going through stuff and they were still able to help me. . . . So, my parents still make sure I'm doing everything I need to do even though they're going through their issues.

Other students also realized it was the presence of a support system that allowed them to pursue their goals, take on extra-curricular leadership roles, and get

involved in their community. For Bonnie, her parents provided this support:

> If I tell my mom I need to go here for an internship or there, because I don't drive, my mom's willing to take me. And every time, I do something good or I got into a college, my parents are there to support me, help me move, and me get whatever I need to get.

Furthermore, more often than not, it was the people in their support network that spoke words of encouragement to them and helped them develop a strong sense of identity. Amber, an African American female student whose mother attended college, noted that each of her parents provided support in their own way,

> My mom, she helped me with the financial aid part and different university stuff that I wouldn't know to do. And my dad, he's always doing, you know, little things like calling me Dr. Amber, and just saying, "Oh, I can't wait for you to pay me back when you become a doctor." So that's really an encouragement.

Similarly, Carissa, a first generation Latina student, noted her parents provided her with the support to stay engaged in school:

> My parents are always the ones who push me. They're like, have you done your homework? Have you done this? Don't miss school. Don't do that. They're always trying to keep me in school in a great way.

Another key finding that emerged was the value of a supportive peer group. Over the course of their high school careers, participants came to understand that it was important to surround themselves with friends who would support them. This support came in both academic interactions and,social interactions. Bonnie, a

first-generation African American female student, utilized her peer network to stay motivated and away from trouble and stated, "I knew my career goal so I knew that if I hung out with the crowd that's not doing well in school, then I would probably get sucked into that [trouble]."

The presence of supportive systems was identified as being important as students transitioned to college. However, as noted above, understanding the value of these systems is what resonated. Just as knowing that their parents were making sacrifices encouraged students to study more, being able to make "genuine connections" with peers enabled students to make important social connections.

Developing Confidence

Knowing they had the skills to be successful played an important role in the students' transition to higher education. A number of students noted that the success they experienced while leading others and volunteering was helping them to succeed in college. Knowing that in past experiences others were able to rely on them translated to them developing confidence in themselves. Being a role model because of their leadership and volunteer experiences gave the students the motivation to get engaged academically. This engagement took the form of not only preparing for class on a daily basis but also leading class discussions and being the first to speak when professors presented questions. For Jayme, a first generation Latina student, being involved in a church leadership position helped her develop more confidence in herself as a person and in her ability to do well in the classroom:

> I met one guy at my church who I never really liked before but we became really good friends. Together, we're the leaders right now at my church with the music. That's helped me because I would always be very shy to go up and sing or go up and play piano or something. I feel like it's helped me a lot with my confidence. . . . I feel more comfortable in the classroom. I do participate once in a while, more than in high school. So it has helped me.

Similarly, the consistent support students received in high school had a direct effect on their ability to do well in the new environment. For a number of students, the support they received while seniors in high school was the motivation they used to stay on top of their academic work. It made them feel confident because they could "apply the supportive words" when they were having a tough time. Lupe, a first generation Latina student, drew on the assistance she received from the teacher who helped her with her financial aid:

> There was a teacher there, she helped us seniors get the FAFSA, how to apply to college, how to write the essay, if you needed help writing the essay, or her editing. So her help, I always try to imagine her here, like, "Oh, you know, you got to do this, do everything."

While it was her parents who were always pushing her to go to college, Carissa, a first generation Latina student, stated that it was her high school music teacher who helped her to understand the importance of college and the value in wanting to succeed for herself.

> Apart from them two, it was my high school music teacher. I met him freshman year and so he also helped me a lot in my confidence 'cause I was a bit more timid back then. He used to push me a lot. It was following what I want to do, going to college. It doesn't matter what my parents actually want; it's what I want to do.

Balancing Self-Identity with Perceived and Real Racial Expectations

Being able to balance their sense of self with the perceived and real racial expectations placed on them by others was a clear result of students' noncognitive characteristics. Participants noted repeatedly that while they were proud of the heritage and their background, there was more to who they were as people. Eli, a first generation Latino college student, shared that he believed that being Hispanic was just a part of who he was and being successful was dependent on his own decision:

> But me, being Hispanic, I don't think that affected me at all. . . . I think it's more about . . . if you want to get better than that. . . . I don't think it had a lot to do with my race or ethnicity, just my personal aspirations and desire to be successful.

An additional finding for some of the students was that they developed a clear understanding that while they were proud of who they were and where they had come from. The stereotypes others held about their ethnic identity did not affect them. Students shared that they faced the "model minority" label (Mel), the "illegal immigrant" tag (Raquel), the "privileged White male" accusation (Adam), and the "sell-out" label (Amber and Sarah). However, having confidence in who

they were and what education meant to them enabled them to overcome any stereotypical racial expectations they encountered. This understanding allowed students to become engaged and immerse themselves in the academic environment at their university.

Internalizing Self-Reliance

Realizing that doing well was up to them as individuals was a key finding that emerged. This finding manifested itself in two ways, internalizing self-reliance and taking control of the learning process.

In regard to doing well in college, participants continually referred to "controlling what you can" and "knowing that it's up to [them]." Whether it was doing well in courses and studying or learning how to register for classes and about financial aid. Students understood that doing well or finding needed information was up to them. Again, students noted that this self-awareness came about as a result of the noncognitive characteristics they had developed. Having a strong self-concept and continually having it reaffirmed allowed them to be active academic participants their first semester in college. Whether it was doing well to "get into grad school" (Amber), "join law enforcement" (Eli), "do better for my family" (Adam), or to "make their family proud" (Mel) each student was keenly aware that it was up to them to accomplish their goal. For each student, knowing they were in control of their own destiny gave them an increased confidence to do well their first semester of college.

A number of students' parents were born outside of the United States. Consequently, these students stated their parents had not attended college and

were thus, first generation college students. When considering the students in this context, it is important to consider other factors that may have contributed to their self-reliance. While these may have been factors that contributed student's self-reliance, the scope of the present study sought to understand the relationship between noncognitive characteristics and engagement.

Taking control of the learning process. Similar to internalizing self-reliance, participants identified taking control of the learning process as an outcome of multiple noncognitive characteristics. Having supportive networks, experiencing leadership positions, volunteering in their community, and knowledge learned in nontraditional settings all played a role in developing this ability.

For a number of students (Bonnie, Carissa, Adam, and Eliana), knowing that their parents supported them enabled them to take more of the initiative in making decisions about their educational pursuits. For each of the students mentioned above, the support came through the verbal and emotional support of their parents. Knowing they had this safety net, these students were more open to taking classes to explore different career paths.

Serving as leaders and volunteering in their communities allowed the students to learn to also take the initiative in actively seeking information they needed to make good decisions. A number of students reported approaching professors (Amber and Eli), counselors (Amber and Jenny), other staff members (Amber, Jenny, and Eli), and professionals in their field (Amber and Eli) in order to get the information they needed. This information included additional help on

assignments, understanding which classes to take, getting additional information on graduate school, and knowing more about what it takes to get a job in their preferred fields.

In regard to knowledge learned in nontraditional settings, such as outside of the classroom, the findings were intriguing. For the students in the study, it was not the basic knowledge that they learned in participating in the activity that helped them so much. Instead it was the lessons they learned as a by-product of being involved in an activity that was so valuable. For one student who was involved in performing poetry (Bonnie), learning how to take criticism and perform on the stage encouraged her to seek more feedback from her professors and participate in class discussions. For another student (Adam), learning the game of golf helped him stay focused in the classroom and seek out different alternatives when learning new material. Another student (Carissa) reported that learning the cello helped her understand the process of how she learned best, which helped her stay engaged academically when learning difficult concepts.

Mixed Methods Analysis

In this final phase of the study, I used quantitative and qualitative data to develop a better understanding of noncognitive characteristics and student engagement. This section provides a discussion on areas of convergence and divergence relating to student data and the constructs of noncognitive characteristics.

The mixed methods analysis yielded findings that provided additional insights in several areas of the study. The analysis provided areas where the

qualitative data extended quantitative findings to provide multiple areas of convergence. Alternatively, the analysis also resulted in areas of divergence. Quantitative data helped describe the actions of study participants, while qualitative data gave complementary insights through the use of students' interpretation of the relationships between noncognitive characteristics and engagement.

The discussion of the mixed methods analysis is structured according to students' quantitative and qualitative responses by instrument and by scale. The discussion includes the results of the analysis of two scales from the NCQ, one scale from the BCSSE, and one scale from the NSSE. The analysis yielded a greater qualitative understanding of experiences associated with scores on various scales for this population of students.

Non-cognitive Questionnaire (NCQ)

Presence of a Strong Support Person. Emily, Mel, Eliana, and Victoria scored high in *presence of a strong support person* on the NCQ. The questions contained in this scale asked the participants if they had someone to turn to when they faced difficulty or needed assistance. Sedlacek (2003, 2004a) posited that students without a strong support person do not do as well as those who have support. The role of a strong support person was best understood by further examining participant's survey responses in the context with what they shared in interviews.

All four students agreed they had someone to go to if they had problems in school and that their families had always wanted them to go to college. When

analyzing these answers in the context of their interviews, participants noted that it was primarily their parents who were encouraging them to do well in school. While all four of the students noted their parents' support played a strong role in their decision to attend college, once they started their undergraduate career the support they received changed. For Emily, a first generation Latina student, she continued to receive positive reinforcement from her parents, while for Mel, a Pacific Islander student, the encouragement from her parents was perceived as a negative reinforcement and severely affected her ability to do well in college. At the time of the interview, Mel's confidence level had waned to the point where she felt as she was "going to fail all [her] classes." As she shared more, she noted that her parents still supported her, but they often made comments such as, "Why can't you be more like your cousin?" She stated these comments "hurt" and that even though she knew she should be pushing harder to do well, her confidence level was just too low.

In contrast, for Emily, a first generation Latina student, her parents supported her through the transition to college. Even though she struggled at the start the semester, with the support she continued to receive from her parents she "got the hang of things." The result was she was confident in what she learned in class, confident in her participation in class discussions, and "one hundred percent focused on what [she was] doing" and feels confident she will do well in her classes. Additionally, she took the initiative to meet with her counselor to see what sequence of classes she should take to graduate in four years, and she did research to find a zoology internship program.

Eliana, a Pacific Islander student whose siblings also attended college, had academic difficulty in the past and was able to receive assistance not only from teacher and professors but also from her parents. This continued to be the case during her first semester of college. This helped boost her confidence, which began to alleviate her fears of academic difficulty. She stated that she was proud of herself for doing so well in college and that she was "pretty confident in finishing my classes."

Similarly, Victoria, a first generation Latina student, had a clear understanding about the rigors of college and the support that her family provided her. Similar to her experiences in high school, she knew her supportive network would be there. Victoria stated, "They've helped me not give up. They've pushed me to do my best because they know that I can do it." Because she knew she had a strong support network, her confidence increased, which helped alleviate her fears related to academic difficulty. She began to manage her time by doing "one thing first and then another." Additionally, the increased confidence allowed her to approach peers in class and make friends.

Demonstrated Community Service. The questions contained in this scale asked participants if there was value in helping other people. In addition, students discussed their community service experiences. Amber, an African American female student whose mother attended college, answered that helping others was not beneficial. Bonnie, a first-generation, African American female student, answered that helping others was neither helpful nor harmful. However, based on their community service experiences, these two participants scored

high on the overall scale measuring community service. Two additional participants, Emily and Mel, scored low on the overall scale. However, in their interviews, these two participants shared the distinct benefits they gained from their respective community service experiences.

For Bonnie, a first generation African American female student, serving in her community helped her learn the value of perseverance. Bonnie noted that working with the younger students helped her realize that, "at times things do happen that get you off track" and " that sometimes you have to learn to separate your personal from your business type stuff." Volunteering to work with students helped Bonnie understand that sometimes "you may have a let down or get knocked down," but the important thing was to keep moving and to not let what she [Bonnie] was going through personally "break you completely."

For Bonnie, working with the younger students helped her see the value of perseverance. In addition, she understood that other people were facing situations more difficult than what she was facing in school. She also used this knowledge to persevere.

> Sometimes I just get caught up in me and what I'm going through. Not realizing that there are other people. People that I know personally who are going through things worse than me and they're still smiling; they're still carrying on, while I'm sitting here complaining.

For Amber, an African American female student whose mother completed college, the skills of leading and directing her peers that she learned while serving in her community transferred to skills she needed in the classroom.

> For the last two years of my high school I was in cadet core. The first year, of course, I was just a cadet, a subordinate. My senior year of high school I was promoted to a battalion commander, so I was over both of the classes that taught cadet core.

She noted that her experience with cadet core helped her during her first semester because she had learned that working in a group required engaging with others. If she did not engage with her peers, she understood they would not learn what they needed to learn. She noted she often led the process, "When we do group discussions, [students] just sit around and look at each other. . . . I'm like, okay, here we go, I always have to start it off." As a self-described "natural leader," it caught her off guard at first that so few students talked during discussions. Her previous leadership experiences helped her see the value in the skills she brought to the classroom.

In reviewing the community service survey responses for Emily, a first generation Latina student, and Mel, a Pacific Islander student who does not identify as a first generation student, each reported that there was no use in helping others and each had minimal community service experience. However, after analyzing their interview responses, it was clear that even though their community service experiences were not extensive, they enabled them to develop confidence and to begin to take control of the learning process. This led them to also understanding the value of collaborative learning.

In terms of confidence, Emily, a first generation Latina student, stated, "I think it [community service] helped me prepare myself because I use to be very

shy. In high school it helped me open up to a lot of people." Emily went on to share that her experiences volunteering showed her how much more she could accomplish when working with other people and she came to the conclusion, "that has helped me a lot in the classroom. It helps when I study with other people." She was able to take control of the learning process by understanding how she best learned and actively seeking out those opportunities.

Lupe, a first generation Latina student, benefitted from the contacts she made in community service. During registration, she recognized a fellow student whom she had met while volunteering and approached her for additional information on the registration process. "Registering for classes, I had no idea how to do that . . . but luckily, I was waiting for a class and there's this girl there that I met while I was out volunteering in high school. Since I knew her, it was easy for me to approach her." This confidence helped her approach other students in her class so they could study together when learning difficult concepts.

> My stats professor, he told us from the start of the class that everything is going to be done online, the quizzes, the homework, everything. . . . So if I needed help, I just had to ask a classmate. That [confidence] helped [me], I guess, interact with other students in my class.

Beginning College Survey of Student Engagement

Expected Academic Difficulty. The findings from this scale were an example of convergent findings. This scale gave students the opportunity to describe how difficult the academic work of college would be. This scale consists

of four items. Two students (Adam and Jenny) provided direct examples of why they expected to face academic difficulty and how they addressed the expectation. Adam, a first generation White student, overcame the academic difficulty he expected by finding that he was indeed able to learn the course material; for Jenny, a first generation Latina student, it was the ability to effectively manage her time. Adam expected to face a fair amount of difficulty his first semester of college; however, he noted during his interviews that the difficulty never occurred. "I thought it was going to be like the worst possible thing ever, but it wasn't. . . . Once you do it [you realize] I can keep doing this." Adam continued to note that the realization that he could do well in college gave him additional confidence, which in turn spurred him on to want to do better academically. He stated, "Now I want to do good, and I want to look good at least, and that's kind of what the confidence level has done."

Similarly, Jenny expected to face a fair amount of academic difficulty, "I thought it was going to be difficult for me . . . but, instead of the workload being difficult, it's just finding the time to do it and not be lazy." Like Adam, doing well over the course of the semester gave Jenny additional confidence that she could complete college level work and continue her education, "It makes me feel like I'm proud of myself in a way because I feel like I'm not going to fail my first semester"

National Survey of Student Engagement

Higher Order Learning. This scale consists of four items that allowed students to share how often they applied facts to new situations, analyzed a

situation by understanding its parts, critically evaluated information, and formed new ideas from old information. Two students (Eli and Bonnie) shared their experiences relating to higher order learning and how it affected their first semester.

Eli, a first generation, Latino college student, connected his ability to face and overcome difficulties in his neighborhood with the ability to face and overcome difficulties he faced in school.

> I've learned that just because life [gets] hard outside of the classroom, you might have difficulties in your neighborhood [or] in your family. But if you can overcome that there, then you can overcome anything in the classroom. In the classroom, it's easy because it's all books; it's all there. You just have to apply it, and you just have to know how to work with it."

He went on to share his strategy for overcoming academic difficulties in the classroom: "In the classroom, if I have trouble about my math, I have to get my book, I have to read it, I have to apply the equations, and then I have to get through it."

Bonnie, a first-generation African American female student, connected the lessons she learned from mentoring students to her college experience. She was involved in a youth leadership program that provided her with the opportunity to mentor students in middle school. She stated that working with the younger students helped here realize that, "At times things do happen that get you off track. It made me realize that sometimes you have to learn to separate your personal from your business type stuff." She went on to say that she learned that

it was easier to face a difficulty and keep making progress and learn from the experience than to let life knock her off track. She shared that she did not want that to happen to her, "Sometimes, it is harder to build back up from that when you never learned from the situation to begin with."

Chapter Summary

In this chapter, I presented quantitative, qualitative, and mixed methods findings from the study. Qualitized profiles provided an in-depth understanding of participants' survey responses. Interview data gave further insight to the relationships between noncognitive characteristics and engagement. Finally, by contextualizing students' survey responses through their interview responses, areas of convergence and divergence were presented. The experiences of the *presence of a strong support person* and *community service* provided students with the confidence they needed to continue doing well in college. While two students expected to face a fair amount of academic difficulty (BCSSE), one overcame the difficulty by realizing he could master the course content and the other did so by effectively managing her time. Finally, two students utilized higher-order learning skills (NSSE) to connect lessons learned to their academic experiences.

CHAPTER 5

DISCUSSION

The purpose of this study was to explore the perceptions of students of color at an urban commuter university as related to the constructs utilized within the engagement literature and within the noncognitive student characteristics literature. The aim of the study was to develop a deeper understanding of noncognitive characteristics and engagement for students of color attending an urban commuter university with the goal of informing institutional practices that could better promote student learning and success.

This chapter begins with a summary of the study's major findings. Findings are then interpreted in light of the prior literature. Because the implications of some of the emergent findings extend beyond the educational research reviewed in Chapter 2, especially as related to the noncognitive factors presented in this study, I additionally draw on psychological and sociological research. Next, I discuss the limitations and strengths of the study as well as implications for policy, practice, and theory as it relates to noncognitive characteristic development for students and engagement practices for commuter students and students of color. In concluding this section, I detail how my research will inform future research in the field of higher education.

Summary of Findings

Psychological, sociological, and educational literature can assist in understanding the processes involved between students' noncognitive characteristics and their paths to engagement. Discussing key findings of the relationship between noncognitive characteristics and engagement as they relate to the research is important. The key findings of this study show that noncognitive experiences and characteristic development assist students in: (a) internalizing messages, (b) understanding systemic process, and (c) identifying motivating factors.

Internalizing Messages

One of the key findings of this study was the importance of students' internal messages. This relates to the body of self-efficacy literature reviewed in Chapter 2, but students' comments reflected deeper intrapersonal and interpersonal realities. The emergence of this finding from the data means this conceptual framework was not presented in Chapter Two. Because of this, future research that seeks to understand the relationships between students' noncognitive characteristics and engagement will want to incorporate this as it may influence the design researchers choose for their studies.

The social and personal worlds of students are in constant transformation due to the interplay of each of these worlds. This idea of the human mind being social and personal has been a topic of research in the field of developmental psychology for some time (Cox & Lightfoot, 2013; Valsiner, 1998). According to Lawrence and Valsiner (2003), the social world provides a person with a

message. As the individual begins to dissect, make sense of, and internalize this message, it is transformed to reflect the meaning the individual has assigned to the message. It is this process of internalizing messages that lies at the crux to understanding the relationship between noncognitive characteristics and student engagement. The concept of ? lies at the heart of the theory of noncognitive characteristics and why they are important predictors of student success.

Psychological research shows there is a clear connection between social support and outcomes for adolescents (Demaray & Malecki, 2002; Piko, 2000). For students in this study, the value of their support network was a key message that needed to be internalized prior to student engagement. The seminal model of social support developed by Tardy (1985) presented five dimensions that explain the role of support networks. The five dimension as outlined by Tardy (1985) are: (a) direction–for students in the present study, they were receiving the support not giving it; (b) disposition–support was not only available to participants, but it was being used on a consistent basis; (c) description or evaluation–this is a key dimension as students were able to describe the support that was available as well as to begin to evaluate its importance; (d) network–participants identified parents, peers, former teachers, coaches, and mentors as important members of their support network; and (e) content–support came in tangible ways such as financial support, informational support, and emotional support. Support networks were found to have two types of effects on the students in general, a buffering effect as well as direct or main effect (Cassel, 1974; Malecki & Demaray, 2002).

Malecki and Demaray (2002) extended the concept of the buffering effect of support networks. Their research is based on the work of Cassel (1974) who found that social networks act as a buffer from the stresses one may face. Students in this study identified the buffering effect as a specific function of their support networks. Because of the assistance provided by their support networks, participants were able to focus on school without having to worry about things that could have affected their performance. The second effect of support networks is a main or direct effect. The simple fact of belonging to a support network engenders belonging, stability, and security. Additionally, knowing the support is there if needed provides a mental and emotional feeling of satisfaction.

Students face a significant transition from high school to college, which results in demands being placed on the student (Tinto, 1993, 2012). Not only is the college academic environment stressful, students are simultaneously expected to exhibit increased levels of initiative, self-regulation, and independence. Chemer, Hu, and Garcia (2001) found that confidence played a major role in students' ability to successfully navigate the transition from high school to college. Knowing they had the knowledge and skills to succeed was a confidence boost that served as a catalyst for students on their pathways to engagement.

Internal Messages and Self-Efficacy

Foundational research on student confidence is attributed to Bandura (1977) and the concept of self-efficacy. Simply put, self-efficacy is internalizing the belief that one can be successful performing certain tasks and behaviors. For

the participants in the present study, noncognitive variables had a direct impact on their self-efficacy or confidence. Furthermore, Bandura (1977, 1986, 2001) found that self-efficacy, or confidence, was developed through different experiences and vicarious learning.

Building on previous research, Pajares and Schunk (2001) postulated that self-efficacy influences behavior by regulating choices, effort, and emotional responses. Furthermore, increased self-efficacy positively affected persevering through difficult situations, reframing complex issues as challenges, engaging in learning, and reframing failure as the need to exert more effort (Pajares & Schunk, 2001). Likewise, Rendón's (1994) work on validation specifically addressed how institutions and institutional agents can promote greater involvement and success among students of color through the use of validating messages and behaviors.

Sfard and Prusak (2005) determined that the narrative of one's self, or one's identity, could be split into two parts: who the person actually is—one's actual identity—and who the person is thought or expected to be—one's designated identity. For students in the study, their noncognitive experiences and characteristics appeared to enable them to balance these two identities. More notably, they were able to separate and act according to their actual identity, while ignoring or turning away from their designated identity. Said another way, students with higher noncognitive variable scores seemed to draw more on their internal locus of control related to their sense of self as opposed to a more external, peer-influenced locus of control. This is consistent with the reason that

Sedlacek (2003) proposed noncognitive variables as a more equitable means of assessing college readiness and potential.

Researchers have determined that one's identity is developed and formed through interactions with others as well as by the process of making sense of those interactions (Holland & Lave, 2001; Roth, 2004). Study participants noted that often times their designated identity was a reflection of their racial background. As students interacted with others, they gained a greater sense of who they were and began to internalize that what others thought of them had little bearing on their own self-image. This may be the result of students beginning to tell themselves that who they were was independent of what others thought about them. Holland, Lachicotte, Skinner, and Cain (1998) developed this concept of narrativization of one's identity. They determined that not only do individuals tell others who they are, more importantly, they tell themselves who they are. This important distinction results in people acting and making decisions that are in line with how they see themselves. As this process of self-understanding develops, the individual's identity is forged. For example, Amber, an African American female student, noted that when she was a high school freshman, what her peers thought of her had a large impact on how she acted. However, she said that by time she was a high school senior, she knew their opinions really did not matter. Amber shared that it was this change in her internal dialogue that helped her the most

Internal Messages and Self-Reliance

The concepts of self-reliance and self-regulation are closely related. For the students in the study, self-reliance was the understanding that if they were going to be successful or do well, it was up to them to do the hard work that doing well required. According to Zimmerman (2002), self-regulation is the process by which students transform their mental abilities into academic skill and action. Zimmerman found that self-regulation was not an academic skill or a mental ability. He stated that the process and activity of learning moves from passive to proactive as students begin to take control of their learning. This is consistent with how the students in this study described self-reliance. Self-reliance, or self-regulation, was evident in students' perseverance, initiative, and ability to get things done. Furthermore, attention in the literature is given to how students begin, navigate, and sustain the learning process (Zimmerman, 2002). This happens both in social settings as well as in private settings of learning. Study participants frequently noted that they became aware that the task of learning and reaching their goals was dependent on their actions. There was a keen awareness that if they were unable to rely on themselves or to self-regulate their own learning they would not reach their goals. Participants noted this awareness came about as a result of noncognitive development and experiences. For example, a number of students noted that the main difference between high school and college was that the professors did not really care if they completed their homework or not. This realization helped the students

understand that their success was really up to them. As will be discussed below, self-regulation and self-reliance consist of a number of underlying processes.

Schunk and Zimmerman (1994, 1998) determined the process of self-regulation, or self-reliance, was actually the sum of multiple skills: (a) setting specific proximal goals, (b) implementing effective strategies for reaching those goals, (c) monitoring performance for progress, (d) making choices and decisions that are compatible with one's goals, (e) effective time management, (f) evaluating the methods used to attain the goal, and (g) making necessary changes to stay on track. The skills identified by Schunk and Zimmerman are congruent with the findings of the present study. As participants internalized the message that success was contingent on them, they began to take control of their learning processes. As they took control of their learning processes, they begin to engage in the activities they identified as being essential to helping them reach their goals.

Understanding Systemic Processes

This section details students' understandings of the systemic processes of how the educational system functions and the multiple effects of racism. These understandings helped to reinforce the messages that students were internalizing. First, students' understanding of the educational system is presented followed by their understanding of the multiple effects of racism.

Students in the study discussed how they were developing an understanding of how the educational system worked. This first-hand knowledge of the institution led to high levels of college persistence in students (London,

1989; Tinto, 1993). While they readily admitted to not always making use of the resources, a number of students noted that when they needed information, they knew where to get that information. Some of the students in the study were missing some important knowledge in regard to the educational system prior to starting college. The information they indicated that they did not have was primarily related to financial aid, registering for classes, and knowing exactly how many years it would take to graduate. However, even those students who did not have prior knowledge of certain crucial information about the educational system reported knowing where to get the information they needed. For example, when Adam was waiting to register, he overheard other students discussing the process for filling out his FAFSA and receiving financial aid. For him, this was new information. In order to find the answers he needed, Adam asked the students what was required and who they spoke to on campus for help.

Choy (2001) found that when students have knowledge of how the educational system works, they also enjoy the benefits that come along with understanding the sometimes complex and daunting structure. The benefits identified by Choy included taking college preparatory courses, completing college applications, and understanding financial aid. Furthermore, when students' parents have firsthand knowledge of the college process, their children will often receive the extra care and attention they need to do well. While the students in this study received extra attention and care from their families, most of them were first generation college students whose parents did not graduate from college. However, the study participants were still able to find the

necessary information (application and financial aid processes) and partake in a number of benefits (learning communities and extra-curricular activities) that are associated with students whose parents have finished college.

Students noted that their high school leadership experiences, participation in community service and other learning opportunities outside of the classroom, strong sense of who they were personally and culturally, and the presence of supportive people enabled them to receive all the information they needed to partake in benefits (AP courses and meeting with professionals in their field) that they may not have otherwise had the chance to pursue.

Participants in the study noted that the racial identity should not play a role in how well students are able to do in school. However, they also described the clear discrepancies in the treatment of different racial groups at their high schools. The most notable discrepancies shared were educational opportunities and college counseling. Students continually noted that Asian, Asian American, and White students were not only encouraged to take AP courses; they also readily received college information and counseling services. Additionally, students from these racial groups were often deliberately funneled into advanced placement courses, while African American, Black, and Latino students were not. Additionally, study participants were aware while teachers may not have held racist views, students in AP courses received the education and information needed to go to college while students taking general education courses often did not. Bonnie, an African American female student, noted the clear difference in the quality of education between AP and general courses. During her interview,

she also shared that had it not been for a friend taking her to sign up for AP courses, she never would have known the courses were available for her to take.

This institutionalized form of racism meant that due to certain structures, certain ethnic or racial groups were not being encouraged to pursue an academic course of study that would prepare them for college (Jones, 1997). Furthermore, the assumption that AP courses and college advising was reserved for some students and not for others, meant that some study participants also faced cultural racism (Jones, 1997). In addition, a small number of students were required to deal with being stigmatized by peers in their own racial group. In order to manage the stigma of racial stereotypes, they disassociated themselves from social settings in which they had to deal with racial stereotypes, dismissed the stigmatization, and drew strength and comfort from outside sources (Choi, Han, Paul, & Ayala, 2011).

Study participants used these kinds of experiences to gain a better understanding of the multiple effects of racism and used this knowledge to their advantage. As the majority of students in this study identified as Latino or African American, they knew that while advanced courses were not off-limits to them, they would not be encouraged to participate in them. Having this knowledge helped them to seek out these opportunities rather than wait to see if they would be offered and face possible disappointment if they were not. Since students took the initiative in seeking opportunities for educational advancement in high school that they might not have been offered otherwise, it can be speculated that they would take the same actions if they noticed similar differences in engagement

opportunities in college. In the next section, the factors students used to stay motivated are discussed.

Motivating Factors

Study participants identified key motivators that enabled them to understand the value of their networks, develop self-confidence, balance who they were with who they were expected to be, and develop self-reliance. The key motivators that enabled students to move through this process were working toward an end goal, living up to family expectations, and developing independence. Participants identified these motivators as they discussed the effect of different noncognitive characteristics on their first semester engagement.

As noted in the findings, while the presence of goals (a noncognitive variable) was important for students, working toward those goals was found to be key. Kivetz, Urminsky, and Zheng (2006) proposed and validated a goal-distance model that ascertained that as a student works toward a goal, the amount of effort invested is in relationship to the original distance to the goal. The concept that one more easily reaches a goal the closer they are to it is referred to as the goal-gradient hypothesis (Hull, 1932). Furthermore, research shows that choice is driven by underlying goals (Zhang, Fishbach & Dhar, 2007; Krantz & Kunreuther, 2007; Shah & Kruglanski, 2003). Psychologically, the closer one gets to a goal, the harder they work to achieve it. Furthermore, this decision may be subconscious as the students' decision to keep moving forward is tied to the establishment of goals. Given the central roles of time and effort to engagement,

these theories appear to have direct implications for practitioners who wish to use goals to promote engagement for students similar to those in this study.

Additionally, researchers found that achieving multiple goals is often the result of one decision (Krantz & Kunreuther, 2007). For the students in the study, the decision to attend college and do well enabled them to stay on track and move toward reaching their goals. Furthermore, the fact that students identified and verbally stated a goal increased their likelihood of engaging in actions that allow them to pursue that goal (Shah & Kruglanski, 2003).

The idea that progress and distance to the goal affect motivation is bolstered by social cognitive and human decision-making theories (Kivetz, Urminksy, and Zheng, 2006). Furthermore, Soman and Shi (2003) noted the distinct impact of the psychological distance between goals and people's resulting behavior and decision-making ability. Fishbach and Zhang (2009) proposed that goal actions are represented in two ways. In the first way goal actions are represented, and the one relevant to the present study, as progress is made toward the goal, motivation increases to choose the actions that will continue to move the individual toward the goal. This idea is based on the concept of self-regulation developed by Carver and Scheier (2004). For students in this study, attending class, doing well on tests, and completing homework signaled that progress was being made toward achieving their goal, which kept them engaged in the learning process. These findings are important in that they provide a more nuanced understanding of short-term/long-term goal construct presented on the NCQ. Items can be included on the NCQ that assess the

importance of working toward their goals and the processes that are a part of that process. Similar to the importance of working towards their goals, having the support of their parents was vital to the students in the study.

The expectations parents have of their students are an important factor related to student success (Smith, 2003). Similarly, Englund, Luckner, Whaley, and Egeland (2004) found that regardless of whether parents held high or low expectations, they always affected how the students responded. For the students in the study, the high expectations their parent's communicated to them gave them the motivation they needed. Miller and Day (2002) found that parental expectations could be understood as a two-step process. First, parent(s) established the expectations of behavior. Then, it was up to the parent(s) to be responsive to meeting the needs of their student. Parents' responsiveness included being warm, nurturing, and sensitive to the student's needs as they were living up to the parent's expectations. Each of the students in the present study shared that their parents treated them in ways that were warm, nurturing, and sensitive. Oftentimes, educational institutions point to the lack of parental involvement as the reason why students who identify as first generation do not do well in college. For the first generation students in the study, parental support was present, and it was vital in their success and how they felt about themselves.

According to Urdan, Solek, and Schoenfelder (2007) the pattern of family influence can fall into two patterns; family pleasing and family obligation. The family-pleasing pattern of meeting familial expectations was a recurrent theme in the present study. Making parents proud and repaying them for their sacrifices

were common sentiments study participants expressed. Students noted that while they were intent on making their parents and family proud, there was no additional pressure placed on them. The participants often wanted to show their parents they were doing well because they knew it would make them proud. The second pattern, family obligation is discussed next.

This pattern differs from the one previously mentioned in that in this pattern students feel as though they are obligated to the family because of the sacrifices they had made. Furthermore, reference is made to the idea that one wants to do better for the family so the sacrifice would be seen as valid. The students in the study mentioned this family obligation motivation as frequently as they mentioned the family-pleasing obligation, and they were often intertwined. For a number of students, doing well, graduating from college, and achieving their goals meant they would be able to enjoy a better life for themselves. This better life extended to their immediate family as well. With the majority of the students being first-generation students with parents who held low paying job, both family pleasing and family obligation were significant motivators in the process of them becoming engaged.

Strengths of Study

The attention given to student voices and perspectives regarding the relationship and effects of noncognitive characteristics on engagement is a strength of the study. This emphasis on student voices provides a perspective that is missing in the literature pertaining to noncognitive variables and student engagement. As the researcher, I was able to investigate how noncognitive

characteristics affect engagement and to understand the process by which it happens for students that have not been well represented in prior empirical studies. The students who participated in all parts of the study contributed to the strength of the study as well. Their ability to clearly identify and communicate the relationships and effects their noncognitive characteristics had on their engagement was a crucial resource in this study.

The methodology selected to conduct the study was an additional strength. The quantitative part of the study provided an in-depth picture of study participants, with the qualitative portion extending the quantitative portion to provide additional insights. Finally, the mixed method part of the study provided an analysis of key relationships between noncognitive characteristics and student engagement. Utilizing sequential exploratory mixed methods was appropriate for the research questions that sought to understand students' perspectives and the relationship between noncognitive characteristics and engagement. As such, the findings of my study have been identified as another strength as they can guide future research pertaining to this phenomenon.

Recommendations

The findings in this study revealed the relationships between students' noncognitive characteristics and the effects they have on first semester engagement. As higher education continues to evolve and to investigate how to best serve students, researchers need to have a clear understanding of the experiences and characteristics that contribute to student success. Furthermore, McEwen (2003) stated that theory has the ability to simplify complex processes

as well as to assist researchers and practitioners in better understanding the development and experiences of students. Recommendations for future theory and research are presented first, followed by recommendations for instrumentation and practice.

Recommendations for Research

The findings of this study highlight the complexities associated with the relationships and the effect noncognitive characteristics have on engagement. Additionally, these constructs show that students' success is not merely reliant on their grade point average or the standardized test score they earned. Torres, Jones, and Renn (2009) posited that understanding the student holistically is an essential area of future research. It would behoove practitioners to move away from a simplistic understanding of student engagement and towards the realization that neither students nor student engagement are monolithic ideas that can be addressed with the same tactics. Instead, student engagement is a multi-faceted concept that is not fully explained by the current literature. As the findings of the present study draw on noncognitive variables and engagement to create a more holistic understanding of students, the relationships between noncognitive variables and engagement is an essential area of research that must be developed into complete theories of student development, student retention, and student success.

This research also provides insight to the engagement experience of a population that has historically been missing in the literature. The study participants attended a broad access, four-year commuter institution.

Furthermore, they were primarily first-generation, female, and students of color attending an institution with approximately 88% of the students identifying as diverse. Many theories and models of engagement were developed using white, male students attending selective residential four-year institutions (McEwen, 2003). The findings presented in this study provide components that can be used as building blocks for future empirical studies (Brown, Stevens, Troiano, & Schneider, 2002). For example, as more students are opting to live off campus and commute to school, institutions must find meaningful ways to connect with off-campus students and to redefine campus boundaries. These connections are likely to take place in the students' communities where they spend time while they are away from the campus. As institutions adapt to the needs of their off-campus students, research must be conducted on the types of interactions students prefer.

An additional area of research that is needed relates to determining the effect size of noncognitive characteristics on student engagement. While students clearly identified the effects their noncognitive characteristics had, the present study is unable to provide a clear understanding of the strengths of the relationships that were identified. It is the duty of institutional leaders to help students make clear connections between who they are as people and who they will become as professionals. By understanding the relationships and effect sizes between noncognitive characteristics, we will provide students environments with which they can fully engage.

Finally, the present study points out the importance of understanding the students' perceptions of their engagement. Interview questions focused on students making positive connections between their high school noncognitive experiences and their college engagement experiences. Recommendations include student outreach (helping students develop noncognitive characteristics), promotional materials (related to increasing student's noncognitive characteristics) and a four-year plan for outreach to students.

Recommendations for Instrumentation

William Sedlacek (1983, 1988, 2003, 2004a, 2005) has provided and developed an valuable tool to assist in measuring noncognitive characteristics. However, the instrument has weaknesses in the areas of: (a) scoring of open-ended questions relating to leadership, community service, and knowledge acquired, (b) items and scales, and (c) language used.

Suggestions and guidance is provided for the scoring of open-ended questions on the noncognitive questionnaire. However, scoring is inevitably affected by the experiences and perceptions of the individual scoring the survey. My recommendation is to modify the open-ended questions so students are able to score the effectiveness of their leadership and community service experience. This modification will still allow the students to share what they were involved in while also providing additional information on whether or not the experiences were beneficial to them. Next, the recommendations for items and scales on the NCQ are discussed.

In utilizing and analyzing the NCQ instrument for this study, a number of scales and items stood out as needing to be revised. The scale measuring racism or navigating the system needs to be modified so questions reflect experiences students may have encountered or are likely to encounter. As it is currently constructed, one item asks explicitly about racism. The others ask about the school's position in improving social conditions, if the student expects to have a more difficult time than others, if they would attend free tutoring, and if they want a chance to prove themselves. While these may be important questions to ask, they can be modified so they more closely reflect a student's ability to handle racism or navigate the system. Similarly, the long-range goals scale should be modified. One question has a fill-in-the blank area, which leaves a fair amount of judgment to the subjectivity of the scorer. The remaining two questions are adequate, but similar to the racism questions, can be improved to directly relate to goal setting and attainment. A final modification to this scale is to include items on students' intermediate goal setting processes that allow them to reach long-term goals. The third scale I have identified measures the presence of a strong support person. This scale consists of three questions, two of which are family-related. Students spend a fair amount of time with peers and seek out advise from teacher, counselors, and other school personnel. This scale should reflect the nuances of where students seek out support. The final NCQ modification I recommend is the addition of a scale that measures self-reliance. In the present study, as students became aware it was up to them to set their

schedules, complete assignments, and do well in school, they started to take control of the learning process and engage in meaningful activities.

In addition, because William Sedlacek developed the NCQ approximately thirty years ago, the language used on the instrument is not as current, or relevant, as it should be. This limitation has the potential to confuse students who are taking the survey. In fact, during interviews with study participants, a handful of students mentioned that there were a number of items on the surveys they had to read multiple times in order to understand the question. When I asked them which questions they were referring to, students referenced a question on the NCQ. This simple, yet effective language modification will make the instrument more accessible to students.

The NCQ is a useful tool that institutions can utilize to develop profiles of students who are likely to succeed. The suggested modifications to the instrument will allow institutions to understand more fully the students who are applying to their institutions, the students who are choosing to enroll at their institutions, and the students who are persisting at their institutions. This level of understanding is currently missing as institutions, leaders, and researchers attempt to meet the needs of their students. Now that recommendations for the NCQ instrument have been discussed, recommendations for practice are presented.

Recommendations for Practice

Implications for practice are provided based on the findings of the present study as well as the current practices I have developed and implemented in my

work as a college outreach and recruitment professional. Colleges and universities have been assessing whether students are ready to succeed at the institution. Instead, institutions need to assess whether or not they are ready for the students who will be enrolling. As such, schools need to develop new recruitment and admission processes that take into consideration the non-academic knowledge, skills, and experiences students possess that contribute to their engagement. Students in this study noted that the knowledge they possessed enabled them to engage over the course of the semester.

Understanding the process by which students' noncognitive characteristics affect first semester engagement provides students a way to reclaim power that has traditionally resided in educational institutions and processes. By having a clear understanding of the relationships between noncognitive characteristics and engagement, students can seek out opportunities and environments that contribute to the development of their noncognitive characteristics. This shift of power from academic preparedness to noncognitive characteristic preparedness provides students the opportunity to have more control over what it means to be prepared for college. Additionally, as students understand the relationships more in depth, they will be able to communicate the importance and impact their noncognitive characteristics will have on their engagement.

Furthermore, moving away from a monolithic understanding of engagement to the complex ways students interact with the campus environment, will provide practitioners multiple options in meeting the needs of students. The development of curricular and co-curricular experiences should

include programs and activities pertaining to internalizing key messages, determining motivators, and understanding systemic processes. The findings of this study underscore the importance of providing incoming students with the opportunity to build on personal skills, experiences, and characteristics that historically have not been seen as being directly related to academic success.

Swail, Redd, and Perna (2002) noted the transition from high school to college has been focused too narrowly on the issue of college enrollment. They went on to assert that insufficient attention is given to the underlying constructs that are needed for students to do well and be engaged academically, socially, and psychologically. Increasing student engagement, and theoretically, the associated student success metrics, means developing programs that specifically target the underlying constructs of student engagement. Relying on data from the present study, my professional experience, and first-hand observations, there must a comprehensive plan in place when preparing students to succeed in college. Components of this plan include: (a) utilizing the noncognitive characteristic approach of college access and awareness programs, (b) developing early outreach efforts aimed at middle school students, (c) making a sustained and focused effort to contact with students every year they are in high school, and (d) developing marketing campaigns and orientations and transition programs that focus on noncognitive factors related to student success. Each of these components are discussed in the following paragraphs.

Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) and TRIO, which is comprised of Upward Bound, Student Support

Services, and Talent Search, are federally funded programs designed to increase the awareness of and access to higher education for traditionally underrepresented groups. Other programs, such as AVID and MESA, also exist for this purpose. While these programs are aimed at students from underrepresented groups, they have program components that focus on the development of noncognitive characteristics to supplement the academic portion of the programs. High schools, as well as colleges, would serve all of their students better if they too adopted the two-pronged approach of noncognitive and academic development to student success. Programs and activities would enable students to determine the motivators that are important to them as they begin to internalize the messages that lead to engagement. Activities that help students deconstruct and understand the identified systemic processes could be provided as well.

Next, outreach efforts communicating the importance of students' experiences and an institutions readiness for students should begin as early as middle school. The key function for these outreach efforts are to help students recognize the value of and to develop their noncognitive characteristics along with their academic preparation for college. These outreach efforts can be conducted by student ambassadors and other staff members in offices of admission, offices of diversity, and by individual school or colleges on a university campus. Camblin (2003) found that by communicating the concept of college readiness in middle school, students were more likely to begin developing college and career aspirations.

Next, as a mid-level administrator tasked with developing and implementing outreach and recruitment activities to communities of color and underrepresented student populations, I suggest a four-year approach to student recruitment that aims to expose students to higher education, assist in their development of long-term goals, support them through standardized test preparation, and build peer connections through mentoring.

Such a plan could involve ninth grade students taking part in a leadership retreat on the campus of a college or university. Adding an overnight element to the retreat would give students the opportunity to interact with staff, faculty, and students in multiple settings, learn about potential courses of study, and become familiar with informal as well as formal aspects of the college campus and environment. Additionally, current college students could serve as mentors during the retreat as well over the course of the students' ninth and tenth grade years. As students move into the tenth grade, mentors would interact with them on a monthly basis and assist them in setting and tracking academic goals. Additionally, they would serve as tutors to prepare students for the ACT Plan or PSAT exam. This preparation should take place on the college campus in group settings. As high school students enter their junior year, they could begin to serve as a mentor for ninth grade students, and they would receive more instruction and preparation regarding the ACT and SAT. As students enter their final year of high school, they would receive assistance in completing college applications in the fall and participate in a two-day retreat in the spring. Such a retreat could serve as a capstone to their experience in the program. The retreat would include

the opportunity for students to share their experiences through presentations and partake in a "signing day" event as they declare their intent to enroll. While this program is currently in the development stage at the researcher's institution, it is believed that this long-term, multi-layered approach will provide students the opportunity to identify their motivation for attending college, have an understanding of relevant systemic processes, and begin to internalize the key messages that will lead to engagement.

Finally, institutions spend an exorbitant amount of time selling potential students on the school's climate, athletic programs, co-curricular experience, and other amenities that have been shown to be beneficial if the student remains enrolled. However, scant attention is given to the personal development students can go through in high school and while they are transitioning to college that will contribute their engagement and success. The key messages students internalize as a result of their noncognitive characteristics must also be acknowledged. These messages play a crucial role in students' ability to engage academically. Understanding the value of support, developing confidence, balancing self-identity with perceived identity, and internalizing self-reliance or self-regulation were all essential for the students in the this study.

Colleges and universities can begin to promote these noncognitive characteristics and associated outcomes through promotional marketing materials, through recruiters who visit high schools, and through mandatory first year orientation sessions. As college recruiters begin to denote the value and importance of these characteristics and outcomes, high school students will

begin to value the importance of these same characteristics and outcomes. Similarly, as orientation sessions and activities are provided to assist students in understanding which noncognitive characteristics are salient to their success, students will also recognize the importance and see the value. However, since institutions determine what is important for college access and success, it is up to the leaders at these schools to chart a new course that values the holistic nature of student development. This new path will provide additional methods of determining college readiness for the students and student readiness for the institutions.

As leaders begin to strategically utilize and understand the relationships between students' noncognitive characteristics and engagement at their respective institutions, they will begin to see patterns and be able to develop student success profiles. These profiles can be used by students to determine which schools will be a good fit for them, and institutions can use the profiles to determine where they are not meeting the needs of their students and to develop more meaningful curricular and co-curricular experiences. As practitioners we have a responsibility to provide our students with the best opportunities and pathways for success. In order to do this, we must begin to acknowledge and utilize the noncognitive characteristics students bring with them to college.

The findings showing the relationships between students' noncognitive characteristics and their first semester engagement present a framework that can be helpful to practitioners working with first generation college students and students of color at commuter institutions. In order to effectively serve the

students their institutions recruit, administrators should have a keen awareness of all the factors that contribute to student engagement and thereby student success.

Summary of the Dissertation

In this chapter, I have presented findings of this study in relationship to theory and research and strengths associated with the study. The chapter concluded with a discussion of recommendations related to theory, research, and practice. The findings presented here provide a framework that researchers and practitioners can use in their work related to the relationships and the effects between noncognitive characteristics and student engagement.

Interviews with study participants were valuable in further understanding the process by which noncognitive characteristics affect engagement. The students' voices and the resulting findings helped me understand the many dimensions and underlying constructs associated with the effects noncognitive characteristics have on engagement. Additionally, this study contributes to the theoretical understand of the relationship between noncognitive characteristics and engagement, provides questions for future research, and offers distinct insight into how students perceive noncognitive characteristics and engagement. As such, benefits associated with the research range from local to global as the reader considers the implications of the research in relation to their context and experiences.

Finally, the present study moved beyond the simple reporting of noncognitive characteristics and engagement to understanding the relationships

and the effects the former has on the latter. Also presented was the nuanced nature of engagement as it relates to first generation students of color attending a commuter institution. These insights provide clear next steps as they relate to expanding the theory of engagement, providing additional research on the importance of noncognitive characteristics, and informing practitioners as they continue to meet the needs of diverse student populations.

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REFERENCES

ACT. (2012). *National collegiate retention and persistence to degree rates.* Iowa City: ACT.

Anaya, G. (1996). College experiences and student learning: The influence of active learning, college environments, and cocurricular activities. *Journal of College Student Development, 37*(6), 611-22.

Astin, A. W. (1975). *Preventing students from dropping out.* San Francisco, CA: Jossey-Bass.

Astin, A. W. (1984). Student Involvement: A developmental theory for higher education. *Journal of College Student Development, 25*(4), 297-308.

Astin, A.W. (1991). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education.* New York, NY: Macmillan.

Astin, A. W. (1993). *What matters in college?: Four critical years revisited.* San Francisco, CA: Jossey-Bass.

Astin, A. W. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development, 40(5),* 1999, 518-529.

Avendano, J. (2003). *Student involvement: Assessing student satisfaction, gains, and quality of effort.* Bloomington, IL: Illinois State University.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review , 84*(2), 191-215.

Bandura, A. (1986). *Social foundations of thought and action: A social-cognitive view.* Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52*(1), 1-26.

Barrick, M., Mount, M., & Judge, T. (2001). Personality and performance at the beginning of the new millennium: What do we know and where do we go next? *International Journal of Selection and Assessment, 9*(1-2), 9-30.

Beal, P., & Noel, L. (1980). *What works in student retention: The report of a joint project of the American College Testing Program and the National Center for Higher Education Management Systems.* Iowa City, IA: ACT.

Bean, J. (1980). Dropouts and turnover: The synthesis and test of a causal model of student attrition. *Research in Higher Education, 12*(2), 155-187.

Bean, J.P., & Metzner, B. S. (1985). A conceptual model of nontraditional student attrition. *Review of Educational Research, 55*(4), 485-540.

Berger, J. B. (2002). Understanding the organizational nature of student persistence: Emperically-based recommendations for practice. *Journal of College Student Retention, 3*(1), 3-21.

Berger, J. P., & Lyon, S. C. (2005). Past to present: A historical look at retention. In A. Seidman (Ed.), *College student retention* (pp. 1-29). Westport, CT: Praeger Publishers.

Boyer, S. P., & Sedlacek, W. (1988). Noncognitive predictors of academic success for international students: A longitudinal study. *Journal of College Student Development, 29*(3), 218-223.

Bradburn, N. M., & Sudman, S. (1988). *Polls and surveys: Understanding what they tell us.* San Francisco, CA: Jossey-Bass.

Brandt, R. (1958). The accuracy of self estimates: A measure of self-concept reality. *Genetic Psychology Monographs, 58*(1), 55-99.

Braxton, J. M., & McClendon, S. A. (2001). The fostering of social integration and retention through institutional practice. *Journal of College Student Retention: Research, Theory & Practice, 3*(1), 57-71.

Braxton, J. M., Milem, J. F., & Sullivan, A. S. (2000). The influence of active learning on the college student departure process: Toward a revision of tinto's theory. *Journal of Higher Education*, 569-590.

Braxton, J., & Mundy, M. (2002). Powerful institutional levers to reduce college student departure. *Journal of College Student Retention, 3*(1), 91-118.

Brown, S., Stevens, R., Troiano, P., & Schneider, M. (2002). Exploring complex phenomena: Grounded theory in student affairs research. *Journal of College Student Development, 43*(2), 173-183.

Carver, C.S., & Scheier, M. F. (2004). Self-regulation of action and affect. In K. Vohs & R. Baumeister (Eds.), *Handbook of self-regulation: Research, theory, and applications* (pp. 13-39). New York, NY: Guilford Press

Camblin, S. (2003). *The middle grades: Putting all students on track for college.* Honolulu, HI: Pacific Resources for Education and Learning.

Carini, R. M., Kuh, G. D., & Klein, S. P. (2006). Student engagement and student learning: Testing the linkages. *Research in Higher Education, 47*(1), 1-32.

Cassel, J. (1974). Psychosocial processes and "stress": Theoretical formulation. *International Journal of Health Services, 4*(3), 471-482.

Chapman, E. (2003). *Assessing student engagement rates.* Retrieved from ERIC database. (ED482269)

Charmaz, K. (2003). Grounded theory: Objectivist and constructivist methods. In N. Denzin, & Y. Lincoln (Eds.), *Strategies of qualitative inquiry* (pp. 249-291). Thousand Oaks, CA: Sage.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis.* Thousand Oaks, CA: Sage.

Chickering, A. (1974). *Commuting versus resident students:.* San Francisco, CA: Jossey-Bass.

Chickering, A., & Gamson, Z. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin, 3*, 7.

Chickering, A., & Reisser, L. (1993). *Education and identity.* San Francisco, CA: Jossey-Bass.

Choi, K., C.S. Han, J. P., & Ayala, G. (2011). Strategies of managing racism and homophobia among US ethnic and racial minority men who have sex with men. *AIDS Education and Prevention, 23*(2), 145-158.

Choy, S. (2001). Essay: Students whose parents did not go to college: Postsecondary access, persistence, and attainment. In J. Wirt, et al. (Eds.), *The condition of education 2001* (pp. XVIII-XLIII). Washington,

D.C.: National Center for Education Statistics, U.S. Government Printing Office.

Coghlan, C. L., Fowler, J., & Messel, M. (2009). The sophomore experience: Identifying factors related to second-year attrition. In R. Hayes (Ed.), *Proceedings of the 5th National Symposium on Student Retention, 2009, Buffalo* (pp. 190-201). Norman, OK: The University of Oklahoma.

Converse, J., & Presser, S. (1989). *Survey questions: Handcrafting the standardized questionnaire.* Newbury Park, CA: Sage.

Cowart, S. (1987). *What works in student retention in state colleges and universities.* Iowa City, IA: ACT.

Cox, B., & Lightfoot, C. (Eds.). (2013). *Sociogenetic perspectives on internalization.* Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Creswell, J. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research.* Boston, MA: Pearson.

Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks, CA: Sage.

Creswell, J., & Plano Clark, V. (2011). *Designing and conducting mixed methods research.* Thousand Oaks, CA: Sage.

Cunha, F., Heckman, J., Lockner, L., & Masterov, D. (2007). Interpreting the evidence on life cylce skill formation. *Handbook of the Economincs of Education, 1,* 697-812.

Daley, C. E., & Onwuegbuzie, A. J. (2004). Attributions toward violence of male juvenile delinquents: a concurrent mixed-methodological analysis. *Journal of Social Psychology, 144*(6), 549-570.

Dayton, B., Gonzalez-Vasquez, N., Martinez, C., & Plum, C. (2004). Hispanic-serving institutions through the eyes of students and administrators. In A. Ortiz (Ed.), *Addressing the unique needs of Latino American students. New Directions for Student Services, #105* (pp. 29-39). San Francisco, CA: Jossey Bass

Demaray, M., & Malecki, C. (2002). The relationship between perceived social support and maladjustment for students at risk. *Psychology in the Schools, 39*(3), 305-316.

DeNisi, A., & Shaw, J. (1977). Investigation of the uses of self-reports of abilities. *Journal of Applied Psychology, 62*(5), 641-644.

Dowd, A., Sawatzsky, M., & Korn, R. (2011). Theoretical foundations and a research agenda to validate measures of intercultural effort. *Review of Higher Education, 35*(1), 17-44.

Duggan, M. (2009). Is all college preparation equal? Pre-community college experiences of home-schooled, private-schooled, and public-schooled students. *Community College Journal of Research and Practice, 34*(1-2), 25-38.

Duggan, M., & Pickering, J. (2007). Barriers to transfer student academic success and retention. *Journal of College Student Retention: Research, Theory and Practice, 9*(4), 437-459.

Durkheim, E. (1951). *Suicide: A study in sociology.* New York, NY: The Free Press.

Englund, M., Luckner, A., Whaley, G., & Egeland, B. (2004). Children's achievement in early elementary school: Longitudinal effects of parental involvement, expectations, and quality of assistance. *Journal of Educational Psychology, 96*(4), 723-730.

Feagin, J. R., Vera, H., & Imani, N. (1996). *The agony of education. Black students at White colleges and universities.* New York, NY: Nikitah.

Fike, D., & Fike, R. (2008). Predictors of first-year student retention in the community college. *Community College Rreview, 36*(2), 68-88.

Fischer, M. J. (2007). Settling into campus life: Differences by race/ethnicity in college involvement and outcomes. *Journal of Higher Education, 78*(2), 125-156.

Fishbach, A., & Zhang, Y. (2009). The dynamics of self-regulation: When goals commit versus liberate. In M. Wanke (Ed.), *Social psychology of consumer behavior* (pp. 365-386). New York, NY: Psychology Press.

Garcia, P. (2001). *Understanding obstacles and barriers to Hispanic baccalaureates.* Notre Dame, IN: University of Notre Dame.

Gianoutsos, D. (2011). *Comparing the student profile characteristics between traditional residential and commuter students at a public, research-intensive, urban commuter university.* UNLV Theses/Dissertations/Professional Papers/Capstones. Paper 925. Las Vegas:University of Nevada Las Vegas.

Goldberg, L. (1990). An alternative description of personality: The big five factor structure. *Journal of Personality and Social Psychology, 59*(6), 1216-1229.

Graham, W. G., & Gisi, L. S. (2000). Adult undergraduate students: what role does college involvement play. *NASPA Journal, 38*(1), 99-122.

Greene, T. (2005). *Bridging the divide: Exploring the relationship between student engagement and educational outcomes for African American and Hispanic community college students in the state of Florida.* Austin, TX: University of Texas, Institute for Community College Research.

Gurin, P., Dey, E., Hurtado, S., & Gurin, G. (2002). Diversity and higher education: Theory and impact on educational outcomes. *Harvard Educational Review, 72*(3), 330-367.

Habley, W., Bloom, J., & Robbins, S. (2012). *Increasing persistence: Research-Based strategies for college student success.* San Francisco, CA: Jossey-Bass.

Habley, W., & McClanahan, R. (2004). *What works in student retention.* Iowa City, IA: ACT.

Habley, W., McClanahan, R., Valiga, M., & Burkum, K. (2010). *What works in student retention.* Iowa City, IA: ACT.

Hansford, B.C., & Hattie, J.A. (1982). The relationship between self and achievement/performance measures. *Review of Educational Research, 52*(1), 123-142.

Harackiewicz, J. M., Barron, K. E., Tauer, J. M., & Elliot, A. J. (2002). Predicting success in college: A longitudinal study of achievement goals and ability

measures as predictors of interest and performance from freshman year through graduation. *Journal of Educational Psychology, 94*(3), 562-575.

Harper, S. (2004). The influence of active learning on the college student departure process: Toward a revision of tinto's theory. *Berkeley Journal of Sociology, 48*(1), 89-107.

Harper, S. R., & Quaye, S. J. (2009). Beyond sameness, with engagement and outcomes for all. In S.R. Harper & S.J. Quaye (Eds.), *Student engagement in higher education: Theoretical perspectives and practical approaches for diverse populations* (pp. 1-15). New York, NY: Routledge.

Heckman, J., Stixrud, J., & Urzua, S. (2006). The effects of cognitive and noncognitive abilities on labor market outcomes and social behavior. *Journal of Labor Economics, 24*(3), 411-482.

Hernandez, J. C. (2000). Understanding the retention of Latino college students. *Journal of College Student Development, 41*(6), 575-588.

Hoffman, K., Llagas, C., & Snyder, T. (2003). *Status and trends in the education of Blacks.* Washington, D.C.: U.S. Department of Education, National Center for Education Statistics.

Holland, D., Lachicotte, W., Skinner, D., & Cain, C. (1998). *Identity and agency in cultural worlds.* Cambridge, MA: Harvard University Press.

Holland, D., & Lave, J. (2001). *History in person: Enduring struggles, contentious practice, intimate identities.* Santa Fe, NM: School of American Press & Oxford.

Howard, C. T. (2003). Culturally relevant pedagogy: Ingredients for critical teacher reflection. *Theory in Practice, 42*(3), 195-202.

Hu, S., & Kuh, G. (2002). Being (dis) engaged in educationally purposeful activities: The influences of student and institutional characteristics. *Research in Higher Education, 43*(5), 555-575.

Hull, C. (1932). The goal-gradient hypothesis and maze learning. *Psychological Review, 39*(1), 25.

Hurtado, S., Milem, J., Clayton-Pederson, A., & Allen, W. (1999). Enacting diverse learning environments: Improving the climate for racial/ethnic diversity in higher education. *ASHE-ERIC Higher Education Report, 26*(8). Washington D.C.

Hurtado, S., & Ponjuan, L. (2005). Latino educational outcomes and the campus climate. *Journal of Hispanic Higher Education, 4*(3), 235-251.

Jacoby, B. (2000). Why involve commuter students in learning? In M. Kramer (Series Ed.), & B. Jacoby (Vol. Ed.). *New directions for higher education: Number 109. Involving commuter students in learning* (pp. 3-12). San Francisco, CA: Jossey-Bass.

Jacoby, B., & Garland, J. (2005). Strategies for enhancing commuter student success. *Journal of College Student Retention: Research, Theory and Practice, 6*(1), 61-79.

Johnson, D. W. (1991). Cooperative learning: Increasing college faculty instructional productivity. *ASHE-ERIC Higher Education, Report No. 4. ASHE-ERIC Higher Education Reports.* Washington DC.

Johnson, R., & Onwuegbuzie, A. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher, 33*(7), 14-26.

Jones, J. (1997). *Prejudice and racism.* New York, NY: McGraw-Hill.

Judge, T., Higgins, C., Thoresen, C., & Barrick, M. (1999). The big five personality traits, general mental ability and career success across the lifespan. *Personnel Psychology, 52*(3), 621-652.

Keeling, R. (1999). A new definition of college emerges: Everything that happens to a (newly defined) student, in the context of a noisy visual 'datascape. *NASPA Forum, 20*(5), 4-5.

Kivetz, R., Urminsky, O., & Zheng, Y. (2006). The goal-gradient hypothesis resurrected: Purchase acceleration, illusionary goal progress, and customer retention. *Journal of Marketing Research, 43*(1), 39-58.

Knoell, D., & Medsker, L. (1964). *Factors affecting performance of transfer students from two-to four-year colleges: With implications for coordination and articulation.* Los Angeles, CA: Center for Study of Higher Education, University of California.

Krantz, D., & Kunreuther, H. (2007). Goals and plans in decision making. *Judgement and Decision Making, 2*(3), 137-168.

Krause, K. (2007). Social involvement and commuter students: The first-year student voice. *Journal of the First-Year Experience & Students in Transition, 19*(1), 27-45.

Kuh, G. (2001). Assessing what really matters to student learning: Inside the national survey of student engagement. *Change: The Magazine of Higher Learning, 33*(3), 10-17.

Kuh, G. (2003). What we're learning about student engagement from NSSE. *Change: The Magazine of Higher Learning, 35*(2), 24-32.

Kuh, G. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter.* Washington, D.C.: Association of American Colleges and Universities.

Kuh, G. (2009). What student affairs professionals need to know about student engagement. *Journal of College Student Development, 50*(6), 683-706.

Kuh, G. D., Cruce, T. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2008). Unmasking the effects of student engagement on college grades and persistence. *Journal of Higher Education, 79*(5), 540-563.

Kuh, G., Gonyea, R., & Palmer, M. (2001). The disengaged commuter student: Fact or fiction. *Commuter Perspectives, 27*(1), 2-5.

Kuh, G.D., Kinzie, J., Cruce, T., Shoup, R., & Gonyea, R. (2006). *Connecting the dots: Multi-faceted analyses of the relationships between student engagement results from the NSSE, and the institutional practices and conditions that foster student success.* Bloomington, IN: Indiana University, Center for Postsecondary Research.

Kuh, G., Kinzie, J., Schuh, J., & Whitt, E. (2005). *Student success in college: Creating conditions that matter.* San Francisco, CA: Jossey-Bass.

Kuh, G. D., Schuh, J. H., & Whitt, E. J. (1991). *Involving colleges: Successful approaches to fostering student learning and development outside the classroom.* San Francisco, CA: Jossey-Bass.

Kuh, G. D., & Whitt, E. J. (1988). *The Invisible Tapestry. Culture in American Colleges and Universities. ASHE-ERIC Higher Education, Report No. 1. ASHE-ERIC Higher Education Reports.* Washington D.C.

Lawrence, J., & Valsiner, J. (2003). Making personal sense an account of basic internalization and externalization processes. *Theory & Psychology, 13*(6), 723-752.

Lester, J., Leonard, J. B., & Mathias, D. (2013). Transfer student engagement: Blurring of social and academic engagement. *Community College Review, 41*(3), 202-222.

London, H. (1989). Breaking away: A study of first-generation college students and their families. *American Journal of Education, 97*(2), 144-170.

Maulding, W. S. , Peters, G. B., Roberts, J., Leonard, E., & Sparkman, L. (2012). Emotional intelligence and resilience as predictors of leadership in school administrators. *Journal of Leadership Studies, 5*(4), 20-29.

Maxwell, J. (1992). Understanding and validity in qualitative research. *Harvard Educational Review. 62*(3), 279-301.

Maxwell, J., & Mittapalli, K. (2004). Realism as a stance for mixed methods research. In A. Tashakkori and C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 145-167). Thousand Oaks, CA: Sage.

McCormick, A., & McClenney, K. (2012). Will these trees ever bear fruit?: A response to the special issue on student engagment. *Review of Higher Education, 35*(2), 307-333.

McEwen, M. (2003). The nature and uses of theory. In S.R. Komives, D.B. Woodard, Jr., & Associates (Eds.), *Student services: A handbook for the profession* (4th ed., pp. 203-233). San Francisco, CA: Jossey-Bass.

McNeely, J. (1937). *College student mortality.* Washington, D.C.: U.S. Government Printing Office.

Mertens, D. (2003). Mixed methods and the politics of human research: The transformative-emancipatory perspective. In A. Tashakkori and C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 135-164). Thousand Oaks, CA: Sage.

Miller, L., & Garcia, E. (2004). Better informing efforts to increase Latino student success in higher education. *Education and Urban Society, 36*(2), 189-204.

Mischel, W., & Ozlem, A. (2002). Self-regulation in a cognitive-affective personality system: Attentional control in the service of self. *Self and Identity, 1*(2), 113-120.

Morgan, W., & Streb, M. (2001). Building citizenship: How student voice in service-learning develops civic values. *Social Science Quarterly, 82*(1), 154-169.

Nelson, T. F., Bridges, B., Morelon-Quainoo, C., Williams, J., & Holmes, M. (2007). African American and Hispanic student engagement at minority

serving and predominantly White institutions. *Journal of College Student Development, 48*(1), 39-56.

Nelson Laird, T., Korkmaz, A., & Chen, P. S. D. (2008, April). How often is 'often' revisited: The meaning and linearity of vague quantifiers used on the National Survey of Student Engagement. *Paper presented at the Annual Meeting of the American Educational Research Association*, San Diego CA.

Nieto, S. (1994). Affirmation, solidarity, and critique: Moving beyond tolerance in multicultural. *Multicultural Education, 1*(4), 35-38.

Nixon, C. T., & Frost, A. G. (1990). The study habits and attitudes inventory and its implications for student success. *Psychological Reports, 66*(3c), 1075-1085.

Nora, A. (2004). The role of habitus and cultural capital in choosing a college: Transitioning from high school to higher education, and persisting in college among minority and non-minority students. *Journal of Hispanic Education, 3*(2), 180-208.

Nora, A., & Cabrera, A. (1996). The role of perceptions of prejudice and discrimination on the adjustment of minority students to college. *Journal of Higher Education, 67*(2), 119-148.

O'Brien, E. M., & Zudak, C. (1998). Minority-serving institutions: An overview. *New Directions for Higher Education, 1998*(102), 5-15.

Onwuegbuzie, A. (2000). *Expanding the framework of internal and external validity in quantitative research. Research in the schools, 10*(1), 71-90.

Orfield, G., Bachmeier, M. D., James, D. R., & Eitle, T. (1997). Deepening segregation in American public schools: A special report from the Harvard Project on School Desegregation. *Equity and Excellence in Education, 30*(2), 5-24.

Ortiz, A. M. (2004). Promoting the success of Latino students: A call to action. *New Directions for Student Services, 2004*(105), 89-97.

Ouimet, J., Carini, R., Kuh, G., & Bunnage, J. (2001). *Using focus groups to establish the validity and reliability of a college student survey.* Long Beach, CA: Association for Institutional Research.

Pace, C. (1984). *Measuring the quality of college student experiences: An account of the development and use of the college student experience questionnaire.* Los Angeles, CA: University of California at Los Angeles, Higher Education Research Institute.

Pajares, F., & Schunk, D. (2001). The development of academic self-efficacy. In A. Wigfield & J. Eccles (Eds.) *Development of achievement motivation* (pp. 16-29). San Diego, CA: Academic Press

Pantages, T., & Creedon, C. (1978). Studies of college attrition: 1950-1975. *Review of Educational Research, 48*(1), 49-101.

Parker, J., Duffy, J., Wood, L., Bond, B., & Hogan, M. (2005). Academic achievement and emotional intelligence: Predicting the successful transition from high school to university. *Journal of the First-Year Experience & Students in Transition, 17*(1), 67-78.

Pascarella, E. (1980). Student-faculty informal contact and college outcomes. *Review of Educational Research, 50*(4), 545-595.

Pascarella, E., Duby, P., & Iverson, B. (1983). A test and reconceptualization of a theoretical model of college withdrawal in a commuter institution setting. *Sociology of Education, 39*(5), 88-100.

Pascarella, E., & Terenzini, P. (1980). Predicting persistence and voluntary dropout decisions from a theoretical model. *Journal of Higher Education, 51*(1), 60-75.

Pascarella, E., & Terenzini, P. (1991). *How college affects students: Findings and insights from twenty years of research.* San Francisco, CA: Jossey-Bass.

Pascarella, E., & Terenzini, P. (2005). *How college affects students: A third decade of research.* San Francisco, CA: Jossey-Bass.

Pascarella, E. T. (2006). How college affects students: Ten directions for future research. *Journal of College Student Development, 47*(5), 508-520.

Pascarella, E. T., & Chapman, D. W. (1983). A multiinstitutional, path analytic validation of Tinto's model of college withdrawal. *American Educational Research Journal, 20*(1), 87-102.

Pascarella, E. T., Seifert, T. A., & Blaich, C. (2010). How effective are the NSSE benchmarks in predicting important educational outcomes? *Change: The Magazine of Higher Learning, 42*(1), 16-22.

Pascarella, E. T., Smart, J. C., & Ethington, C. A. (1986). Long-term persistence of two-year college students. *Research in Higher Education, 42*(1), 47-71.

Pascarella, E. T., & Terenzini, P. T. (1979). Student-faculty informal contact and college persistence: A further investigation. *Journal of Educational Research, 72*(4), 214-218.

Pascarella, E. T., & Terenzini, P. T. (1983). Predicting voluntary freshman year persistence/withdrawal behavior in a residential university: A path analytic validation of tinto's model. *Journal of Educational Psychology, 75*(2), 215-226.

Patton, M. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

Pike, G. (1999). The constant error of the halo in educational outcomes research. *Research in Higher Education, 40*(1), 61-86.

Piko, B. (2000). Perceived social support from parents and peers: Which is the stronger predictor of adolescent substance use? *Substance Use & Misuse, 35*(4), 617-630.

Porter, S. (2006). Institutional structures and student engagement. *Research in Higher Education, 47*(5), 521-558.

Porter, S. (2011). Do college student surveys have any validity. *Review of Higher Education, 35*(1), 45-76.

Pryor, J., Hurtado, S., DeAngelo, L., Blake, L., & Tran, S. (2009). *The American freshman: National norms fall 2009*. San Francisco, CA: University of California Press.

Pryor, J., Hurtado, S., Saenz, V., Santos, J., & Korn, W. (2007). *The American freshman: Forty year trends.* Los Angeles, CA: Higher Education Research Institute.

Punch, K. (2005). *Introduction to social research: Quantitative and qualitative approaches* (2nd ed.). London, England: Sage.

Rendon, L. (1994a). *A systematic view of minority students in educational institutions.* Paper presented at the Social Education Foundation Panel on Educational Opportunity and Postsecondary Desegregation, Austin, TX.

Rendón, L. (1994b). Validating culturally diverse students: Toward a new model of learning and student development. *Innovative Higher Education, 19*(1), 33-50.

Robbins, S., Allen, J., Casillas, A., Peterson, C., & Le, H. (2006). Unraveling the differential effects of motivational and skills, social, and self-management measures from traditional predictors of college outcomes. *Journal of Educational Psychology, 98*(3), 598-616.

Robbins, S. B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do pschological and study skill factors predict college outcomes? A meta-analysis. *Psychological Bulletin, 130*(2), 261-288.

Roth, (2004). Identity as dialectic: Re/making self in urban school. *Mind, Culture, and Activity, 11*(1), 48–69.

Rothert, M., Rovner, M., Rovner, D., Kroll, J., Breer, L., Talarczyk, G., . . . Wills. (1997). An educational intervention as decision support for menopausal women. *Research in Nursing and Health, 20*(5), 377-388.

Sackett, P., Schmidt, N., Ellingson, J., & Kabin, M. (2001). High-stakes testing in employment, credentialing and higher education: Prospects in a post-affirmative-action world. *American Psychologist, 56*(4) 302-318.

Sarantakos, S. (2005). *Social research* (3rd ed.). New York, NY: Palgrave Macmillan.

Schein, E. (2004). *Organizational culture and leadership.* San Francisco, CA: Jossey-Bass.

Schmitt, N., Billington, A., Keeney, J., Oswald, F. L., Pleskac, T., Sinha, R., et al. (2006). *Prediction of four-year college student performance using cognitive and noncognitive predictors and the impact on demographic status of admitted students.* East Lansing, MI: American Psychological Association.

Schuetz, P. (2008). Developing a theory-driven model of community college student engagement. *New Directions For Community Colleges, 2008*(144), 17-28.

Schuh, J. (1999). Examining the effects of scholarships on retention in a fine arts college. *Journal of College Student Retention, 1*(3) 193-202.

Schunk, D., & Zimmerman, B. (1998). Conclusions and Future Directions. In D. Schunk and B. Zimmerman (Eds.), *Self-regulated learning: From teaching to self-reflective practice* (pp. 225-235). New York, NY: Guilford Press.

Schunk, D.H., & Zimmerman, B. K. (1994). *Self-regulation of learning and performance: Issues and educational applications.* Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Sedlacek, W. (1983). Teaching minority students. *New Directions for Teaching and Learning, 1983*(16), 39-50.

Sedlacek, W. (1988). Institutional racism and how to handle it. *Health Pathways, 10*(9), 4-6.

Sedlacek, W. (2003). Alternative measures in admission and scholarship selection. *Measurement and Evaluation in Counseling and Development, 35*(4), 263-272.

Sedlacek, W. (2005). The case for noncognitive measures. In W. Camara & E. Kimmel (Eds.), *Choosing students: Higher education admissions tools for the 21st century*, (pp. 177-193). Mahwah, NJ: Lawrence Erlbaum & Associates, Inc.

Sedlacek, W. E. (2004a). *Beyond the big test: Noncognitive assessment in higher education.* San Francisco, CA: Jossey-Bass.

Sedlacek, W. E. (2004b). Why we should use noncognitive variables with graduate and professional students. *The Advisor: The Journal of the National Association of Advisors for the Health Professions, 24*(2), 32-39.

Sedlacek, W. E., & Brooks, G. C. (1976). *Racism in American education: A model for change.* Chicago, IL: Nelson-Hall.

Seibert, S. E., & Kraimer, M. L. (2001). The five-factor model of personality and career success. *Journal of Vocational Behavior, 58*(1), 1-21.

Sexton, V. (1965). Factors contributing to attrition college populations: Twenty-five years of research. *Personnel and Guidance Journal, 72*(2), 301-326.

Sfard, A., & Prusak, A. (2005). Telling identities: In search of an analytic tool for investigating learning as a culturally shaped activity. *Educational Researcher, 34*(4), 14-22.

Shah, J., & Kruglanski, A. W. (2003). When opportunity knocks: Bottom-up priming of goals by means and its effects on self-regulation. *Journal of Personality and Social Psychology, 84*(6), 1109.

Shaughnessy, M. F., Spray, K., Moore, J., & Siegel, C. (1995). Prediction of success in college calculus: Personality, scholastic aptitude test, and screening scores. *Psychological Reports, 77*(3f), 1360-1362.

Sirin, S. R. (2005). Socioeconomic status and academic achievement: a meta-analytic review of research. *Review of Educational Research, 75*(3), 417-453.

Smith, C. (2003). Research note: Religious participation and parental moral expectations and supervision of American youth. *Review of Religious Research, 44*(4), 414-424.

Spady, W. (1970). Dropouts from higher education: An interdisciplinary review and synthesis. *Interchange, 1*(1), 64-85.

Spady, W. G. (1971). Dropouts from higher education: Toward an empirical model. *Interchange, 2*(3), 38-62.

Sternberg, R. J. (1985). *Beyond IQ.* London: Cambridge University Press.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Newbury Park, CA: Sage.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Grounded theory procedures and techniques.* Thousand Oaks, CA: Sage.

Summerskill, J. (1962). Dropouts from college. In N. Sanford (Ed.), *The American college: A psychological and social interpretation of the higher learning* (pp. 627–657). New York, NY: John Wiley & Sons, Inc.

Swail, W., Cabrera, A., Lee, C., & Williams, A. (2005). *Pathways to the bachelor's degree for Latino students. Latino students and the educational pipeline, Part III.* Stafford, CT: Education Policy Institute Research Report.

Swail, W., Redd, K., & Perna, L. (2003). *Retaining minority students in higher education: A framework for success.* Washington, D.C.: The George Washington University, School of Education and Human Development.

Sweetman, D., Badiee, M., & Creswell, J. W. (2010). Use of the transformative framework in mixed methods studies. *Qualitative Inquiry, 16*(6), 441-454.

Tardy, C. (1985). Social support measurement. *American Journal of Community Psychology, 13*(2), 187-202.

Tashakkori, A., & Teddlie, C. (2003). *Handbook of mixed methods in social and behavioral research.* Thousand Oaks, CA: Sage.

Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches.* Thousand Oaks, CA: Sage.

Teddlie, C., & Stringfield, S. (1993). *Schools Make a difference: Lessons learned from a 10-year study of school effects.* New York, NY: Teachers College Press.

Tenhouse, A. (2002). Commuter students. *Encyclopedia of Education* (p. 451). New York, NY: MacMillan.

Teno, J., Stevens, M., Spernak, S., & Lynn, J. (1998). Role of written advance directives in decision making. *Journal of General Internal Medicine, 13*(7), 439-446.

Terenzini, P., Yaeger, P., Bohr, L., Pascarella, E., & Nora, A. (1997). *African American college students' experiences in HBCUs and PWIs and learning outcomes.* University Park, PA: National Center on Postsecondary Teaching, Learning, and Assessment.

Thomas, L., Kuncel, N., & Credé, M. (2007). Noncognitive variables in college admissions: The case of the noncognitive questionnaire. *Educational and Psychological Measurement, 97*(4), 635-657.

Tinto, V. (1975). Dropout from higher education: A Theoretical synthesis of recent research. *Review of Educational Research, 45*(1), 89-125.

Tinto, V. (1988). Stages of student departure: Reflections on the longitudinal character of student leaving. *Journal of Higher Education, 59*(4), 438-455.

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition.* Chicago, IL: University of Chicago Press.

Tinto, V. (2006). Research and practice of student retention: What next. *Junior College Student Retention, 8*(1), 1-19.

Tinto, V. (2012). *Completing college: Rethinking Institutional action.* Chicago, IL: University of Chicago Press.

Torres, V., Jones, S., & Renn, K. (2009). Identity development theories in student affairs: Origins, current status, and new approaches. *Journal of College Student Development, 50*(6), 577-596.

Tracey, T., & Sedlacek, W. (1984). Noncognitive variables in predicting academic success by race. *Measurement and Evaluation in Guidance, 16*(4), 172-178.

Tracey, T., & Sedlacek, W. (1988). A comparison of white and black student academic success using noncognitive variables: A LISREL analysis. *Research in Higher Education, 27*(4), 333-348.

Tracey, T., & Sedlacek, W. (1989). Factor structure of the noncognitive questionnaire-revised across samples of black and white college students. *Educational Psychological Measurement, 49*(3), 637-648.

Turner, C. S. (1994). Guests in someone else's house: Students of color. *Review of Higher Education, 17*(4), 355-370.

Urdan, T., Solek, M., & Schoenfelder, E. (2007). Students' perceptions of family influence on their academic motivation: A qualitative analysis. *European Journal of Psychology of Education, 22*(1), 7-21.

Valsiner, J. (1998). *The guided mind: A sociogenetic approach to personality.* Boston, MA: Harvard University Press.

Ward, T., & Commander, N. E. (2011). The power of student voices: An investigation of the enduring qualities of freshmen learning communities. *Journal of College Student Retention, 13*(1), 63-85.

Waxman, C. H., & Huang, Y. L. (1997). Classroom instruction and learning environment differences between effective and ineffective urban elementary schools for African American students. *Urban Education, 32*(1), 7-44.

Wicker, A. (2004). The relationship of demographic, aspirational, situational, employment, and commuting factors to commuter students' perceptions of mattering at a large public university (Doctoral dissertation). Retrieved from http://drum.lib.umd.edu/bitstream/1903/1569/1/umi-umd-1628.pdf

Wolf-Wendel, L., Ward, K., & Kinzie, J. (2009). A tangled web of terms: The overlap and unique contribution of involvement, engagement, and integration to understanding college student success. *Journal of College Student Development, 50*(4), 407-428.

Zhang, Y., Fishbach, A., & Dhar, R. (2007). When thinking beats doing: The role of optimistic expectations in goal-based choice. *Journal of Consumer Research, 34*(4), 567-578.

Zimmerman, B. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice, 41*(2), 64-70.

APPENDIX A

NONCOGNITIVE QUESTIONNAIRE

1. Your school email address: _____
2. Your sex is: Male Female
3. Your age is: _____ years.
4. Your father's occupation: _____
5. Your mother's occupation: _____
6. Your race is:

   ___Black (African American)

   ___White (not of Hispanic origin)

   ___Asian American (Pacific Islander)

   ___Hispanic (Latino)

   ___American Indian (Native American, Alaskan native)

   ___Other _____
7. How much education do you expect to get during your lifetime?

   ___ College, but less than a bachelor's degree

   ___ Bachelor's degree (B.A., B.S., etc.)

   ___ Master's Degree (M.A., M.S., etc.)

   ___ Doctoral or professional degree (Ph.D., J.D., M.D., etc.)

8. Please list three goals you have for yourself right now:

   1. _____

   2. _____

   3. _____

9. About 50 percent of university students typically leave before receiving a degree. If this should happen to you, what would be the most likely cause? Choose only one?

___ Absolutely certain I will obtain a degree
___ To accept a good job
___ To enter military service
___ It will cost more than my family can afford
___ Marriage
___ Disinterest in study
___ Lack of academic ability
___ Insufficient reading or study skills
___ Other

10. Please list three things you are proud of having done:

1. _____

2. _____

3. _____

Please indicate the extent to which you agree or disagree with each of the following items. Respond to the statements below with your feelings at present or your expectation of how things will be. Write your answer to the left of each item.

(1) Strongly Agree (2) Agree (3) Neutral (4) Disagree (5) Strongly Disagree

_____ 11. The University should use its influence to improve social conditions in state.

_____ 12. It should not be very hard to get a B (3.0) average at this school

_____ 13. I get discouraged easily when I try to do something and it doesn'twork.

_____ 14. I am sometimes looked up to by others.

_____ 15. If I run into problems concerning school, I have someone who would listen to me and help me.

_____ 16. There is no use in doing things for people; you only find that you get t taken advantage of in the long run.

_____ 17. In groups where I am comfortable, I am often looked to as a leader.

_____ 18. I expect to have a harder time than most students at this school.

_____ 19. Once I start something, I finish it.

_____ 20. When I believe strongly in something, I act on it.

_____ 21. I am as skilled academically as the average applicant to this school.

_____ 22. I expect I will encounter racism at this school.

_____ 23. People can pretty easily change me even though I thought my mind was already made up on the subject.

_____ 24. My friends and relatives **don't** feel I should go to college.

_____ 25. My family has always wanted me to go to college.

_____ 26. If course tutoring is made available on campus at no cost, I would attend regularly.

_____ 27. I want a chance to prove myself academically.

_____ 28. My high school grades **don't** really reflect what I can do.

_____ 29. Please list offices held and/or groups belonged to in high school or in your community:

_____

_____

_____

APPENDIX B

BEGINNING COLLEGE SURVEY OF STUDENT ENGAGEMENT

1. **When are you completing this Survey (Select only one)**
   a. Prior to the start of fall term classes
   b. During the first week of fall term classes
   c. After the first week of fall term classes

2. **From which type of high school did you graduate (Select only one)**
   a. Public
   b. Private, religiously affiliated
   c. Private, not religiously affiliated
   d. Home school
   e. Other (e.g., GED)

3. **What were most of your high school grades**
   a. A
   b. A-
   c. B+
   d. B
   e. B-
   f. C+
   g. C
   h. C or lower
   i. Grades not used
   j. Did you take the SAT and/or ACT
      i. Composite ACT score _____
      ii. Sat (possible range = 200-800)
         1. Critical Reading _____
         2. Mathematical Reasoning _____
         3. Writing _____

4. **During high school, how many of the following types of classes did you complete?**

Classes	0	1-2	3-4	5-6	7-8	9-10	11 or more
Advanced Placement (AP) Classes							
College/University courses for credit							

5. **During your last year of high school, about how many papers, reports, or other writing tasks of the following length did you complete?**

Up to 5 pages

None	1-2	3-5	6-10	11-15	16-20	More than 20

Between 6 and 10 pages

None	1-2	3-5	6-10	11-15	16-20	More than 20

11 pages or more

None	1-2	3-5	6-10	11-15	16-20	More than 20

6. **During your last year of high school, about how many hours did you spend in a typical 7-day week doing each of the following?**

Preparing for class (studying, reading, doing homework, etc.)

0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30

Working for Pay

0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30

Participating in co-curricular activities (organizations, school publications, student government, sports, etc.)

0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30

Relaxing and Socializing (time with friends, video games, TV or videos, keeping up friends online, etc.)

0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30

7. **During your last year of high school, of the time you spent preparing for class in a typical 7-day week, about how many hours were on assigned reading?**

0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30

8. During your last year of high school, about how often did you do the following?

	Very often	Often	Sometimes	Never
Came to class without completing readings or assignments				
Prepared 2 or more drafts of a paper or assignment before turning it in				
Reached conclusion based on your own analysis of numerical information (numbers, graphs, statistics, etc.)				
Used numerical information to examine a real-word problem or issue (unemployment, climate change, public health, etc.)				
Evaluated what others have concluded from numerical information				
Identified key information from reading assignments				
Reviewed your notes after class				
Summarized what you learned in class from course materials				
Included diverse perspective (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments				
Examined the strengths and weaknesses of your own views on a topic or issue				
Tried to understand someone else's views by imagining how an issue looks from his or her perspective				

9. During your high school years, how involved were you in the following activities at your school or elsewhere?

	Very much	Quite a bit	Some	Very little	Not at all
Performing or visual arts programs (band, chorus, theatre, art, etc.)					
Athletic teams (varsity, JV, club sports, etc.)					
Student government					
Publications (student newspaper, yearbook, etc.)					
Academic clubs or honor societies					
Vocational clubs (business, health, technology, etc.)					
Religious youth groups					
Community service or volunteer work					

10. During your last year of high school, to what extent did your courses challenge you to do your best work?

Not at all							Very much
0	1	2	3	4	5	6	7

11. During the coming school year, about how many hours do you expect to spend in a typical 7-day week doing each of the following?

Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)

0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30

Working for Pay on-or-off campus

0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30

Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.

0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30

Relaxing and Socializing (time with friends, video games, TV or videos, keeping up friends online, etc.)

0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30

12. During the coming school year, of the time you expect to spend preparing for class in a typical 7-day week, about how many hours will be on assigned reading?

0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30

13. During the coming school year, about how often do you expect to do each of the following?

	Very often	Often	Sometimes	Never
Ask another student to help you understand course material				
Explain course material to one or more students				
Prepare for exams by discussing or working through course material with other students				
Work with other students on course projects or assignments				
Talk about career plans with a faculty member				
Work with a faculty member on activities other than coursework (committees, student groups, etc.)				
Discuss your academic performance with a faculty member				
Discuss course topics, ideas, or concepts with a faculty member outside of class				
Prepare two or more drafts of a paper or assignment before turning it in				
Come to class without completing readings or assignments				

14. During the coming school year, about how often do you expect to have discussions with people from the following groups?

	Very often	Often	Sometimes	Never
People of a race/ethnicity other than your own				
People from an economic background other than your own				
People with religious beliefs other than your own				
People with political views other than your own				

15. During the coming school year, how certain are you that you will do the following?

	Not certain at all					Very Certain
	1	2	3	4	5	6
Study when there are more interesting things to do						
Find additional information for course assignments when you don't understand the material						
Participate regularly in course discussions, even when you don't feel like it						
Ask instructors for help when you struggle with course assignments						
Finish something you have started when you encounter challenges						
Stay positive, even when you do poorly on a test or assignment						

16. During the coming school year, how difficult do you expect the following to be?

	Not at all difficult					Very difficult
	1	2	3	4	5	6
Learning new course material						
Managing your time						
Paying college expenses						
Getting help with school work						
Making new friends						
Interacting with faculty						

17. During the coming school year, about how many papers, reports, or other writing tasks of the following length do you expect to complete?

Up to 5 pages

None	1-2	3-5	6-10	11-15	16-20	More than 20

Between 6 and 10 pages

None	1-2	3-5	6-10	11-15	16-20	More than 20

11 pages or more

None	1-2	3-5	6-10	11-15	16-20	More than 20

18. How prepared are you to do the following in your academic work at this institution?

	Not at all prepared					Very prepared
	1	2	3	4	5	6
Write clearly and effectively						
Speak clearly and effectively						
Think critically and analytically						
Analyze numerical and statistical information						
Work effectively with others						
Use computing and information technology						
Learn effectively on your own						

19. How many courses are you taking for credit this fall term?

0	1	2	3	4	5	6	7 or more	uncertain

Of these courses, how many are entirely online?

0	1	2	3	4	5	6	7 or more	uncertain

20. Which of the following sources are you using to pay your education expenses (tuition, fees, books, room and board, etc.)?

	Using	Not using	Not sure
Support from parents or relatives			
Loans			
Grants or scholarships			
Job or personal savings			
Other			

21. What do you expect most of your grades will be during the coming year (Select only one)

A	A-	B+	B	B-	C+	C	C- or lower	Grades not used

22. Do you expect to graduate from this institution?

No	Yes	Uncertain

23. Do you know what your major will be?

No	Yes	If yes, list major(s)

24. Are you (or will you be) a full-time student this fall term?

Yes	No

25. How many of your close friends will attend this institution during the coming year?

None	1	2	3	4 or more

26. This institution was your:

First choice	Second choice	Third choice	Fourth choice	Fifth choice or lower

27. What is the highest level of education completed by either of your parents (or those who raised you)?

a. Didn't finish high school
b. High school diploma or GED
c. Attended college but did not complete degree
d. Associates degree (A.A., A.S., etc.)
e. Bachelor's degree (B.A., B.S.., etc.)
f. Master's Degree (M.A., M.S., etc.)
g. Doctoral or professional degree (Ph.D., J.D., M.D., etc.)

28. In driving time, about how far is this school from the home where you lived during your last year of high school?

Less than 1 hour	At least 1, less than 2 hours	At least 2, less than 4 hours	At least 4, less than 6 hours	At least 6, less than 8 hours	8 hours or more

29. Which of the following best describes where you will be (or are) living during the coming school year?

Dorm/campus housing	Within walking distance to campus	Farther than walking distance to campus	None of the above

APPENDIX C

NATIONAL SURVEY OF STUDENT ENGAGEMENT

1. During the current school year, about how often have you done the following?

Response options: Very often, Often, Sometimes, Never

a. Asked questions or contributed to course discussions in other ways
b. Prepared two or more drafts of a paper or assignment before turning it in
c. Come to class without completing readings or assignments
d. Attended an art exhibit, play or other arts performance (dance, music, etc.)
e. Asked another student to help you understand course material
f. Explained course material to one or more students
g. Prepared for exams by discussing or working through course material with other students
h. Worked with other students on course projects or assignments
i. Gave a course presentation

2. During the current school year, about how often have you done the following?

Response options: Very often, Often, Sometimes, Never

a. Combined ideas from different courses when completing assignments
b. Connected your learning to societal problems or issues
c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments
d. Examined the strengths and weaknesses of your own views on a topic or issue
e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective
f. Learned something that changed the way you understand an issue or concept
g. Connected ideas from your courses to your prior experiences and knowledge

3. During the current school year, about how often have you done the following?

Response options: Very often, Often, Sometimes, Never

a. Talked about career plans with a faculty member
b. Worked with a faculty member on activities other than coursework (committees, student groups, etc.)
c. Discussed course topics, ideas, or concepts with a faculty member outside of class
d. Discussed your academic performance with a faculty member

4. During the current school year, how much has your coursework emphasized the following?

Response options: Very much, Quite a bit, Some, Very little

a. Memorizing course material
b. Applying facts, theories, or methods to practical problems or new situations
c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts
d. Evaluating a point of view, decision, or information source
e. Forming a new idea or understanding from various pieces of information

5. During the current school year, to what extent have your instructors done the following?

Response options: Very much, Quite a bit, Some, Very little

a. Clearly explained course goals and requirements
b. Taught course sessions in an organized way
c. Used examples or illustrations to explain difficult points
d. Provided feedback on a draft or work in progress
e. Provided prompt and detailed feedback on tests or completed assignments

6. During the current school year, about how often have you done the following?

Response options: Very often, Often, Sometimes, Never

a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)
b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)
c. Evaluated what others have concluded from numerical information

7. During the current school year, about how many papers, reports, or other writing tasks of the following length have you been assigned? (Include those not yet completed.)

Response options: None, 1-2, 3-5, 6-10, 11-15, 16-20, More than 20 papers

a. Up to 5 pages
b. Between 6 and 10 pages
c. 11 pages of more

8. During the current school year, about how often have you had discussions with people from the following groups?

Response options: Very often, Often, Sometimes, Never

a. People of a race or ethnicity other than your own
b. People from an economic background other than your own
c. People with religious beliefs other than your own
d. People with political views other than your own

9. During the current school year, about how often have you done the following?

Response options: Very often, Often, Sometimes, Never

a. Identified key information from reading assignments
b. Reviewed your notes after class
c. Summarized what you learned in class or from course materials

10. During the current school year, to what extent have your courses challenged you to do your best work?

Response options: 1=Not at all to 7=Very much

11. Which of the following have you done or do you plan to do before you graduate?

Response options: Done or in progress, Plan to do, Do not plan to do, Have not decided

a. Participate in an internship, co-op, field experience, student teaching, or clinical placement
b. Hold a formal leadership role in a student organization or group
c. Participate in a learning community or some other formal program where groups of students take two or more classes together
d. Participate in a study abroad program
e. Work with a faculty member on a research project
f. Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.)

12. About how many of your courses at this institution have included a community-based project (service-learning)?

Response options: All, Most, Some, None

13. About how many hours do you spend in a typical 7-day week doing the following?

Response options: 0, 1-5, 6-10, 11-15, 16-20, 21-25, 26-30, More than 30 (Hours per week)

a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)
b. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)
c. Working for pay **on campus**

d. Working for pay **off campus**
e. Doing community service or volunteer work
f. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)
g. Providing care for dependents (children, parents, etc.)
h. Commuting to campus (driving, walking, etc.)

14. Of the time you spend preparing for class in a typical 7-day week, about how many hours are on *assigned reading*?

Response options: 0, 1-5, 6-10, 11-15, 16-20, 21-25, 26-30, More than 30 (Hours per week)

15. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

Response options: Very much, Quite a bit, Some, Very little

a. Writing clearly and effectively
b. Speaking clearly and effectively
c. Thinking critically and analytically
d. Analyzing numerical and statistical information
e. Acquiring job- or work-related knowledge and skills
f. Working effectively with others
g. Developing or clarifying a personal code of values and ethics
h. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)
i. Solving complex real-world problems
j. Being an informed and active citizen

16. How would you evaluate your entire educational experience at this institution?

Response options: Excellent, Good, Fair, Poor

17. If you could start over again, would you go to the *same institution* you are now attending?

Response options: Definitely yes, Probably yes, Probably no, Definitely no

19. Thinking about this current academic term, are you a full-time student?

Response options: Yes, No

20a. How many courses are you taking for credit this current academic term?

Response options: 0, 1, 2, 3, 4, 5, 6, 7 or more

20b. Of these, how many are *entirely online*?
Response options: 0, 1, 2, 3, 4, 5, 6, 7 or more

21a. How many majors do you plan to complete? (Do not count minors.)
Response options: One, More than one

21b. [If answered "One"] **Please enter your major or expected major:**
[If answered "More than one"] **Please enter up to two majors or expected majors (do not enter minors):**

22. What have most of your grades been up to now at this institution?
Response options: A, A-, B+, B, B-, C+, C, C- or lower

23. Did you begin college at this institution or elsewhere?
Response options: Started here, Started elsewhere

24. Since graduating from high school, which of the following types of schools have you attended *other than* the one you are now attending? (Select all that apply.)
Response options: Vocational or technical school, Community or junior college, 4-year college or university other than this one, None, Other

25. What is the highest level of education completed by either of your parents (or those who raised you)?
Response options: Did not finish high school, High school diploma or G.E.D., Attended college but did not complete degree, Associate's degree (A.A., A.S., etc.), Bachelor's degree (B.A., B.S., etc.), Master's degree (M.A., M.S., etc.), Doctoral or professional degree (Ph.D., J.D., M.D., etc.)

APPENDIX D

INTERVIEW PROTOCOL

CONSENT FORMS FILLED OUT BEFORE AND COPY PROVIDED TO PARTICIPANTS
GROUP BEGINS.

Good morning/afternoon. Thank you for taking the time to join our discussion as part of the first year survey here at [NAME REDACTED]. Today is [INSERT DAY] November [INSERT DATE], 2013.
My name is Amir Law; I'll be leading the discussion today. This is, _____ my assistant for the day. I'm conducting research on the personal on the relationship between your personal characteristics and your academic and social involvement during your first semester. Historically, schools have used students' high school test scores and grade point averages to determine how involved students they will be. However, I think there is more to the puzzle. The answers you've provided on the surveys and our discussion today will help shed more light on those key personal characteristics.

We want to talk with you about eight specific characteristics/experiences and the role they've played in your involvement this semester academically and socially. The eight characteristics are: Positive Self-concept, realistic self-appraisal, long-term goals, navigating the system or handling racism, presence of a strong support person, leadership experience, community service experience, and non-traditional knowledge). For each characteristic I will ask and encourage you to directly relate it to how it has or has not contributed to your first semester engagement.

Before we begin, let me suggest some things to make our discussion more productive. Because we'll be recording for an accurate record, it is important that you speak up and that you only speak one at a time. We don't want to miss any of your comments. Please refrain from using your name or other's names, in this way, we will maintain your confidentiality. No reports will link what you say to your name or the institution. In addition, we ask that you also respect the confidentiality of everyone here. Please don't repeat who said what when you leave this room.

During the two hours we'll be here, I will ask you questions, and I will listen to what you have to say. While I may have follow up questions, I will not participate in the discussion. So please, feel free to respond to each other and to speak directly to others in the group. However, you are also free to stop at any time and can refuse to answer any question.
We want to hear from all of you. We're interested in both majority and minority viewpoints, common and uncommon experiences. So I may sometimes act as a

traffic cop by encouraging someone who has been quiet to talk, or by asking someone to hold off for a few minutes.
If it is OK with you, we will turn on the recorder and start now. [TURN ON RECORDER]
This student focus group is being conducted to satisfy a requirement for the educational leadership doctoral program at California State University Fullerton. This focus group is occurring on [DATE] and is being conducted by Amir Law and assisted by [INSERT ASSISTANT'S NAME].

We are starting at [INSERT START TIME].

A. Let's begin with introductions.
    i. Please tell us what you're intended major is, your career goals, and one way college has been what you've expected.
B. (Positive Self-concept) Now that we know a little about you, let's talk about confidence. Compared to when you started this semester, where's your confidence level in regard to finishing this year? Graduating?
    i. If low
        a. Why do you think that is?
        b. Are there specific things that have happened?
        c. How has the decreased confidence affected your semester?
    ii. If high
        a. Why do you think that is?
        b. Are there specific things that have happened?
        c. How has the increased confidence affected your semester?
C. (Self-appraisal) Let's talk about graduation. This is a two part question: Before you started school this semester, how many years do you plan on taking to graduate? What effect has that had on your first semester involvement academically and socially?
D. (Long-term goals) Now that you've shared little about your graduation plans, let's talk a little bit about your other goals. Do you have a goal you would like to achieve in 3-5 years?
    i. Goal – What role (if any) has having that goal played in your involvement this semester?
        i. Why do you think that is/isn't?
        ii. What role does identifying goals play in your day-to-day life?
    ii. No Goal – What role (if any) has that played in your involvement this semester?
        i. Why do you think that is/isn't?
        ii. What role does identifying goals play in your day-to-day life?

E. (Support Person) I'm interested in learning more about the role of those supportive people in your life. Think of a person who supported or encouraged you to pursue college:
    i. Had a person: what effective has having that person had on your first semester?
    ii. Did not have a person: What affect (if any) has that had on your first semester?
F. (Navigating the system or handling racism Let's switch gears a bit and talk about what could be a hot button issue, what effect do you think a person's race or ethnicity has on their ability to do well academically and socially in high school?
    i. How (if at all) did your race/ethnicity affect your ability to do well in high school?
    ii. How (if at all) did that experience prepare you to do well academically and socially this semester?
G. (Leadership) This next question will give you an opportunity to discuss your leadership experiences during high school and the role those experiences have played during your time here at the University. Have you identified a leadership experience? Tell me a little about that experience and the role it has played in your academic performance this semester.
H. (Community Service) We (educators and people running universities) are realizing that a person's experience serving or volunteering in the community plays a role in student success. This is another two-part question, what is your involvement volunteering or serving the community where you live and have those experiences played a role in how you've done academically and getting involved this semester?
I. (Non-Traditional Knowledge) Are we all familiar with the terms street smarts and book smarts? (Explain if not). So, let's talk about that a little. Has what you've learned outside of the classroom, helped you in your classroom performance and being involved on campus?
    i. What are those specifics learning experiences?
J. Finally, as I told you at the beginning, the purpose of this study is to understand the relationship between your personal characteristics and your academic and social involvement here at the university. With that in mind, is there anything we left out or something else you would like to share?
K. This focus group is one of a series we are holding at your institutions, so any suggestions you could make for improving it would be very helpful.

Thank you again for taking the time to participate in this discussion.

We are ending at [INSERT END TIME].

APPENDIX E

CONSENT FORM (ONLINE SURVEY)

Dear Student:

My name is Amir A. Law. I am a graduate student under the direction of Dr. Maria Oropeza at California State University, Fullerton (CSUF).

I am conducting a study on the relationship between first-year students' personal characteristics and how involved you plan to be, academically and socially. The personal characteristics I am studying are:

- Positive self-concept
- Realistic self-appraisal
- Navigating the system
- Availability of a strong support person
- Preference for long-range goals
- Successful leadership experience
- Demonstrated community service
- Knowledge in an acquired field

I am requesting your participation in my study because you are a first-year student. Your participation will involve completing this survey and an additional, follow-up survey in approximately 8 weeks. Each survey will take approximately 30 minutes to complete. The questions include demographic information, information on personal characteristics, and how much you plan to be involved socially and academically this year.

Personal identifiable information will be collected in order to group your surveys together. However, participant identity will be protected by numerically coding each of the returned surveys. When reporting, your name will not be connected with your surveys. The responses will be seen only by the principal researcher who will then present a summary of the results.

Confidentiality will be provided to the extent allowed by law. All survey files collected for this study will be kept in a locked file cabinet and on a password-protected computer at the home office of the principal researcher. Data will be kept indefinitely by the primary researcher for use in additional studies and publications.

This protocol contains no foreseeable risks. At any point you may choose not to answer any question that makes you feel uncomfortable. Your participation is voluntary and you are free to withdraw from participation at any time without suffering penalty or loss of benefits or services you may otherwise be entitled to.

The researcher does not have a conflict of interest relating to results of this study. If you have additional questions please contact me at . You may also contact my faculty advisor, Dr. Maria Oropeza, at moropeza@fullerton.edu. For any questions concerning your rights as a research subject, please contact the CSUF Institutional Review Board (IRB) at 657-278-7640.

Participants must be at least 18 years old to participate. By completing this survey, you are agreeing to participate in this project.

I have carefully read and/or I have had the terms used in this consent form and their significance explained to me. By clicking on the link below I agree that I am at least 18 years of age and agree to participate in this project.

Link to Survey

APPENDIX F

CONSENT FORM (INTERVIEW)

Dear Student:

My name is Amir A. Law. I am a graduate student under the direction of Dr. Maria Oropeza at California State University, Fullerton (CSUF).

I am conducting a study on the relationship between your personal characteristics and how involved you have been this semester, academically and socially. The personal characteristics I am studying are:

- Positive self-concept
- Realistic self-appraisal
- Navigating the system
- Availability of a strong support person
- Preference for long-range goals
- Successful leadership experience
- Demonstrated community service
- Knowledge in an acquired field.

I am requesting your participation because you are a first-year student who has previously completed two surveys connected with this study. I will be conducting focus groups with first-year students. A focus group is a small-group discussion on general topics. The topics to be discussed are the personal characteristics mentioned above and how involved you have been this semester academically and socially. The group meeting will last about 60 to 90 minutes and will be audio-recorded.

This protocol contains no foreseeable risks. Confidentiality will be provided to the extent allowed by law. Your name will not be used in the focus group. After the focus group meeting, the audio-recorded responses will be heard only by the principal researcher who will then present a summary of the results.

Research records will be kept in a locked file cabinet and on a password-protected computer at the home office of the principal researcher. Data will be kept indefinitely by the primary researcher for use in additional studies and publications.

At any point you may choose not to answer any question that makes you feel uncomfortable. Your participation is voluntary and you are free to withdraw from participation at any time without suffering penalty or loss of benefits or services you may otherwise be entitled to.

The researcher does not have a conflict of interest relating to results of this study.

If you have additional questions please contact me at amir.law@csu.fullerton.edu. You may also contact my faculty advisor, Dr. Maria Oropeza, at moropeza@fullerton.edu. For any questions concerning your rights as a research subject, please contact the CSUF Institutional Review Board (IRB) at 657-278-7640.

I have carefully read and/or I have had the terms used in this consent form and their significance explained to me. By signing this consent form, I agree that I am at least 18 years of age and agree to participate in this project.

Participant's Name: _____
Signature: _____