ABSTRACT


The purpose of this study was to examine the level of student engagement for undergraduate students with and without psychological disabilities. George Kuh (2009) examined the benefits and impact of student engagement in supporting retention, student success and enhancing the overall collegiate experience. The study provides an analysis of the level of engagement according to the four engagement indicators as identified and assessed by the National Survey for Student Engagement (NSSE). These themes are academic challenge, learning with peers, experiences with faculty, campus environment to also include high-impact practices. This study compares an analysis of the level of engagement for students with psychological disabilities as compared with their non-identified peers overall and by institution.

Students with disabilities continue to enroll in institutions of higher education and are considered an underrepresented population. Many students, especially those with psychological disabilities often encounter unwelcoming environments upon entering many institutions and may not feel connected to the campus community. In order to create engaging, inclusive and supportive environments for all students, institutions should be committed to minimizing barriers and ensuring accessibility in every aspect of the student experience. Determining the level of engagement or the lack thereof is one intentional way to understand this particular diverse group of students in order to inform institutions on ways to create and implement intentional ways to support meaningful engagement and success for all students.
THE IMPACT OF STUDENT ENGAGEMENT FOR UNDERGRADUATE STUDENTS
WITH PSYCHOLOGICAL DISABILITIES

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THE IMPACT OF STUDENT ENGAGEMENT FOR UNDERGRADUATE STUDENTS WITH PSYCHOLOGICAL DISABILITIES

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To the many students, both in K-12 and in higher education that I have been able to teach, counsel, advise, support, advocate for, encourage and inspire. You are the foundation of my passion and purpose for this work.
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CHAPTER 1: INTRODUCTION

Background of the Study

Within the United States there are increasing numbers of students with identified
disabilities who are attending and enrolling in colleges and universities (Hall & Belch, 2000).
For this current study, a disability is defined as a physical or mental condition that causes
functional limitations that substantially limit one or more major life activities, including
mobility, communication (seeing, hearing, speaking), and learning (Americans with Disabilities
Act, 2008). Eleven percent of college students have a disability (National Center for Education
Statistics, 2011). Disabilities categories include learning disabilities, physical and mobility,
hearing and visual impairment, autism spectrum disorders and psychological/psychiatric
disabilities. One of the fastest-growing populations of disability among college students is
psychological disabilities (Belch, 2011). Psychological disabilities include bipolar disorder,
anxiety disorders and borderline personality disorders, among others (Kampsen, 2009). Belch
(2011) notes are challenges exist in “service delivery, support, policy development and
implementation, retention and successful integration into the campus community are distinct for
this subpopulation” (p. 74). Because of the unique needs of this population, a comprehensive
understanding to support the needs of these students in not universally understood (Belch, 2011).
With appropriate treatment and support, students with psychological disabilities can have the
opportunity to develop their talents and reach their full potential, however these disabilities are
least understood and least academically supported on campus (Megivern, Pellerito, & Mowbray,
2003).

Success in the K-12 system brought about by legislation such as the Individuals with
Disabilities Education Act (IDEA) and the use of individualized education plans have made
higher education possible and more accessible for student with disabilities (Wolanin & Steele, 2004). Even with the passage of IDEA and ADA students with disabilities often face critical challenges adjusting to postsecondary school and have a unique set of needs as they transition (Brinckerhoff, 1996). The impact of that change in philosophy often sets students up to have unrealistic expectations of the role of the disability services provider in the college setting. With the change in the level and frequency and support coupled with the student’s presenting challenges, a successful transition may be difficult of many students with disabilities. In fact, 86% of students with psychological disabilities withdraw from college (Collins & Mowbray, 2005). College students with disabilities have lower retention rates and often take longer to complete their degree programs. Additionally these students have lower degree completion rates according to Wessel, Jones, Markle, and Westfall (2009). There is evidence that indicates that students with disabilities have poorer academic performance in higher education settings than do students without disabilities (Wessel et al., 2009).

Under the Americans with Disabilities Act of 1990, colleges and universities must provide reasonable accommodations to ensure equal access to the educational environment for all students. Given the prevalence and diversity of disabilities among students, providing an inclusive environment along with reasonable accommodations and services is both a necessary goal and a worthy challenge. As a goal of Lumnia’s 2015 Challenge from the White House, graduating intellectually capable students who happen to also have disabilities can assist in realizing these goals. By way of challenge, however, with disabilities students may be at a disadvantage in engaging in the college experiences and persisting to degree completion. Contributing factors that impact students with disabilities and their ability to engage and persist to graduation include challenges with academic, personal and social skills need to cope with the
demands of higher education, financial, social, psychological and environmental supports, academic accommodations, lack of self-advocacy skills, insufficient preparation for college and lack of fundamental programs and services to support students with disabilities (Tagauyna, Stodden, Chang, Zeleznik & Whelley, 2005). Quaye and Harper (2015) indicate that students with disabilities, like all students require both “academic and co-curricular opportunities for engagement in order to optimize their growth and success in college” (p. 191). Students with psychological disabilities face an array of barriers to success that are often associated with their disability. Some of these barriers include social isolation, withdrawal and academic failure, which often exacerbate the symptoms of their psychological disabilities. The negative impact of these barriers often result in challenges with “learning, academic performance, social integration and retention (Schwartz, 2002). Creating an inclusive environment that engages all students is a way to support this population in reaching their goal of persisting to graduation at rates comparable to their non-identified peers.

**Problem Statement**

Universities are paying more attention to essential issues that enhance student success. Given the association between student engagement and graduation rates, being able to retain already enrolled students by deepening their engagement with their college experience can aid towards the attainment of this national goal. Student engagement is an integral part of a quality education. It has a critical role in creating many desirable outcomes such as student learning, academic performance and persistence (Astin, 1993; Hu & Kuh, 2003). Students with disabilities often “encounter specific barriers that impede their academic and social engagement” (Nichols & Quaye, 2009). Census data revealed that 16 million individuals have a psychological disability (U.S. Census Bureau, 2006), while another source indicates that approximately one in four
Americans (age eighteen and older) has a mental disorder, which is often synonymous with the term psychological disability (National Institute of Mental Health, 2010). With the increase of the prevalence for this condition, estimates indicate that students with psychological disabilities represent 15 to 20% of the population (Rickerson, Souma, & Burgstahler, 2003). These students are often considered the “forgotten minority” of student affairs practice in higher education” (Junco & Salter, 2004, p. 263). Indeed students with disabilities commonly report feelings of alienation and isolation which is compounded by other students who consciously or unconsciously keep their distance (Nichols & Quaye, 2009). Campuses should provide meaningful engagement so that students can feel a sense of connectedness to the collegiate experience and environment. Inclusion implies that “individuals are active members of a work and learning environment” (Kalivoda, 2009, p. 3). In order for campus to achieve inclusion and integration for students with psychological disabilities, campus constitutions must be strategic in sharing a value system and then taking action that communicates and demonstrates a core value of inclusivity for all individuals. The challenges many institutions face is engaging all students to include underrepresented populations such as individuals with disabilities. From a student affairs and higher education perspective, inclusion and integration refer to a sense of belongingness, connectedness and full, meaningful participation in the college experience. At a fundamental level “inclusion implies that individuals are active members of a work and learning environment” (Kalivoda, 2009, p. 3). In order to achieve inclusion and integration for students with psychological disabilities, campus constituents should align thoughts, ideas and actions plans with theory that support student development in order to impact practice.
Statement of Purpose

The purpose of this study is to examine the level of student engagement for undergraduate students with psychological disabilities. George Kuh (2009) examined the benefits and impact of student engagement in supporting retention, student success and enhancing the overall collegiate experience. The study will examine the level of engagement according to the four engagement indicators as identified and assessed by the National Survey for Student Engagement (NSSE). These themes are academic challenge, learning with peers, experiences with faculty, campus environment to also include high-impact practices. This study will compare an analysis of the level of engagement for students with psychological disabilities as compared with their non-identified peers overall and by institution.

Significance of the Study

Research indicates that students with disabilities are a “rapidly growing, yet historically underrepresented population in postsecondary education” (Brown, Broido, Stygles, Bronkema, 2015, p. 187). Hall and Belch (2000) note that historically underrepresented groups share a common experience, which is being faced with an unwelcoming environment upon entering many institutions. Ableism, which is the oppression of people with disabilities, plays a significant role in the way students with and without disabilities experience the educational environment because “by assuming one normative way to do things (such as move, speak, learn) and the like, society privileges those who carry out these functions as prescribed and oppresses those who use other methods” (Evans, Forney, Guido, Patton, & Renn, 2010, p. 242). In order to create engaging environments that provide an inclusive and supportive environment for all students, institutions should be committed to “identifying and addressing ways in which ableism shapes the experiences of members of the campus communities” (Brown et al., 2015, p. 187).
Determining the level of engagement or the lack thereof is one intentional way to understand this particular diverse group of students in order for institutions to create and facilitate intentional ways to engage and support the success of all students.

**Theoretical Framework**

The theoretical framework of this study is based on student engagement as described by George Kuh. The operational definition is borrowed from Kuh, Kinzie, Buckley, Bridges and Hayek (2007) which indicates that 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. Additionally the meaning and applications of this definition of student engagement have evolved over time to represent increasingly complex understandings of the relationships between desired outcomes and the amount of time and effort students invest in their other educationally purposeful activities (Kuh et al., 2007).

According to Kinzie and Kuh (2004) there are three dimensions of engagement, which include affect, cognition and behavior. To support Kuh’s (2009) definition of engagement, various scholars have contributed to different aspects of student engagement to include the following aspects: time on task, quality of effort and involvement. There are also various outcomes associated with this level of engagement to include cognitive development (Astin, 1993), psychological development, self-esteem and locus of control (Bandura, Millard, Peluso, & Ortman, 2000), moral and ethical development (Jones & Watt, 1999) and persistence (Berger & Milem, 1999).

Student engagement is more than just “an internal static state, meaning the individual experience is embedded within the socio-cultural context and shown as influenced by
characteristics of both the student and the institution” (Kahu, 2013, p. 766). Kahu (2013) noted that a “key strength of envisioning student engagement in this way acknowledges the lived reality of the individual, while not reducing engagement to just that” (p. 766). The entire campus community, to include faculty and student affairs educators at the helm must “foster the conditions that enable diverse populations of students to be engaged” (Quaye & Harper, 2015, p. 5). This engagement includes undergraduate students with psychological disabilities.

**Overview of the Methodology**

This study was designed to gain an understanding of the level of engagement for undergraduate students with psychological disabilities utilizing a secondary data analysis of the National Survey of Student Engagement (NSSE). The National Survey of Student Engagement (NSSE), is an instrument developed by Kuh which has been used to collect data from approximately five million undergraduates at more than 1,500 different college and universities since 2000. It is constructed of ten engagement indicators within four engagement themes to which are academic challenge, learning with peers, experiences with faculty, campus environment to also include high impact practices (National Survey of Student Engagement [NSSE], 2010). The high impact practices as defined by NSSE are participation in a practicum or internship, involvement in community service or volunteer work, participation in a learning community, research with faculty, study abroad or completing a culminating Senior Captone or Project. Kuh, Kenzie, Buckley, Bridges, B., & Hayek, (2006). indicate that “student engagement in the activities associated with each NSSE indicator is considered educationally purposeful, as it leads to deep levels of learning and the production of enduring and measurable gains and outcomes (p. 49). The purpose of the NSSE was to determine the level of engagement of undergraduate students in the first year and senior year in order to inform educational practices at
the institution. The survey does not access student learning outcomes, however it does provide critical feedback for institutions to ensure students have opportunities for meaningful engagement to support retention and graduation rates. These opportunities for engagement provide students intentional experiences to support their holistic development and student success. Additionally, using a mixed methods research design with the embedded perspective, the qualitative component of the study involved an open-ended focus group interview with of thirteen students with and without psychological disabilities. This provided a qualitative data to support the primary data collected from the secondary data analysis from NSSE.

This study compared the NSSE data from two institutions within a southeastern state system. As part of each institutions’ assessment of student engagement NSSE was deployed to assess first year students and seniors and their level of engagement in higher education. The engagement of students with psychological disabilities enrolled at both institutions was compared to the level of engagement of their non-identified peers. The students who participated in the NSSE at each of the institutions were identified by their student identification number to determine if they have self-disclosed a psychological disability and registered for services through the Disability Services Office (DSO). The data were compared to determine students who disclosed and registered with the DSO on both campuses in order to differentiate those students from their non-identified peers. Additionally a standard open-ended interview was administered using a focus group. A pattern, theme and content analysis from the focus group interview provided an additional qualitative data regarding the level of engagement for students with or without psychological disabilities. Given the sensitivity of this research, procedures to maintain the confidentiality of participants were developed in conjunction with the human subjects review panels of both institutions.
Research Questions

The three research questions guiding this study are:

1. What are the levels of engagement for undergraduate students?

2. Is there a difference in the level of engagement and participation in high impact activities (such as Internships, Study Abroad, Living Learning Communities, CAPStone Projects and/or Research with Faculty) for undergraduate students with psychological disabilities as compared to their non-identified peers?

3. Is there a difference in the level of engagement for undergraduate students with psychological disabilities as compared to their non-identified peers and additionally by gender and age?

Instrumentation

This study examined student engagement, as identified and defined by the National Survey of Student Engagement (NSSE). In this instrument, student engagement is measured along with ten engagement indicators within four engagement themes. The student engagement in the activities associated with each NSSE indicator is considered “educationally purposeful, as it leads to deep levels of learning and the production of enduring and measurable gains and outcomes” (Kuh, Kinzie, Schuh, & Whitt, 2005). The information from the NSSE data confirms “good practices in undergraduate education as they reflect behaviors of students and institutions that are associated with the desired outcomes of college” (National Survey of Student Engagement, 2010). The survey also indicated areas to which colleges and universities are performing well and aspects of the undergraduate experience that could be strengthened.

The qualitative component of the research involved the use of an in depth open-ended interviews of students with and without psychological disabilities. The survey design captured
the individuals’ experiences, opinions, feelings and knowledge involving their level of student engagement, their perception of others and how the engagement or lack thereof impacted their collegiate experience. The type qualitative interview was a standard open ended interview with the purpose of capturing the participants’ responses in a structured, yet open-ended manner. The use of a focus group interview style was used interviewing to interview a total of thirteen students from both institutions. This study was designed to provide a comprehensive perspective of student engagement as experienced by the interviewees participating in the study.

Data Analysis

Basic descriptive statistics for students, disabled and non-identified, will be calculated overall and by institution. This includes the calculation of the four NSSE engagement themes for academic challenge, learning with peers, experiences with faculty, campus environment which includes high-impact practices. This design is mixed methods. The quantitative component of the study involved a secondary data analysis of the NSSE data. Due to the size of the sample the Fishers Exact Test was applied to determine if there is a difference in the level of student engagement for students with psychological disabilities as compared to their non-identified peers. The Fisher’s Exact test examined the significance of the association between the level of student engagement for variables such as gender, race, and by individual campus. Each of the various themes for student engagement were analyzed to determine if there is a significant difference in the level of engagement for students with psychological disabilities as compared to their non-identified peers. A logistical regression model was computed for certain variables. Additionally, a regression model was utilized to control for predictors such as disability status, gender and age.
Additionally a standard open-ended interview was conducted in a focus group format. Thirteen students (with and without psychological disabilities) were interviewed in order to capture their experiences regarding student engagement. The thirteen participants self-selected to participate based on the advertisement placed in strategic locations on both campuses. Those locations included the Counseling Center, Student Union and Office of Disability Services. A pattern, theme and content analysis were conducted based on the responses during the focus group interviews. The comparisons were made by examining the level of engagement for disabled and non-identified, overall and by institution.

**Definition of Terms**

It is important to clarify the operational definitions used in this study. The following terms are defined in the context in which they were used in this study.

*Disability*- is the consequence of an impairment that may be physical, cognitive, mental, sensory, emotional, developmental, or some combination of these. A disability may be present from birth, or occur during a person's lifetime. Additionally, disabilities are consequences of attitudes and physical or social environments that support only putatively normal ways of doing things (Jones, 1996).

*Psychological disability*-mental illness, psychological and psychiatric disorder are used interchangeably to describe individuals with specific types of medical conditions. The board definition of these disorders are medical conditions that disrupt a person’s thinking, feeling, mood, ability to relate to others and daily functioning (National Institute of Mental Health, 2010).
**Impairment**- any condition that results in a way of functioning or results in behavior that differs from the expected level of performance in any given area; impairments are ways in which people’s bodies or minds differ from what society defines as normal (Jones, 1996).

**Persistence rate**- percentage of students who re-enrolled in the semester subsequent to their entry in the cohort semester and who earned a grade point average of 2.0 or higher.

**Retention rate**- percentage of students remaining in the college 1 year after entry in the cohort year.

**Student engagement**- this concept has two critical features that include: (1) the amount of time and effort students put into their studies and other educationally purposeful activities and (2) how the institution deploys its resources and organizes the curriculum, other learning opportunities and support services to induce students to participate in activities that lead to the experiences and desired outcomes such as persistence, satisfaction, learning and graduation (Kuh, 2009).

**Student involvement**- the amount of physical and psychological energy that a student devotes to the academic experience; behaviors and what students actually do, instead of what they think, how they feel and the meanings they make about their experiences (Astin, 1993).

**Student with disability**- for the purposes of this study, students with disabilities are students that have disclosed a disability to the Disability Services Office (DSO) on each particular campus. This study will only note the students that have registered for services based on the definition of disability as outlined by the Americans with Disabilities Act (ADA). It does not account for the total percentage of the student population that have disabilities.
Student without disability—students that do not have a formal diagnosis of any category of disability and/or students who have not self-disclosed a disability to the University’s DSO.

Limitations and Assumptions of the Study

Limitations from this study involve comparing data of students with psychological disabilities as designated by a licensed mental health professional, using the DSM-5 criteria. This data captured students who have disclosed a psychological disability at both institutions represented in the study. Students often have challenges with engagement and involvement on a college campus; however this study may not be generalized to any other disability populations, beyond the scope of this study. The sample population was not selected using a randomized sampling approach; therefore generalizations should not be made about other underrepresented groups in higher education.

Additional limitations include the percentage of students who participated in the study who have documented disabilities. Regarding the NSSE Study, this study only captured findings for students who disclosed a psychological disability. In this vein, it is expected that there is an underrepresentation of the actual number of students with disabilities based on various institutions record keeping practices, the manner in which they categorize various disabilities, noting a primary disability when there are multiple conditions or a combination of both. There are several noted limitations within the NSSE instrument and questions about the validity of NSSE. Finally, age was a confounding factor given the spread and distribution of participants by age. The results may not be generalized to traditional age students.

Summary

Students with disabilities have unique gifts as well as needs that require expertise as well as the commitment of the institution to support their success in the postsecondary educational
setting. Students often transition into higher education with minimal ability in the area of self-advocacy and often lack self-efficacy. An inclusive environment is critical for support in providing services through the Disability Services Office as well as creating a welcoming environment campus-wide. Providing reasonable accommodations as required by the law is the minimum standard in ensuring equal access to the educational environment. In order to truly create a climate of inclusivism, disability is embraced as an area of diversity to be supported and celebrated. A welcoming environment consists of faculty, student affairs educators, staff and administrators who are committed to ensuring those policies, procedures and the climate support engagement for all students. This environment impacts the retention and graduation rates for students with disabilities, and also heightens the students’ satisfaction with their collegiate experience.
CHAPTER 2: REVIEW OF LITERATURE

This study examines various aspects of student engagement and the potential impact for students with psychological disabilities. This chapter will provide an operational definition of student engagement and will describe the journey from involvement to meaningful engagement. Student engagement has impact on student learning outcomes, retention and graduation rates. Various aspects of retention are explored to include engagement with faculty, student affairs professionals, other staff and students. Factors that impact the retention of students with disabilities are identified. Additionally, the theoretical framework notes how meaningful engagement involves institutional commitment and intentional ways of allowing access and exchange for all students. The theoretical perspectives for disability are noted, indicating how various perspectives have impact on the culture and climate of an institution and its response to underrepresented populations including students with disabilities. This research involves an analysis of the National Survey of Student Engagement (NSSE) data from two institutions in the southeastern region on the United States. NSSE is a survey designed to examine student engagement structured around engagement indicators and high impact educational practices. The purpose of the NSSE data is to inform best institutional practice regarding impactful student engagement. The reliability, validity and limitation of NSSE are also examined with consideration for further research. In addition to the secondary data analysis from NSSE, an open-ended focus group survey will be conducted to capture the experiences and perspectives of student engagement for students with and without psychological disabilities. The history of education for persons with disabilities, as well as the integration and inclusion of students with disabilities into higher education are noted. This history provides a framework for the current enrollment trends of students with disabilities, as well identified barriers for student engagement.
These barriers and challenges create a campus culture that potentially impacts their holistic collegiate experience to include retention and graduation for students with disabilities.

**Background**

The concept of student engagement emerges from Astin’s (1999) Theory of Involvement as well as the concept of “quality of effort” as noted by Pace (1980) and Pascerella & Terenzini, (2005). Astin (1984) defines involvement as "the amount of physical and psychological energy that the student devotes to the academic experience" (p. 297). Astin (1993) indicated that the more students are involved, the more likely they will gain a rich collegiate experience. The concept of student engagement emerges from Astin’s (1999) Theory of Involvement as well as the concept of “quality of effort” as noted by Pace (1980) and Pascerella and Terenzini (2005). Additionally, these concepts are associated with Chickering and Gamson’s (1987) *Seven Principles for Good Practice in Undergraduate Education*, including student-faculty contact, cooperation among students, active learning, prompt feedback, time on task, communication of high expectations and respect of diverse talents and ways of learning. Student engagement is considered the pathway to success in college according to Kuh (2009). In order to successfully navigate that pathway, students must be fully engaged in their academic journey. Higher education professionals, to include faculty, student affairs professionals and administrators support in reducing barriers to access is critical in ensuring success for students with disabilities.

Engagement has been positively linked to a wide range of student outcomes such as persistence (DeSousa & Kuh, 1996; Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008), leadership development (Pascarella, Seifert, & Blaich, 2008; Pike, 2011), identity development (Harper, Carini, Bridges, & Hayek, 2004; Hu & Kuh, 2003), moral development (Pascarella et al., 2008), academic performance or GPA (Carini, Kuh, & Klein, 2006; Gordon, Ludlum, & Hoey, 2008;
Kuh et al., 2008), and critical thinking skills (Anaya, 1996; Pascarella et al., 2008; Pike, 2011). Additionally engagement is influenced by a number of factors in the collegiate environment, such as students’ involvement on campus (Astin, 1999; Kuh, Hu, & Vesper, 2000), frequency of interaction between students and faculty (Pascarella & Terenzini, 2005) and between students and staff (Flowers, 2003; Kuh, 2009). It is the interconnection between how students engage with the rigor of academia and other aspects of campus life and what the institution does to foster engagement.

Astin (1993) noted that what matters most regarding student learning is what students do both in and outside of the classroom. With that notion, student engagement should not only be initiated and supported by Student Affairs professionals. This theory indicates that collaboration with academic affairs is critical to ensure engagement for all students. Student engagement is also framed by research from Schlossberg (1989). Schlossberg (1989) emphasized that it is “imperative that post-secondary institutions make students feel significant since that feeling precedes student involvement in college activities and programs” (p. 9). This theory indicated that peer interaction, campus involvement, service learning, and engaging in experiences that promote diversity and participating in athletics, either organized or intramural increases a student’s connection to the campus community. When students feel connected and involved with their institutions, they are more likely to persist and graduate (Pascarella & Terenzini, 2005). Administrators, faculty and executive leadership are charged with creating and fostering an environment that is inclusive and supports diversity within the student body and campus community.
From Involvement to Engagement

Astin (1984) defined student involvement as “the amount of physical and psychological energy that a student devotes to the academic experience” (p. 297). Astin’s (1984) conceptualization of involvement “refers to behaviors and what students actually do, instead of what they think, how they feel and the meanings they make about their experiences” (p. 301). His theory of student involvement is centered on how college students spend their time and how institutions process and facilitate opportunities for development (Quaye & Harper, 2015, p. 4).

Kuh’s theory involves engagement, which is qualitatively different than involvement. Involvement alludes to the mere presence of a student, however engagement involves “action, purpose and cross-institutional collaboration, which are requisites for engagement and deep learning” (Kinzie & Kuh, 2004). Astin’s (1993) Theory of Involvement also indicated that the “more students are involved the more likely they would gain from college”. This involvement may include engagement in student organizations to include clubs and Greek Letter Organizations, athletics or intramurals and other opportunities that support student development.

Kuh (2009) defined student engagement as “in and out of classroom activities and experiences that contribute to student learning and personal development (p. 31). Kuh (2009) continued by indicating the belief that student engagement is the path to success in college. Student engagement is an integral part of a “quality education and plays an important role in many desirable college outcomes such as student learning, academic performance and persistence” (Astin, 1993; Hu & Kuh, 2003). Additionally, opportunities to engage with faculty and staff, particularly student affairs professionals provide exposure to diversity experiences to further the students’ personal development and growth.
The manner in which students engage on a college campus may be viewed differently depending on the lens by which behavior is being observed. A faculty member may view student engagement very differently from a student affairs practitioner. Kuh et al. (2007) provide the following operational definition of student engagement that represents two critical features:

- the amount of time and effort put into their (the student’s) studies and other educationally purposeful activities and
- the second component is how the institution deploys its resources and organizes the curriculum, other learning opportunities, and support services to induce students to participate in activities that lead to the experience and desired outcomes such as persistence, satisfaction, learning and graduation (p. 44).

Administrators and those charged with enhancing the student experience should strive to be intentional about the strategic direction of the opportunities for engagement at the institution. This is a complex phenomenon and engagement involves every aspect of the institutional structure with the student at the core.

**The Nature and Importance of Student Engagement**

Engagement is a critical component of the collegiate experience. Pascarella and Terenzini (2005) note that “the impact of college is largely determined by individual effort and involvement in the academic, interpersonal and extracurricular offerings on a campus” (p. 602). Research suggests that students must engage, however the institution must foster a culture and atmosphere that strives to serve and meet the needs of all students. Our campuses’ are extremely diverse and a “one size fits all” response will not prove to be an efficient way to meet every student population. Faculty and student affairs educators must be “strategic and intentional about fostering conditions that compel students to make the most of college, both inside and outside of the classroom” (Quaye & Harper, 2015, p. 1). Institutions should not expect students to engage
themselves, rather student engagement is a measure of institutional quality, institutional attention to the details that encourage increased student engagement (Kuh, 2009). Pascerella (2005) maintain the idea that “an excellent undergraduate education is most likely to occur at those colleges and universities that maximize good practices and enhance students’ academic and social engagement” (p. 22). College presidents, deans, senior administrator, faculty and staff alike must hold themselves accountable for ensuring institutional quality regarding student engagement (Quaye & Harper, 2015). There are tremendous gains to be made as a result of intentional and strategic ways to engage all students.

**Approaches to Student Engagement**

Kahu (2013) notes that there are four distinct approaches to understanding engagement as identified in the literature. The approaches are the behavioral perspective, which focuses on effective teaching practice; the psychological perspective, which views engagement as an internal individual process; the socio-cultural perspective, which considers the critical role of socio-cultural context; and finally a holistic perspective that strives to draw the strands together (Kahu, 2013). An overarching conceptual framework notes the importance of the “student and the institution while recognizing the critical influences of the socio-cultural context” (Kahu, 2013, p. 758). This is especially critical as the study examines the socio-cultural context from the perspective of a student with a psychological disability. There are perceived and actual barriers for this population, often created by the environment and internally from the student. This supports the notion that institutions must be strategic in involving all stakeholders, including giving the student a voice in acknowledging and communicating the needs in order to meet them.

The most commonly viewed aspect of student engagement in higher education emphasizes student behavior and teaching practices (Kahu, 2013). Student engagement involves
an “evolving construct that captures a range of institutional practices and student behaviors related to student satisfaction and achievement, including time on task, social and academic integration, and teaching practices” (Kahu, 2013, p. 759). Students who feel connected to a community of scholars, with a purpose provided and explored in and outside of the classroom, will have greater motivation to attend to the required task. Attending lecture series, conducting interviews, shadowing and other forms of experiential learning enhances the student experience. The emphasis of this aspect of student engagement is drawn from Chickering and Gamson’s (1987) Seven Principles of Good Practices in Undergraduate Education. Finally, within the context of the behavioral perspective, student engagement is defined as the “time and effort students devote to educationally purposeful activities” (Australian Council for Educational Research, 2010, p. 1). If students find meaning and purpose for the task, they are more likely to find fulfillment in meeting the requirement because their motivation increases with their level of engagement. This approach explains the what, how and how often students do what they choose to do regarding academic tasks and experiences, within and outside of the classroom.

The second approach according to Kahu (2013) is psychological. This approach suggests there is an “emotional intensity attached to the experience of learning that is often overlooked” (Askham, 2008, p. 94). This could be synonymous with attachment and whether students feel they belong (Libbey, 2004). Other literature suggests a more immediate emotion such as enjoyment and interest in the task (Furlong, Whipple, St Jean, Simental, Soliz, & Punthuna, 2003). Finally, the affective dimension highlights the distinction between instrumental and intrinsic motivation (Furlong et al., 2003). In essence, the students are motivated by their connection and interest in the learning. With this approach institutions should determine a means to gauge student’s level of satisfaction with every aspect of the campus community, from the
course rigor, academic support and tutoring, student support services, housing, recreation and student activities. The students’ dissatisfaction with any component of the collegiate experience can impact their level of engagement which may ultimately impact retention and graduation.

The next approach is the socio-cultural component, which focuses on the impact of the “broader social context on the student experience as noted by Kahu (2013, p. 763). This aspect of the literature notes an explanation for the opposite of engagement, which is alienation, which is a “subjectively undesirable separate from something outside oneself” (Geyer, 2001, p. 390). In essence, this component is indicative of innate qualities the student possesses such as drive, determination or grit. It’s difficult to measure these qualities, however they presence or lack thereof has impact on a student’s level of engagement. Mann’s (2001) influential work identifies factors such as “disciplinary power, academic culture and an excessive focus on performativity, which can all lead to the disconnection of students within higher education” (p. 16). There are often unwritten cultural biases within institutions that favor the dominant social group, which often impact the retention of non-traditional students. This dominant social group typically includes traditional age, Christian, heterosexual, American-born, able-bodied citizens. A student outside of these descriptors may feel alienated at some point in their collegiate career, especially if resources are scarce and they select to not utilize what is available. Additionally, students outside of these groups are often described as “not having the necessary social, cultural and academic capital to easily fit into the university culture (Lawrence, 2006, p. 24). The experience of starting at a university for many is described as a culture shock for many students, especially first generation college students. A related constructivist approach argues that higher education needs to take an “ontological turn and institutions need to ‘engage the whole person: what they
know, how they act, and who they are” (Dall’alba & Barnacle 2007, p. 689). This is a critical and necessary task that all institutions of higher education should make a priority.

McInnis (2001) noted that the term disengagement is misleading, as it implies a “deficit on the part of students. This notion is that the entire community must be invested in student engagement and satisfaction. Often considered neglected portion of the task of understanding student engagement, the socio-cultural perspective offers “important ideas on why students become engaged or alienated at the university, with particular emphasis placed on non-traditional or underrepresented populations of students (Kahu, 2013, p. 763). This aspect of student engagement speaks to the culture of the campus environment, norms that are established and the importance of policy development that speaks to the needs of all individuals.

The final approach is the holistic component of student engagement. This approach attempts to weave the aforementioned approaches together regarding the research on student engagement. The concept of engagement encompasses the “perceptions, expectations and experience of being a student and the construction of being a student” (Bryson, Hardy, & Hand, 2009, p. 1). The behavioral, psychological, socio-cultural approaches also include student motivation as expressed by the three needs proposed by self-determination theory to include autonomy, competence and relatedness (Deci & Ryan, 2000). The process of the students’ becoming who they are can be motivated or hindered by the environment in which they consistently find themselves. Each of these approaches note the significance of institutional culture, practices to include biases and unwritten, unintentional messages that are often communicated. Finally, the holistic approach recognizes the need to “consider the students’ own motivation and expectations and the institutions response in order to facilitate a more engaging environment for all students.
Some may think the onus of student engagement is the full responsibility of the student. Quaye and Harper (2015) counter this notion, putting the onus for student engagement on the faculty, staff and administrators. They reason that engagement is a “measure of institutional quality and it is incumbent upon institutions being intentional about creating educationally engaging learning environments (Quaye & Harper, 2015). The institution should be committed to fostering an environment that engages a diverse group of students. In order to achieve this goal, universities must work collaboratively across divisions in order to ensure that this educational environment is created and maintained.

**Engagement and Student Outcomes**

There are tremendous implications of educationally and purposeful engagement. It leads to “production gains, benefits and outcomes in the following domains cognitive and intellectual skill development (Anaya, 1996; Baxter Magolda, 1992); college adjustment (Cabrera, Nora, Terenzini, Pascarella, & Hagedorn, 1999; Kuh, Palmer, & Kish, 2003); moral and ethical development (Evans & Broido, 2011); practical competence and skill transferability (Kuh, 1993, 1995); the accrual of social capital (Harper, 2008); and psychological development, productive racial and gender identity formation and positive images of self (Evans, Forney, & Guido-DoBrito, 1998; Harper, 2008; Torres, Howard-Hamilton, & Cooper, 2003). Additionally, Pace (1980, 1984) developed the College Student Experience Questionnaire (CSEQ) to measure the quality of effort to identify the activities that contributed to various dimensions of student learning and personal development (Pace, 1980). His research from 1960-1990 showed that students gained more from their studies than any other aspect of the college experience when they devoted more time and energy to certain tasks that required more effort than others such as studying, interacting with their peers and teachers about substantive matters, applying their
learning to concrete situations and tasks in different contexts (Pace, 1980). If the collegiate environment is committed to creating and sustaining an engaging experience, it has the potential to promote the enhancement and academic rigor within and outside the walls of the classroom. Students can then be intentional and consistent in meaningful academic engagement in order to benefit from their holistic college experience.

There is literature that supports the development and implementation of high-impact activities. For example, the AAC&U’s Leap Project (2007) calls for more “consistent and widespread use of effective educational practices including ten potentially high-impact practices that make a claim on student time and energy in ways that channel student efforts toward productive activities that deepen learning”. According to this research high-impact practices include activities such as first-year seminars, learning communities, writing-intensive courses, common intellectual experience, service learning, diversity experiences, student-faculty research, study abroad, internships and other field placements and senior capstone experiences (Kuh, 2009). These valuable experiences cannot be developed effectively solely within the walls of the classroom effectively. There must be collaboration within the structure of the institution to ensure that these experiences are created and implemented in meaningful ways. Faculty can work alongside student affairs professionals and various support units such as Career Services, Office of International Affairs and/or Study Aboard, Academic Support, New Student Services and Residential Life and Housing to create living learning communities. The collaboration from a fiscal lens as well as the academic planning and co-curricular efforts have the potential to create a culture where these experiences are developed and executed.

The impact of a learning community where engagement is optimized is critical to sustaining meaningful exchanges within the academy. Zhao, Kuh, and Carini (2005) found that
students with learning community experience defined as some formal program where groups of students take two or more classes together where substantially more engaged in all the other educational effective activities represented by the NSSE themes compared with their counterparts who had not participated in such a program. The interaction and engagement associated with a living learning community has a positive and lasting impact on the students’ sense of community, and therefore impacts retention and persistence. Research also notes that learning community students interact more with diverse peers and faculty, engaged in more consistent and meaningful study time, engaged more in higher order thinking and mental activities that involved analyzing problems and synthesizing material (Kuh, 2009). These students also reported gaining more from their college experience. These experiences allow for a deeper development of self and self-discovery, career exploration, social and emotional student development and an increased sense of self-esteem and self-worth. If these experiences are created during the first year, the likelihood of this level of engagement will persist throughout the students’ collegiate career.

Additionally, effective engagement is generally positive for all students, including those from different racial and ethnic backgrounds, those first in their families to attend college and those who are less well prepared for college (Griffiths, Winstanley, & Gabriel, 2005; Kuh, 2009; Pace, 1990). Students from underrepresented populations, first generation college students and those less prepared for the academic demands of college often require additional resources and supports to be successful. Quaye and Harper (2015) note that educators can “observe the particulars in students’ experiences and begin to develop customized services to improve student outcomes” (p. 8). As this phenomenon is true, the greatest effects of college experiences are conditional, meaning that some students benefit more than others from certain activities.
Because this is evident in most cases, researchers suggest that institutions should employ ways to channel student energy and interest toward educationally effective activities, “especially for those who start college with two or more factors that may put them at risk, such as being academically underprepared, first in the family to go to college or from low-income backgrounds” (Pascarella & Terenzini, 2005). Unfortunately students from these groups are less likely to participate in high-impact activities during college (Kuh, 2009). Institutions must be extremely strategic in how they engage students that factor in their background, interests and abilities while fostering a sense of community by which students can feel comfortable and connect. These factors influence the students’ level of engagement and satisfaction which impacts their ability be retained and to graduate from the institution.

**Engagement and Institutional Retention**

Student engagement has direct impact on institutional retention. Students’ level of engagement and satisfaction with an institution often determines if they are retained that the institution. From an institutional perspective, student satisfaction is related to retention, encourages engagement within the learning environment, promotes further course taking and advanced degrees (Alves & Raposo, 2006; Elliott & Shin, 2002; Helgesen & Nesset, 2007) as well as creates marketing exposure to future students (Shwu-yong, 2012) and enhances the climate for fundraising (Elliott & Shin, 2002). Retention is often described in two different ways: “as degree completion versus non-completion and as dropping out versus not dropping out” (Leone & Tian, 2009, p. 122). Harper (2011) indicates that one of the most efficient ways to improve student engagement is to invite those who are the lease engaged to share their knowledge and experiences. He continues to ne that barriers to achievement can result from decision making from administration without qualitative input from students (Harper, 2011).
Scholarly studies also indicate that about 40% of freshman and sophomores are dropping out of college or transferring to other institutions and at the same time 60% of all bachelor’s degrees are awarded to students who did not start their education at the same institution that granted them their degrees (Leon & Tian, 2009). With studies and findings such as these, institutions can make an effort to offer every possible resource necessary to ensure success of all students.

A variety of reasons are noted by scholarly researchers as to why students drop out of school and/or left the original college for another. The reasons are summarized into one of the following categories: financial (Adams & Ruth, 2005), academic (Devonport & Andrew, 2006; Zajacova, Scott, & Thomas, 2005), campus life issues (Nutt, 2003; Raley, 2007), campus physical conditions and personal issues (Budny & Paul, 2003; Hoyt, 2004). These factors may be more systemic in nature and policy changes may need to occur in many cases, however there is power in the “human touch” and connect with faculty and staff on a college campus. Astin (1992) suggest that retention rates are impacted by the level and quality of their interactions with peers as well as faculty and staff. Living learning communities and engagement during high-impact activities increases the likelihood of meaningful exchanges with among students, faculty, staff and their peers. Research noted that students report consistent reasons for the selection of an institution to include the following: educational program (Tinto, 2006), the location of the school (Seidman, 2005); the cost of the school (Tinto, 2006), and the size of the school (Hong, Ivy, Humberto, & Ehrensberger, 2007). In contrast this research study noted the following reasons prompted them to leave their original college: the higher cost of the school (Zajacova et al., 2005), the lack of degree programs (Pompper, 2006), the boring campus life-or lack of engagement opportunities (Hong et al., 2007) and their disappointed academic progress (Hong et al., 2007). This research would indicate that students may enter an institution with a certain set of
expectations, only to find that those expectations were not being met by the institution. Additionally, this noted the impact of institutional functions and supports Kuh et al. (2005) that “responding to students’ needs is essential in order to push all students to attain at high levels which at the same time supporting them so that they could attain the educational goals and benefit in desired ways” (p. 83). Kuh et al. (2005) also indicated the one specific step colleges or universities can take is to periodically audit their policies and practices to ensure they are working in the mutual interests of all students and the institution.

As noted in Tinto’s (1993) work *Leaving College: Rethinking the causes and cures for student attrition*, the factors in student’ dropping out include academic difficulty, adjustment problems, lack of clear academic goals, uncertainty, lack of commitment, poor integration with the college community, incongruence and isolation. Enhancing student interaction with the educational institutions staff is a way to improve retention (Leone & Tian, 2009). The students’ perception of an institution also plays a role and students want to know that policies and the learning environments are developed with the success of the student at its center (Leon & Tian, 2009). The manner in which students engage in campus life plays a significant role in “facilitating student retention as new students want to feel welcomed, part of a community and confident they made the right choice upon entering college” (Leone & Tian, 2009, p. 123). Student engagement is “intricately connected to student satisfaction, and thereby indirectly, but significantly influences, overall student persistence as well as student retention” (Juillerat, 1995).

Tinto (1993) continued by noting that there are five major aspects that support an institution’s retention rates. These factors are expectation, advice, support, involvement and learning (Tinto, 1993). The educational staff should communicate effectively and consistently how to seek support and additional resources in order to be successful. Pompper (2006) proposed
A public relations approach to increase retention rates at higher education institutions. Pompper (2006) noted that effective communication among all of institutional departments to include students, parents, alumni, prospective students and community are essential to the holistic notion of retaining students. In addition to the educational staff to include faculty, staff and administrators, the facilities should be designed to engage students and to foster retention. Adams and Ruth (2005) noted that buildings, technology, multipurpose equipment and spaces, student centers and alternative learning communities can help students learn but it can also improve retention if the spaces are conducive for learning and engagement (Adams & Ruth, 2005). Spaces should also allow for discussion, relaxation, private spaces for study, as well as social and residential areas to capture the students’ attention and needs (Adams & Ruth, 2005). Campus amenities often impact the student’s decision to continue their educational journey at a particular institution. These same offerings may also appeal to the traditional college age student, especially if the academic programming meets their goals and the admissions process is streamlined and easily navigated.

**Engagement from the Faculty Perspective**

The manner in which faculty engage with students is essential to the collegiate experience. On many campuses, faculty are often considered the keepers and sustainers of the intellectual pulse on a college campus. Most university mission statements include a component at that emphasizes teaching, learning and research. Chickering and Gamson (1987) distilled the discussions about the features of high-quality teaching and learning settings into seven good practices in undergraduate education which include: “(a) student–faculty contact, (b) active learning, (c) prompt feedback, (d) time on task, (e) high expectations, (f ) respect for diverse learning styles, and (g) cooperation among students” (p. 4). Each of these represents a different
dimension of engagement (Chickering & Gamson, 1987, p. 4). Faculty should be committed to ensuring that they are providing an academic environment in which the rigor meets the needs of all learners while incorporating the practices as described by Chickering and Gamson (1987).

There is research that indicates the critical importance and impact of a professor’s disposition, specifically the need for creating an inviting and engaging academic environment (Bryson & Hand, 2009; Kember, Lee, & Li, 2001). Additionally, Strayhorn (2012) has brought attention to students “sense of belonging” which is describes as the students’ perception of affiliation and identification within the university community. This sense of belonging is often evident for minority students on majority campuses’ as well as first generation college students feeling guilt for pursuing their education while their families are left back home without the ability to pursue theirs. This mindset may impact the manner in which student engage. Bryson and Hand (2009) suggested that staff need to consider and incorporate three levels of engagement which are discourse with students, enthusiasm for the subject and professionalism with the teaching process. Students at all educational levels are impacted by the passion and enthusiasm displayed by their professors. Students at the collegiate level also require this level of excitement about the content and subject matter. This does impact their level of engagement and satisfaction in the learning environment.

There is a “positive relationship between college environments where faculty use active and collaborative learning techniques and student gains” (Lăzăroiu, 2013, p. 128). The faculty behaviors and practices create an environment that relates to “student engagement behaviors, student perceptions of the environment and student self-reported gains” (Lăzăroiu, 2013, p. 128). Faculty expectations, attitudes and beliefs about the student experience can play a role in creating an environment that fosters student learning (Pera, 2013). Pera (2013) continues to note
that that “interactions with students in and out of the classroom can have a profound effect on student learning” (p. 164). The manner in which faculty engage with students is critical component that impacts student success in academia.

**Engagement from the Student Affairs Perspective**

The student affairs profession has long embraced the onus and motivation to engage students specifically within the context of developing meaningful co-curricular activities and opportunities to enhance student development. Blimling, Whitt and Associates (1999) noted that “engaging in active learning is one of the principles of good practice in student affairs”. Student affairs professionals focus on student development and enhancing the student experience in order to have a meaningful impact on the whole student. According to Kuh (2009) it is important that faculty, student affairs professionals and academic leadership agree and commit to who shares the responsibility for student engagement. At many institutions one of the primary roles of student affairs is to collaborate with various campus constituents to review data about the effectiveness of policies and practices to ensure they are consistent with the institutions values, priorities and strategic goals (Kuh et al., 2005). Finally, an effective way for student affairs professional to enhance and foster student engagement is by consistently sharing the message of what research shows to be effective educational practices. These educational practices must be collaborative in nature ensuring that the faculty are engaged and committed to experiences that also occur outside of the classroom. Student affairs should take the lead in monitoring student participation, particularly from underrepresented groups such as students with disabilities. Kuh (2009) that the educational activities should be high-impact and implemented at a high level of quality. The activities should be thoughtful, intentional and inclusive for all students.
Quaye and Harper (2015) note in *Student Engagement in Higher Education: Theoretical Perspectives and Practical Approaches for Diverse Populations* indicate additional ways that student affairs professionals can engage students with disabilities with the following components: transitions programs, mentoring programs, consistent collaboration with the Disability Services Office, creation of a climate assessment and to strategically include disability as a multicultural issue. Transition or bridge programs can be an effective way to engage students with disabilities as they assist students in navigating the significant differences in receiving services in a K-12 setting to higher education (Quaye & Harper, 2015). Students must switch from an environment to which parents took the lead in most of the planning of services to the collegiate setting where students have to self-identify themselves as a person with a disability and become their own advocates (Camerena & Sarigiani, 2009). Mentoring programs are an effective way to engage students with disabilities. Mentoring programs have been shown to “enhance general self-efficacy, learning strategies, and study skills for students with disabilities (Zwart & Kallemeyn, 2001). Characteristics of a successful mentoring program for student with disabilities include flexibility, authentic relationships and a system of multi-layered supports (Brown, Taka-hashi, & Roberts, 2010).

Student affairs professionals can engage students with disabilities by collaborating consistently with the Disability Service Office. Disability Services Office are “as diverse as the institutions and students they serve” (Harper, 2011). They provide services and resources for students along a continuum “reflecting fundamental philosophical differences, variations in allocated resources (fiscal and personnel) and/or limitations based on administrative and programmatic structure at the institution” (Wilson, Getzel, & Brown, 2000, p. 37).
Student affairs practitioners can collaborate with the DSO by attending educational events offered by the office, ensuring that events are advertised in a way that’s accessible to all students, review the physical space for events to ensure that the space and content are accessible and make appropriate referrals to the office as needed (Quaye & Harper, 2015). Climate studies and assessments are critical to gaining a sense of the connection students feel with the campus. Student affairs educators often aspire to “create learning environments that are inclusive, divers and affirming of human dignity and equality” (Hall & Belsch, 2000, p. 7). The first step in creating a supportive environment for all is to conduct an assessment of the needs of current and potential students at the institution (Torres, Howard-Hamilton, & Cooper, 2003). Climate assessments are a strategic way of obtaining data regarding “physical, attitudinal and resource barriers to engagement for students with disabilities” (Quaye & Harper, 2015, p. 202). Determining these needs assist in informing best practice regarding program development, individual reactions and policy decisions (Quaye & Harper, 2015).

Finally, student affairs professionals can engage students with disabilities by including disability into multicultural conversations, programs and campus-wide events (Quaye & Harper, 2015). Pope, Reynold and Muellar (2004) defined multicultural competence as “the awareness, knowledge and skills needed to work with others who are culturally different from self in meaningful, relevant and productive ways” (p. 13). This also includes disability in that framework. Educators must be aware of their “own attitudes about disability, their acceptance of socially constructed stigma associated with disability and to extent to which they value students with disabilities as a part of the campus community” (Quaye & Harper 2015, p. 202). Educators who wish to engage with students with disability must “acquire knowledge about the social constructions of disability, legal parameters, universal design techniques and accessible
technology” (Quaye & Harper, 2015, p. 203). In fact, Kurth and Mellard (2006) find two of the most powerful components of academic success are the empowerment of students with a disability and the education of others about disability (p. 73). Being strategic, authentic, inclusive and self-aware of the needs of students with disabilities should be essential to the work of student affairs professionals in higher education. This study involves the level of engagement as reported in the National Survey of Student Engagement and various ways students can engage within the context of the environment and resources available.

**Retention of Students with Disabilities**

A successful and engaging collegiate experience typically results in increased retention and graduation rates, however these rates or often lower for students with disabilities. Wessel et al. (2009) found difference in graduation rates for students with disabilities as compared to students without disabilities. Their research reported that students with disabilities are taking longer to graduate within six years with “students without disabilities graduating in 4.44 years, students with visible disabilities graduating in 4.61 years and students with invisible disabilities graduating in 4.67 years (Wessel et al., 2009, p. 120). In contrast, Newman, Wagner, Cameto and Knokey (2009) noted in their longitudinal survey conducted by the U.S. Department of Education, “consistently found lower graduation and retention rates for students with disabilities (United States Department of Education, National Center for Education Statistics, 2012). This data supports that only 29% of students with disabilities in their sample had completed their degrees in four years after leaving high school (Newman et al., 2009, p. 45). The discrepancies in these particular findings warrant further research regarding graduation rates and data trends for students with disabilities.
Because students with disabilities are graduating at a lower rate than their non-identified peers the institutional resources, structure, culture and intentional engagement of this population must be examined in order to facilitate an environment that enhances the total experience of all students, regardless of the minority group in which they represent. Students with disabilities are one of the faces of diversity on today’s college campuses. The institution may want to consider ways to accept responsibility for the engagement of all students. In order to create engaging and supportive environments for students with disabilities, campuses’ must identify and address ways to meet the student’s need individually and systematically.

**Theoretical Perspectives on Disability**

There are three theoretical perspectives on disability that have emerged in the literature. They include the medical model (functional limitations), the minority group paradigm and the social constructivism (Jones, 1996). In this section each model is discussed from a theoretical perspective that involves disability. Each model provides a framework and a lens in how we view disability. This lens may impact how campus’ engage students with disabilities in the manner in which they view disability, either as an aspect of the human experience of a defect that needs to be cured. Both mindsets are present and have impact on the campus culture and ultimately the collegiate experience for everyone, with or without disability.

The medical model of disability has roots in the scientific or biological understanding of disability (Smith & Erevelles, 2004). The foundation of this model is the idea that disability is an individual experience and every persons’ experience is unique (Smart & Smart, 2006). The person with the disability is viewed as somehow malfunctioned and it’s the experts job to “return the individual to normalcy” (Aune, 2000, p. 55). The medical model ignores “social and environmental components of disability, therefore students are perceived as having deficiencies
that interventions or medical services are designed to rectify” (Quaye & Harper, 2015, p. 190).
The model is a proponent of the problem being located in the student instead of the environment (Quaye & Harper, 2015). Advocates for the medical model of disability of people see the disability first and see the people with disabilities as in need of a cure (Kettle, 2005; Quaye & Harper, 2015). Kettle (2005) continues to note that advocates of the medical model focus on trying to cure the disability and/or the individual, instead of improving or correcting the environment, ensuring accessibility for all persons.

Within many institutions, the culture sends a message, often times unintentionally that in order to access support, students must “fit” themselves into or identify themselves with a category system (i.e. dyslexia, visual impairment, epilepsy) that has roots in the medical model. Riddell (1998) notes:

In higher education, categories of impairment….serve the functions of underlining the difference and separateness of disabled students from others and impose a view of impairment as an individual deficit rather than a structural problem, with the onus on the individual to accommodate to the institution rather than vice versa. (p. 211).

As such, the medical model is referred to as the individual model because it puts the onus of the program of the disability on the individual not on the modifications needed with the environment and society as a whole (Kettle, 2005). Institutions that endorse the particular philosophy may intentionally exclude and/or isolate many individuals within the campus community, while placing limits to the abilities and contributions of all students.

The second theoretical perspective is minority group paradigm. This perspective includes students with disabilities in the spectrum of diversity (Quaye & Harper, 2015). The minority paradigm focuses on issues of relative social privilege, power and oppression (Jones, 1996).
Jones (1996) continues to note that this perspective is “helpful in adding to a more complex analysis of disability because it acknowledges environmental factors as well as the differential power structures, group identification….and discriminatory treatment” (p. 350). In summary, the minority group lens “focuses on issues of prejudice and discrimination that students with disabilities may experience as significant obstacles to engagement” (Quaye & Harper, 2015, p. 190).

The third perspective, the social constructivism paradigm expands the definition to include both individuals with disabilities and those without (Jones, 1996). The foundation of this theory is that it considers impairment as a normal human variation (Denhart, 2008). Jones (1996) continues to note that conceptualizing disability “as a social constructed phenomenon shifts an analysis from one focusing primarily on the disability itself to one recognizing the intersection of individual and societal factors” (p. 349). This vantage point allows student affairs educators to align programing with both “individual and social factors” (Aune, 2000, p. 58). Strayhorn (2012) expressed that “educators need to understand not only the conditions and characteristics of students with disabilities but also the conditions and characteristics of the campus environments these students inhabit” (p. 20). Under this paradigm, “priority is given to academic and social engagement that requires adjustment for both students with disabilities and members of the campus community without disabilities” (Aune, 2000, p. 58). Finally within the context of the social constructivism paradigm there is shared responsibility between students with disabilities and the campus community in creating a receptive and inclusive learning environment (Quaye & Harper, 2015, p. 191). In the present study, the framework centers around a combination of both minority group paradigm and social constructivism paradigm. Disability is a component of the human experience, not be cured or fixed, but ensuring the environment is accessible.
Additionally, it is recognized that stigma, prejudice, power and privilege are evident in our society and education is needed to ensure that all students have collegiate experience and environment that is safe, accessible and inclusive for everyone. Minoritized students to include underrepresented populations such as students with disabilities often have challenges with being engaged on campuses. There is limited research in the area of student engagement with students with disabilities.

Students with psychological disabilities are unique among the larger population of students with disabilities (Nolan & others, 2005). The range of disabilities that are psychological in nature are complex, hidden and these students often have multiple disabilities (Nolan & others, 2005). Nolan and others (2005) continue to note that students with psychological disability is the most recent subgroup of students who “challenge the conventions of higher education and to gain access” (p. 175). Because of the nature of psychological disabilities, each of the theoretical perspectives on disability applies for this particular category of disability. Although the medical model in particular initially spoke to physical disabilities and impairments, each perspective speaks to the presence of psychological disabilities as well.

Institutions are embracing the minority group paradigm and social constructivism paradigm in how they approach the supports and services needed to enhance the collegiate experience for students with psychological disabilities. The theoretical perspectives on disability involve having an inclusive perspective on serving all students. From the disability community perspective “inclusion refers to the concept of encouraging and welcoming individuals with disability into higher education, by using various formalized models of support” (Kalivoda, 2009, p. 3). The goal is create and sustain an environment where all students, regardless of ability, can experience full inclusion. Inclusion and integration refer to a “sense of
belongingness, connectedness and full meaningful participation in the college experience to which all individuals are active members of a work and learning environment (Kalivoda, 2009, p. 3). The theoretical perspectives on disability provide a framework by which campuses’ can be assessed, with the goal of creating more welcoming and inclusive environments for all students.

**Measuring Engagement: The National Survey of Student Engagement (NSSE)**

Kuh (2009) defined student engagement as “the term usually used to represent constructs such as quality of effort and involvement in productive learning activities” (p. 6). The National Survey of Student Engagement (NSSE) is a survey instrument that has now data from approximately four million undergraduates at more than 1,500 difference four year institutions since 2000. Approximately 473,633 students completed the NSSE in 2004 (as cited at http://nsse.iub.edu/html/about.cfm). The survey is constructed around ten engagement indicators and four engagement themes which are: academic challenge, learning with peers, experiences with faculty, campus environment to include high-impact practices (National Survey of Student Engagement, 2010). Each engagement indicator provides information about a specific aspect of student engagement by summarizing the students’ responses to a set of related survey questions.

The first engagement theme involves academic challenge. The specific areas that are assessed in this area of engagement include higher-order learning, reflective and integrative learning, quantitative reasoning and learning strategies. The second engagement theme includes learning with peers. The focus of this theme is collaborative learning and discussions with diverse others. The next engagement component according to NSSE is experiences with faculty. This includes student-faculty interaction and effective teaching practices. The next area of engagement is campus environment. This area includes the quality of interactions and supportive environment. An additional aspect of the NSSE is the examination of high impact practices. High
impact practices include special undergraduate opportunities such as service learning, study abroad, internships and senior Capstone Projects that have positive effects on student learning and retention. In earlier versions of the NSSE, the focus included the following five themes: academic challenge, active learning, student-faculty interaction, enriching educational experiences and supportive campus environment. Currently NSSE focuses on four themes of student engagement with an additional focus to be examined concerning high-impact practices. The NSSE Data that will be analyzed for this study was the 2012 and 2015 findings as reported by two institutions in the southeast region of the United States utilizing analysis of the six high-impact educational practices.

Student engagement in the activities associated with each NSSE indicator is considered “educationally purposeful, as it leads to deep levels of learning and the production of enduring and measurable gains and outcomes (Kuh et al., 2005). These themes were not intended to represent underlying theoretical constructs, instead, the themes were conceived as clusters of “student behaviors and institutional actions that represent good educational practices” (Kuh, 2009). The major purpose for NSSE is to inform practice for institutional level decision making. The goal is to use the data presented in order to provide strategic and intentional ways to enhance the comprehensive experience for undergraduate college students. NSSE promotes the use the data to facilitate conversations about improving the undergraduate education, which can directly impact retention and graduation rates, which is a significant component in measuring student success.

Several studies have raised questions about the reliability and validity of NSSE (Campbell & Cabrera, 2011). Many studies have questioned the accuracy of students’ self-reports, the manner in which the NSSE is structured and whether the themes scores are related to
educational outcomes. Pike (2011) argues that a limitation of these studies that focus on the validity of the survey data have failed to consider the intended use of the data, which is to inform institutional practices. Even if students fail to provide accurate responses, if there are themes noted in the data, institutions have valuable information that can allow them to be more intentional and strategic in offering opportunities to engage on their campus. Consideration can also be given to the thought that if a student made the choice to participate in the survey, they are taking the time to provide accurate feedback based on their experiences at the institution. It is the discretion of the individual campus administration to use that data to inform practice.

Additional research that’s critical of the NSSE has focused on similar issues related to content, structure and external relationships to include: (1) the accuracy of student’s self-reports in general, (2) the factor structure of the themes and (3) the relationships between theme scores and educational outcomes at the student level (external relationships) (Pike, 2011). Research that supports the use of NSSE data for institutional assessment and improvement has focused on three issues to include the clarity of NSSE questions, the dependability of institutional theme scores and the extent to which institutional/group theme scores are related to external variables (Pike, 2011). This reiterates that the data should be used to inform practice to engage students and enhance their collegiate experience.

Limitations of NSSE

The themes outlined NSSE have strong theoretical grounding however little work has been done to investigate the construct validity of the five NSSE themes themselves and the extent to which they predict relevant student outcomes (Carle, Jaffe, Vaughan, & Eder, 2009; Gordon et al., 2008; LaNasa, Cabrera, & Tangsrud, 2009; Pascarella et al., 2008; Pike, 2011; Kuh, McCormick, Ethington, & Smart, 2011; Porter, 2009). Researchers at NSSE have
conducted certain analyses on the validity of the themes including “Cronbach’s alpha, stability correlations across time, and correlations across institutional types and student groups” (Campbell & Cabrera, 2011, p. 80). However NSSE has not posted results that use “confirmatory factor analysis, item response theory, or other forms of more sophisticated techniques that are the most accepted methods for determining construct validity” (Brown, 2006). Another concern is the lack of research on whether the NSSE themes prove reliable and valid on an institutional level (Gordon et al., 2008; LaNasa et al., 2009). Very few studies have examined the reliability and validity of other facets of the NSSE that are unrelated to the five themes (Carle et al., 2009; Kuh et al., 2008; Pike, 2011). Two studies that investigated the themes at a single institution have not produced strong results confirming the internal and predictive validity of NSSE themes (LaNasa et al., 2009; Gordon et al., 2008). Those studies found that (a) the construct validity of certain themes was either marginal or poor, (b) the themes did not appear to be strongly associated with important student outcomes, like GPA, and (c) the themes were highly intercorrelated: they appear not to measure distinct domains of student engagement (Campbell & Cabrera, 2011). However, as more institutions use NSSE as a tool for assessing engagement and effectiveness, the need to validate NSSE becomes increasingly important. If the NSSE themes are a valid measure of student engagement, “they should be predictive of student learning across a variety of institutional types and student populations” (Campbell & Cabrera, 2011, p. 81). Additionally, a strong measure of institutional effectiveness must have construct validity, which in the case of NSSE, would be evidence that the five themes measure aspects of engagement. If institutions are being critiqued on institutional effectiveness, the validity of NSSE should be confirmed.
Providing Educational Access for Students with Disabilities

There is no comprehensive history of people with disabilities in higher education; however the journey to providing a free, appropriate and accessible education for all persons regardless of disability was complex and involved. The history of special education in the United States started to take a significant transition following the national civil rights movement. Taking a stand for the rights and freedoms of people regardless of race, creed or color, drew attention to persons with disabilities. Many educators, legislators and child advocates used the momentum from the civil rights movement to begin examining the rights of students with disabilities (Fisher, 2012). Prejudiced opinions regarding individuals with disabilities were common to include the belief that students with disabilities did not belong in public school or for that matter, public life (Stainback & Stainback, 1995).

Evidence of programs for persons with disabilities and special school began to materialize in the early 1990s but the most common method of service from the early to mid-1900s was residential institutions and asylums for the disabled (Sigmon, 1983). For those who were educated there was a huge disparity in the services and teachers of students with special needs were separated and excluded from other educators who taught in traditional mainstream education (Stainback & Stainback, 1995). Although it has been a long journey, “strides have been made from the educational residence halls and asylums for students with disabilities to inclusive classrooms and least restrictive environments (Sigmon, 1983, p. 10).

Notable historical examples of students with disabilities in post-secondary education include “deaf students founding Gallaudet University in 1864” (Hall & Belch, 2000, p. 10), Helen Keller entering Radcliff College in 1900 and veterans with disabilities advocating for formal support programs at the University of Illinois following World War II” (Dean, 2009).
Other than these examples, the development for “large scale services for students with disabilities did not occur until after 1973, when Section 504 of the Rehabilitation Act became the first national civil rights legislation that provided equal access for persons with disabilities into postsecondary educational institutions (Hall & Belch, 2000). In 1990, a second piece of legislation extended the rights of persons with disabilities which was the Americans with Disabilities Act (ADA). According to the ADA, a disability is defined as a person who “has a physical or mental condition that causes functional limitations that substantially limit one or more major life activities, including mobility, communication (seeing, hearing, speaking), and learning (Americans with Disabilities Amendments Act., 2008). The ADA initially passed in 1990 was reauthorized in 2009 to bring “social equality for people with disabilities (Harvard Law Review, 1998). The ADA extended the protections offered in Section 504 of the Rehabilitation Act to include “private employers, places of public accommodation and programs provided by state and local government” (Americans with Disabilities Amendments Act, 2008).

The Americans with Disabilities Act Amendments Act (ADAAA), effective January 1, 2009 clarified who is considered to have a disability by expanding the definition of the term. In essence, the ADA and ADAAA mandates that “students with disabilities must have the same opportunities for engagement as students without disabilities” (Quaye & Harper, 2015, p. 194).

National longitudinal studies conducted by researchers at the U.S. Department of Education in 1990 and 2005 confirmed “notable increases in postsecondary students with disabilities since the passage of the ADA, although their numbers still lag behind those of their peers without disabilities (Quaye & Harper, 2015, p. 189). Data from the National Longitudinal Study (NLTS) and the National Longitudinal Transitions Study-2 (NLTS-2) indicated 46% of youth with disabilities in 2005 were reported to have enrolled in a --postsecondary school within
four years of leaving high school (Newman, Wagner, Cameto, & Knokey, 2009). This is a significant increase over the 26% of students with disabilities who reported continuing their education in 1995 (Newman et al., 2009). There is notable and positive impact of these legislations in that they ensure equal access for all individuals.

Although the law mandates the inclusion of persons with disabilities, the law “defines a minimum standard of accommodations, but best practices go beyond just making the --campus accessible and actively encourage students with disabilities to access the benefits of engagement” (Quaye & Harper, 2015, p. 193). Shwu-yong (2012) notes that “access has many faces, including physical and communications access, programmatic access and access to accommodations” (p. 98). Shwu-yong, (2012) concludes that the “goal of access is to facilitate the increased integration of students with disabilities” (p. 98).

**Enrollment Trends and Demographics of Students with Disabilities**

The rate at which students with disabilities are enrolling into colleges and universities, potentially speaks to the level of preparedness students are feeling leaving high school and the supports their received as they transition into higher education. The National Center for Educational Statistics (NCES) indicated that for the 2008-09 academic year that 99% of public two year institutions, 88% of private not-for-profit four year institutions and 99% of public four-year institutions enrolled students with disabilities (Raue & Lewis, 2011). While students attend nearly all public and many private higher education institutions, they are more likely to enroll in two year community colleges (Newman et al., 2009). NCES and NTLS-2 reported that between half and three-quarters of undergraduate students with disabilities enrolled in public two-year institutions (Raue & Lewis, 2011). Although the prevalence for students with disabilities is increasing in postsecondary educational settings it is imperative to consider “academic and co-
curricular engagement, legal issues and barriers to engagement” (Quaye & Harper, 2015, p. 191). Once acknowledged and identified, students with disabilities will have the resources, support and inclusive environment needed to optimize their growth and success in college.

The prevalence of students with psychological disabilities in postsecondary education is difficult to capture, as reporting mechanisms are not always consistent. Some students seek services and support from the University’s Counseling Center. Others disclose and register with the University’s Disability Services Office. Due to confidentiality, reporting the data of the percentage of enrolled students with psychological disabilities if often difficult and an estimate at best. Census data have revealed that 16 million individuals have a psychological disability (U.S. Census Bureau, 2006), while other sources say that approximately one in four Americans (age eighteen and older) has a psychological disability (National Institute of Mental Health, 2010). The considerably high rate of the prevalence in the general population translated to increases in attendance at postsecondary institutions (Eudaly, 2002).

The Impact of Gender and Age in Student Engagement

The U.S. National Comorbidity Survey (NCS) (Kessler, McGonagle, Zhao, Nelson, Hughes, & et al., 1994) was conducted to analyze gender differences in the prevalence of commonly occurring mental disorders, including mood disorders, anxiety disorders, substance use disorders, and antisocial personality disorder. This research indicated that women are more likely to have anxiety and mood disorders than men, while men are more likely to have substance use disorders and antisocial personality disorder than women (Kessler, 2004). These findings have appeared consistently in community epidemiological studies, using a variety of diagnostic schemes and interview methods (Bebbington, 1988; Nolen-Hoeksema, 1987; Weissman & Klerman, 1992) in the United States (Robins & Regier, 1991b) as well as in such
other countries. Psychological disabilities have been shown in these recent studies to have substantial personal and social costs (Raue, & Lewis, 2011). With impairments as great as those associated with serious chronic physical illnesses (Wolanin, & Steele, 2004). Mental disorders have also been linked to substantially reduced quality of life (Wolanin & Steele, 2004) and impaired work role functioning (Kessler & Frank, 1997). Additionally, the psychological disabilities assessed in the NCS are “significantly associated with adverse outcomes in educational attainment, age at first childbearing, probability of ever marrying, and marital timing” Kessler, 2004, p. 93). All of these factors can impact women in college, as they are often expected to balance variety of responsibilities including managing a home, spouse, children and employment while maintaining their studies.

The Epidemiologic Catchment Area (ECA) Study (Raue, & Lewis, 2011) is another research study conducted regarding the prevalence of psychological disabilities. The ECA surveyed more than 20,000 people and estimated the prevalence of specific psychological disabilities and past-year use of services for these disorders. The ECA data suggested that women with mental disorders were significantly more likely than comparable men to obtain treatment (Raue, & Lewis, 2011). This was not due to women having more psychiatric problems than men, however, as the ECA investigators and others before them found that the gender difference in use persisted after adjusting for differential need for services (Raue & Lewis, 2011). This has impact in higher education in that women outnumber men (58% to 42%) in college enrollment (Andrews & Ridenhour, 2006). Women outnumber men, which may indicate the level of engagement being higher for women than men. The literature further notes that gender disparities in the level and intensity of student engagement are increasingly concerning for higher education (Quaye & Harper, 2015). College men are not as engaged in educationally
purposeful activities, such as leadership in student organizations, study abroad, community service) as the women on campus to include seeking treatment and services for a diagnosis or other symptoms of concern (Quaye & Harper, 2015). The NCS and ECA indicate that women are diagnosed with certain psychological disorders at a higher rate than men, and women are more likely to seek treatment for their psychological impairments and needs. This research may result in a greater number of women who disclose a psychological disability and seek treatment from campus resources, such as the Counseling Center. The level of student engagement for the purposes of this research study may be impacted by gender and a student’s comfort level in disclosing and seeking treatment. Additionally, gender is a critical factor that impacts a student’s pursuit of a higher education degree, course selections, declaration of major, co-curricular activities and overall engagement in the educational process (Sax, 2008). Further research is needed to determine if a difference emerges with students with psychological disabilities as compared by gender, which is the goal of this study.

The age of students with psychological disabilities may also have an impact on the level of engagement during their undergraduate experience. Although there are increasing numbers of non-traditional age students in college today, the traditional age student continues to serve as the majority of undergraduate students. Of adults with mental illness, 75% experience their onset by the age of 24, with most disorders to include mood, psychotic, personality and substance abuse disorders, occurring in the early teens to the mid-20s (McGorry, Purcell, Hickie, & Jorm, 2007). This is the age most young adults are entering and experiencing college for the first time. The age range of 16-24 has a high prevalence of psychological disabilities (American Bureau of Statistics [ABS], 2008). These early onset disorders can have negative impact on the “prognosis and function and require immediate intervention” (Chen, Cohen, Crawford, Kasen, Guan, &
Gorden, 2009, p. 867). McGorry et al. (2007) continue to note that many young people with mental illness have co-existing problems such as health risk behaviors (i.e. smoking and hazardous substance use), increased likelihood of self-harm and poorer physical health. Due to the age of the onset for these types of impairments, it is possible that the college students who are sampled in this study are traditional college age where the onset of a psychological disability is most prevalent.

**Barriers to Engagement for Students with Disabilities**

There are often barriers presented for students with disabilities. These barriers can be academic, social, institutional, physical and attitudinal. To engage students with disabilities “it is imperative to consider academic and co-curricular engagement, legal issues and barriers to engagement” (Quaye & Harper, 2015, p. 191). Academic engagement is captured in the NSSE themes in the areas of retention, graduation and interactions with faculty in the area of assessing academic challenge. Co-curricular engagement is captured within the theme of supportive campus environments to include campus living and interactions with peers. These barriers can be present within the academic and co-curricular aspect of campus life for students with disabilities. These barriers must be identified in order for strategic planning to occur and implement policy and a culture shift that minimizes these barriers to ensure equal access for all.

Regarding students co-curricular engagement, research indicates that “co-curricular engagement benefits students with disabilities as well as those without” (Quaye & Harper, 2015, p. 192). One study indicated that living in an on campus residence hall was a significantly and meaningful predictor of retention for students with disabilities between their first and second year of college (Mamiseishvili & Koch, 2011). Also, this same study indicates that students with some level of social engagement were almost 10% more likely to persist from first to second
year of college than their uninvolved classmates (81.1% vs 72.6%) (Mamiseishvilli & Koch, 2011). A national study noted that students with disabilities reported similar levels of engagement in educational experiences as their non-identified peers but they perceived the campus to be less supportive than did students without disabilities (Henderson, 2001). The research has been inconsistent regarding student engagement for students with disabilities as compared to those without (McInnis, 2001), however most research indicates students with disabilities are less involved than their peers without disabilities (Anaya, 1996). Anaya (1996) additionally noted that students with disabilities felt they had limited choice regard co-curricular involvement, being limited to either organizations associated with their major or to their disability. McInnis (2001) found that over 50% of students with disabilities were dissatisfied with their current levels of engagement and involvement. Additionally, research supports the idea that engagement is influenced by the kinds of disabilities students have (Evans & Broido, 2011). Evans and Broido (2011) found that student with visible disabilities were less likely to engage in co-curricular activities and educational enriching experiences than were students with invisible disabilities. Students with visible impairments often face “physical barriers to their engagement such as inaccessible buildings or poor sight-lines for wheelchair accessible spaces” (Quaye & Harper, 2015, p. 193). In contrast, students with invisible impairments often become extensively involved in co-curricular activities (Evans & Broido, 2011). This study further indicated that students with psychological disabilities “who often faced attitudinal barriers to co-curricular involvement felt pressure from their families to focus solely on academics, or feared the stigma that acknowledgement of their disability might bring” (Evans & Broido, 2011).

Another aspect of barriers for academic and social engagement are students who chose to not self-identify has having a disability. Evans and Broido (2011) note that the “ability to accept
one’s disability and understand its effect on learning are critical to transition to and success within higher education” (p. 80). Newman et al. (2009) found that only approximately 37% of postsecondary students who were considered by their high schools as having a disability disclosed a disability to their post-secondary schools. Many students are reluctant to self-disclose because they prefer to have a fresh start and new beginning as they transition into higher education. Some students may not want the stigma that is often associated with having a disability and the labels that are often attached. Others decide to wait until later in their academic career to disclose, often once they are experiencing academic problems (Evans & Broido, 2011). Often there is a misunderstanding regarding chronic illnesses with students not realizing they can also request services. Many students do not consider having a chronic illness as a disability and do not realize that services are also available to them is they choose to disclose to Disability Support at their particular institution (Broido, 2006).

The attitudinal barriers that are present for students with disabilities generally fall under two assumptions which are ableism and the social construction of stigma (Quaye & Harper, 2015). Ableism, which is the oppression of people with disabilities, leads to the “presumption that accommodations for disabilities typically are expensive, inconvenient, hold people to lower standards and that they have no benefit for users without disabilities” (Griffiths, Winstanley, & Gabriel, 2005, p. 337). Ablest attitudes which often stem from a medical model of disability which inaccurately presumes that the traditional or mainstream way of doing things are the only appropriate ways and that certain accommodations are expensive to the institution and/or burdensome to those providing the accommodation (Quaye & Harper, 2015). Additionally, many fail to realize that everyone benefits from an educational environment that’s designed for universal access (Quaye & Harper, 2015).
A second attitudinal barrier is the social construction of stigma that creates the assumption that students with disabilities are not capable and therefore need to be saved from their limitations and cured from their defects (Quaye & Harper, 2015). Brown (2006) emphasized that it is important that student affairs professionals possess the ability to empower students rather than rescue them by giving them tools and resources to be successful (Brown, 2006). Students with disabilities have the right to succeed or fail just like any other student. Quaye and Harper (2015) noted “the attitudes of ableism and stigma extend to members of the campus community, including faculty, staff and administrators” (p. 195). Many faculty are passionate advocates for and supporters of students with disabilities and others feel that accommodations lower academic standards (Kurth & Mellard, 2006). Hall and Belch (2000) reported that only 1 of 44 listed academic accommodations was willingly performed by faculty more than half the time and that for a third of the participants this has significant impact on equal access and their ability to pursue a postsecondary education. Many faculty feel that providing accommodations is an unnecessary burden and that they should not need “extra help” to be successful in college. These attitudes are detrimental in providing an inclusive environment by leveling the playing field in providing access. Non-compliance with accommodations also places the institution at risk for complaints to the Office of Civil Rights (OCR) and/or litigation. These are critical issues which require training of all faculty to ensure they understand their role and responsibility in providing access in the academic space.

In addition to challenges with faculty, Quaye and Harper (2015) examined challenges that students with disabilities faced in working with student support personnel. The students perceived that some support personnel as “insufficiently knowledgeable about disability or accommodations and as impatient and disrespectful” (Quaye & Harper, 2015 p. 152).
Additionally, attitudes from the campus community can negatively impact student engagement for this population. Administrations often relegate full responsibility for enhancing the engagement of students with disabilities to the office that provides the service, rather than viewing this as a shared responsibility for the entire campus community (Quaye & Harper, 2015). Institutions must be committed to changing the culture of ablest attitudes in order to remove barriers to engagement for students with disabilities.

Another barrier to student engagement is physical barriers. Physical barriers can significantly impact the manner in which student access the campus regarding their academic, social and administrative needs. Some of the more obvious barriers are “lack of curb cuts, insufficiently wide doors, lack of elevators and automatically opening doors, insufficient and inconveniently located parking spaces and inaccessible bathrooms that restrict the access of students with mobility impairments” (Quaye & Harper, 2015, p. 196). Some less obvious barriers are “inadequate snow removal, elevator buttons and reception desks at heights that cannot be reached by people using wheelchairs, software incompatible with screen readers, computer and standard desks that cannot be raised and lowered for students with orthopedic impairments, absence of Braille signage and lack of software and advertising for campus events readable to those with visual impairments” (Quaye & Harper, 2015, p. 196). All of these barriers make it difficult, frustrating and oftentimes impossible for students to fully engage in campus life (Quaye & Harper, 2015). Despite many challenges to facilities and access to all physical points of campus communities, many institutions are now making necessary improvements to enhance the accessibility of their facilities through renovations and new construction. Although physical barriers may not impact a student with a psychological disability, this type of barrier could create potential psychological challenges for a student with mobility impairments if they are finding it
difficult to navigate the campus. This could further heighten any perceptions of not feeling welcomed or accepted at the institution.

An institutions commitment to supporting a safe and inclusive campus community is a critical component of a diverse campus community (Quaye & Harper, 2015). Kurth and Mellard (2006) indicted that institutional support for students with disabilities typically occurs on a spectrum:

Institutions that provide equal access by the letter of the law (i.e. primarily to avoid lawsuits) exhibit a philosophy that may not be verbalized on a campus but is felt and observed, and ultimately limits the success potential of a college and its students. Colleges that embrace the spirit of the law, on the other hand are likely to invest in an accommodations process that considers the entire context of student life, individual functional needs, trade-offs between the immediate and long-term costs and benefits, and incorporates system wide universal design concepts. (p. 83).

Additionally, it is noted that there are three important components in creating a welcoming and inclusive campus include: upper leadership, a community orientation and cross-campus collaboration and supportive policies (Brown, 2006). Brown continues by suggesting that one way to address the institutions commitment to creating an inclusive and accessible campus is to create a campus-wide committee composed of staff, faculty and students to address issues involving access, to identify barriers and strategic ways to improve the campus climate and community.

Summary

Determining the level of engagement for underserved and underrepresented populations can provide invaluable information as institutions determine and implement best practices to
serve the entire student population. If institutions are able to reach the students that are considered “unreachable” there could be significant strides made in enhancing the level of engagement for everyone. Students with disabilities are often a population that is considered historically underrepresented and often face unwelcoming environments as they began their post-secondary educational journey. Many students with disabilities have lower graduation rates than their non-identified peers and there are several contributing factors to this phenomenon. Students with disabilities of have challenges with the academic, personal and social skills needed to cope with demands of higher education, in addition to the lack of fundamental programs and services to assist and support their very individualized needs. In order to create engaging and supportive environments for students with disabilities, campuses’ may determine their commitment to identifying and strategically implementing ways to create a culture and environment where engagement is encouraged, supported and sustained for all students.

Student engagement and involvement has significant impact on students’ overall collegiate experience. Because student involvement includes how students spend their time on campus and how institutions engage them, institutions have a responsibility in the culture that is created. Institutions must be strategic in how they engage all students, but giving underrepresented and minority populations the specific tools and resources to ensure they are able to connect with all aspects of campus life. The various approaches to engagements noted should be considered and infused within the campus culture. Student engagement is not a “one size fits all” response. Students are diverse, which means we must approach various communities in a way that is meaningful to them. Climate surveys are helpful in that they give sense of the pulse of the campus to identify barriers and needs of all students. This will assist greatly in how campuses engage with students, to include faculty and student affairs professionals. Student
engagement has a direct impact on institutional retention; therefore this work is critical to student success.

Student engagement is not solely the responsibility of student affairs professionals. Positive engagement with students and faculty within and outside of the classroom yields active collaborative learning and student gains. Faculty expectations, attitudes and beliefs about the student experience can create an environment that fosters and sustains student learning. Student engagement requires commitment from the entire campus community. Consultation, collaboration and support of the Disability Services Office (DSO) on individual campuses are efficient ways to engage and support students with disabilities. This procedure can ensure that programming is accessible and meets the needs of a diverse group of students. The manner in which engagement occurs with students with disabilities often stems from the theoretical framework to which the person ascribes, even unconsciously. The medical model, minority group paradigm and the social constructivism models have distinct approaches to how disability is defined and viewed in a societal context. Trainings and staff development are critical in that students with disabilities are viewed as whole in every way and that the environmental barriers must be addressed instead of the student with the disability being fixed. This distinct perspective is the framework for the manner in which institutions provide intentional services as well as engagement for students with or without disabilities.

Barriers to exist for students with disabilities are academic, social, institutional, physical and attitudinal. Students with psychological disabilities often experience challenges with engagement, involvement, making peer connections, maintaining relationships and seeking assistance and support prior to having a major crisis. Academic expectations, relationships, attitudes and beliefs of college personnel, even access to campus resources impact the students’
ability to be successful. Institutions must be intentional in their approach to providing meaningful engagement for this unique population of students.

The National Survey of Student Engagement (NSSE) is a tool that provides data on the responses of first year students and seniors regarding their level of engagement in five theme areas. The instrument is constructed of ten engagement indicators and five high-impact educational practices to include academic challenge, learning with peers, experiences with faculty, campus environment and high impact practices (National Survey of Student Engagement [NSSE], 2007). This study examined the level of engagement for students with psychological disabilities as compared to their non-identified peers from two four year institutions in the southeast region of the United States. There was a secondary data analysis of both institutions and how students with disabilities report their level of engagement as compared to their non-identified peers, particularly in the area of high impact practices. The data from the NSSE is designed to provide information to campuses in order to inform best practices regarding areas in which to focus efforts to improve engagement on the campus. An open-ended with a focus group interview was conducted with thirteen undergraduate students enrolled with both institutions with and without psychological disabilities. This qualitative component of the research design provided a description of the patterns, themes and content of the experiences of this sample regarding their perceptions of engagement during their undergraduate experience.
CHAPTER 3: METHODOLOGY

The purpose of this study is to compare the level of student engagement for students with and without psychological disabilities by investigating relational variables, using the framework of student engagement as defined by George Kuh. This chapter describes the sampling method utilized and outlines the processes for data collection and analysis. This study employs a mixed methods embedded design approach which involves collecting quantitative and qualitative data simultaneously, using one form of data to provide a supportive role to the other form of data (Creswell, 2008). Quantitative data is drawn from institutionally collected measures of student engagement as indicated in results of the National Survey of Student Engagement (NSSE) deployed at two institutions within a southeastern state system in the United States. The qualitative component of the research involved the use of focus groups with in depth open-ended questions posed to students with and without psychological disabilities, capturing individuals’ experiences, opinions, feelings and knowledge involving their level of student engagement, their perception of others and how the engagement or lack thereof impacted their collegiate experience. This mixed methods approach provided a comprehensive perspective of student engagement as experienced by the interviewees participating in the study. Details of the research questions, instrumentation, sampling frame, data collection and analysis are provided below.

Research Questions

The three research questions guiding this study are:

1. What are the levels of engagement for undergraduate students? Is there a difference in the level of engagement and participation in high impact activities (such as Internships, Study Abroad, Living Learning Communities, CAPStone Projects and/or
Research with faculty) for undergraduate students with psychological disabilities as compared to their non-identified peers?

2. Is there a difference in the level of engagement for undergraduate students with psychological disabilities as compared to their non-identified peers additionally by gender and age?

To answer these questions, I used a mixed methods research design using a quantitative dominant embedded design approach to compare the level and impact of student engagement for students with and without psychological disabilities. A mixed methods embedded design involves an embedded design wherein both quantitative and qualitative data were collected simultaneously. In this particular study, the qualitative data supported the quantitative data, which is primary (Creswell, 2008).

**Instrumentation**

This study examined student engagement as defined by the National Survey of Student Engagement (NSSE), and whether there were differences in engagement by identified psychological disability. Quantitative data was drawn directly from institutional results from the two institutions. Open-ended qualitative questions were drawn based on the NSSE as well.

NSSE is an instrument used to measure the student engagement of approximately five million undergraduates at nearly 1,500 different four year colleges and universities since 2000. The NSSE is issued to hundreds of four-year colleges and universities annually regarding first-year and senior student’s participation and engagement in programs and activities provided by the institution. Over 320,000 students completed the NSSE in 2015.

In NSSE, student engagement is measured along four high-impact educational practices and ten engagement indicators. The engagement indicators are higher order learning, reflective
and integrative learning, learning strategies, quantitative reasoning, collaborative learning, discussions with divers others, student-faculty interaction, effective teaching practices, quality of interactions and supportive environment. These 10 engagement indicators aggregate to four engagement themes. The four engagement themes are academic challenge, learning with peers, experiences faculty and campus environment (National Survey of Student Engagement, 2010).

Student engagement as measured in the activities associated with each NSSE engagement theme is considered “educationally purposeful, as it leads to deep levels of learning and the production of enduring and measurable gains and outcomes” (Kuh et al., 2005). Institutions use NSSE indicators to confirm “good practices in undergraduate education as they reflect behaviors of students and institutions that are associated with the desired outcomes of college” (NSSE, 2010). The survey indicates areas to which colleges and universities are performing well and aspects of the undergraduate experience that could be strengthened.

**Sampling Frame**

**Site Selection**

This study involved a data analysis and interview of undergraduate students enrolled at two public universities in the southeast region of the United States. Institutions were purposefully selected for reasons of providing variance in institutional type, so as to disaggregate the influence of institution from student engagement among students with identified psychological disabilities (Mamiseishvili, & Koch, 2011). In addition, in order to obtain sensitive information such as disability status meant needing to have connections with key personnel. Because of my role in higher education, there was access to critical staff at both institutions that could assist in gaining this information.
Utilizing two institutions with varied Carnegie Classifications allowed for broader perspective than if engaging a single site study alone. The two institutions selected for the study are part of a larger state system of higher education and were given the pseudonyms of Northern State University and Eastern State University. The Carnegie Classification of Northern State University described it as a four year public historically black university, with a liberal arts focus. Northern State University (NSU) is master’s comprehensive university with an enrollment of approximately 8,000 students. The enrollment profile is majority undergraduate students with a primarily residential campus. Many are full-time, residential and there is a focus on the recruitment and retention of transfer students from local community colleges. The undergraduate instructional program is balanced with arts and science, professional to include a School of Nursing as well as a School of Education. The graduate programs are comprehensive to include a Law and Masters of Business Administration. NSU has the elective classification of community engagement to include curricular engagement, outreach and partnerships to engage students in local and global service.

Eastern State University (ESU) is a four-year public research institution with an enrollment of approximately 27,000 students. It is a research institution with undergraduate as a majority enrollment profile. The undergraduate degrees offered are professional including arts and sciences. The undergraduate profile is four-year, full-time, selective and a high number of transfer students. The graduate instructional program includes research doctoral programs and comprehensive professional programs including a medical and dental school. ESU has an elective Carnegie classification of community engagement with a focus on curricular engagement, outreach and partnerships.
Participant Selection

For the quantitative portion of the study, all students with identified psychological disabilities who took the NSSE were included in the analysis. The students at Northern State University (NSU) were identified by their student identification number indicating they disclosed a psychological disability and participated in the 2012 NSSE. The responses from the identified students who disclosed a psychological disability were selected to be analyzed to determine if their level of engagement according to the themes as assessed by the NSSE. The students from Eastern State University (ESU) who disclosed a psychological disability on the 2015 NSSE had their responses analyzed to determine the impact of student engagement for undergraduate students with psychological disabilities. The 2015 NSSE allowed for students to self-identify on the assessment tool. Questions in the 2012 and 2015 NSSE were the same and there is no reason to believe that differences by year would produce different results. Future studies could confirm this assumption. For both institutions, a comparable number of students who did not disclose a psychological disability from each institution were randomly selected to provide a comparative analysis of the level of student engagement to determine if there were significant differences based on disability status, age, gender and by institution. There were a total of 39 participants. Further information is provided in Chapter 4.

For the qualitative component of the study, advertisements for participants were placed in common places on both institutions to include the Student Center, Counseling Centers and Disability Services. There was a flyer created that provided the details of the study and the principal researcher’s information to contact regarding their interest in participating in the study. Participants included individuals with psychological disabilities as well as those without. The participants participated in a standard open-ended interview in focus groups. Two focus group
sessions were held, one at each institution. A total of 13 persons participated in the focus groups. Details are provided in Chapter 4.

This part of the study design captured the individual experiences for each student regarding their level of engagement during their undergraduate matriculation. The interview protocol was developed based on NSSE questions. The protocol can be found in the appendix.

Data Collection

Quantitative

Data collection for the quantitative portion of the study involve the retrieval of results from the 2012 NSSE conducted at Northern State University (NSU) and the 2015 NSSE conducted at Eastern State University (ESU). Northern State University (NSU) had 650 students to participate in the NSSE in 2012. Eastern State University (ESU) had 1,487 student to participate in 2015. Differences in the number of participants is attributable to the differences in institutional size. ESU is considered a large doctoral university whereas NSU is a medium-sized master’s comprehensive university.

To identify the NSSE results of students with identified psychological disabilities, students that were registered with the Disability Services Office (DSO) at NSU were identified according to their student identification number. At NSU the responses were connected to the student identification number that indicated if they disclosed a psychological disability and was registered with the Disability Services Office. Using unique identifiable codes, it was determined which students were registered under the category of having a psychological disability as identified in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5). According the DSM-5 psychological disabilities include the following conditions: generalized anxiety, bipolar disorder, depression, schizophrenia and post-traumatic stress disorder. At ESU,
data compared were from different years because the NSSE from 2012 did not identify students with psychological disabilities. However the 2015 NSSE provided an opportunity for students to identify themselves as having a psychological disability and at ESU those students were selected based on that indicator. All unique identifiers were removed prior to data analysis.

All students at NSU and ESU who identified as having or disclosed a psychological disability and took the NSSE were selected for the study. Future studies can test the accuracy of identification versus disclosure processes. Data were downloaded from the NSSE was entered in the Statistical Package for Social Sciences (SPSS) statistical software program.

**Qualitative**

The qualitative component of this study involved an open ended focus group interviews of students with and without psychological disabilities. The students were undergraduate students who were currently enrolled at the institutions represented in the study. The interviews were conducted in a focus group setting on each individual campus. The participants were unable to identify which students have disclosed a psychological disability. There were measures to ensure that individual comments or practices are unidentifiable to protect the anonymity and reduce the risk of causing discomfort in the current educational setting. The students were not required or ask to disclose if they had a documented psychological disability and the interviews were conducted in a manner that not indicate disability status or any other confidential information about each participant.

All participants were informed of their right to privacy and anonymity. The researcher ensured the participants understand the importance of this in regards to confidential and sensitive information. The goal of the research was to understanding of the student’s level of student engagement and participation in high impact practices as defined by the National Survey of
Student Engagement (NSSE). This information provided information regarding ways to further engage students with and without psychological disabilities.

**Recording**

Interviews were audio recorded using a digital recording system. In addition to recording the interviews, the researcher also manually record responses through written notes. These notes served as an outline to capture the main points of the interview. They were used as a back-up to the digitally recorded notes. The digitally recorded notes were accurately labeled with the date, time and pseudonym so the person interviewed cannot be identified.

**Transcribing**

Each interview was transcribed exactly as recorded. This transcription process served as a written document of the interview dialogue. After transcribing the interview, the researcher checked the transcription for accuracy by listening to the audio recording again and reading the transcribed notes.

**Field Notes**

Field notes were used in the interviews as another source of data. Field notes were used to collect information outside of the interview. Field notes noted mood of the participant, non-verbal communication, and other important factors that are not directly transmitted during the interview. Field notes were used as a point of reference for the researcher to receive clarification or follow-up questioning, if appropriate.

In summary, data collection included two open-ended focus group interviews with thirteen undergraduate students from both institutions collectively and represented in this study. A separate focus group interview was conducted on each campus. Data were collected from these interviews by using a digital recording device in order to accurately capture the information.
in the interview. In addition to recording the interview with the participant, the researcher maintained field notes and a written detail of the interview. The interviews were transcribed in order to have an accurate written account to be used in the data analysis section.

**Data Analysis**

For the quantitative portion of the study, basic descriptive statistics for each question were compiled overall and then by disabled and non-identified statuses as well as by institution. This includes the calculation of the four NSSE engagement themes of academic challenge, learning with peers, experiences faculty and campus environment. Separate calculations of high-impact practices in the number of hours spent in the engaged activities were calculated. A Fishers Exact Test was applied to determine if there was difference in the level of student engagement for students with psychological disabilities as compared to their non-identified peers. The Fisher’s Exact test examined the significance of the association between the level of student engagement and compared variables such as gender, race, and by individual campus. A logistical regression model was computed to determine if there was a difference in the level of engagement based on disability status, institution, gender and age. Additionally, a regression model was utilized with the predictors of students with psychological disabilities and those without, as well as using gender and age. Each of student engagement themes was analyzed to determine if there was a significant difference in the level of engagement for students with psychological disabilities as compared to their non-identified peers.

For the qualitative component of the study, a standard open-ended interview was conducted in a focus group format, one at each institution. Thirteen students (with and without psychological disabilities) were interviewed in order to capture their experiences regarding student engagement. The focus group interviews were recorded and transcribed. The
transcriptions where then coded thematically. Preliminary qualitative data analysis of participant answers occurred by question. Then a cross question analysis was conducted to determine patterns, themes and content derived from the responses provided during the focus group interview. Lincoln and Guba (1985) indicate that the “constant comparative method involves breaking down the data into discrete units and coding them into categories” (pp. 334-336). The method used for this study involved reviewing the transcript of the interview each participant’s response. The relationships between the responses, to include the level of student engagement, how students engage with faculty in and outside of the classroom as well as the amount of hours per week students are engaging in co-curricular activities. The responses were then color coded according to common themes regarding how students engage, what motivates them to engage, which opportunities they chose to engage and the frequency. Those themes are recorded in Chapter 4.

**Summary**

The purpose of this study is to compare the level of student engagement for students with and without psychological disabilities by investigating relational variables, using the framework of student engagement as defined by George Kuh. This chapter describes the sampling method utilized and outlines the processes for data collection and analysis. This study employs a mixed methods embedded design approach which involves collecting quantitative and qualitative data simultaneously, using one form of data to provide a supportive role to the other form of data.

The quantitative component of the study involved secondary data analysis of NSSE results collected from traditionally deployed surveys of first-year and senior students. The qualitative component of the research involved the use of focus groups with in depth open-ended questions posed to students with and without psychological disabilities, capturing individuals’
experiences, opinions, feelings and knowledge involving their level of student engagement, their perception of others and how the engagement or lack thereof impacted their collegiate experience. This mixed methods approach provided a comprehensive perspective of student engagement as experienced by the interviewees participating in the study. Results of the study are provided in Chapter 4.
CHAPTER 4: ANALYSIS OF DATA AND FINDINGS

This chapter outlines the analysis of the data and findings from my study. In the study, I explored whether there is a difference between the levels of engagement for undergraduate students with psychological disabilities as compared to their non-identified peers. It was designed to determine if there was a significant difference between the levels of student engagement for undergraduate students with psychological disabilities as compared to their non-identified peers.

My research study used a mixed-methods design. For the quantitative portion, my study analyzed National Survey of Student Engagement (NSSE) data from the survey administered at Northern State University (NSU) in 2012 and Eastern State University in 2015. There were 650 students who participated in the survey at Northern State University and 1,487 students participated in the study at Eastern State University (ESU). The quantitative portion of my study included a sample size of 39 participants. All of the students who completed the NSSE at their institution who disclosed a psychological disability were selected for the study. A comparable number of students who did not disclose a psychological disability were randomly selected to comprise the sample size of 39. For the quantitative component, I compared the level of engagement based on disability, gender, age and campus for each of the four engagement indicators noted by NSSE to include academic challenge, learning with peers, experiences with faculty and campus environment. Additionally, my study provides an analysis of the NSSE data in regards to the students’ level of engagement in high impact practices and their participation in co-curricular activities on campus.

The qualitative component of my study involves the analysis of a focus group interview that involved thirteen participants across both institutions. The participants responded to a focus
group interview conducted on the individual campuses and those responses were coded to
determine themes regarding the level of student engagement for undergraduate students with and
without psychological disabilities on campus. An analysis was conducted based patterns, themes
and content derived from the responses provided during the focus group interview. Lincoln and
Guba (1985) indicate that the “constant comparative method involves breaking down the data
into discrete units and coding them into categories” (pp. 334-336). The method used for this
study involved reviewing the transcript of the interview each participant’s response. The
relationships between the responses, to include the level of student engagement, how students
engage with faculty in and outside of the classroom as well as the amount of hours per week
students are engaging in co-curricular activities. The responses were then color coded according
to common themes regarding how students engage, what motivates them to engage, which
opportunities they chose to engage and the frequency. Interview questions were centered on
NSSE engagement indicators and high impact practices, in order to provide a more granular
account of student engagement for students with psychological disabilities as compared to their
non-identified peers.

The variables analyzed in my study included the four engagement indicators and high
impact practices as measured in the 2012 and 2015 NSSE instrument administered to students at
the two institutions represented. The four engagement indicators are academic challenge,
learning with peers, experiences with faculty and campus environment. The participants from
Northern State University (NSU) were selected from a list of students who disclosed a
psychological disability and who were also identified as completing the NSSE in 2012. The
students from Eastern State University (ESU) were selected from students who completed the
NSSE in 2015 and who self-disclosed a psychological disability. The reason two different years
were selected was due to the fact that both institutions do not employ the survey every year. The NSSE Survey from both 2012 and 2015 is the same survey with the same questions for both institutions.

All of the students who took the NSSE and disclosed a psychological disability were selected for the study. A comparable group of students who did not disclose a psychological disability were randomly selected to include a total of 39 students. There were 19 students who disclosed a psychological disability and 20 who were not identified. The data collected from the NSSE were entered in the Statistical Package for Social Sciences (SPSS) statistical software program. High impact practices are identified in 6 dimensions which included the following: (1) Participation in a practicum, internship or field experience, (2) Community service or volunteer work, (3) Involvement in Learning Communities, (4) Research project with faculty, (5) Study abroad, and (6) Culminating Senior Capstone Project. Additionally the number of hours of participation each week in a co-curricular activity was also analyzed and compared in this study. Independent variables of interest measured were identified as psychological disability, age, gender and campus. Within this sample, 49% of students were identified with psychological disabilities. Average student age was 31 (S.D. = 13.84). The majority of participants were women (N_{women} = 27; N_{men} =12). Participants were nearly equally split by campus (N_{NSU}=20; N_{ESU}=19) (see Table 1).

**Profile of the Qualitative Study Participants**

The qualitative portion of the study included thirteen undergraduate students from both Northern State University (NSU) and Eastern State University (ESU). The focus group interviews were conducted separately on both campuses. The survey design provided the student’s classification in school, age range, and gender. The student could disclose disability in
Table 1

Profile of Participant Data in NSSE Survey, n=39

<table>
<thead>
<tr>
<th></th>
<th>Number of Students</th>
<th>Mean</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>12</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Female</td>
<td>27</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>N/A</td>
<td>31</td>
<td>19 to 61 (S.D. = 13.84)</td>
</tr>
<tr>
<td><strong>Disability Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identified</td>
<td>19</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Not-Identified</td>
<td>20</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Institution</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSU</td>
<td>20</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>ESU</td>
<td>19</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
a confidential manner and the researcher coded it in way that ensured anonymity. There were 6 participants from Northern State University (NSU) and 7 participants from Eastern State University (ESU). The participants included 9 females and 4 males. There were 7 participants who disclosed a psychological disability and 6 who did not disclose a psychological disability. The survey asked for the age range of all participants and there 10 who were ages 18-24, 1 was 31-35 and 2 who were 36 and above. The classifications in college include 9 seniors, 2 juniors, 1 sophomore and 1 freshman. The researcher’s field notes indicated the ethnic identities of the participants to include 1 who was identified as white, 1 as multiracial and 11 as African American. The data collected provides a comprehensive response both quantitatively and qualitatively to all three research questions.

**Research Question 1**

*What are the levels of engagement for undergraduate students?* The National Survey on Student Engagement (NSSE) notes that there are ten engagement indicators within four engagement themes. Those themes are academic challenge, learning with peers, experiences with faculty and the campus environment. The engagement themes were evident for the undergraduate students as noted in the NSSE data from both campuses highlighted in the research study. Table 2 notes the level of engagement based on the four NSSE Engagement Themes compared by disability, gender and institution.

Regarding the first theme, Academic Challenge, 47% of students with psychological disabilities did participate in academic challenging aspects of campus life as compared to 40% of non-identified students. Regarding gender; 58% of males did participate in academic challenging components of campus as compared to 37% of the females noted in this study. Regarding institution; 42% of the students at Northern State University participated in academically
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Classification</strong></td>
<td></td>
</tr>
<tr>
<td>First Year</td>
<td>1</td>
</tr>
<tr>
<td>Sophomore</td>
<td>1</td>
</tr>
<tr>
<td>Junior</td>
<td>2</td>
</tr>
<tr>
<td>Senior</td>
<td>9</td>
</tr>
<tr>
<td><strong>Age Range</strong></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>10</td>
</tr>
<tr>
<td>25-35</td>
<td>1</td>
</tr>
<tr>
<td>36 or above</td>
<td>2</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>4</td>
</tr>
<tr>
<td>Female</td>
<td>9</td>
</tr>
<tr>
<td>Transgender</td>
<td>0</td>
</tr>
<tr>
<td><strong>Disability Status</strong></td>
<td></td>
</tr>
<tr>
<td>Identified</td>
<td>6</td>
</tr>
<tr>
<td>Not Identified</td>
<td>7</td>
</tr>
<tr>
<td><strong>Institution</strong></td>
<td></td>
</tr>
<tr>
<td>NSU</td>
<td>6</td>
</tr>
<tr>
<td>ESU</td>
<td>7</td>
</tr>
</tbody>
</table>
challenging endeavors as compared to 25% of students from Eastern State University. There was no statistical difference for academic challenge ($M = .44; SD = .502$).

Regarding the second theme, Learning with Peers; 26% of students with psychological disabilities did participate in learning with peers as compared to 35% of non-identified students who participated in meaningful experiences with their peers. Regarding gender; 25% of males participated in learning with peers as compared to 33% of females. Regarding institution; 53% of students at Northern State University participated in learning with peers as compared to 10% of students at Eastern State University. There was significance regarding learning with peers based on the institution (.006). However, statistically significant differences based on this engagement dimension ($M = .31; SD = .468$) were not found.

Regarding Experiences with Faculty; 42% of identified students reported engaging experiences with faculty, as compared to 30% of non-identified students. Regarding gender; 58% of males noted experiences with faculty as compared to 22% of females. Regarding institution; 42% of students enrolled at NST noted experiences with faculty as compared to 25% of faculty at ESU. In reference to the campus environment, 89% of students with psychological disabilities participated within campus community and felt there was a quality environment and meaningful interactions. For non-identified students, 70% of those students expressed the same level of engagement. The level of engagement for students with psychological disabilities, as compared to their non-identified peers was comparable, regarding each of the NSSE Engagement Indicators, with significance noted according to the Fisher’s Exact Test for Learning with Peers based on institutions (.006).
Table 3

**NSSE Engagement Themes**

<table>
<thead>
<tr>
<th>Academic Challenge</th>
<th>Participate</th>
<th>Not Participate</th>
<th>Total</th>
<th>p-value from Fisher’s Exact test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disability Yes</td>
<td>9 (47%)</td>
<td>10 (53%)</td>
<td>19</td>
<td>.751</td>
</tr>
<tr>
<td>No</td>
<td>8 (40%)</td>
<td>12 (60%)</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Gender Male</td>
<td>7 (58%)</td>
<td>5 (42%)</td>
<td>12</td>
<td>.299</td>
</tr>
<tr>
<td>Female</td>
<td>10 (37%)</td>
<td>17 (58%)</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Institution Northern State</td>
<td>8 (42%)</td>
<td>11 (5%)</td>
<td>19</td>
<td>.320</td>
</tr>
<tr>
<td>Eastern State</td>
<td>5 (25%)</td>
<td>15 (75%)</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Learning with Peers</th>
<th>Participate</th>
<th>Not Participate</th>
<th>Total</th>
<th>p-value from Fisher’s Exact test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disability Yes</td>
<td>5 (26%)</td>
<td>14 (74%)</td>
<td>19</td>
<td>.731</td>
</tr>
<tr>
<td>No</td>
<td>7 (35%)</td>
<td>13 (65%)</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Gender Male</td>
<td>3 (25%)</td>
<td>9 (75%)</td>
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</tr>
<tr>
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<th>p-value from Fisher’s Exact test</th>
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### Table 3 (continued)

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<td>Gender</td>
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<td></td>
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<tr>
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<td>4 (33%)</td>
<td>12</td>
<td>.172</td>
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<td>Female</td>
<td>24 (89%)</td>
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<tr>
<td><strong>Institution</strong></td>
<td></td>
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</tr>
<tr>
<td>Northern State</td>
<td>18 (95%)</td>
<td>1 (5%)</td>
<td>19</td>
<td>.091</td>
</tr>
<tr>
<td>Eastern State</td>
<td>14 (70%)</td>
<td>6 (30%)</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* *indicates statistical significance $p \leq 0.05$. 
In addition to an analysis of the four themes, I evaluated the intensity of engagement in these activities using the number of hours per week students participated in co-curricular activities. Intensity was coded as follows:

1. 0 hours per week
2. 1-5
3. 6-10
4. 11-15
5. 16-20
6. 21-25
7. 26-30
8. More than 30 hours

On average, students participated at an intensity of 1-5 hours per week ($M=1.95; S.D. = 1.48$). Students with a disability tended to spend less time in these high impact activities ($M=0.49; S.D. =0.51$). Co-curricular activities include participation in organizations, campus publications, student government, fraternity and sorority life, intercollegiate or intramural sports, Lecture Series, theatrical productions, music concerts, etc. A regression analysis was used to estimate the relative influence of psychological disability status, gender, and age on the number of hours in which participants participated in co-curricular activities on a weekly basis. This analysis confirmed there were no statistically significant associations with the number of hours spent participating in co-curricular activities by psychological disability status, gender, or age (see Table 4).
Table 4

*Number of Hours Participating in Co-Curricular Activities per Week by Age, Gender, Disability, and Institution*

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>Wald</th>
<th>Df</th>
<th>Sig</th>
<th>Exp (B)</th>
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</thead>
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</tr>
<tr>
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<td>1.337</td>
<td>.093</td>
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<td>.665</td>
</tr>
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<td>Age</td>
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<tr>
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<td>1.965</td>
<td>3.774</td>
<td>1</td>
<td>.052</td>
<td>.022</td>
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</tbody>
</table>
Qualitative Summary

Qualitative research methods were also used to gain a better understanding of the engagement for undergraduate students with psychological disabilities. Six of the thirteen focus group participants disclosed a psychological disability. Participants were initially asked about their classroom participation, how much or often they participated in the discussions or group activities. The themes that emerged from the qualitative data noted two specific areas to include: (1) Students are motivated to participate by extrinsic factors and if engagement provided students a direct benefit; (2) Interest and connection motivates engagement. These were evident from the responses collected from the focus group interviews.

Several students from Northern State University indicated they were willing to engage in class discussions if they were confident and comfortable with the material. They also noted they would seek assistance from professors during office hours only if they had specific questions of course content or needed clarity on assignments. The others noted they would engage as long as they were interested in the subject matter. They were also encouraged to participate by their peers and often took an interest if their peers were interested in participating outside of the classroom. Students at Eastern State University (ESU) indicated similar comments, noting they would generally participate if it were required and if there were points or credit associated with their engagement. Overall, the students on both campuses were engaged to the level that it was expected and/or required. There were no noted differences between the students who disclosed a psychological disability and their non-identified peers.

These findings point to the first theme which notes that students are motivated by extrinsic factors regarding their interest in and decision to participate in co-curricular activities. The students in the focus group noted that they were not interested in an activity or event unless
there was an immediate reward or positive outcome from their time spent, such as extra credit or the fact that it is required for a course and could impact the grade earned. One participant noted that she would participate in cooperative work if it were required. This student was a white, non-traditional age female who disclosed a psychological disability. This was stated in an interview and was a common theme throughout the interviews. Another student, who was a traditional age non-identified student, indicated that if the engagement allowed for extra credit he would be willing to participate. This confirms the same need for an extrinsic reward in order to be motivated to participate in engaging activities beyond the classroom.

Additionally, this theme emerged when students received an immediate benefit from that engagement. It appears that students are not as intrinsically motivated with engagement providing an opportunity for learning and development. One student who disclosed disability indicated that if he needed the professors during office, he would plan to see them only if the visit were critical to his understanding or ability to successfully complete the required task. This student specifically shared that seeing a professor was only a support utilized if there were a specific need. Another student who did not disclose a psychological disability shared that he felt encouraged to participate in co-curricular activities, especially when encouraged by peers to participate. He also expressed that earning extra credit was an additional bonus and motivator for attending. This notes that community and connection are important to these students who are highly extrinsically motivated. The desire for extra credit could potentially impact their grade for attending the event, and therefore the motivation lies in the extra credit and grade and not the experience. This is a consistent theme throughout the focus group interviews.

Participants in the study with identified psychological disabilities particularly noted their participation in class was indicative of their interest in the subject matter. They noted they were
willing to engage if the professors strongly encouraged or required that particular experience. They also noted that they would make decisions about participating in co-curricular experiences depending on who was sponsoring the event. The level of connection was enhanced or diminished depending upon which group was sponsoring the event. This was shared by the students at ESU, which is the larger of the two campuses. The students at NSU indicated more of a need to have a direct benefit before they would choose to engage in an event.

The final theme that emerged from the qualitative focus group interviews was the idea that interest and connection motivates engagement. Students shared during the interviews that they were motivated to participate in a co-curricular activity if there were a genuine connection, such as the department or club sponsoring the event. It appeared that when there was a relationship established with that department or even the persons involved with the programming there was an increase in likelihood that the student would attend and engage. One student, who disclosed a psychological disability, noted that the advertising played a role in her choice to participate. This student indicated that the person sponsoring the event as well as the format of the advertisement impacted her interest and willingness to participate. This also speaks to the means in which programs and activities are advertised, whether through a flyer or other electronic medium, word or mouth or social media. Other levels of engagement within the classroom were also contingent on whether the event is required. This factor impacts the level of connection to the particular aspect of engagement. The themes noted in the focus interviews indicated that students are motivated to participate in co-curricular activities by extrinsic factors such as receiving extra credit or any positive impact on their final grade or evaluation in the course. Additionally, academic engagement outside of the instructional time is evident when students find a direct benefit to the engagement such as having knowledge of a final exam or the
reward of a professor having proof of their attendance and participation in some way. The final theme that emerged from the focus group interviews was that the students’ interest and connection to the event motivated engagement.

The qualitative results also indicated that academic and student services support are critical components in ensuring that students are engaging and having a meaningful experience on campus. The Campus Environment is an aspect of NSSE and is one of the four engagement indicators. NSSE indicates that a supportive environment and the quality of those interactions on campus can impact the student’s level of engagement. Several departments were identified as being utilized at each institution. With respect to service centers on campus, students from Northern State University (NSU) utilized services such as Disability Services, Student Health and Counseling, Student Union/Student Activities, Women’s Center and Academic Support/Tutoring. Students enrolled at Eastern State University (ESU) utilized services such as the Library, Tutoring, Career Services and Campus Recreation. These services were used as needed, based on the academic requirements at any given time and the social engagement or emotional support needed for each particular student. Regarding co-curricular activities, students from NSU participated in activities such as Lecture Series, Plays, Lyceums, Concerts, Honor Societies, National Council for Negro Women, Living, Learning Communities and Football Games. The students participated in co-curricular activities an average of 2 hours per week. Students enrolled at ESU participated in various student organization including African Student Organization, Women’s Organizations for Minorities, National Council for Negro Women, Cultural Explosion, Intramural Sports and Football Games. The average time per week spent in co-curricular activities for students at ESU was 3 hours. ESU is a predominately white institution (PWI) and therefore there was evidence of more organizations that represented a minority
identity to which students in the study could identify and feel connected. In total, intentional outreach and creation of opportunities strategically implemented for students to engage seemed most useful in encouraging students to participate in engaging experiences to enhance their academic, social and emotional development to create a holistic student.

**Research Question 2**

*Is there a difference in the level of engagement and participation in high impact activities (such as internships, study abroad, living learning communities, CAPStone Projects and/or research with faculty) for undergraduate students with psychological disabilities as compared to their non-identified peers?* The high-impact practices noted in NSSE incorporate the ten engagement indicators within the four engagement themes. The high-impact practices speak to the specific experiences that undergraduate students are able to engage in that encompass each of the four engagement themes which are academic challenge, learning with peers, experiences with faculty and campus environment. Table 5 shows the engagement for high impact practices for student with psychological disabilities as compared to their non-identified peers. Table 5 notes the students’ participation in high impact activities disaggregated by disability, gender and institution. It also provides an overview of the level of student engagement in each of the high-impact practices according to NSSE. Of the students with psychological disabilities, eight-nine percent of them participated in a practicum or internship and 70% of non-identified students participated in the same. Of the students with psychological disabilities, 63% of the students participated in community service or service learning and 60% of non-identified students participated in the same. Regarding learning communities, of the students with psychological disabilities 26% participated in learning communities and 35% of unidentified students participated in the same. Of the students with psychological disabilities 42% of these
Table 5

Engagement in High Impact Practices

<table>
<thead>
<tr>
<th>Participation in a Practicum, Internship or Field Experience</th>
<th>Participate</th>
<th>Not Participate</th>
<th>Total</th>
<th>p-value from Fisher’s Exact test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>17 (89%)</td>
<td>2 (10%)</td>
<td>19</td>
<td>.235</td>
</tr>
<tr>
<td>No</td>
<td>14 (70%)</td>
<td>6 (30%)</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>8 (76%)</td>
<td>4 (33%)</td>
<td>12</td>
<td>.172</td>
</tr>
<tr>
<td>Female</td>
<td>24 (89%)</td>
<td>3 (11%)</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Institution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northern State</td>
<td>18 (95%)</td>
<td>1 (5%)</td>
<td>19</td>
<td>.091</td>
</tr>
<tr>
<td>Eastern State</td>
<td>14 (70%)</td>
<td>6 (30%)</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

Community Service or Volunteer Work

| Disability                                                  |            |                |       |                                 |
| Yes                                                         | 12 (63%)   | 7 (37%)        | 19    | 1.000                           |
| No                                                          | 12 (60%)   | 8 (40%)        | 20    |                                 |
| Gender                                                      |            |                |       |                                 |
| Male                                                        | 9 (75%)    | 3 (25%)        | 12    | .477                            |
| Female                                                      | 16 (59%)   | 11 (41%)       | 27    |                                 |
| Institution                                                 |            |                |       |                                 |
| Northern State                                              | 19 (100%)  | 0 (0%)         | 19    | .000*                           |
| Eastern State                                               | 14 (70%)   | 6 (30%)        | 20    |                                 |

Participate in Learning Communities

| Disability                                                  |            |                |       |                                 |
| Yes                                                         | 5 (26%)    | 14 (74%)       | 19    | .731                            |
| No                                                          | 7 (35%)    | 13 (65%)       | 20    |                                 |
| Gender                                                      |            |                |       |                                 |
| Male                                                        | 3 (25%)    | 9 (75%)        | 12    | .719                            |
| Female                                                      | 9 (33%)    | 18 (67%)       | 27    |                                 |
| Institution                                                 |            |                |       |                                 |
| Northern State                                              | 10 (53%)   | 9 (47%)        | 19    | .006*                           |
| Eastern State                                               | 2 (10%)    | 18 (90%)       | 20    |                                 |

Research with Faculty

| Disability                                                  |            |                |       |                                 |
| Yes                                                         | 8 (42%)    | 11 (58%)       | 19    | .514                            |
| No                                                          | 6 (30%)    | 14 (70%)       | 20    |                                 |
| Gender                                                      |            |                |       |                                 |
| Male                                                        | 7 (58%)    | 5 (42%)        | 12    | .062                            |
| Female                                                      | 6 (22%)    | 21 (78%)       | 27    |                                 |
| Institution                                                 |            |                |       |                                 |
| Northern State                                              | 8 (42%)    | 11 (58%)       | 19    | .320                            |
| Eastern State                                               | 5 (25%)    | 15 (75%)       | 20    |                                 |
Table 5 (continued)

<table>
<thead>
<tr>
<th></th>
<th>Participate</th>
<th>Not Participate</th>
<th>Total</th>
<th>p-value from Fisher’s Exact test</th>
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<td>8 (42%)</td>
<td>11 (58%)</td>
<td>19</td>
<td>.320</td>
</tr>
<tr>
<td>No</td>
<td>5 (25%)</td>
<td>15 (75%)</td>
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<tr>
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<td></td>
</tr>
<tr>
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<td>6 (50%)</td>
<td>12</td>
<td>.133</td>
</tr>
<tr>
<td>Female</td>
<td>6 (22%)</td>
<td>21 (78%)</td>
<td>27</td>
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<tr>
<td>Institution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northern State</td>
<td>9 (47%)</td>
<td>10 (53%)</td>
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<td>10 (53%)</td>
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<td>.751</td>
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<tr>
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<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Male</td>
<td>7 (58%)</td>
<td>5 (42%)</td>
<td>12</td>
<td>.299</td>
</tr>
<tr>
<td>Female</td>
<td>10 (37%)</td>
<td>17 (63%)</td>
<td>27</td>
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<tr>
<td>Institution</td>
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<tr>
<td>Northern State</td>
<td>8 (42%)</td>
<td>11 (58%)</td>
<td>19</td>
<td>.320</td>
</tr>
<tr>
<td>Eastern State</td>
<td>5 (25%)</td>
<td>15 (75%)</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>
students participated in research with faculty and 30% of the non-identified students participated in the same. Regarding participation in study abroad, 42% of students with psychological disabilities participated and 25% of students without psychological disabilities participated in the same. Of the students with psychological disabilities, 47% completed a culminating senior experience (Capstone Project, Thesis, Comprehensive Exam, etc.) and 40% of students without psychological disabilities completed the same. As such, within this sample, students with psychological disabilities engaged at a higher rate than their non-identified peers in every high impact practice as identified in the NSSE, with the exception of participation in Learning Communities.

The data for Research Question 2 was analyzed using data from the NSSE on student participation in high impact practices and co-curricular activities. The following are identified by NSSE as high impact practices: Practicum, Internship, Field Experience or Co-Op; Community Service or Volunteer Work; Participate in Learning Communities; Work on research project with faculty; Study Abroad, and Culminating Senior Experience (Capstone, Senior Project, thesis, comp exam). Participant responses are indicated in the following categories:

1. 1-Have not decided
2. 2-Do not plan to do
3. 3-Plan to do
4. 4-Done

This key was collapsed in order to facilitate analyses in light of sample sizes. If the student did participate in the high impact practice it was noted with a 1. If the student did not participate in the high impact practice it was noted with a 0. On average, nearly half of all students participated in each of the practices (47.86%). Participation varied from a high of 82.05% with students
engaged in practicum, internship, or field experience to a low of 30.76% who participated in learning communities.

The Fisher’s Exact Test was used to determine whether there was a significant difference in the level of student engagement for undergraduate students with psychological disabilities as compared to their non-identified. The Frequency tables note significance with Dimension 2 (Community Service or Volunteer Work) at \((p=0.00)\) regarding institution 1, for Dimension 3 (Participating in learning communities) at \((p=0.006)\) regarding institution and for Dimension 5 (Study Abroad) at \((p=0.041)\) regarding institution. Regarding the Logistic regression, there was only significance regarding Dimension 3 (Participating in a Learning Community) at \((p=0.007)\) for institution.

The focus groups participants noted their level of engagement as evidenced in their responses to the focus group interview. With respect to participating in high-impact engagement activities such as Service learning, Study Abroad, research with faculty, Living Learning Communities, Internship, Capstone Project, student with disabilities engaged at a similar rate as their non-identified peers. There was no significant difference according to the narrative regarding their level of engagement in the high impact practices. Of the 6 students who disclosed psychological disabilities 100% of them participated in a community service or service learning, as well as 100% of non-identified students. There were 100% of students with psychological disabilities who did not participate in study abroad and 100% of non-identified students who did not participate. There were 43% of the students who disclosed disability who completed research with faculty and 100% of unidentified students did not. There were 43% of students with a psychological disability who participated in an internship and 50% of unidentified students who participated in an internship. There were 14% of students with a psychological disability who
Table 6

*High Impact Practices: Logistic Regression*

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>B</th>
<th>SE</th>
<th>Wald</th>
<th>Df</th>
<th>p-value</th>
<th>Odds ratio (OR)</th>
<th>95%CI for OR (Lower/Upper)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1.005</td>
<td>1.322</td>
<td>1</td>
<td>.250</td>
<td>.315</td>
<td>.044/2.257</td>
</tr>
<tr>
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<td>3.279</td>
<td>1</td>
<td>.070</td>
<td>.116</td>
<td>.011/1.195</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
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<td>1.926</td>
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<td>.165</td>
<td>.261</td>
<td>.039/1.739</td>
</tr>
<tr>
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<td>.038</td>
<td>.011</td>
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<td>.996</td>
<td>.924/1.074</td>
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<td>Df</td>
<td>p-value</td>
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<td>95%CI for OR (Lower/Upper)</td>
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<tr>
<td>--------------------------</td>
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<td>.013/.497</td>
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Table 6 (continued)

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<th>Df</th>
<th>p-value</th>
<th>Odds ratio (OR)</th>
<th>95%CI for OR (Lower/Upper)</th>
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<td>.265</td>
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<td>.070/2.076</td>
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<td>.083</td>
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<td>.243</td>
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<td>.662</td>
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<td>.382</td>
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<td>.757</td>
<td>1.641</td>
<td>1</td>
<td>.200</td>
<td>2.637</td>
<td>.598/11.628</td>
</tr>
<tr>
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<td>.026</td>
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<td>.981</td>
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<td>Constant</td>
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<td>.470</td>
<td>1</td>
<td>.493</td>
<td>2.090</td>
<td>N/A</td>
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</tbody>
</table>

*Note.* The Reference group for disability is student with psychological disabilities. The reference group for gender is Female. The reference group for school is Northern State University (NSU).
completed a Capstone or Senior Project as compared to 16% of students who were not identified who completed a Capstone or Senior Project.

Overall, the level of student engagement seemed mediated by extrinsic factors. Students are motivated to participate in co-curricular activities and high impact practices by extrinsic factors. In particular, academic engagement outside of instructional time is evident when students find the direct benefit. The students indicated they would participate if the event were directly connected to their major or associated with extra credit. They also noted their peers served as a means for motivation and encouraged engagement outside of the academic setting. Many students who participated in the focus interviews cited professors’ encouragement as a factor for engagement outside of the classroom. An encouraging word to attend an event, in addition to extra credit to boost a final grade was noted several times as a factor that impacted engagement. The students with identified psychological disabilities noted similar levels of engagement. They were also motivated by extrinsic factors at the same level as their peers.

Students were most engaged when there was an interest or connection. In these instances of intrinsic motivation, students shared that they enjoyed feeling connected to other individuals and also wanted a tangible outcome from their participation. Regarding the level of engagement for students with and without psychological disabilities within the high impact practices, students engaged at comparable levels. They noted that disability was not a factor in their decision to engage in high impact practices; however their interest, motivation, access and the degree at which the event was required had impact in their decision to participate. These high impact practices included internship or practicum, service learning and community service, study aboard, research with faculty and a culminating senior experience. The trends that were noted include all 100% of students with and without psychological disabilities who participated in
service learning. Regarding study abroad, 100% of all students, with or without a psychological disability did not participate in study abroad. The final comparable high impact activity was the fact that 100% of all students, with or without a psychological disability participated in a living learning community. This notes that engagement decisions were not based on the documented disability but their interest, connection and the impact of the activity on the students’ academic record.

**Research Question 3**

*Is there a difference in the level of engagement for undergraduate students with psychological disabilities as compared to their non-identified peers and additionally by gender, age and institution?* The sample from the NSSE data noted that there was significance regarding the Fisher’s Exact Test in three dimensions of student engagement according to NSSE. There was significance regarding Dimension 1, which is participation community service or service learning (.000) as compared by institution. Dimension 3, which is participation in a Learning Community, also noted significance (.006) based on institution. Finally, Dimension 5, which is Study Abroad, noted significance (.041) based on institution. There was not significance noted in the other dimensions to include participation in a practicum or internship, research with faculty and the completion of a culminating senior experience such as a Capstone Project, Thesis or Comprehensive Exam) (see Table 6).

There was an analysis of the number of hours the students participated in a co-curricular activity outside of the academic setting per week. There is no significant difference between the number of hours engaged in co-curricular activities based on disability, gender or institution. The students participated in comparable number of hours during a given week. Table 7 indicates the
Table 7

*Independent Two Sample t-Test of Numbers of Hours Students Participated in Co-Curricular Activities per Week*

<table>
<thead>
<tr>
<th>Model</th>
<th>T</th>
<th>df</th>
<th>p-value</th>
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</thead>
<tbody>
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<td>.508</td>
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<tr>
<td>Institution</td>
<td>.854</td>
<td>37</td>
<td>.549</td>
</tr>
<tr>
<td>Gender</td>
<td>-.373</td>
<td>37</td>
<td>.627</td>
</tr>
</tbody>
</table>
Table 8

*Description of Number of Hours Students Participated in Co-Curricular Activities per Week*

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With disability</td>
<td>19</td>
<td>2.11</td>
<td>1.761</td>
<td>.636</td>
</tr>
<tr>
<td>Without disability</td>
<td>20</td>
<td>1.80</td>
<td>1.196</td>
<td></td>
</tr>
<tr>
<td>Institution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSU</td>
<td>19</td>
<td>2.16</td>
<td>1.772</td>
<td>.854</td>
</tr>
<tr>
<td>ESU</td>
<td>20</td>
<td>1.75</td>
<td>1.164</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>27</td>
<td>1.89</td>
<td>1.553</td>
<td>-.373</td>
</tr>
<tr>
<td>Male</td>
<td>12</td>
<td>2.08</td>
<td>1.379</td>
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</tr>
</tbody>
</table>
The mean and descriptive statistics were noted for Dimension 7, which is the number of hours students engaged in co-curricular activities per week. There was no significance with each specific area noted within the sample comparative analysis for the number of hours per week participating in co-curricular activities based on disability, institution and gender. Table 8 indicates the specific descriptions of the 39 participants from the sample. The participants included 19 students with disabilities and 20 students without disabilities within the random sample. There were 19 students who participated from Northern State University (NSU) and 20 students who participated from Eastern State University (ESU). There were 27 who were female and 12 who were male. Each of the individual groups based on disability, institution and gender participated in co-curricular activities 1-5 hours per week. The groups participated in similar numbers of hours and there was no difference in the amount of time per week participating in co-curricular activities based on disability, institution, or gender. The standard deviation is also noted for each group.

Table 9 indicates that the 39 students selected from the NSSE Survey at both NSU and ESU had an average number of hours of 1-5 per week participating in co-curricular activities. The range of hours was 1-8, which represented 0 hours up to 30 hours per week. Additionally the median was 1.00 which represented 0 hours of co-curricular participation each week. The mode was 1, which represented 0 hours per week was the number that appeared the most in the data set.

The focus group interviews provided an overview of each of the four engagement themes as noted in the NSSE. The indicators are the academic challenge, learning with peers, experiences with faculty and campus environment. The participants noted there was minimal academic challenge and they felt each professor differed in the approach to instruction. Learning
Table 9

*Descriptive Statistics for Dimension 7: Numbers of Hours Students Participated in Co-Curricular Activities Per Week*

<table>
<thead>
<tr>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Std. Deviation</th>
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<tbody>
<tr>
<td>39</td>
<td>1</td>
<td>8</td>
<td>1.95</td>
<td>1.00</td>
<td>1</td>
<td>1.486</td>
</tr>
</tbody>
</table>
with peers was evident when an assignment required such interactions or group work. Both students with and without disabilities noted their preference to work alone, unless cooperative learning was required. This was noted within and outside of the classroom. Experiences with faculty varied from research with faculty to meeting with them during office hours. Both students with and without psychological disabilities noted these interactions were often encouraged based on the professors’ personality, expectations and teaching style. Finally, campus experiences were diverse and driven by individual needs and connection to the participate type of co-curricular activity or service unit. The participants noted that the campus provided active and consistent opportunities to engage that involved academic, social and wellness and activism. They participated at least two hours per week based on their interest and ability to participate due to other obligations as students.

The qualitative portion of my study noted that the 13 students who participated in the research study noted their reasons for participating in co-curricular activities. The 6 students who disclosed psychological disabilities, as to the 7 students who were not identified had comparable interest and motivation for participating in co-curricular activities. They identified being encouraged to participate by their professors and motivated to participate by the opportunity for extra credit. Both groups of students regardless of disability status, institution or age indicated a level of commitment to the co-curricular activities that worked well with their schedules, interest and could positively impact their final grade. There were students with disabilities who noted that they did not feel disconnected because of their disability (which is invisible) but did feel disconnected due to factors such as age or ethnicity. One student with an identified psychological disability shared that she felt like a unicorn because she is a white woman at an HBCU. This challenge was not due to her disability but due to the fact that she is a minority at a campus that
is a historically and traditionally black institution. Another student, also with a psychological
disability noted that she felt unwelcomed at times in student engagement events because she was
a non-traditional student. She noted that more traditional age students would often look at her
and make her feel as if she were too old to participate. This same student also noted that at one
time she lived on campus and it was difficult engaging with the other students in her residence
hall. She decided after one semester it was best that she secure off campus housing. She was
interested in engaging and participating; however the body language of her classmates made her
feel as if she were out of place. They also made comments to confirm her perspective. Regarding
the qualitative portion of the research study the students participated in a variety of co-curricular
activities that included the arts, cultural experiences, athletics and intramural sports and speaker
series. There were no significant differences in reporting, which indicates that all students who
participated in the sample engaged on a comparable level, regardless of the presence of a
psychological disability.

Regarding each of the three research questions, the data indicates comparable levels of
student engagement for both students who have identified a psychological disability as well as
their non-identified peers. Regarding the four NSSE Engagement Indicators, which are academic
challenge, learning with peers, experiences with faculty and campus environment, the noted
participation indicated that both student groups are engaging within the two institutions noted in
this study. There was only significance noted in the area of learning with peers by institution.

The high impact practices noted by NSSE were also analyzed, noting that students with
and without psychological were engaged in these activities. There was only significance noted in
Dimensions 2, 3 and 5 which were Community Service or Volunteer work, Participation in
Learning Communities and Study Abroad. The significance was noted in each dimension by
institution. This analysis will be explored further in Chapter 5. Regarding differences in the level of engagement for students with and without psychological disabilities, each group (disability, gender and institution) reported participating in co-curricular activities approximately 1-5 hours per week. This was consistent for each group. Further analysis of each research question will be further analyzed to include recommendations in Chapter 5.
CHAPTER 5: SUMMARY, CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

Student engagement is a critical component in ensuring that students have a comprehensive and rewarding college experience, as well as supporting student retention and institutional graduation rates (Schwartz, 2002). Student engagement includes the way in which institutions provide intentional and strategic efforts to ensure that the academic and co-curricular experiences are meaningful and thoughtful. Additionally, engagement involves 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 et al., 2007). However, there exists a question as to whether students with identified psychological difficulties can engage campus at the same intensity as their peers. Students with psychological disabilities often need additional resources to ensure student success and their level of engagement can impact their ability to successfully complete their undergraduate degree.

There are more students with disabilities are enrolling in colleges and universities today and are often excelling with appropriate supports. Eleven percent of college students have a disability (National Center for Education Statistics, 2011). College students with disabilities have lower retention rates and often take longer to complete their programs. Students with psychological disabilities are one of the fastest growing populations of disability among college students, however 86% of students with psychological disabilities withdraw from college (Belch, 2011; Collins & Mowbray, 2005). This category of disability includes bipolar disorders, anxiety disorders and borderline personality disorders, among others (Kampsen, 2009). Belch (2011) also notes challenges exist in “service delivery, support, policy development and implementation, retention and successful integration into the campus community are distinct for
this subpopulation” (p. 74). Many of the unique needs of this population are misunderstood, a situation which can greatly impact the retention and successful matriculation of these students. The primary purpose of my study was to determine the level of student engagement for students with psychological disabilities as compared to their non-identified peers.

In the present study, a mixed methods embedded design approach was used to analyze the following research questions:

1. What are the levels of engagement for undergraduate students?
2. Is there a difference in the level of engagement and participation in high impact activities (such as Internships, Study Abroad, Living Learning Communities, CAPStone Projects and/or Research with Faculty) for undergraduate students with psychological disabilities as compared to their non-identified peers?
3. Is there a difference in the level of engagement for undergraduate students with psychological disabilities as compared to their non-identified peers and additionally by gender and age?

To answer, data from the National Survey of Student Engagement (NSSE) at two institutions was used to determine the levels of student engagement for students with and without psychological disabilities. The NSSE focuses on ten engagement indicators within four engagement themes. The four engagement themes are academic challenge, learning with peers, experiences with faculty and campus environment. Additionally, high impact practices were noted in the NSSE Survey and provided additional indicators of the ways students engage and how this translates to persistence and graduation. The high impact practices as identified by NSSE are (1) Participation in a Practicum, Internship or Field Experience, (2) Community Service or Volunteer hours, (3) Involvement in Learning Communities, (4) Research with
Faculty, (5) Study Abroad and (6) Culminating Senior Capstone Experience. Data from NSSE was accompanied with qualitative interview data from students at both institutions to attain a more granular perspective of student engagement among students with disabilities.

The mixed methods embedded design approach involves collecting both quantitative and qualitative data simultaneously, having one form of data be a supportive role to the other form (Creswell, 2008). Creswell (2008) noted that this approach indicates that the second form of data will support the primary form of data. The quantitative research component was primary and the qualitative data were secondary. The qualitative portion of the research designed provided a comparative analysis using the Fishers Exact Test, an independent two samples t-test, frequencies and standard deviations noting if there was a difference in student engagement and the participation in high-impact practices and assessed by the NSSE Data. The dependent variables were: the high impact practices which were participation in a practicum, internship or field experience, community service or volunteer hours, involvement in learning communities, research with faculty, study abroad and the completion of a culminating senior capstone. The independent variables were: whether the student disclosed a psychological disability or not, gender, institution and age. The NSSE Data analyzed was drawn from 39 students enrolled at the two institutions represented in this study. The students were randomly selected from students that participated in the NSSE survey at both institutions who also disclosed a psychological disability. The students who disclosed psychological disabilities from both institutions who participated in the NSSE survey were selected for the study. There were a comparable number of students from each institution who were randomly selected who did not self-disclose a psychological disability. The qualitative portion, which included thirteen students in focus group interviews, supplemented the quantitative data. Students for the qualitative portion of the study
were solicited from an advertisement flyer for the study posted in the Counseling Center and in Disability Services at both institutions. The students were provided the contact information for the researcher and the interviews were scheduled on campus. The qualitative portion of the research design analyzed the engagement themes, high impact practices as well as student engagement in co-curricular activities on campus.

**Summary of Results**

The results of my study noted that students are engaged and connected with their institutions, both with and without psychological disabilities. Thus, across all four engagement themes students with and without identified psychological disabilities were similarly engaged by academic challenge, experiences with faculty and campus environment. There were no statistically significant differences between students by any of the independent variables (identified psychological disability status, gender, or age, except with regard to the area of learning with peers by institution. The quantitative portion of the data did indicate significant differences in the level of engagement regarding the high-impact practices associated with the NSSE regarding participation in community service or volunteer work \( p = .000 \) by institution, participation in a learning community \( p = .006 \) by institution and study abroad \( p = .041 \) by institution. These findings indicate that of the six dimensions of the high impact practices, 50% indicated significance according to the Fisher’s Exact Test.

Northern State University is a public historically black university, with a liberal arts focus. Eastern State University is a four year public research university. Northern State University (NSU) is master’s comprehensive university with an enrollment of approximately 8,000 students. The enrollment profile is majority undergraduate students with a primarily residential campus. Many are full-time, residential and there is a focus on the recruitment and
retention of transfer students from local community colleges. NSU has the elective classification of community engagement to include curricular engagement, outreach and partnerships to engage students in local and global service. Based on fact that NSU is a minority serving institution could result in the fact there is significance regarding community services and participation in Living Learning Communities. Because community is a major identify for minority serving institutions, this could have impact on how students engage.

Eastern State University (ESU) is a four-year public research institution with an enrollment of approximately 27,000 students. It is a research institution with undergraduate as a majority enrollment profile. The undergraduate degrees offered are professional including arts and sciences. The undergraduate profile is four-year, full-time, selective and a high number of transfer students. The graduate instructional program includes research doctoral programs and comprehensive programs with a medical and veterinary school. Because of the institution identifies as a majority institution that could impact the student’s resources and ability to travel abroad. This was the final engagement theme that had significance based on institution. This discrepancy seems to point toward the fact that the institutions, although both are public four year institutions, the size and academic emphasis could impact how students engage and the resources made available to them due to differences in enrollment and historical populations served.

There was no statistically significant difference in the intensity of student engagement as measured by the number of hours the students participated in co-curricular activities. There was no significance noted between the presence of disability or not, institution or gender. Overall, this analysis indicates that students with and without psychological disabilities are both engaged at comparable levels. The presence of a psychological disability did not impact their ability,
interest or motivation to be engaged at their institutions. If anything, institutional opportunities seem the most significant consideration in student choice to engage in a high impact activity.

The qualitative portion of my study provided supplemental information for the quantitative portion. The focus group interviews involved thirteen students with and without psychological disabilities from both institutions. The findings from the focus group noted their level of engagement regarding the high-impact practices according to the NSSE. The focus group participants noted their level of engagement as evidenced in their responses to the focus group interview. As was found in the quantitative portion of the study, there did not seem to be a distinction in engagement between students by their psychological disability status. With respect to participating in high-impact engagement activities such as Service Learning, Study Abroad, Research with Faculty, Participation in Living Learning Communities, Participation in Internship and a Culminating Capstone Project, students with disabilities engaged at a similar rate as their non-identified peers. There was no significant difference according to the narrative regarding their level of engagement in the high impact practices. Of the 6 students who disclosed psychological disabilities 100% of them participated in a community service or service learning, as well as 100% of non-identified students. There were 100% of students with psychological disabilities who did not participate in study abroad and 100% of non-identified students who did not participate. There were 43% of the students who disclosed disability who completed research with faculty and 100% of unidentified students did not. Of both the identified and non-identified group of participants, 100% of each did not participate in a Living Learning Community. There were 43% of students with a psychological disability who participated in an internship or practicum experience and 50% of unidentified students who participated in the same. There were 14% of students with a psychological disability who completed a Capstone or Senior Project as
compared to 16% of students who were not identified who completed a Capstone or Senior Project. These findings indicate that students with psychological disabilities are participating at comparable rates as their non-identified peers.

Two themes emerged from the qualitative portion of the study: (1) Students are motivated to participate by extrinsic factors and if engagement provided students a direct benefit; (2) Interest and connection motivates engagement. These findings were evident from the responses collected from the focus group interviews that included students with and without psychological disabilities. These themes were mostly consistent regardless of institution, gender and age, although two students shared concerns about feeling connected regarding their age and race. One student, who is considered non-traditional college age indicated that she often felt unwelcomed in spaces due to her age. This concern was evident by comments made and the body language of the students. Another student indicated that she was a non-traditional white woman on a Historically Black College or University (HBCU). She noted that she was very comfortable in her choice to attend but would often notice students staring. She has had students ask why she chose that particular institution as a white woman. These students’ comments were noticed but were not a deterrent to their level of student engagement. Overall, the students noted in this study indicated that they become engaged if the engagement has a positive impact on their grades or if there is an immediate need from their faculty member. Pascarella and Terenzini (2005) note that “the impact of college is largely determined by individual efforts and involvement in the academic, interpersonal, and extracurricular offerings on campus” (p. 602). An excellent undergraduate experience is capitalized upon when the institution has provided clear and intentional ways to enhance and increase student engagement.
Conclusions

Students with psychological disabilities often face challenges as they transition to a higher education setting. In order to create engaging environments, institutions must be committed to providing an inclusive and supportive environment for all students. Faculty, Student Affairs Educators and staff should consider the idea that “fosters the conditions that enable diverse populations of students to be engaged” (Quaye & Harper, 2015, p. 5). Students with disabilities often face barriers once they arrive to campus. These barriers include academic, social, institutional, attitudinal and physical barriers. These barriers often impact a student’s ability and motivation to engage. However, the findings of this study seem to indicate that students with psychological disabilities are engaging on the campuses noted in this research study. In reviewing the four NSSE engagement indicators, I discovered that there was only significance found in the area of learning with peers by institution. This could be due to the fact that Northern State University (NSU) is a minority serving institution and Eastern State University (ESU) is a larger minority institution. At NSU 53% of students with psychological disabilities participated in learning with peers and 10% of identified students at ESU participated in learning with peers. This may be evidence of the fact that NSU is a smaller minority serving institution where a culture of cooperative learning is fostered and encouraged. Because ESU is a larger campus, students may feel the need to be more independent and have more autonomy with their studies.

Regarding the high-impact practices, there was only significance according to institution in the dimensions of participation in service or volunteer work, participation in learning communities and study abroad. There were 100% of the participants participated in Community Service or Volunteer work at Northern State University (NSU) and 70% of students at Eastern
State University (ESU). These findings could be the result of the requirement for community service at NSU. Every student is required to complete 120 hours of community services (or 15 hours per semester enrolled. Requiring community service for graduation might have impacted the level of participation based on institution. The participation in learning communities is prevalent at majority serving institutions, which is how NSU is classified. There were 53% of participants at NSU to participate in Learning Communities and 10% of students at ESU that participated. Because students tend to thrive in communities, this is common practice in these institutions, which could increase the likelihood of students participating in learning communities as compared to a larger institution. Finally, there was significance regarding study abroad based on institution. There were 47% of students who participated in study abroad at NSU and 15% of students who participated at ESU. Since NSU is a smaller minority institution and ESU is a larger majority serving research institution, it was unexpected to see a larger percentage of students participate in study abroad from the smaller institution. This may speak to the fact that NSU has a comprehensive Office of International Affairs that works collaboratively with other units on the campus to ensure that international students are provided the appropriate resources and supports to be successful. In addition to providing these services, they do work collaboratively with student organizations, academic affairs and student affairs to engage students in study abroad, as well as cultural emersion experience. These experiences allow for travel and study abroad to include mission and service trips as well a cultural emersion experience. The cultural emersion allows students to engage and interact with a culture different than their own within the United States and allows them to understand and appreciate the values, customs, rituals and traditions of another culture.
The other dimensions of high impact practices include participation in practicum and/internship, research with faculty and a culminating senior experience were comparable, and students with and without disabilities participated and engaged at both institutions. From the quantitative perspective, students were engaging at similar levels regardless of disability, institution or gender, which indicates that students are comfortable engaging whether they have identified a psychological disability or not and that campuses are providing supportive environments that are engaging everyone. In addition, the levels of student engagement, the time intensity, were analyzed and found comparable for students with psychological disabilities as compared to their non-identified peers. Results from the qualitative inquiry affirmed quantitative findings. In addition, two themes furthering understanding of student engagement emerged: 1). Students are motivated to participate by extrinsic factors and if engagement provided students a direct benefit 2). Interest and connection motivates engagement. These were evident from the responses collected from the focus group interviews. There were similar responses regarding their level of engagement regardless of disability, gender, institution or age. The participants’ responses noted that they engaged with their professors, peers and with co-curricular campus experiences if these exchanges were required by their professors, provided extra credit or recognition or they felt a direction connection or interest to the co-curricular activity. The majority of the students who participated in the focus group interviews participated in service learning and internships as noted in their participation in high impact practices. This information indicates that these students either had an interest or the service learning is required for that particular institution. Internships are great opportunities that provide specific skill development, networking and greater understanding of the career aspiration of the particular student. These observations confirm the themes that were noted from the qualitative portion of the study.
Students are motivated by extrinsic factors that could provide a direct benefit to them. Disability, gender or institution was not a major factor in their intentional choice to engage within the campus community. The students noted a level of academic challenge, learning with peers, experiences with faculty and campus environment that met their specific needs and academic goals. Students engaged in every aspect of campus life that would ensure their specific definitions for success.

The qualitative data confirms the quantitative findings and further explains student engagement. Students engaged as noted by the NSSE Findings at comparable rates with only significant differences in the dimensions of Community Service/Service Learning, participation in Learning Communities and Study Abroad. Regarding their engagement, the qualitative data further notes that students did engage without impact based on disability status, gender or age. The qualitative portion indicated that students engaged based on their interest and connection to the engagement, being externally motivated by earning points or extra credit for a course by attending, or if their schedules allowed for engagement and participation.

**Implications**

The implications of this study are extensive. Students with disabilities are often faced with unwelcoming environments upon entering many institutions. Institutions should be committed to “identifying and addressing ways in which ableism shapes the experiences of members of the campus communities” (Brown, 2006, p. 187). The theoretical framework of this study focused on the two-fold definition of student engagement as described by George Kuh and operationally defined by Kuh et al. (2007). Their definition describes student engagement as the time and effort students devote to activities that are linked to desired outcomes of college, as well as what colleges and institutions do to intentionally invited student to engage and participate.
in these activities (Kuh et al., 2007). This framework notes that students should seek opportunities to engage and institutions should be intentional about being inclusive in their practices. Kinzie and Kuh (2004) also noted additional aspects of student engagement to include time on task, quality of effort and involvement. These are critical aspects of student engagement. Additionally, it is critical to note that a ‘key strength of envisioning student engagement as a way that acknowledges the lived reality of the individual, while not reducing engagement to just that’ (Kuh, 2009, p. 766). The entire campus community, which include faculty and student affairs professionals should “foster the conditions that enable diverse populations of students to be engaged” (Quaye & Harper, 2015, p. 5). Students with disabilities are included in this diversity.

Looking at the present study, the students randomly selected for the quantitative and qualitative portion of this study indicate a comparable level of student engagement, with and without an identified psychological disability. The students randomly selected from the NSSE data engaged at comparable levels as noted by the four engagement indicators and the high-impact practices. The participants from the focus group interviews also noted comparable levels of engagement in co-curricular activities such as Lecture Series, Music Events, Concerts, Sporting Events and Intramurals and Student Organizations. Additionally, students engaged with various academic and support units on campus such as Academic Support, Tutoring, Campus Recreation, Women’s/Men’s Center or the Student Center. Students enrolled at Eastern State University (ESU) participated in more minority based organizations such as the African Students Organization, Women’s Organizations for Minorities and the National Council for Negro Women. These organizations were not evident at Northern State University, which is a minority serving institution. ESU is a larger predominately white research institution, where minority groups are more prevalent. These organizations provide a sense of community for many minority
students, while providing a space for individuals of similar cultures, backgrounds and experiences to engage and connect. This accommodation was the only difference noted in the way students engaged within the campus community.

On the positive side, as both institutions have utilized the NSSE framework for more than a decade, it may be the case that student engagement is a priority on these campuses and given institutional intentionality, students are able to engage equitability without regard for disability status. In fact the greatest differences were between rather than within campuses. More pessimistically, it may be the case that identification is the key and that as more students come to campus with psychological disabilities, a growing number may not be diagnosed. For some, unless the students have an outburst of some sort, their psychological disabilities could be hidden if not disclosed to each professor and/or support staff. As such, there may be no actual difference between students by psychological status – only with some identified while others are not. The type and intensity of disability could impact the barriers student encounter as well as their holistic college experience. Further research could further distill by disability type.

Student engagement is critical to the success of all students. When students feel connected and involved with their institution, they are more likely to persist and graduate (Pascarella & Terenzini, 2005). In order to increase this connectedness, peer interaction, campus involvement, service learning and engaging in experiences that promote diversity and participating in co-curricular activities increase students’ connection and engagement (Scholssberg, 1989). These aspects are evident and noted in the four engagement themes assessed by the National Survey of Student Engagement (NSSE) of academic challenge, learning with peers, experiences with faculty and campus environment.
Based on the literature, students with disabilities nationwide are not being retained, completing or engaging at the same rate as their non-identified peers. Additionally, barriers were identified in the literature to include academic, social, institutional, attitudinal and physical. To engage students with disabilities, it is “imperative to consider academic and co-curricular engagement, legal issues and barriers to engagement” (Quaye & Harper, 2015, p. 191). The presence of barriers, even for students with psychological disabilities, which are invisible disabilities, can impact how students feel they are perceived and subsequently how they engage. It can also impact the level of services and support they seek to assist in providing the necessary tools to ensure their success. Yet, in the present study, no differences between students with and without identified disabilities were found.

**Limitations**

The sample size of this study is a significant limitation. The sample size for the quantitative portion of the study included 39 students. This small number was the result of the number of students from both institutions who disclosed a psychological disability. Additionally, it would be helpful to sample more students that identified psychological disabilities so as to make sure there is an understanding of patterns among students who are unidentified. Of the students who participated in the NSSE at both Northern State University (NSU) and Eastern State University (ESU) these were the total number of students who disclosed a psychological disability. Additionally, the NSSE data analyzed was from two different years. The 2012 NSSE was used from NSU, which noted 20 students with psychological disabilities. The 2012 NSSE administered at ESU did not allow for students with disabilities to be captured. The 2015 NSSE allowed students to disclose their specific disability. Of the students who completed the NSSE in 2015, 19 of those students disclosed a psychological disability. The qualitative portion of the
study noted 13 students who selected to participate in the research. A poster advertising the research study was displayed in the Counseling Center and the Disability Services Offices at both institutions. The study represents the students with and without psychological disabilities to select to participate. Even though there was randomization, it is not clear how representative these students are of the student bodies at NSU and ESU. In addition, I had to pick different years of the quantitative data which could reduce comparability of results although the same instrument was used.

These limitations notwithstanding, this study is important descriptively as the literature regarding students with disabilities points to barriers to student engagement while the present study poses that these barriers are not insurmountable. Students with disabilities in the present study engaged in the same types and intensity of activities on campus and were similarly motivated as their non-identified peers to engage. Additionally, age was a confounding factor given the spread and distribution of participants by age, as the average age of the students in the qualitative portion was 31. The results may not be generalizable to traditional age students. Results should also not be generalized to either the ESU or NSU campuses, much less other institutions, or be indicators of particular trends. Further study and documentation is necessary to determine whether these findings are truer than anomaly.

**Recommendations**

This study focused on the level of student engagement for students with and without psychological disabilities and if there were significant differences in the level of engagement based on disability, institution and gender. Regarding the four engagement indicators from the National Survey of Student Engagement (NSSE), there was only one area of significance, which was learning with peers based on institution. Regarding the high impact practices, there was
significance in three of the six dimensions which were; participation in Community Service/Volunteer Work, Learning Communities, and Study Abroad. The other areas of high impact practices, which are participation in Practicum or Internship, Research with Faculty or completing a Culminating Senior Experience, were comparable regardless of ability, gender or age. This study notes that the students who were randomly selected for the secondary data analysis of the NSSE data and the students who participated in the focus group interviews are engaging on their campuses, with very few barriers that many students with disabilities face.

This study only represents a small population of students with and without psychological disabilities and does not consider other disabling conditions as identified by the Americans with Disabilities Act (ADA) or the Americans with Disabilities Act Amendment Act (ADAAA). This study does not speak to every need for engagement that a student might have on a college campus. However, it does provide a sample of how students are engaging and what specific types of engagement they experience on campus.

The literature speaks to students with disabilities experiencing barriers to the environment and engaging less, which often results in their not being retained or graduating at the same rate as their non-identified peers. This study indicates that this sample of students are in fact engaging and are able to utilize resources on campus to support their engagement and to enhance their ability to connect to the campus. Since students with psychological disabilities have invisible disabilities, the barriers they face are often quite different than students with visible disabilities such as mobility, hearing or visual impairments. Their ability to navigate the campus environment and the educational experiences may be different as the barriers they face are often heightened as they deal with physical barriers, professors and staff attitudes and perceptions about their ability to achieve in college. These aspects could greatly impact a
student, or as seen in the present study, these barriers may be surmountable allowing students with psychological disabilities to engage similarly as their peers.

Schwartz (2002) provided an overview and comparison of how disturbed clients who utilized services at College Counseling Centers noting differences in clients from 1992-93 and 2001-2002. Using the Personality Assessment Inventory, it was noted that the pathology of clients was unchanged for 3,400 counseling center clients seen during 10 consecutive years. However, during those 10 years, the use of medications increased 5 times, which could attribute to symptoms possibly being managed in a more socially appropriate manner, however still having the need for the counseling intervention. Within this study, it was noted that barriers often result in challenges with “learning, academic performance, social integration and retention” (Schwartz, 2002). Although my study only noted social integration and engagement and not the other factors, it was concluded with my sample that students with psychological disabilities are engaging at comparable rates with their non-identified peers. The data noted that even with the presence of a psychological disability, the students in this study sample did not indicate evidence that their engagement was impacted negatively by the presence of a psychological disability.

Another study by Evans and Broido (2011) indicated that students with invisible disabilities were extensively involved in co-curricular activities on campus and engaged more than their peers who had visible disabilities. This difference might be impacted by the fact students with visible disabilities often face “physical barriers to their engagement such as inaccessible building or poor sight-lines for wheelchair accessible space” (Quaye & Harper, 2015, p. 193). The students in this study who disclosed disability have an invisible disability and the data noted confirmed the notion that students with invisible disabilities participated in co-curricular engagement at comparable rates to their non-identified peers. Evans and Broido (2011)
noted that students with psychological disabilities often “felt pressure from their families to focus solely on academics or feared the stigma that acknowledgement of their disability might bring” (Poster Presentation, Evans & Broido, 2011). Evans and Broido’s study confirms that students with invisible disabilities often face different barriers and the participants in my study managed to overcome their barriers and chose to engage in meaningful ways.

Recommendations for further study include understanding exactly what supports and services students with all types of disabilities need to successfully engage, and which ones impact retention and graduation rates. Further studies could consider a larger population sample size which would provide a broader scope of the experiences of students with and without psychological disabilities, the barriers they face and how they chose to engage. Additional research could be explored to determine specific factors that determine the manner and frequency in which students engage within the campus community, as well as determining the value they place on the engagement. For students with psychological disabilities, there could be further studies that analyze their own feelings of the ability to persist and graduate and their level of self-efficacy in that process. Additionally, further research could explore the manner in which institutions can ensure that their learning environments include co-curricular experiences that are inclusive and integrative in their approaches. There was significance in the areas of Community Service, participation in Learning Communities and Study Abroad. Institutions might consider intentional programming and outreach regarding ways to engage diverse students in these and other high impact activities.

Ensuring accessibility in every aspect of the institution is required by the various disability laws, however campuses should be committed to ensuring that the campus climate supports and maintains the spirit of those laws. This commitment is evident in the culture and the
student’s perception of the environment. This study has noted that with this sample size, the
majority of students are engaging regardless of ability, gender and institution; however it is
critical that institutions are intentional in their practices of engaging all students to ensure their
successful matriculation at institutions of higher education and beyond.
REFERENCES


Council for the Advancement of Standards in Higher Education.


Zwart, L., & Kalamieyn, L. (2001). Peer based coaching for college students with ADHD and learning disabilities. *Journal of Postsecondary Education and Disability, 1*.
APPENDIX A: FOCUS GROUP INTERVIEW QUESTIONS

Student Engagement

1. What is your classification (freshman, sophomore, junior, senior, or special “non-degree earning” student)?

2. What is your age range?  
   18-24  
   25-30  
   31-35  
   36 or above

3. What is your gender?  
   Male  
   Female  
   Transgender or other

4. In your classes during a given week, describe how much or often you participate in the discussions or group activities.

5. During a given week, how many times would you say you participate in cooperative learning or group work in your classes? Outside of your classroom instructional time?

6. Do you ever visit your professors during their office hours? In a given week how many times would you say you’ve seen a professor during office hours?

7. Do you engage with or visit support office such as Student Health and Counseling, Campus Recreation, Student Union, Women’s Center, Men’s Achievement Center or other support offices? If so, which ones and how often?

8. Have you participated in any co-curricular activities on campus? If so, what activities or organizations?

9. Have you ever participated in a high-impact engagement activity such as:
   Service learning  
   Study abroad (out of the country)  
   Research with faculty  
   Living Learning Community  
   Internship  
   Capstone Project
10. How many hours do you spend during the week outside of the classroom participating in educational activities (such as a Speaker Series, Lyceum, Theatrical Production, Music Concert, etc.)?

11. Do you feel encouraged to participate in co-curricular activities? Do you feel welcomed to participate in any activity of your choice? Do you participate in any activities? Which ones and how often?
APPENDIX B: INTERVIEW PROTOCOL

The qualitative component of this study involved an open-ended focus group interviews including students with and without psychological disabilities. The students were undergraduate students who are currently enrolled at the institutions represented in the study. The interviews were conducted in a focus group setting on each individual campus. The participants were unable to identify which students have disclosed a psychological disability. There were measures to ensure that individual comments or practices are unidentifiable to protect the anonymity and reduce the risk of causing discomfort in the current educational setting.

All participants were informed of their right to privacy and anonymity. As the researcher, I ensured all participants understand the importance of this in regards to confidential and sensitive information. The goal of the research was to gain an understanding of the student’s level of student engagement and participation in high impact practices as defined by the National Survey of Student Engagement (NSSE). This information provided information regarding ways to further engage students with and without psychological disabilities.

Interviews were audio recorded using a digital recording system. In addition to recording the interviews, the researcher manually recorded responses through written notes. These notes served as an outline to capture the main points of the interview. They were used as a back-up to the digitally recorded notes. The digitally recorded notes were accurately labeled with the date, time and pseudonym so the person interviewed cannot be identified.

Each interview was transcribed exactly as recorded. This transcription process provided written document of the interview dialogue. After transcribing the interview, the researcher checked the transcription for accuracy by listening to the recording and reading the transcribed notes.

Field notes were used in the interviews as another source of data. Field notes were used to collect information outside of the interview. Field notes will note specifics such as mood of the participant, non-verbal communication, and other important factors that are not directly transmitted during the interview. Field notes were used as a point of reference for the researcher to receive clarification or follow-up questioning, if appropriate.

In summary, data collection included open-ended focus group interviews with six to twelve undergraduate students at each institution represented in this study. Separate focus group interview were conducted on each campus. Data were collected from these interviews by using a digital recording device in order to accurately capture the information in the interview. In addition to recording the interview with the participant, the researcher kept field notes and a written detail of the interview. The interviews were transcribed in order to have an accurate written account to be used in the data analysis section.

The following script will be used for the focus group interview:

Welcome and thank you for participating in this research study. The goal of this research is to gain and understanding of the level of student engagement for students with and without psychological disabilities. Student engagement is defined as the participation in educationally effective practices both inside and outside of the classroom. Some of the questions will involve your participation in co-curricular activities, which means activities outside of the classroom. Examples are participation in clubs, organizations, athletics, travel abroad, and research with faculty or internships. There is no right or wrong answer and this will not impact your grades in
anyway. Please be respectful of others thoughts and opinions in this group. Also, I ask that we speak one at a time and that all cell phones be placed out of sight and on silent. This will allow us to engage in the discussion with minimal distractions. This interview should last 45-60 minutes. I will ask you questions one at a time and will take notes of your responses. I will also record the interview so I can then transcribe the interview for the purposes of this study. You can take a break as needed and you can end the interview at any time without penalty. What you share will assist in how colleges and universities can enhance the level of student engagement to ensure student success for all students. At the completion of the focus group interview, you will be entered into a drawing to win a gift card. Thanks again for participating in this research study.
February 17, 2016

Kesha Lee
Student Disability Services
North Carolina Central University
1801 Fayetteville Street
Durham, NC 27707

Dear Ms. Lee:

As required by University policy the Institutional Review Board (IRB) has reviewed your research protocol, “Impact of Student Engagement for Undergraduate Students with Psychological Disabilities,” under procedures for expedited review. The IRB has determined that the activities described in this application meet current criteria for research with human subjects. You have been granted approval to begin your research.

Your IRB approval number is #1201277. This approval will expire February 17, 2017.

No further action is required as long as research procedures described in this application remain the same. You are, however, required to obtain IRB approval for any revisions or modifications to your original project description prior to implementation of those changes. You are responsible for reporting any unanticipated events involving risks to research participants or others. **You are responsible for notifying the IRB when the research study is completed or discontinued.**

If additional information is needed, please contact the IRB office at IRB@nccu.edu. A hard copy of this letter will be held in the Office of Research Compliance (309 Hubbard-Totten Building). We wish you the best in your endeavor.

Sincerely,

Gail Hollowell, PhD
Chairperson
APPENDIX D: ECU INSTITUTIONAL REVIEW BOARD APPROVAL

EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board Office
4N-70 Brody Medical Sciences Building· Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834

Office 252-744-2914 · Fax 252-744-2284 · www.ecu.edu/irb

Notification of Initial Approval: Expedited

From: Social/Behavioral IRB
To: Kesha Lee
CC: Crystal Chambers
Date: 7/1/2016
Re: UMCIRB 16-000660
Impact of Student Engagement for Undergraduate Students with Psychological Disabilities

I am pleased to inform you that your Expedited Application was approved. Approval of the study and any consent form(s) is for the period of 7/1/2016 to 6/30/2017. The research study is eligible for review under expedited category #5, 6, 7. The Chairperson (or designee) deemed this study no more than minimal risk.

Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The Investigator must adhere to all reporting requirements for this study.

Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).

The approval includes the following items:

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<th>Name</th>
<th>Description</th>
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<tr>
<td>Informed Consent Form</td>
<td>Consent Forms</td>
</tr>
<tr>
<td>IRB Recruitment Documents (K. Lee).docx</td>
<td>Recruitment Documents/Scripts</td>
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<tr>
<td>K. Lee-Dissertation Proposal</td>
<td>Study Protocol or Grant Application</td>
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<tr>
<td>Research Protocol/Questions</td>
<td>Interview/Focus Group Scripts/Questions</td>
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<td>Research Questionnaire</td>
<td>Surveys and Questionnaires</td>
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The Chairperson (or designee) does not have a potential for conflict of interest on this study.

IRB00000705 East Carolina U IRB #1 (Biomedical) IORG0000418
IRB00003781 East Carolina U IRB #2 (Behavioral/SS) IORG0000418