Institutional Strategies of Identified Involvement Triggers that Increase Campus Engagement: A Longitudinal Analysis Based on an Individual National Survey of Student Engagement Responses

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DEDICATION

First, I must thank my Lord and Savior Jesus Christ, who is my strength in the time of trouble and my support each and every day. Then to my wife, Zelda Hughes- Howard for your unwavering support, despite your personal health challenges. If it was reading my papers when you were too tried or your willingness to lend a sympathetic ear, you have been my rock. Thank you for being so understanding of this process while never letting me lose track of what matters most. To my parents, Eddie J. Howard, Sr., and Katie Mae Howard for instilling the work ethic necessary to complete a task of this magnitude. To my children, Kristafer, Avery, Taylor, and Trinity for believing in your father and never doubting I could do it.

ABSTRACT

The purpose of this study was to examine the relationship between student engagement and institutional strategies at Youngstown State University using National Survey for Student Engagement (NSSE) data collected by the Office of Assessment for the years of 2010, 2013, 2016 and 2018. A longitudinal analysis was conducted to determine if there was a statistically significant difference in the level of student engagement between 2010 and 2013 (pre-Student Experience) and 2016 and 2018 (with-Student Experience). The study also examined differences within student types (nontraditional, LGBTQI, students of color, international, commuter, and residential students) and engagement outcomes. Thirty-six questions, from the NSSE survey, were identified which correlated to motivation, engagement, participation, academic participation, demographics, and strategy. Results revealed no change in engagement, motivation, and participation based on the institutional strategies for 2010, 2013, 2016, and 2018. However, when comparing results from 2010 and 2013 (pre-Student Experience) and 2016 and 2018 (with-Student Experience) there was a significant increase in pre-graduation engagement for with-Student Experience based on the NSSE data. Additional results showed that when grouping NSSE questions by categories different student types responded to engagement strategies differently.

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Chapter 1

Today's college students are faced with a mountain of distractions from the first day they arrive on campus until graduation. Heibutzki (2019) stated that these distractions might range from financial uncertainty to personal development. Parental separation and the freedoms that come with leaving home for the first time, roommate conflicts, and learning the social culture of campus are all contributing factors to academic distractions (Heibutzki, 2019). These distractions also hinder the students' ability to make a true connection with the institution they are attending. When students fail to make these critical connections during the early matriculation period, a chain reaction of events can occur. This chain reaction may manifest in enrollment decline, a reduction in state appropriations, and a loss of tuition revenue. Based solely on fiscal implications, institutions have been quick to recognize the importance of engagement as one of the strategies that will improve retention and increase institutional enrollment.

Problem Statement

Campus engagement is critical to the academic success and personal growth of students attending colleges and universities nationwide. Wyatt (2011) related these critical elements of campus engagement to retention and achievement rates of college students regardless of their age. Research shows that nontraditional college students become more engaged in the institution if there is a supportive environment (Wyatt, 2011). Therefore, colleges and universities must provide a mechanism for engagement to flourish. When colleges and universities promote participation in campus activities and student organization, they create an improved sense of belonging and a connection to the institution's traditions

(Elkins, Forrester, & Noel-Elkins, 2011). However, campuses fall short when identifying specific institutional strategies that lead to increased campus engagement.

Alexander Astin's theory of involvement showed that a student's beliefs, perceptions, knowledge, and moral framework are shaped by developmental changes during their college experience (as cited in Kuh & Pike, 2005). Likewise, Tinto's (2012) examination of students exiting college before completion provided evidence that a student's inability to engage in campus culture, both intellectually and socially, has a negative effect on their academic success. For years, institutions have used these theories to predict institutional engagement and prevent early departure. However, practitioners struggle to find the correct approach that will result in increased participation and engagement in campus activities. Quaye and Harper (2014) indicated that Astin's theory of involvement focused primarily on the activities of college students and the length of time they dedicate to those activities, as well as the institutional professionals who influence their development (as cited in Kuh & Pike, 2005, p. 4). A review of current literature shows a gap in understanding when identifying the effective approaches to increase progression towards student engagement on college and university campuses. This study will address that gap of understanding by demonstrating how institutional strategies can be used to alter behavior and show a pattern of participation that leads to increased engagement. Using a longitudinal analysis, this hypothesis will be tested by comparing National Survey of Student Engagement (NSSE) data collected at Youngstown State University (YSU) during 2010-2018 related to participation and engagement, to identify institutional strategies and show the progression of engagement. Predicting and identifying participatory behaviors should increase campus engagement and retention and reduce early departure at this institution.

Statement of Purpose

The purpose of this study was to show that identified institutional strategies contributed to an increased level of engagement by students at YSU. Previous research has shown the benefits of student engagement, as well as negative impacts when students choose not to participate or lack the motivation to engage in campus activities. However, there is limited research in the area of college student engagement and progression based on institutional triggers both intrinsic and extrinsic which lead to increased engagement. More than 20 years of experience in student affairs work have made it clear that research on student engagement, participation, and motivation is needed. The role of today's college student is rapidly changing with the greater dependence on technology, distance education, and alternatives to the traditional post-secondary education. Insight that has developed over the last two decades positions the researcher to interpret finding through an institutional specific lens and use this information to impact future institutional activities.

Furthermore, motivational factors have not been specifically identified or linked to increased student engagement. The study will link the aforementioned motivational factors to increased participation and engagement.

Wolf-Wendel, Ward, and Kinzie (2009) stated that the terms engagement, involvement, and integration are often used to define participation, though their definitions are not the same. Since there is a common perception that participation and engagement are theoretically the same, a goal of this study is to highlight their unique differences. Quaye and Harper (2014) stated that participation does not always translate to engagement. They believed that it is extremely plausible for a student to be present (participating) but disconnected from the group at the same time (Quaye & Harper, 2014). This study provided

clear definitions of participation and engagement, while demonstrating their differences.

Using these variables, the study attempted to show participation progresses to increased campus engagement, based on motivational factors.

Research Questions

In order to understand the effects of how participation progresses to engagement, the following research questions will be addressed in the study:

- Have reported levels of engagement changed between the collection of NSSE data from 2010 & 2013 and the 2016 & 2018 school years at YSU?
- What institutional strategies, as indicated by student responses, reveal a change in engagement from 2010 & 2013 and the 2016 & 2018 school years at YSU?
- What were the most effective institutional strategies at YSU as identified by the NSSE data?
- What differences in engagement were identified based on the following student populations: students of color, commuter students, residential students, international students, nontraditional students, and Lesbian, Gay, Bisexual, Transgender, Queer, Intersex (LGBTQI) students at YSU?

These questions were explored using results from the NSSE data collected at YSU in 2010, 2013, 2016, and 2018. The data was used to draw correlations between the variables (participation and engagement/dependent variables and motivation/independent variable) using a longitudinal analytic procedure to synthesize the responses across multiple years of data.

Overview of Methodology

The methodology of this study is fully explained in Chapter 3, which outlines the research design and conceptual framework of the study, research questions and target populations selected, sampling methods and sample sizes, and key dependent and independent variables. Since participation and engagement will be linked to intrinsic and extrinsic motivation, a longitudinal analysis will be used to show a relationship between motivational factors and participation and engagement. Using the Statistical Package for the Social Sciences (SPSS), an IBM program utilized in social science research, data points were be loaded into the program to draw these correlations (Field, 2015). The goal was to establish a relationship between institutional strategies and college student campus engagement and to identify triggers of motivation that lead to progression. There is ample research available related to campus engagement, student involvement, motivation, and the characteristics of students who participate in campus activities. However, it will be important for the study to establish practical and specific parameters regarding this research. Using the NSSE data with the correct sample size and power will be critical in supporting the hypothesis. Information regarding student demographics used in the analysis, as well as research excluded from the study, was also be explained. The goal was to collect YSU data related to college student campus engagement, motivational factors that lead to campus engagement, and consistent motivational triggers. Once the data had been selected, the variables from each of the survey years was analyzed to determine whether institutional strategies exist and how these strategies effect progression in college student participation and engagement. As Field (2015) stated, manipulation of an independent variable can be a useful method of reaching a desired result, especially when the data are one-sided. The desired result in this study was to establish specific motivational triggers that lead to the

progression of college student engagement. If research and data support this hypothesis, there may be positive implications for college administrators who struggle to tap into motivational triggers that increase engagement across campuses.

Definition of Key Terms

Engagement: engagement is identified as continuous, documented membership in an organization, or when a student is a major or minor contributor to the planning, execution, and creation of the organization and its activities. Wekullo (2019) defined engagement as the amount of time and input students place on continuous dedication to the activities and events in which they have been participating as well as the level of effort, by institutions, to ensure students participate in those activities (p. 322).

Motivation: motivation is defined in terms of intrinsic and extrinsic motivation, outlined in Chapter 2 of this dissertation and defined by theorist Robert White. White stated that intrinsic motivation involves an internal driver, like personal pleasure or the excitement of learning something new (p. 56). Extrinsic motivation is concerned with external drivers, like the opportunity to win a prize or an increase in salary for positive evaluation (Ryan & Deci, 2000, p. 60).

Participation/Involvement: participation/involvement is defined as simply showing up, but not contributing to the planning, execution, or creation of the event. "Astin (1984) defined involvement as the amount of physical and psychological energy a student devotes to his/her academic experience." (Wolf-Wendel, Ward, & Kinzie, 2009, p. 410)

Summary of Dissertation

Chapter 2 of this study will provide a background and body of literature related to participation, engagement, and the type of students who engage in campus activities, student

organizations, and service projects. Chapter 2 will also provide a theoretical framework of students using Astin's 1984 theories, Tinto's theories (2012), and Duckworth's theories (2016). Chapter 3 will provide information about the methodology, including how the study was conducted, its purpose, the research method used, and the study's hypothesis, which includes the conceptual framework, and the research questions will be identified. Chapter 4 will provide information related to the research questions posed in the study as well as the results and findings. Finally, chapter 5 will provide information about the limitations in the study, future recommendations and a discussion related to findings.

Chapter 2

Review of the Literature

For several years, college administrators have struggled to understand and predict why college students choose to participate in campus activities. Many colleges and universities view involvement as connecting students to programs, services, and activities. They have also spent substantial financial resources to define and increase campus involvement, engagement, or participation. Regardless of definition, the resources allocated toward involvement efforts are designed to improve retention and graduation rates. Prior research studies indicate that increased campus involvement can also lead to improved persistence, progression, and graduation rates (Kuh & Pike, 2005). Aside from the financial benefit to the institution, there are developmental benefits to the student through continuous participation. Continuous participation ensures that a student's overall educational experience is a positive one. Improving the educational experience is not only about introducing students to new experiences or helping them to make connections, it is also about aiding personal growth and creating a sense of belonging. Some college professionals see this as an opportunity to challenge students' belief systems and/or expand their understanding of a particular subject. Regardless of the motive, the question is how do students get there? What keeps them engaged and what motivates them to get involved initially?

Student involvement has stimulated the interest of many researchers curious about its impact on students and their behavior. Bergen-Cico and Viscomi (2012) studied the effects of a students' involvement in co-curricular programs and activities and how that involvement increased student's grade point average. In another study, Case (2011) concluded that college women participated more than their male counterparts. Although men and women

shared the same number of working hours and sense of belonging to the institution, the study revealed that women, who were less involved than the men, also had lower career expectations than men. The author noted that because many off-campus externships commence during senior year, student participation may be limited. The research also suggested that on-campus employment, coupled with faculty involvement, leads to more campus participation in clubs and organizations. A student's personal motivation in oncampus employment was the catalyst for increased campus involvement (Case, 2011).

Another important motivational factor for students is a sense of belonging that is created through involvement in campus activities. An article by Elkins et al. (2011) highlighted the sense of community that college students possess and how it correlates to involvement on campus. The study indicated that the more frequent a student's participation is, the stronger the feeling of belonging, which also improves the likelihood of learning the history and traditions of the institution.

All of these connections are important to the academic success of students and ultimately lead to progression and graduation. Therefore, this study attempted to provide evidence that motivational factors (both intrinsic and extrinsic) contributed to an increased level of student engagement. Alexander Astin's 1984 theory of involvement (as cited in Kuh & Pike, 2005), Vincent Tinto's (2012) research on student departure, and Robert White's work on intrinsic motivation (as cited in Ryan & Deci, 2000) was used as theoretical frameworks for this study. In addition to these theorists, Angela Duckworth's (2016) work on GRIT® supported the hypothesis related to motivational factors and why students chose to engage in campus activities.

Theoretical Framework: Theory of Student Involvement

Astin's 1984 theory of involvement that student behavior is affected by increased participation in co-curricular activities was published in 1984 and established in 1985.

Colleges and universities began to connect developmental outcomes to this new theory. Prior to Astin (1984), there was no evidence to support the benefits of co-curricular participation.

Astin's (1984) theory was based on the following three concepts: a student's input, a student's environment, and a student's outcome (as cited in Kuh & Pike, 2005). The theory explained that input involves the person's demographic make-up and personal experiences, whereas their involvement in the campus culture is created around the student by the institution.

A student's outcome, as it relates to the theory, is how beliefs, perceptions, knowledge, and moral framework might shift during the student's experience in college. Astin's (1984) theory was also grounded in the belief that there are five basic assumptions about student involvement: (a) student involvement entails a certain amount of personal psychosocial and physical effort, (b) student involvement is on-going and investment by the students is unpredictable, (c) student involvement can be qualitative and quantitative when assessed, (d) the more the student participates, the greater the personal reward, and (e) there is a direct link between academic success and increased participation (as cited in Kuh & Pike, 2005). Since the original theory was established in 1985, other researchers have conducted similar studies and yielded the same results. Each study re-enforces the concept that involvement in co-curricular activities has a major impact on student behavior and personal development.

Model of Institutional Departure

Similarly, with what motivates students to engage with their institution, it is equally important to understand what motivates them to leave or postpone their educational pursuits. Vincent Tinto (2012) is considered an expert on the subject of student departure. Dr. Tinto (2012) created the model of institutional departure in 1993. This model identifies three key components that contribute to why students might leave an institution. Tinto (2012) found that students who chose not to return to their college or university do so because of academic hurdles, their failure to resolve educational and employment issues, and inability to engage in the campus culture, both intellectually and socially (Tinto, 2012). Tinto's (2012) model helped shape the argument that student involvement is critical to academic success, engagement, and leadership attainment. To avoid early departure or drop out, Tinto (2012) suggested using formal and informal methods to encourage persistence. This involves formal integration into academic programs and social networks on campus and informal integration with faculty/staff and other peer groups (Tinto, 2012). In addition to institutional integration, a student's individual motivation, intrinsic, extrinsic, or a combination of the two, is also a key element to increased engagement in campus activities, events, and leadership roles.

The current study was conducted under a theoretical framework using personal motivation, a student's mindset around participation, and the internal grit the student possesses to complete college or overcome leadership challenges.

GRIT® Theory

Theorists like Angela Duckwork (2016) have investigated non-cognitive skill, or the ability to attain success regardless of a person's intelligence (Muenks, Wigfield, Yang, & O'Neal, 2017). Results of GRIT® tests show that people with a higher GRIT® scores are

more likely to succeed during challenging situations than those with a lower score. In addition, GRIT® scores are shown to be a better predictor of success than intelligence scores, a person's leadership, or physical abilities (Duckworth, 2016).

Similar to mindset theory, it is believed that grit can be developed if the person is willing to change their outlook. Carol Dweck (2006) stated that there are two types of mindsets when it comes to a person's approach toward life. People have either a "growth" or "fixed" mindset (p. 7). People with a growth mindset see a challenge as an opportunity to prove themselves or to learn something new. Conversely, people with a fixed mindset see a challenge as a struggle and approach the new task as if they are going to inherently fail because some people are successful at things, while other people or not. People with a fixed mindset believe there is really nothing a person can do to change their condition. Dweck (2006) believed that a person's mindset can be changed, and if persistent and hardworking, the person can achieve their goals.

Duckworth (2016) opined that when college becomes difficult, grit matters. Grit is the difference-maker that propels some to succeed, while others do not. The GRIT® study also showed that students who complete an associate's degree have more grit than those with a bachelor's degree. This is due in part to the fact that most students in the study were first-generation college students or were attending a community college, while balancing school, work, and financial challenges (Duckworth, 2016). The use of grit in this study was important when explaining the engagement level of first-generation and nontraditional students, as well as students of color.

Student Participation and Motivating Factors

Although student involvement has been the topic of several research studies, limited research has been done on how incremental involvement translates to increased campus engagement. Some campuses report high percentages of participation among their student body, while others struggle to get students engaged. This study investigated the institutional strategies that caused students to engage in campus events, activities, and student organizations. Using a longitudinal analysis research approach, the study supported the hypothesis that specific institutional strategies trigger student involvement. It also identified core institutional factors that transition involvement to engagement. Ultimately, the greater a student's personal motivation and institution support, the greater their level of participation.

Participation Levels by Campus

Students of Color participation at predominantly White institutions. For many years, colleges and universities have viewed student campus involvement from a mostly individual perspective. Researchers track a student's singular experience and use this data to make broad generalizations about student involvement and engagement for a majority of college students. Individual learning outcomes, established by college practitioners to measure effectiveness, are extremely important in assessing knowledge gained outside of the classroom. Research shows that students learn soft skills through their engagement in campus activities, participation in student organizations, and exposure to different cultural experiences (Taylor & Howard-Hamilton, 1995). Rodgers and Summers (2008) highlighted the differences in campus involvement by students of color at Predominantly White Institutions (PWIs), indicating that institutions were not particularly effective in the retention and mentorship of Black students when compared to Historically Black Colleges and

Universities (HBCUs). One strategy that has been found to yield results for Black students attending PWIs is linking ethnic identity to personal motivation (Rodger & Summer, 2008).

Taylor and Howard-Hamilton (1995) assessed student involvement and racial identity attitude among African American males and suggested that many students of color shed their identity to participate in mainstream activities at PWIs and assimilate into campus culture. However, this abandonment creates an internal struggle for the students of color as they try to maintain cultural ties. Taylor and Howard-Hamilton (1995) stated that there are three factors that affect the campus experience for African American students: (a) the lack of African American faculty, (b) the lack of academic and financial preparedness, and (c) a poor selection of campus activities related to African American students. Without these elements, African American students have more difficulty making connections at PWI campuses.

In a study reviewing student participation in collegiate organizations, Hegedus and Knight (n.d.) concluded that students' strongest motivational factors for membership are: (a) increased or improved leadership skills, (b) increased communication network, (c) stronger communication skills, (d) a belief in the group's purpose, and (e) belonging to an organization is important to the student (p. 3). The Hegedus and Knight (n.d.) study also suggested that undergraduate student organizations should recruit members with academic difficulty. Students with a grade point average (GPA) of 2.5 or lower should be identified and selected to become more involved, intended to help them develop connections to students in class, increase their communication network, and improve their academic skills. If students of color (specifically, African Americans) do not have a selection of campus activities or organizations that relate to their interests, as compared to their White counterparts, they will never be able to achieve the skill development discussed in the study.

Taylor and Howard-Hamilton (1995) suggested African American students are forced to defer their emotional, personal, and cultural development at predominately White institutions while in college. This deferment may be a contributing factor to why African American student participation at PWIs is low. Ethnic identity development also plays a key role in how much African American students participate in campus activities and student organizations. Taylor and Howard-Hamilton (1995) explained that African American identity development moves from negative, or external determination to positive, or internal, determination using Cross's model of Nigrescence. During this transition, African Americans progress through stages of development. These stages are:

- Pre-encounter: the idea that one's belief system is predicated on Euro-American values;
- Encounter: a shift to an anti-Black or pro-Black belief system;
- Immersion-Emersion: the acceptance of African American beliefs and values and the rejection of Euro-American beliefs;
- Internalization: the ability to pull from both African American and Euro-American beliefs; and
- International-Commitment: the integration of Afrocentric awareness and a passion to move from belief to action and empowerment of others.

As a result of this ethnic identity model, it is difficult to determine the motivational factors for African American student involvement at PWIs. Taylor and Howard-Hamilton (1995) concluded that African American students who became comfortable with their racial identity are more willing to participate in campus activities, regardless of the cultural connection.

African American students attending HBCUs experience ethnic identity development, but that development may not manifest itself in the same way as African American students attending PWIs. For example, studies have revealed that African American students attending HBCUs demonstrate a stronger association, more confidence, and a sense of belonging on these campuses as compared to PWIs which impacts these students' ability to succeed academically (Harper, Carini, Bridges, & Hayek, 2004). Moreover, HBCUs did not create the most positive environment for undergraduate women when it came to collegiate experience. African American males at HBCUs felt more confident about their college experience similar to their White male counterparts at PWIs (Harper et al.). This empowerment of African American males had a profound effect on African American females attending HBCUs wherein instructors perpetuated this empowering behavior in the classroom. As a result, African American females, with strong academic backgrounds from high school, fell below their male counterparts based on the emotional disengagement of faculty. These same females also felt less motivated to obtain post graduate education (Harper et al.). This study was conducted using NSSE data of first year and senior students from a cross-section of majors. Harper et al. indicated in their study that faculty interaction and a supportive campus environment have no direct correlations. They went on to state that a student might feel supported on campus, but the lack of faculty interaction may result in low academic performance.

A study by Boyraz, Horne, Owens, and Armstrong (2016) found that African American females, with a history of trauma prior to attending college, found it difficult to achieve academic success the first year and were more likely to drop out by the second year. Understanding that dropout rates are at its most high at the end of the first year, institutions

must develop strategies and programs that assist these students in dealing with their traumatic past. In addition, African American students, in particular, are 20% less likely to graduate from PWI in six years when compared to their White counterparts. African American students are also more likely to show signs of depression because of the limited resources available to them while in college. This is more profound in African American students attending PWIs (Boyraz et al.). African American students attending PWIs reported feeling singled out, alienated and lacking in representation, which contributed to a feeling of frustration and misrepresentation. This coupled with the lack of faculty interaction resulted in poor academic performance by the students (Boyraz et al.). Therefore, research supports the findings that African American students, attending PWIs, have more difficulty obtaining academic success than students attending HBCUs (Boyraz et al.). Further research is needed in this area to compare ethnic identity development of African American students attending HBCUs and those attending PWIs.

African American students, who are often first generation and/or come from low income household, attending PWIs often face some of the same hurdles as those students at HBCUs. Boyraz et al. (2016) stated that transition from high school to college brings with it a number of unforeseen struggles for first year and/or low-income students. These students often deal with academic uncertainty, economic issues, a lack of a sense of belonging, and personal family issues. Research by Adams, Meyers, and Beidas (2016) revealed that one-in-10, low income and first-generation college students complete college and earn a degree by the age of 25. In comparison, second generation and non-low-income students have a one-intwo chance of earning the same degree? The main stressors contributing to these results for low income and first-generation students are financial strain, perceived stress, psychological

symptoms, and academic and social interaction (Adams et al.). When low income and first-generation students fail to make an academic and social connection, they are less likely to interact with faculty outside the classroom, create strong social bonds with peers, and fail to participate in extracurricular activities (Adams et al.). Therefore, institutional professionals must create an environment for engagement to happen organically. Research has also shown that linking scholarship awards to peer advisement, mentoring, and study sessions will lead to increased academic success and persistence (Adams et al.). Institutions must be willing to assist students with the removal of financial roadblocks if they expect to increase participation rates of first generation and low-income students.

Involvement in Black Greek-letter organizations. When looking at engagement, it is important to examine the level of involvement by fraternities and sororities. For many years, these organizations have played a pivotal role in the development of college students. A study by Debard and Sacks (2011) looked at participation of fraternities and/or sororities during a student's freshman year to see if it contributed to a positive or negative academic outcome. The hypothesis was that first-year students involved in Greek organizations were less successful academically than those who did not join. Whereas the overall study concluded that participation in fraternities and sororities showed an improvement in academic success, the study also showed differences between male and female achievement rates after the first year (Debard & Sacks, 2011). Understanding the role of Greek-letter organizations play in helping students to make a connection to the institution is crucial, but is there a difference in the motivational factors of African American students joining Greek-letter organizations (specifically Black Greek-letter organizations) at PWIs?

To understand the motivational factor of African American students who join Black Greek-

letter organizations, one must examine the history of these organizations. In a study conducted by Walter Kimbrough (1995), looking at self-assessment, participation and values of leadership skills, activities and experience for Black students relative to their membership in historically Black fraternity and sororities, he explained the rich history associated with the founding of, at that time, the eight national Black Greek-letter organizations. He stated that during the time the founders of these organizations were looking for systematic means of providing wholesome recreation and social pleasures for themselves while attending college like their White counterparts. They believed that joining a Greek-letter organization provided social and developmental benefits which were greatly needed during this era. These African American students were of high caliber and understood the unique opportunity afforded to them and knew that linking together and forming fraternities and sorority would ensure their academic success. Kimbrough (1995) explained that Black Greek-letter organizations (BGOs) are held in esteem today because of their history, contribution to society and their connection to notable members like Martin Luther King, Thurgood Marshall, Lena Horne, and Mary McLeod Bethune. Kimbrough (1995) stated that in recent years an increase in hazing incidents has tarnished the rich legacy created by these organizations, and some members steadfastly maintain that hazing is the only true way to build a lifelong connection with their organization. The desire to be a part of Black Greekletter organizations by African American students is a motivating factor for these students regardless if the campus is a PWI or HBCU. Kimbrough (1995) stated that the small size of these groups makes it relatively easy for African- American students to gain access to leadership roles within these groups. He also stated that these leadership opportunities may not always exist for African American students in mainstream organizations on PWI

campuses. The African American students in the Kimbrough (1995) study also indicated that leadership was an important skill to obtain and that their participation and their ability to hold multiple leadership roles helped them become better people. Another interesting fact that was revealed in Kimbrough's (1995) study was the division between members of BGOs and non-members. The study concluded that "based on the negative and ambivalent feelings expressed by nonmembers about BGOs, it is undetermined from the study whether these organizations serve to divide or unite the African- American community at predominantly White institutions." (p. 73). This is a powerful statement because BGOs at PWIs have always struggled to maintain their existence on these campuses. Kimbrough's (1995) study also stated that nonmembers see the members of BGOs as part of the problem when it comes to creating a connection on a PWI campus. It is only when members of BGOs expand their involvement in other campus organizations that they see their leadership role as an opportunity to connect with the institution.

College student engagement by student type. Axleson and Flick (2018) believed that participation and engagement will manifest itself differently based on what is being measured. They cited that engagement could be connecting learning to classroom participation, sense of belonging to the university, or a connection to other students. However, the type of student who is engaged is also critical. To support this statement information was revealed about nontraditional students, students of color, international students, students with disabilities, commuter and residential students, student of the LGBTQI community and recent literature about the impact of engagement on college students based generational types.

Nontraditional students. Wyatt (2011) stated that nontraditional students are the fastest growing population of students in attending post-secondary institutions. About 43% of all students in college are identified as nontraditional. College students are divided into two groups, traditional: age 18 to 24, and nontraditional: age 25 and above. In the past, these students have been referred to as "mature students or adult learners" but the most common and inclusive term used today is nontraditional (Wyatt, 2011, p. 13-14). Using the term that is widely accepted by the National Center for Educational Statistic (NCES), nontraditional students were defined using the following criteria:

- students who choose to delay attending college for one year or more after high school;
- students who are not enrolled full time;
- students working 40 hours a week;
- students who are financially independent;
- students who are married and/or have children; and
- students without a high school diploma but possess a general education diploma. ([GED], Wyatt, 2011, p. 13)

Wyatt (2011) also predicted that growth among nontraditional students will reach historic proportions and that this group will be more diverse than in the past. Tan and Pope (2017) explained that these nontraditional students will be presented differently than other students in their expectations and motivations to be on campus. Their goals for returning or attending college will be complex and might range from degree attainment to personal enrichment. Wyatt (2011) opined that nontraditional students must be truly immersed and actively engaged in the campus culture. He warned that if school administrators fail to

provide adequate support, these students may be more vulnerable to early departure.

Therefore, engagement must be one of the tools used to ensure academic success for nontraditional students.

Tinto (2012) stated that two of the most accurate indicators that increased learning outcomes are campus involvement and engagement (Wyatt, 2011). Likewise, Tan and Pope (2017) stated that nontraditional students are often commuter students, as well, and this combination makes extracurricular engagement extremely difficult, which is why campuses must develop unique methods to address the problem.

Further research shows that students who are active participants in the classroom and beyond, achieve a high degree of success and are more satisfied with their college experience. In turn, these students receive better grades and often match their counterparts who started college at a higher level and were predicted to be successful (Wyatt, 2011). Wyatt (2011) stated that one reason these students see greater success than their traditional counterpart is based on research that shows that nontraditional students tend to be more focused, spend more time preparing for class, and are seriously driven to succeed. This ability to be self-motivated and consistent about the practice of learning and achieving personal goals translates and supports the GRIT® theory (Muenks et al., 2017). Therefore, campus engagement in extracurricular activities by these students is often lower than that of traditional students because of this drive to succeed at all cost. Only 27 % of nontraditional students seek to participate in campus activities (Wyatt, 2011). Therefore, programs, activities and support services must be intentionally redesigned to entice nontraditional students to participate.

Institutions interested in employing these techniques must be willing to institute the following measures:

- the college or university must be committed to support;
- instruction by faculty must be altered;
- staff must treat nontraditional students with respect based on their life experiences;
- academic counselor(s) must be trained in advising and special needs accommodations;
- the program of study must be flexible to meet their limited availability;
- programs and service must be created to appeal to their unique needs;
- institutional marketing efforts must be tailored to the need of nontraditional students; and
- the institution must maintain an environment that cultivate a spirit of engagement that makes nontraditional students want to remain on campus.

These programs and activities should include family members whenever possible to help the students achieve school life balance (Wyatt, 2011). Unlike traditionally-aged students, nontraditional students must negotiate work, family, household management, study time, and class attendance. Therefore, institutions must be willing to assist these students with identifying support services, creating spaces that are family friendly, and changing policies that cater to nontraditional students. Tan and Pope (2007) suggested that colleges and universities consider expanding childcare service options, family-related programs, and campus job opportunities; these efforts coupled with increased funding in the way of financial aid and scholarships will make a difference.

International students. As the vast number of American college students will begin to shrink in the next decade, colleges and universities will need to increase the number of international students on campus (Grawe, 2018). Therefore colleges and universities must pay closer attention to the needs of international students, not just their religion, culture and background, but all aspects of their experience to ensure these students are fully engaged in the educational process and the campus at large (Wekullo, 2019). Korobova and Starobin (2015) indicated that international students and native students participate in campus activities at nearly the same level, but native students often have more institutional support than international students.

Wekullo (2019) also offered that a student's ethnic background plays a key role in the level of engagement by students considered international. Further research shows that engagement by Black international students appear to be somewhat high when it comes to class assignments, group projects, civic engagement, and student-faculty interactions when compared to other international students (Wekullo, 2019). Korobova and Starobin (2015) came to the same conclusion about the importance of faculty interaction as it related to overall satisfaction with the institution.

The literature also shows that students from Asian countries, particularly China and Korea, believe their intellect is greater than other international students and even American professors; therefore, these students were less likely to engage in campus activities. This lack of engagement also contributed to the students' perception that the campus was not accepting (Wekullo, 2019). Korobova and Starobin (2015) explained that international students often find it difficult to assimilate into American culture; this inability to connect with the campus and culture contribute to the isolation and loneliness felt by these students. This feeling of

unacceptance could be matched with the feeling of discrimination that some international students experience as a direct result of their gender, race, program of study, and religious preference. Wekullo (2019) also explained that Black international students have a different experience than their American counterparts. Results showed that African American students experienced profound discrimination from faculty members and other students of color based on perceived stereotypes. It is also noted that international students from European countries experience less discrimination than those from Africa, Asia, Latin America, and the Middle East (Wekullo, 2019).

Likewise, an international student's level of participation might be different based on institution type. For example, at private institutions international students were convinced that since they were paying for it, they should strive to succeed. Whereas international students attending public institutions believed they must demonstrate a strong work ethic, (Wekullo, 2019). Korobova and Starobin (2015) indicated that international students performed better in the classroom than domestic students at community colleges. Regardless of the institution type, one of the keys to increase engagement by international students is the development of a sense of belonging. Wekullo (2019) stated that international students who are able to build friendships with their American counterparts, through participation in student organizations, often benefit from academic and emotional support which reduced anxiety and depression that may exist when trying to navigate a different country and its system of higher education. As a result of this reality, international students often find themselves maneuvering the campus ecosystem in clusters. This interdependence on one another ensures they avoid the pitfalls that could hinder their academic success at a foreign institution (Wekullo, 2019).

Students with disabilities. Often considered the "forgotten minorities", students with disabilities tend to be overlooked by practitioners in higher education as a result of the attention given to traditional minority groups (Nichols & Quaye, 2009, p. 41). These students also encounter similar obstacles as other marginalized groups and often represent a cross section of students from all ethnic groups, genders, and sexual orientations as they attempt to achieve their educational goals. This lack of recognition by administrators in higher education contribute to the feeling of isolation these students might feel on campus (Nichols & Quaye, 2009). Brown and Broido (2014) expanded upon this notion of isolation by describing the feelings students with disabilities experience as a form of oppression. The differences between the educational atmosphere for disabled students and non-disabled students has been shown to shape their perspective about their overall experience (Brown & Broido, 2014). Despite federal mandates to provide the students with reasonable accommodations, the attention given to providing support services is often lacking. Students with physical disabilities, who are mostly visible, can be marginalized simply because of their appearance, whereas those students with more psychological disabilities, who are invisible, might be compelled to hide their disability and not seek the help they need (Nichols & Quaye, 2009).

The Americans with Disabilities Act of 1990 stated that a person with a disability must, (a) have a physical or mental impairment that substantially limits one or more major life activity, (b) have a record of such impairment, and (c) is regarded as having such an impairment. Both the Americans with Disabilities Act and section 504 of the Rehabilitation Act of 1973, restrict public institutions as well as government funded organizations,

activities, and programs from discriminating against qualified persons on the grounds of their disability (Nichols & Quaye, 2009).

However, the need to provide educational access for students with disabilities both in the classroom and beyond is not only a lawful mandate. Brown and Broido (2014) explained that students with disabilities often graduate behind their non-disabled counterparts.

Therefore, the need for engagement by these students is critical to their academic success and retention on campus. When facilities and programs are made accessible for students with disabilities, the access to engage in campus life is also expanded. Brown and Broido (2014) highlighted a study of disabled students living in the residence halls and the increased retention rate as a result of this experience. This shows that intentional strategies are needed to increase engagement level of students with disabilities. Brown and Broido (2014) offered the following suggestions

- establish institutional policies and procedures centered around universal design;
- implement transition and bridge programs;
- create a mentoring program;
- develop partnerships with the office of disability services;
- conduct a climax survey; and
- include disability as a multicultural, inclusion, and equity issue. (pp.197-202)

LGBTQI students. Discrimination and harassment among students of color, international students, and other racial minorities are only segments of a larger issue that hinder collegiate engagement. Blumenfield (2012) explained that students who identify as being a part of the LGBTQI community experience the same level of discrimination and

harassment but an even greater degree when the student is also a member of one of the racial groups. Students who are identified as LGBTQI also experience harassment in primary and secondary schools and are at a greater risk for bullying, harassment, and even violence. This bullying and harassment are not limited to only student peers but faculty and staff who lack sensitivity training (Blumenfield, 2012). This type of behavior creates an oppressive environment for LGBTQI students and further reduces their ability to succeed in the classroom and beyond (Garvey, Rankin, Beemyn, & Windmeyer, 2017).

Furthermore, this feeling of continued harassment makes it difficult for LGBTQI students to achieve academic success. As a result of these traumatic experiences, research has revealed intense drug use, depression, Post Traumatic Stress Disorder (PTSD), a lowered sense of self-worth, issues of self-esteem, and even suicidal thoughts in this student population (Blumenfield, 2012). Garvey et al. (2017) stated that a campus climate that is unwelcoming and not inclusive may affect the LGBTQI students' ability to connect to their educational experience. This lack of connect may contribute to the students' feelings of isolation and lack of self-worth. Therefore, the need to provide support and understanding for this population is extremely critical. Blumenfield (2012) stated that about one-fifth of all incidents related to harassment and violence are directed toward people of the LGBTQI community.

Therefore, college campuses must work to create safe environments and a sense of inclusion and belonging to ensure this population has the same opportunity for success as all students. Blumenfield (2012) provided some recommendations that will equip campuses with tools they need to increase engagement:

- institutions should incorporate inclusive issues into the curriculum that relates to LGBTQI individuals;
- institutions should invite speakers and presenters to campus who can provide education and understanding to the entire community;
- institutions should design courses that deal with LGBTQI issues related to the humanities;
- institutions should enhance multicultural education which includes information about the contributions of LGBTQI people throughout the United States and the world; and
- institutions should demonstrate support by expanding the curriculum to include queer and LGBTQI studies as well as sexuality and gender studies to help bring about a broader understanding.

Finally, it is critical that the institution provides support services, change policies, and procedures that embrace this unique population of students, which include, but are not limited to, flexible student housing options, timely resolutions to negative LGBTQI incidents, and appropriate healthcare options (Blumenfield, 2012). In addition, administrators can use the Campus Pride Index (CPI) as a tool to guide the decision-making and policy implementations. Created in 2007, the CPI is an instrument designed to assess the inclusiveness of LGBTQI policies, procedures, and programs (Garvey et al., 2017)

Students of color. Beyond the students from the LGBTQI community, colleges, and universities must provide support programs and services to all domestic students of color. Solórzano and Villalpando (1998) defined students of color as those non-White Americans who are Native American, African American, Hispanic American, and Asian American. In a

study by Thompson and Schultz (2003), they discovered that students of color in a predominantly White environment are more likely to experience a least six psychological hurdles while in these environments. They defined these six potential experiences as:

- social loneliness;
- racial visibility and social invisibility;
- class and cultural discomfort among White parents and administrators;
- the burden of explaining oneself to White people;
- completing studies at a demanding school with minimal parent participation; and
- the burden of having to feel grateful all the time. (pp. 42-48)

The same experience can be felt by students of color at PWIs. Therefore, a singular approach (which supports only one minority group) to addressing the needs of students should not be implemented. First, PWIs must be willing to educate White students, faculty, and staff in White racial identity. Torres, Jones, and Renn (2009) explained that White racial identity assumes that the dominant White group is willing to recognize and accept that they possess White privilege, and this privilege has given them an advantage over other minority groups, and finally, that they should not force assimilation of the dominant culture on others. This push to assimilate by the dominant group re-enforces the hurdles identified by Thompson and Schultz (2003).

Solórzano and Villalpando (1998) explained critical race theory as one identifier which may explain some of the obstacles that students of color face. Critical race theory is defined as "a set of basic insights, perspectives, methods and pedagogy that seek to identify,

analyze and transform the structure of cultural aspects of higher education that maintain marginal positions and subordination of students of color" (p. 213). Solórzano and Villalpando (1998) also stated that students have the ability to alter their marginalized position through participation and campus activities. This involvement allows them to demonstrate some ability of achievement in an environment where they were once oppressed. In some cases, these students are able to acquire the same level of achievement as their White peers when they are willing to assimilate into the campus culture. However, those who reject assimilation will forgo any cultural capital, but may still succeed if certain support mechanisms are in place (Solórzano & Villalpando, 1998). Similar to strategies that have been employed with other minoritized groups, students of color who reject assimilation must have support and mentorship from students and faculty of color, must have support to deal with the racial exclusion in the curriculum and teaching methods, and the university must have multicultural and inclusive responsive policies and practices (Solórzano & Villalpando, 1998).

Students of color may present with a variety of multiple and/or secondary identities. These multiple identifies can be represented by race, cultural preference, sexual orientation, and gender. Renn (2008) concluded that some students have rejected the notion of a single race identifier, and instead, have demanded to be identified by a mixed-race classification. Multiracial college students are no longer willing to select one race over the other. However, further research shows that three main influencers to aid a student's selection of a primary identity, and are "physical appearance, cultural knowledge, and peer culture" (Renn, 2008, p. 18). Torres et al. (2009) showed that a student's identity is also influenced by their selection of roles, personal expectations, and belief system, which contribute to a concept called

intersectionality. Renn (2008) stated that mixed-race students feel the same pressure of assimilation as their single-race peers; these students are not exempt from racial discrimination, bigotry, and stereotyping. In fact, these students have indicated a similar encounter with faculty and staff when it comes to cultural insensitivity, lack of knowledge of how to deal with people from mixed backgrounds, and event aggressive behavior. Therefore, colleges and universities must be able to understand the importance of individual identity. Torres et al. stressed the importance of understanding identity development as a method of supporting and promoting student engagement as a process for learning and personal development.

Commuter/residential students. Research has shown the differences between commuter students and residential students. Jacoby and Garland (2014) stated that commuter students make up the largest population of students attending college and this number will only increase as more students of color and nontraditional students enter the college environment. Jacoby and Garland (2004) defined residential students as students living in university-controlled and/or owned housing. Similarly, commuter students are defined as those who live with their parents at their primary residence, those who live in rental dwellings near campus, and those adult students who are employed full time and who may or may not have children. The distance from campus is also a factor as Jacoby and Garland (2004) found that there was a distinct difference in behavior based on commuting distance. Defined simply as "walking commuters" and "driving commuters" (p. 67), their experiences and level of engagement were also different. For example, Kuh, Gonyea, and Palmer (2001) found that commuter students who drive to campus are usually nontraditional, first generation, and come from unrepresented backgrounds. In addition, these students are less

involved in university programs like study abroad trips, campus activities, and service projects and generally do not connect with professors outside of the classroom. Burlison (2015) also highlighted this difference in commuter students based on distance. He stated that students who drove to campus and who had other obligations were less likely to make a connection with their faculty member beyond the classroom. It is not that the connection to faculty is not important to these students, but obligations, time constraints, and transportation insecurity are also factors. Jacoby and Garland (2004) revealed that commuter students are often limited for time due to strict transportation schedules, issues with ride-sharing or carpooling, traffic jams, and problems getting to class when their vehicle breaks down.

It is assumed that in all cases residential students tend to make better grades and are more involved in campus activities than commuter students. However, Burlison (2015) suggested that regardless of their lack of campus engagement, commuter students achieve academic success at the same level as residential students. Kuh et al. (2001) came to the same conclusion about the academic effort of commuter students, when they found that these students showed greater commitment to class discussion, group projects, assignment completion, and faculty expectations. Jacoby and Garland (2004) also cited that similar to residential students, commuter students seek engagement and development in the campus culture but are often constricted by competing priorities such as employment, family commitments, and other adult responsibilities. The myth that these students do not have time or do not want to be involved is, simply untrue. Burlison (2015) stated the importance of college and universities creating opportunities for commuter students and residential students to engage in campus events together. This engagement is important because off-campus students and/or commuter students face barriers to participation and often fail to make the

connection to the institution and their on-campus peers. One of the reasons for this failure is the amount of hours commuter students are employed off campus. Research indicates that students who live off campus worked on average more than those students living in university-controlled housing. The percentage of hours worked by off-campus students was more than 25 hours per week compared to less than 10 hours per week for those students who live on campus. In addition, it was found that students who work close to 40 hours a week were rarely involved in on-campus activities and student organizations (Burlison, 2015). Jacoby and Garland (2004) suggested that instead of forcing commuter students to adjust their expectations of the institutions, the institution should investigate their practices and procedures to create an atmosphere of belonging to help these students connect to the campus. This might require colleges and universities to consider the following suggestions: (a) helping students to identify resources to meet basic needs like food, housing, and transportation, (b) creating an environment where commuter students feel and believe they matter to the institution, (c) designing curriculum and cocurricular activities that enhance the learning process, and (d) ensuring that the campus environment is physically welcoming and designed for commuter students to interact (Jacoby & Garland, 2004). Understanding the critical nature of these measures will enhance the student's ability to become engaged.

Generational research and other trends. Another important factor that might affect the level of engagement by college students is the time period and/or the societal conditions a person grew up in, or, simply put, their generation. Rosenberg (2019) provided information about six different generational categories that have been studied and researched by other scholars. These categories are commonly known as

• Generation Z or the New Silent Generation (2000 to present);

- Generation Y or Millennials (1980 to 2000);
- Generation X or Thirteeners (1965 to 1979);
- Baby Boomers (1946 to 1964);
- Silent Generation (1925 to 1945; and
- G.I. Generation (1900 to 1924). (pp. 2-3)

However, Rosenberg (2019) cautioned that these terms should not be used outside of the United States because the terminology is mostly a western notion that is not commonly used in other regions of the world where societal conditions may differ. Regardless of the terms used, there is no question of the impact generational types have played in a college student's motivation to become engaged or not. Baby Boomers of the 1960s completely changed the landscape of student engagement. Their participation in demonstrations against the war in Vietnam and in support of Civil Rights movement is still being discussed today in classrooms throughout the United States. The generational impact on college engagement is still being realized today by the efforts of Millennials, and now, Generation Z.

Millennial and generation z students. With the expansion of technology and cellular phones in the hands of virtually every college student, the traditional ways of engaging college students has almost disappeared. McGlynn (2008) stressed the frustration felt by college administrators who were unable to motivate their millennial students to participate in campus activities as a result of their time spent on the Internet and other obligations that were more important than their college experience. While understanding that survey data support the notion that engagement by students is critical to motivation, determination and graduating with a degree, some millennial students appear to believe that they are customers making a transaction rather than participating in the educational enterprise; to these students, it is not

about learning or participating, it's more about getting it done as quickly as possible (McGlynn, 2008). Millennials are the first generation to have information available at their fingertips, which feeds their desire for instant gratification (McGlynn, 2008). Therefore, their expectations of the institution are shaped by this reality. McGlynn (2008) explained how millennials expect the same quick response to questions posed and assignments completed; just like the Internet, the expectation is that someone is always available to answer their questions. On a positive note, millennials are quite civic-minded and desire to learn by doing, which is one of the keys to creating engagement with these students (McGlynn, 2008). Another factor that has been found to increase engagement of millennials is the inclusion of parents and guardians in the college experience. These students have close ties to parents and the parents are directly involved in student daily lives. Therefore, inclusion of parents in new student programs like orientation and campus activities have been implemented (McGlynn, 2008).

The same or more can be said about students who have been identified as Generation Z or Gen Z. Schwieger (2018) indicated that Gen Zs often grew up in an environment surrounded by technology with unprecedented exposure. These individuals have never known an existence without access to instant information and the ability to communicate whenever they feel it is appropriate. Schwieger (2018) also confirmed that most of Gen Zs' interaction is online; this group prefers electronic interaction as opposed to face-to-face exchanges with others which has proven to be both positive and negative for their development. Gen Zs' motivation is derived from an independent spirit, which allows them to be more self-sufficient and makes them seek learning independently rather than from proven scholars. These students also prefer engagements and experiences that are

interconnected, which create a sense of belonging and long-lasting relationships (Schweiger, 2018). Unlike their millennial counterparts, Gen Zs do not see the world as their oyster; this group is more realistic and believe they must work hard to get what they want out of life. This belief system comes from being raised by Gen X parents who learned from the mistakes of millennial parents (Linde & Weatherly, 2017). Although Gen Zs are engaged in social media, like Snapchat, Instagram, and YouTube, Linde and Weatherly (2017) explained that these students are not under the impression that technology is all powerful; in fact, they feel it is only an instrument to be used for an intended purpose. Institutions are now embracing social media as a platform to increase engagement with their students. Linde and Weatherly (2017) suggested setting up social media accounts to connect with students, where administrators might have a Twitter and/or Instagram account to encourage student followers. In that respect, social media is the new measure of engagement.

National Survey of Student Engagement

NSSE is a qualitative survey administered at over 1,600 colleges and universities granting bachelor's degrees throughout the United States and beyond (Kinzie, McCormick, & Gonyea, 2016). Survey results are used to gauge first-year, and senior students' experiences while attending the institutions. These two populations (freshmen and senior students) were selected because they have shown to be the best populations to provide reliable data indicators of what the student engagement is really like. The students' perception of their engagement at the end of the first year has proven to be the most credible. Likewise, the students' perception of their engagement at the end of their experience, during their senior year, has also proven to be just as credible. George Kuh believed that educators should pay attention to how engaged students are on campus as a primary indicator for assessing

educational quality (Kinzie et al.). Therefore, the NSSE survey looked at student engagement in activities-centered on the learning process. This survey data from both populations were used when measuring student engagement and effectiveness when compared with national trend data. Colleges and universities can use this information to make strategic decisions about improving engagement on their particular campuses. NSSE has been used by countless universities throughout the nation. Practitioners, administrators, and educators have all used information from NSSE to set goals and make institutional decisions related to student success, retention, progression, and graduation rates. A number of colleges like the University of Northern Iowa, University of North Carolina at Charlotte, and Gettysburg College have all used NSSE date to better inform their boards (Kinzie et al.).

Summary

The current study examined prior research that measured involvement of students of color at PWIs to see if there was a statistical, significant difference in the motivational factors behind their campus participation compared to their White counterparts. Research studies related to Black Greek Letter organizations will be explored to see if their existence at PWIs has any influence on participation of students of color. This study reviewed previous research that assesses types of organizations students of color selected for participation and some of the societal factors that created hurdles for involvement, such as socio-economic status, first-generation vs. second-generation status, and gender differences. The longitudinal analysis examined studies of participation by gender to determine if there was a significant difference in male and female student patterns of involvement. Finally, comparison studies of traditional and nontraditional students, commuter and residential students, international and domestic students, and students from the LGBTQI community were examined.

Chapter 3

Methods

This chapter will explain how the study was conducted, outlining the purpose, the research method used, and the study's hypothesis, which includes the conceptual framework and the research questions. This chapter will also provide information about the research design used in the study, the target population selected, sampling methods and sizes, and key variables, both dependent and independent. Longitudinal analysis was used, since there are a variety of variables used to show a relationship between intrinsic motivation and engagement. Data were used from existing survey results from NSSE surveys conducted in 2010, 2013, 2016, & 2018 by the Office of Assessment at YSU. Finally, the chapter will provide information about data collection, data analysis, and the results of the study, along with limitations and recommendations for further research.

Institutional Background

YSU is a comprehensive urban research institution with over 12,000 students, offering over 115 undergraduate and 40 graduate programs. There are six colleges within the university offering the 155 graduate and undergraduate programs where students can receive associate degrees, bachelor's degrees, master's degrees, graduate certificate programs, and doctorate in educational leadership and physical therapy. The university sits on 140 acres with over 36 individual facilities ranging from academic classrooms to athletic fields and it is less than a mile from downtown Youngstown. Students who attend YSU primarily come from Northeast Ohio and western Pennsylvania, and the majority of these students come from a five county area, which include Mahoning, Trumbull, Columbiana, Lawrence, PA and Mercer, PA. The proximity to those areas is why the institution is a commuter campus with

only 1240 students living in university owned housing facilities. There are other privately-owned properties that are in partnership with the university due to the increased on-campus population to over 2,100 students living near campus. With an annual operating budget of 155 million dollars, YSU only receives 27% of its budget from state appropriated funds or State Share of Instruction (SSI); the remaining funds are generated through tuition and fees which makes up 70%, with the remaining 3% coming from other sources like auxiliary services. Administratively the institution's governing body is led by the Ohio Board of Regents and it is locally under the control of a Board of Trustees, who are appointed by the governor (Archives & Special Collection: History of YSU, n.d.).

Research Questions

The purpose of this study was to investigate involvement, in a broad sense, of student participation across campus using engagement as variables. In order to understand how participation progresses to engagement, the following research questions were addressed in the study:

- Have reported levels of engagement changed between the collection of NSSE data from 2010 & 2013 to 2016 & 2018?
- What institutional strategies, as indicated by student responses, reveal a change in engagement between each survey?
- What were the most effective institution strategies at YSU as identified by the NSSE data?
- What differences in engagement were identified based on the following student populations: students of color, commuter students, residential students, international students, nontraditional students, and LGBTQI students?

It is certainly plausible to conclude that participation based on institutional strategies results in increased engagement. Therefore, identifying evidence of this fact should be relatively apparent. Establishing a relationship between institutional strategies and participation should be inevitable. However, establishing a relationship between institutional strategies and increased engagement could be somewhat problematic. After reviewing the original questions, it was determined that an explanation of the difference between participation and engagement was needed. Extrinsic motivation may lead someone to participate, but intrinsic motivation keeps a student engaged.

Research Design

This quantitative, correlational research design used a longitudinal analytic approach to draw associations and differences between participation, engagement, and institutional strategies. By identifying institutional strategies that related to college student involvement and participation and drawing comparisons from these variables, the hypothesis is that key institutional strategies contribute to increased engagement. The systematic overview of previous research studies will test the effectiveness of these correlations (Borenstein et al, 2007).

Instrumentation

Primary data consisted of individual participant's responses to engagement data collected by the Office of Assessment at YSU using the NSSE. These data include basic student demographic information and responses to the 2010 to 2018 surveys. According to Bureau, Ryan, Ahren, Shoup, and Torres (2011), the NSSE inventory is described as:

the engagement in learning-oriented activities by fraternity/sorority members.

NSSE is a tool for college/university administrators to examine conditions that

contribute to learning and student success. The survey measures students' participation in educational activities that prior research determined is positively related to desired educational outcomes (Astin, 1984; Chickering & Gamson, 1987; Kuh, 2001a; 2001b, 2003; Pascarella & Terenzini, 2005). NSSE is specifically designed to assess the level of engagement in and perceived gains from students' experiences in college (Kuh, 2001b). While an indirect measure, engagement data has often been used as a "proxy" for learning. (Bureau et al., pp. 6-7)

Dependent variables. The dependent variables in the study were measured by the following outcomes of student involvement: participation, and engagement. Other dependent variables were institutional strategies and which key strategies type(s) correlate to increased participation and/or engagement.

Participation was defined by the students' involvement in campus activities, like attending campus events, lectures, club meetings, or sporting events. Participation was also defined as simply showing up to these events and not contributing to their planning, execution, or creation. NSSE data containing evidence of students' participating in these type of activities based on their level of extrinsic and/or intrinsic motivation were shared.

Engagement was defined by the students' involvement or membership in student organizations (i.e., fraternities, sororities, civic organizations, sport clubs, honor societies, and academic clubs) or any other activity that may demonstrate longer-term commitment, such as on-campus employment. Engagement was also defined as continuous documented membership in an organization where the student contributes to the planning, execution, and creation of the organization and its' activities. NSSE data based on a combination of

extrinsic and intrinsic motivation factors were identified to review evidence of students demonstrating engagement.

The independent variables in the study will be motivation and its' effect on engagement verses participation across the four administrations of the NSSE. Student motivation will be measured based on NSSE questions that demonstrate persistence. For example, questions like: Time spent completing assignments, readings, working on or off campus and participating in extra-cocurricular activities. Since a longitudinal analysis was used to show a relationship between the dependent variables and the independent variables, results will be selected that contained elements of participation, and engagement.

The NSSE questions to be incorporated in the current investigation based on four categories, demographic data, motivation, participation and engagement. The following questions below

Demographic Data Questions

- 12. Which of the following best describes where you are living while attending college?
- 30. What is your gender identity?
- 31. Enter your year of birth (e.g., 1994):

have been identified based on these categories.

- 32. Are you an international student?
 - 32b. What is your county of citizenship?
- 33. How would you describe yourself?

Questions Related to Participation

- 1. During the current school year, about how often have you done the following?;
 - 1a. Asked questions or contributed to course discussion in other ways
 - 1d. Attended an art exhibit, play, or other arts performance (dance, music, etc.)

- During the current school year, about how often have you done the following?;
 Included diverse perspective (political, religious, racial /ethnic, gender, etc.) in course discussions or assignments.
- During the current school year, about how often have you done the following?;3b. Worked with faculty members on activities other than coursework (committee, student groups, etc.)
 - 3c. Discussed course topics, ideas, or concepts with a faculty member outside of class.
- Which of the following have you done, or do you plan to do before you graduate?;
 11a Participate in an internship, co-op, field experience, student teaching, or clinical placement.
 - 11b. Hold a formal leadership role in a student organization or group
 - 11c. Participate in a student learning community or some other formal program where groups of students take two or more classes together.
 - 11d. Participate in a study abroad program.
 - 11e. Work with a faculty member on a research project.
 - 11f. Complete a cumulating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio etc.)

Questions Related to Engagement

- 5. Indicate the quality of your interaction with the following people at your institution.
 - 13a. Students
 - 13b. Academic Advisors
 - 13c. Faculty

- 13d. Students services staff (career services, student activities, housing, etc.)
- 13e. Other administrative staff and offices (registrar, financial aid, etc.)
- 6. How much does your institution emphasize the following?;
 - 14d. Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)
 - 14e. Provide opportunities to be involved socially
 - 14f. Provide support for your overall well-being (recreation, health care, counseling, etc.)
 - 14g. Helping you manage your non-academic responsibilities (work, family, etc.)
 - 14h. Attending campus activities and events (performing arts, athletics events, etc.)
 - 14i Attending events that address important social economic and political issues
- 8. How would you evaluate your overall educational experience at this institution?
- 9. If you could start over would you go to the same institution you are now attending?
- 10. Do you intend to return to do the institution next year?
- 11. Are you a member of a social fraternity or sorority?

Questions Related to Motivation

- 1. During the current school year, about how often have you done the following?;
 - 1b. Prepared two or more drafts of a paper or assignment before turning it in.
 - 1c. Come to class without completing readings or assignments
 - 1e. Asked another student to help you understand course materials
 - 3a. Talked about career plans with a faculty member.
 - 3d. Discussed your academic performance with a faculty member.

- 7. About how many hours do you spend in a typical seven day week doing the following 15b. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports 15c. Working for pay on campus.
 - 15d. Working for a pay off campus.
 - 15 h. Commuting to campus (driving, walking, etc.)

Procedures

After receiving YSU Institutional Review Board (IRB) (Appendix G)108 approval, requests were made for all primary data from the Office of Assessment. All data received were input into SPSS for analysis and coded so that each research question could be addressed. Data were identified as primary or secondary as a sub-component of the analysis. Variables that were different across the four years or not included in each of the four years were only analyzed for the years that the information was provided.

Data Analysis

Data were reviewed and analyzed in order to present the basic descriptive statistics and was completed in SPSS. The data that were extracted supported the computation of reported means, standard deviations and sample sizes, or reported correlational analysis, inferential statistics and reported *p*-values. Inferential analyses included Independent Samples T test, Pearson's Zero-order Correlation, and Univariate General Linear Modeling.

Chapter Four

Results

Using the NSSE survey data collected by the YSU Office of Assessment for the 2010, 2013, 2016 and 2018 academic years, specific questions from all four surveys were identified that provided demographic information about the participants, strategies used by the institution and other questions that emphasized a student's participation in overall campus events, academic participation in class, indicators related to motivation and their engagement beyond attending events. In the final analysis, 34 questions were identified from the NSSE survey to support the following areas: Demographic (8 questions), Strategy (4 questions), Participation (4 questions), Academic participation (6 questions), Motivation (7 questions) and Engagement (15 questions). Tables 1 through 44 provide a breakdown of each of the questions by category.

Table 1 provides a breakdown of the number of students in each data collection year from a range of 2010, 2013, 2016, and 2018.

Table 1 **Demographic-** Student Participants by Year

Year	Frequency	Percent
2010	1660	35.6
2013	997	21.4
2016	1176	25.2
2018	830	17.8

As indicated above a total of (N = 4663) students were surveyed using the NSSE.

Table 2 provides a breakdown of the number of first year and senior students by gender for the collection year from a range of 2010, 2013, 2016, and 2018.

Table 2 **Demographic-** Student Participants by Gender

Year	Gender	Frequency	Percent
10	Men	598	36.0
	Women	881	53.1
13	Men	287	28.8
	Women	525	52.7
16	Men	375	31.9
	Women	583	49.6
	Another gender identity	5	0.4
18	Men	201	24.2
	Women	428	51.6
	Another gender identity	5	0.6

Based on how the survey was designed, there was no way for the respondent to indicate another gender other than man or woman for each of the years collected.

Table 3 provides a breakdown of the number of first year and senior students by sexual orientations as identified by the survey for the collection year from a range of 2010, 2013, 2016, and 2018.

Table 3

Demographic- Student Participants by Sexual Orientation

Year	Orientation	Frequency	Percent
13	Straight (heterosexual)	713	71.5
	Bisexual	9	0.9
	Gay	4	0.4
	Lesbian	19	1.9
	Queer	6	0.6
	Total	751	75.3
16	Straight (heterosexual)	831	70.7
	Bisexual	16	1.4
	Gay	13	1.1
	Lesbian	31	2.6
	Queer	11	0.9
	Questioning or unsure	11	0.9
	Total	913	77.6
18	Straight (heterosexual)	548	66.0
	Bisexual	29	3.5
	Gay	5	0.6
	Lesbian	10	1.2
	Queer	3	0.4
	Questioning or unsure	6	0.7
	Another sexual orientation, please specify	12	1.4

Based on how the survey was designed by NSSE in 2010, there was no way for the respondent to indicate their sexual orientation. Therefore, no data are available for 2010.

Table 4 provides a breakdown of the number of first year and senior students who were identified by the survey as international students for the collection year from a range of 2010, 2013, 2016, and 2018.

Table 4

Demographic- Student Participants by International Students

Year	Response	Frequency	Percent
10	No	1447	87.2
	Yes	30	1.8
13	No	788	79.0
	Yes	14	1.4
16	No	955	81.2
	Yes	8	0.7
18	No	610	73.5
	Yes	28	3.4

Based on the total of students who completed the survey only (n=80) students identified as international.

Table 5 provides a breakdown of the number of first year and senior students who were identified as traditional and nontraditional for the collection year from a range of 2010, 2013, 2016, and 2018. Based on the total number of students surveyed who provided date related to an identified age, (N=3,884) reported. The average age of the groups surveyed was 25.2. As indicated in the table below 58.3% of the students were traditional age with the remaining 25.0% of students identified as nontraditional.

Table 5 **Demographic-** Traditional/Nontraditional

	Frequency	Percent
Traditional	2718	58.3
Nontraditional	1166	25.0

Table 6 provides a breakdown of the number of first year and senior students who were identified by race and ethnicity using the following categories: American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian or Other Pacific Islander, White, Other, Foreign or Nonresident alien, Two or more races/ethnicities and Unknown for the collection year from a range of 2010, 2013, 2016, and 2018.

Table 6

Demographic- Student Participants by Race and Ethnicity

Year	Race/Ethnicity	Frequency	Percent
10	American Indian or Alaska Native	11	0.7
	Asian	28	1.7
	Black or African American	139	8.4
	Hispanic or Latino	62	3.7
	Native Hawaiian or Other Pacific		
	Islander	3	0.2
	White	1137	68.5
	Other	4	0.2
	Foreign or Nonresident alien	24	1.4
	Two or more races/ethnicities	16	1
	Unknown	61	3.7
13	American Indian or Alaska Native	4	0.4
	Asian	7	0.7
	Black or African American	101	10.1
	Hispanic or Latino	67	6.7
	White	759	76.1
	Foreign or Nonresident alien	7	0.7
	Two or more races/ethnicities	7	1.8
16	American Indian or Alaska Native	2	0.2
	Asian	15	1.3
	Black or African American	101	8.6
	Hispanic or Latino	36	3.1
	Native Hawaiian or Other Pacific		
	Islander	1	0.1
	White	934	79.4
	Foreign or Nonresident alien	15	1.3
	Two or more races/ethnicities	25	2.1
18	American Indian or Alaska Native	1	0.1
	Asian	14	1.7
	Black or African American	46	5.5
	Hispanic or Latino	32	3.9
	Native Hawaiian or Other Pacific		
	Islander	1	0.1
	White	641	77.2
	Foreign or Nonresident alien	38	4.6
	Two or more races/ethnicities	25	3

Table 7 provides a breakdown of the number of first year and senior students who were identified as either living in university-owned housing, housing close to campus, or within walking distance or farther for the collection year from a range of 2010, 2013, 2016, and 2018.

Table 7 **Demographic-** Student Participants by Student Living on or Near YSU campus

Year		Frequency	Percent
10	Campus housing (other than a fraternity or sorority house)	223	13.4
	Fraternity or sorority house	83	5.0
	House, apartment, or other residence WITHIN		
	WALKING DISTANCE to campus	1079	65
	House, apartment, or other residence FARTHER THAN		
	WALKING DISTANCE to campus	6	0.4
13	Campus housing (other than a fraternity or sorority house)	109	10.9
	Fraternity or sorority house	1	0.1
	House, apartment, or other residence WITHIN		
	WALKING DISTANCE to campus	54	5.4
	House, apartment, or other residence FARTHER THAN		
	WALKING DISTANCE to campus	589	59.1
16	Campus housing (other than a fraternity or sorority house)	121	10.3
	Fraternity or sorority house	4	0.3
	House, apartment, or other residence WITHIN		
	WALKING DISTANCE to campus	97	8.2
	House, apartment, or other residence FARTHER THAN		
	WALKING DISTANCE to campus	682	58.0
18	Campus housing (other than a fraternity or sorority house)	136	16.4
	Fraternity or sorority house	1	0.1
	House, apartment, or other residence WITHIN		
	WALKING DISTANCE to campus	66	8.0
	House, apartment, or other residence FARTHER THAN		
	WALKING DISTANCE to campus	414	49.9

Based on the data provided in Table 7, respondents (N=1974) indicated they were living within campus housing or within walking distance of campus. However, the year with the most responses from students who lived on or near campus was in 2010. For all of the other

years of the NSSE survey (2013, 2016, & 2018), over 90% of the responses came from students who indicated living farther than walking distance to campus.

Table 8 provides a breakdown of the number of first year and senior students who rated their overall experience while attending YSU for the collection year from a range of 2010, 2013, 2016, and 2018.

Table 8

Demographic- Student's Overall YSU Experience Rating

Year	Response	Frequency	Percent
10	Poor	32	1.9
	Fair	193	11.6
	Good	825	49.7
	Excellent	427	25.7
13	Poor	15	1.5
	Fair	139	13.9
	Good	417	41.8
	Excellent	246	24.7
16	Poor	21	1.8
	Fair	139	11.8
	Good	505	42.9
	Excellent	320	27.2
18	Poor	19	2.3
	Fair	90	10.8
	Good	321	38.7
	Excellent	228	27.5

Based on the total number of students who completed the survey in Table 8, (N=3,289) indicated that their experience was Poor, Fair, Good, or Excellent.

Table 9 provides a breakdown of the number of first year and senior students who indicated by the survey their intentions to return to YSU for the next academic year for the collection year from a range of 2010, 2013, 2016, and 2018.

Table 9

Participation- Indications of the Student's Willingness to Return to Campus the Next Year

Year	Response	Frequency	Percent
10	NO	301	18.1
	Maybe	646	38.9
	Yes	484	29.2
13	NO	9	0.9
	Maybe	22	2.2
	Yes	22	2.2
16	NO	16	1.4
	Maybe	3	0.3
	Yes	2	0.2
18	NO	369	44.5
	Maybe	27	3.3
	Yes	309	37.2

NOTE: Missing data not reported in table.

Based on the total of students who completed the survey in Table 9, only (N= 817) students stated they would return to YSU, with the highest percentage in 2010 where more students living on or near campus were surveyed.

Table 10 provides a breakdown of the number of first year and senior students who identified their participation in a course with a capstone for the collection year from a range of 2010, 2013, 2016, and 2018.

Table 10

Participation- Student Participants in a Course with a Capstone

<u> </u>	1	1	
Year	Response	Frequency	Percent
10	Have not decided	324	19.5
	Do not plan to do	161	9.7
	Plan to do	735	44.3
	Done	315	19
13	Have not decided	144	14.4
	Do not plan to do	61	6.1
	Plan to do	395	39.6
	Done	252	25.3
16	Have not decided	188	16
	Do not plan to do	82	7
	Plan to do	454	38.6
	Done	319	27.1
18	Have not decided	122	14.7
	Do not plan to do	64	7.7
	Plan to do	331	39.9
	Done	166	20

Based on the total of students who completed the survey in Table 10, only (N=2967) students indicated they had completed a capstone or were planning to do so.

Table 11 provides a breakdown of the number of first year and senior students who identified that they participated in a course discussion based on the data for the collection year from a range of 2010, 2013, 2016, and 2018.

Table 11

Participation- Student Participants by Course Discussions in Other Ways

Year	Response	Frequency	Percent
10	Never	33	2
	Sometimes	459	27.7
	Often	570	34.3
	Very often	549	33.1
13	Never	27	2.7
	Sometimes	274	27.5
	Often	316	31.7
	Very often	374	37.5
16	Never	39	3.3
	Sometimes	363	30.9
	Often	411	34.9
	Very often	359	30.5
18	Never	27	3.3
	Sometimes	267	32.2
	Often	283	34.1
	Very often	247	29.8

Based on the total number of students who completed the survey in Table 11, only (N=3,109) indicated they participated in discussion often or very often.

Table 12 provides a breakdown of the number of first year and senior students who identified by the survey that they participated in course discussion with diverse perspectives for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 12

Participation- Student Participants by Course Discussions of Diverse Perspectives (Political, Religious, Racial/Ethnic, Gender, etc.)

Year	Response	Frequency	Percent
10	Never	124	7.5
	Sometimes	483	29.1
	Often	544	32.8
	Very often	462	27.8
13	Never	129	12.9
	Sometimes	351	35.2
	Often	265	26.6
	Very often	188	18.9
16	Never	183	15.6
	Sometimes	414	35.2
	Often	319	27.1
	Very often	219	18.6
18	Never	116	14
	Sometimes	303	36.5
	Often	249	30
	Very often	118	14.2

Based on the total of students who completed the survey in Table 12, only (N=2,364) students indicated that they had these discussions in class often or very often.

Table 13 provides a breakdown of the number of first year and senior students who identified by the survey who stated that coursework emphasized memorizing course materials for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 13

Academic Participation- Coursework Emphasized: Memorizing Course Material

Year	Response	Frequency	Percent
10	Very little	82	4.9
	Some	397	23.9
	Quite a bit	614	37
	Very much	476	28.7
13	Very little	42	4.2
	Some	251	25.2
	Quite a bit	363	36.4
	Very much	260	26.1
16	Very little	58	4.9
	Some	295	25.1
	Quite a bit	463	39.4
	Very much	294	25
18	Very little	52	6.3
	Some	201	24.2
	Quite a bit	316	38.1
	Very much	174	21

Based on the total of students who completed the survey in Table 13, only (N=1,204) students indicated that memorization was very much emphasized at YSU.

Table 14 provides a breakdown of the number of first year and senior students who identified by the survey that they participated in coursework which emphasized applying facts, theories, or methods to practical problems or new situations for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 14

Academic Participation- Coursework Emphasized: Applying Facts, Theories, or Methods to Practical Problems or New Situations

Year		Frequency	Percent
10	Very little	76	4.6
	Some	377	22.7
	Quite a bit	632	38.1
	Very much	472	28.4
13	Very little	27	2.7
	Some	188	18.9
	Quite a bit	370	37.1
	Very much	327	32.8
16	Very little	35	3
	Some	231	19.6
	Quite a bit	476	40.5
	Very much	372	31.6
18	Very little	22	2.7
	Some	171	20.6
	Quite a bit	343	41.3
	Very much	196	23.6

Based on the total of students who completed the survey in Table 14, (*N*= 1,367) students indicated that these courses were very much emphasized.

Table 15 provides a breakdown of the number of first year and senior students who identified by the survey that they participated in coursework which emphasized analyzing and idea, experience, or line of reasoning in depth by examining its parts for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 15

Academic Participation- Coursework Emphasized: Analyzing an Idea, Experience, or Line of Reasoning in Depth by Examining Its Parts

Year		Frequency	Percent
10	Very little	34	2
	Some	267	16.1
	Quite a bit	663	39.9
	Very much	602	36.3
13	Very little	37	3.7
	Some	217	21.8
	Quite a bit	361	36.2
	Very much	300	30.1
16	Very little	48	4.1
	Some	257	21.9
	Quite a bit	450	38.3
	Very much	351	29.8
18	Very little	28	3.4
	Some	200	24.1
	Quite a bit	309	37.2
	Very much	191	23

Based on the total of students who completed the survey in Table 15, (N=1,444) students indicated that these courses were very much emphasized.

Table 16 provides a breakdown of the number of first year and senior students who identified by the survey that they participated in coursework which emphasized evaluating a point of view, decision, or information source for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 16

**Academic Participation- Coursework Emphasized: Evaluating a Point of View, Decision, or Information Source

Year	Response	Frequency	Percent
10	Very little	73	4.4
	Some	349	21
	Quite a bit	654	39.4
	Very much	486	29.3
13	Very little	47	4.7
	Some	250	25.1
	Quite a bit	354	35.5
	Very much	255	25.6
16	Very little	58	4.9
	Some	335	28.5
	Quite a bit	439	37.3
	Very much	274	23.3
18	Very little	32	3.9
	Some	210	25.3
	Quite a bit	321	38.7
	Very much	163	19.6

Based on the total of students who completed the survey in Table 16, (N=1,178) students indicated that these courses were very much emphasized.

Table 17 provides a breakdown of the number of first year and senior students who identified by the survey that they participated in coursework which emphasized forming a new idea or understanding from various pieces of information for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 17

Academic Participation- Coursework Emphasized: Forming a New Idea or Understanding from Various Pieces of Information

Year	Response	Frequency	Percent
13	Very little	44	4.4
	Some	229	23
	Quite a bit	381	38.2
	Very much	260	26.1
16	Very little	64	5.4
	Some	287	24.4
	Quite a bit	475	40.4
	Very much	280	23.8
18	Very little	36	4.3
	Some	222	26.7
	Quite a bit	298	35.9
	Very much	166	20

Based on the total of students who completed the survey in Table 17, (N=706) students indicated that these courses were very much emphasized.

Table 18 provides a breakdown of the number of first year and senior students who were identified by the survey as having given a presentation for the collection year from a range of 2010, 2013, 2016, and 2018.

Table 18

Academic Participation- Giving a Presentation

Year	Response	Frequency	Percent
13	Never	195	19.6
	Sometimes	344	34.5
	Often	251	25.2
	Very often	168	16.9
16	Never	199	16.9
	Sometimes	395	33.6
	Often	323	27.5
	Very often	240	20.4
18	Never	115	13.9
	Sometimes	278	33.5
	Often	254	30.6
	Very often	163	19.6

Based on the total of students who completed the survey in Table 18, (N=1,399) students identified as giving a presentation often or very often.

Table 19 provides a breakdown of the number of first year and senior students who rated YSU's emphasis related to providing opportunities to be involved socially for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 19

Strategy- Institutional Emphasis: Providing Opportunities to be Involved Socially

Year	Response	Frequency	Percent
10	Very little	326	19.6
	Some	584	35.2
	Quite a bit	410	24.7
	Very much	171	10.3
13	Very little	81	8.1
	Some	253	25.4
	Quite a bit	284	28.5
	Very much	199	20
16	Very little	86	7.3
	Some	249	21.2
	Quite a bit	385	32.7
	Very much	267	22.7
18	Very little	41	4.9
	Some	180	21.7
	Quite a bit	252	30.4
	Very much	190	22.9

Based on the total of students who completed the survey in Table 19, (N=2,158) indicated that social involvement was emphasized quite a bit or very much.

Table 20 provides a breakdown of the number of first year and senior students who rated YSU's emphasis related to providing support for overall well-being for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 20

Strategy- Institutional Emphasis: Providing Support for Overall Well-Being (Recreation, Health Care, Counseling, etc.)

Year	Response	Frequency	Percent
13	Very little	108	10.8
	Some	227	22.8
	Quite a bit	282	28.3
	Very much	198	19.9
16	Very little	116	9.9
	Some	257	21.9
	Quite a bit	367	31.2
	Very much	250	21.3
18	Very little	61	7.3
	Some	174	21
	Quite a bit	251	30.2
	Very much	175	21.1

Based on the total of students who completed the survey in Table 20 (N=1,523), overall wellbeing was emphasized quite a bit or very much.

Table 21 provides a breakdown of the number of first year and senior students who rated YSU's emphasis related to helping students manage non-academic responsibilities for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 21

Strategy- Institutional Emphasis: Helping Manage Non-Academic Responsibilities (Work, Family, etc.)

Year	Response	Frequency	Percent
10	Very little	529	31.9
	Some	529	31.9
	Quite a bit	287	17.3
	Very much	158	9.5
13	Very little	285	28.6
	Some	284	28.5
	Quite a bit	147	14.7
	Very much	99	9.9
16	Very little	343	29.2
	Some	324	27.6
	Quite a bit	216	18.4
	Very much	105	8.9
18	Very little	224	27
	Some	210	25.3
	Quite a bit	143	17.2
	Very much	86	10.4

Based on the total of students who completed the survey in Table 21 (N= 1,241), help with managing non-academic responsibilities was emphasized quite a bit or very much.

Table 22 provides a breakdown of the number of first year and senior students who rated YSU's emphasis on attending campus activities and events for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 22

Strategy- Institutional Emphasis: Attending Campus Activities and Events (Performing Arts, Athletic Events, etc.)

Year	Response	Frequency	Percent
10	Very little	248	14.9
	Some	525	31.6
	Quite a bit	464	28
	Very much	267	16.1
13	Very little	125	12.5
	Some	298	29.9
	Quite a bit	233	23.4
	Very much	152	15.2
16	Very little	144	12.2
	Some	294	25
	Quite a bit	348	29.6
	Very much	198	16.8
18	Very little	76	9.2
	Some	195	23.5
	Quite a bit	246	29.6
	Very much	146	17.6

Based on the total of students who completed the survey in Table 22 (N= 2,054), attending campus activities and events were emphasized quite a bit or very much.

Table 23 provides a breakdown of the number of first year and senior students who were identified by the survey as commuting to YSU for the collection year from a range of 2010, 2013, 2016, and 2018.

Table 23 *Motivation- Commuting*

Year	Response	Frequency	Percent
10	0 Hours per week	58	3.5
	1-5	912	54.9
	6-10	369	22.2
	11-15	113	6.8
	16-20	40	2.4
	21-25	16	1
	26-30	9	0.5
	More than 30	19	1.1
3	0 Hours per week	83	8.3
	1-5	463	46.4
	6-10	165	16.5
	11-15	47	4.7
	16-20	22	2.2
	21-25	14	1.4
	26-30	5	0.5
	More than 30	10	1
16	0 Hours per week	99	8.4
	1-5	575	48.9
	6-10	201	17.1
	11-15	51	4.3
	16-20	23	2
	21-25	18	1.5
	26-30	7	0.6
	More than 30	12	1
18	0 Hours per week	101	12.2
	1-5	347	41.8
	6-10	115	13.9
	11-15	45	5.4
	16-20	17	2
	21-25	7	0.8
	26-30	6	0.7
	More than 30	20	2.4

Based on the total of students who completed the survey in Table 23, only (N=850) students were identified as commuting from six to 10 hours a week.

Table 24 provides a breakdown of the number of first year and senior students who demonstrated motivation by preparing two or more drafts of a paper or assignment before turning it in for the collection year from a range of 2010, 2013, 2016, and 2018.

Table 24

Motivation- Student Motivation: Prepared Two or More Drafts of a Paper or Assignment Before Turning It In

Year	Response	Frequency	Percent
10	Never	176	10.6
	Sometimes	477	28.7
	Often	522	31.4
	Very often	435	26.2
13	Never	177	17.8
	Sometimes	318	31.9
	Often	289	29
	Very often	200	20.1
16	Never	219	18.6
	Sometimes	425	36.1
	Often	323	27.5
	Very often	198	16.8
18	Never	175	21.1
	Sometimes	281	33.9
	Often	214	25.8
	Very often	142	17.1

Based on the total of students who completed the survey in Table 24 (N=975), students indicated this was a consistent pattern of behavior for them with a response of Very Often.

Table 25 provides a breakdown of the number of first year and senior students who demonstrated motivation by coming to class without completing reading or assignment for the collection year from a range of 2010, 2013, 2016, and 2018.

Table 25

Motivation- Student Motivation: Coming to Class without Completing Readings or Assignments

Year	Response	Frequency	Percent
10	Never	425	25.6
	Sometimes	916	55.2
	Often	183	11
	Very often	88	5.3
13	Never	314	31.5
	Sometimes	507	50.9
	Often	106	10.6
	Very often	56	5.6
16	Never	372	31.6
	Sometimes	609	51.8
	Often	125	10.6
	Very often	51	4.3
18	Never	246	29.6
	Sometimes	438	52.8
	Often	98	11.8
	Very often	42	5.1

Based on the total of students who completed the survey in Table 25 (N=237), students indicated this was a consistent pattern of behavior for them with a response of Very Often.

Table 26 provides a breakdown of the number of first year and senior students who demonstrated motivation by asking another student to help them understand course material for the collection year from a range of 2010, 2013, 2016 and 2018.

Table 26

Motivation- Student Motivation: Asked Another Student to Help in Understanding Course Material

Year	Response	Frequency	Percent
13	Never	130	13
	Sometimes	464	46.5
	Often	250	25.1
	Very often	143	14.3
16	Never	123	10.5
	Sometimes	457	38.9
	Often	394	33.5
	Very often	187	15.9
18	Never	82	9.9
	Sometimes	346	41.7
	Often	263	31.7
	Very often	127	15.3

Based on the total of students who completed the survey in Table 26 (N=457), students indicated this was a consistent pattern of behavior for them with a response of Very Often.

Table 27 provides a breakdown of the number of first year and senior students who demonstrated motivation by discussing their academic performance with a faculty member for the collection year from a range of 2010, 2013, 2016 and 2018.

Table 27

Motivation- Student Motivation: Discussed Academic Performance with a Faculty Member

Year	Response	Frequency	Percent
10	Never	101	6.1
	Sometimes	495	29.8
	Often	640	38.6
	Very often	339	20.4
13	Never	225	22.6
	Sometimes	407	40.8
	Often	173	17.4
	Very often	111	11.1
16	Never	268	22.8
	Sometimes	476	40.5
	Often	239	20.3
	Very often	130	11.1
18	Never	151	18.2
	Sometimes	323	38.9
	Often	195	23.5
	Very often	73	8.8

Based on the total of students who completed the survey in Table 27 (N= 653), students indicated this was a consistent pattern of behavior for them with a response of Very Often.

Table 28 provides a breakdown of the number of first year and senior students who were identified by the survey as working for pay on campus for a certain number of hours for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 28

Motivation- Hours Per Week: Working for Pay on Campus

Year	Response	Frequency	Percent
10	0 Hours per week	1255	75.6
	1 to 5	29	1.7
	6 to 10	57	3.4
	11 to 15	53	3.2
	16-20	113	6.8
	21-25	10	0.6
	26-30	5	0.3
	More than 30	13	0.8
13	0 Hours per week	632	63.4
	1 to 5	25	2.5
	6 to 10	40	4
	11 to 15	29	2.9
	16-20	71	7.1
	21-25	5	0.5
	26-30	3	0.3
	More than 30	7	0.7
16	0 Hours per week	739	62.8
	1 to 5	31	2.6
	6 to 10	53	4.5
	11 to 15	64	5.4
	16-20	42	3.6
	21-25	41	3.5
	26-30	6	0.5
	More than 30	6	0.5
18	0 Hours per week	498	60
	1 to 5	17	2
	6 to 10	27	3.3
	11 to 15	35	4.2
	16-20	42	5.1
	21-25	29	3.5
	26-30	3	0.4
	More than 30	5	0.6

Based on the total of students who completed the survey in Table 28, a large percentage of the students (N=3124) indicated not working 0 hours per week.

Table 29 provides a breakdown of the number of first year and senior students who were identified by the survey as working for pay off campus for a certain number of hours for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 29

Motivation- Hours per Week: Working for Pay Off Campus

	Response	Frequency	Percent
10	0 Hours per week	601	36.2
	1 to 5	69	4.2
	6 to 10	94	5.7
	11 to 15	106	6.4
	16-20	188	11.3
	21-25	139	8.4
	26-30	105	6.3
	More than 30	236	14.2
13	0 Hours per week	313	31.4
15	1 to 5	36	3.6
	6 to 10	43	4.3
	11 to 15	54	5.4
	16-20	93	9.3
	21-25	70	7
	26-30	61	6.1

	More than 30	137	13.7
16	0 Hours per week	356	30.3
	1 to 5	50	4.3
	6 to 10	70	6
	11 to 15	87	7.4
	16-20	108	9.2
	21-25	113	9.6
	26-30	76	6.5
	More than 30	124	10.5
18	0 Hours per week	268	32.3
	1 to 5	29	3.5
	6 to 10	45	5.4
	11 to 15	46	5.5
	16-20	81	9.8
	21-25	58	7
	26-30	42	5.1
_	More than 30	86	10.4

Based on the total of students who completed the survey in Table 29, a large percentage of the students (N=1538) indicated not working 0 hours per week.

Table 30 provides a breakdown of the number of first year and senior students who were identified by the survey that they were a member a of fraternity or sorority for the collection year from a range of 2010, 2013, 2016, and 2018.

Table 30

Engagement- Student Engagement in a Fraternity or Sorority

Year	Response	Frequency	Percent
10	No	1377	83
	Yes	90	5.4
13	No	742	74.4
	Yes	68	6.8
16	No	901	76.6
	Yes	74	6.3
18	No	604	72.8
	Yes	37	4.5

Based on the total of students who completed the survey in Table 30, only (N=269) students identified as fraternity or sorority members.

Table 31 provides a breakdown of the number of first year and senior students who showed engagement by participating on study abroad for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 31

Engagement- Engagement: Study Abroad

Year	Response	Frequency	Percent
10	Have not decided	401	24.2
	Do not plan to do	792	47.7
	Plan to do	243	14.6
	Done or in progress	90	5.4
13	Have not decided	178	17.9
	Do not plan to do	523	52.5
	Plan to do	117	11.7
	Done or in progress	35	3.5
16	Have not decided	250	21.3
	Do not plan to do	599	50.9
	Plan to do	157	13.4
	Done or in progress	42	3.6
18	Have not decided	169	20.4
	Do not plan to do	353	42.5
	Plan to do	119	14.3
	Done or in progress	43	5.2

Based on the total of students who completed the survey in Table 31 (N=210), students responded as having completed a study abroad trip or they were scheduled to do so.

Table 32 provides a breakdown of the number of first year and senior students who showed engagement by attending an art exhibit or play for the collection years from a range of 2010 and 2013.

Table 32

Engagement- Attended Art Exhibit or Play

Year	Response	Frequency	Percent
10	Never	629	37.9
	Sometimes	555	33.4
	Often	219	13.2
	Offen	219	13.2
	Very often	153	9.2
	·		
13	Never	464	46.5

Based on the total of students who completed the survey in Table 32 (*N*= 1093), students responded as having never attended an art exhibit or play.

Table 33 provides a breakdown of the number of first year and senior students who were identified by the survey as working with a faculty member on activities other than coursework for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 33

Engagement- Worked with a Faculty Member on Activities Other Than Coursework (Committees, Student Groups, etc.)

Year	Response	Frequency	Percent
10	Never	919	55.4
	Sometimes	379	22.8
	Often	179	10.8
	Very often	102	6.1
13	Never	468	46.9
	Sometimes	242	24.3
	Often	118	11.8
	Very often	93	9.3
16	Never	509	43.3
	Sometimes	330	28.1
	Often	147	12.5
	Very often	128	10.9
18	Never	326	39.3
	Sometimes	212	25.5
	Often	128	15.4
	Very often	79	9.5

Based on the total of students who completed the survey in Table 33 (N= 2,222), students indicated that they have never work with a faculty member on activities other than coursework.

Table 34 provides a breakdown of the number of first year and senior students who were identified by the survey as discussing course topics, ideas, or concepts with a faculty member outside of class for the collection years from a range of 2010, 2013, 2016 and 2018. Table 34

Engagement- Discussed Course Topics, Ideas, or Concepts with a Faculty Member Outside of Class

-			
Year	Response	Frequency	Percent
10	Never	594	35.8
	Sometimes	597	36
	Often	261	15.7
	Very often	138	8.3
13	Never	288	28.9
	Sometimes	348	34.9
	Often	171	17.2
	Very often	111	11.1
16	Never	322	27.4
	Sometimes	472	40.1
	Often	194	16.5
	Very often	126	10.7
18	Never	230	27.7
	Sometimes	264	31.8
	Often	171	20.6
	Very often	77	9.3

Based on the total number of students who completed the survey in Table 34 (N=1,434), students indicated that they have never worked with a faculty member outside of the classroom.

Table 35 provides a breakdown of the number of first year and senior students who showed engagement by participating in an internship, co-op, field experience, student teaching, or clinical placement for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 35

Engagement-Internship, Co-op, Field Experience, Student Teaching, or Clinical Placement

Year	Response	Frequency	Percent
10	Have not decided	173	10.4
	Do not plan to do	116	7
	Plan to do	878	52.9
	Done or in progress	377	22.7
13	Have not decided	81	8.1
	Do not plan to do	87	8.7
	Plan to do	457	45.8
	Done or in progress	239	24
16	Have not decided	97	8.2
	Do not plan to do	113	9.6
	Plan to do	509	43.3
	Done or in progress	326	27.7
18	Have not decided	68	8.2
	Do not plan to do	65	7.8
	Plan to do	351	42.3
	Done or in progress	201	24.2

Based on the total of students who completed the survey in Table 35 (N=1,143), students responded as having completed an internship, co-op, field experience, student teaching, or clinical placement or they were scheduled to do so.

Table 36 provides a breakdown of the number of first year and senior students who were identified by the survey that held a formal leadership role in a student organization or group for the collection year from a range of 2013, 2016, and 2018.

Table 36

Engagement- Formal Leadership Role in a Student Organization Or Group

Year	Response	Frequency	Percent
13	Have not decided	172	17.3
	Do not plan to do	365	36.6
	Plan to do	147	14.7
	Done or in progress	175	17.6
16	Have not decided	229	19.5
	Do not plan to do	425	36.1
	Plan to do	156	13.3
	Done or in progress	228	19.4
18	Have not decided	154	18.6
	Do not plan to do	232	28
	Plan to do	153	18.4
	Done or in progress	144	17.3

Based on the total of students who completed the survey in Table 36, only (N=1,690) students identified as holding a leadership role or were in the process of doing so.

Table 37 provides a breakdown of the number of first year and senior students who were identified by the survey as participating in a learning community or other formal program where groups of students took two or more classes together for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 37

Engagement- Learning Community or Other Formal Program Where Groups Of Students Took Two or More Classes Together

Year	Response	Frequency	Percent
10	Have not decided	853	51.4
	Do not plan to do	506	30.5
	Plan to do	156	9.4
	Done or in progress	75	4.5
13	Have not decided	205	20.6
	Do not plan to do	347	34.8
	Plan to do	155	15.5
	Done or in progress	144	14.4
16	Have not decided	286	24.3
	Do not plan to do	411	34.9
	Plan to do	170	14.5
	Done or in progress	174	14.8
18	Have not decided	182	21.9
	Do not plan to do	263	31.7
	Plan to do	136	16.4
	Done or in progress	98	11.8

Based on the total of students who completed the survey in Table 37, only (N=491) students identified as having participated in a learning community or in the process of doing so.

Table 38 provides a breakdown of the number of first year and senior students who were identified by the survey as working with a faculty member on a research project for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 38

Engagement- Worked with a Faculty Member on a Research Project

Year	Response	Frequency	Percent
10	Have not decided	491	29.6
	Do not plan to do	506	30.5
	Plan to do	381	23
	Done or in progress	165	9.9
13	Have not decided	240	24.1
	Do not plan to do	272	27.3
	Plan to do	205	20.6
	Done or in progress	134	13.4
16	Have not decided	314	26.7
	Do not plan to do	331	28.1
	Plan to do	202	17.2
	Done or in progress	188	16
18	Have not decided	196	23.6
	Do not plan to do	235	28.3
	Plan to do	161	19.4
	Done or in progress	90	10.8

Based on the total of students who completed the survey in Table 38 (N=577), students indicated that they had worked with a faculty member or were in the process of doing so.

Table 39 provides a breakdown of the number of first year and senior students who rated the quality of their interaction with other students for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 39

Engagement- Quality of Interactions with Students

Year	Response	Frequency	Percent
10	Poor	22	1.3
	Neutral	33	2
	Fair	85	5.1
	Somewhat okay	211	12.7
	Okay	333	20.1
	Great	453	27.3
	Excellent	406	24.5
13	Poor	16	1.6
	Neutral	20	2
	Fair	45	4.5
	Somewhat okay	93	9.3
	Okay	224	22.5
	Great	235	23.6
	Excellent	223	22.4
16	Poor	13	1.1
	Neutral	26	2.2
	Fair	53	4.5
	Somewhat okay	109	9.3
	Okay	249	21.2
	Great	289	24.6
	Excellent	292	24.8
18	Poor	10	1.2
	Neutral	20	2.4
	Fair	36	4.3
	Somewhat okay	88	10.6
	Okay	162	19.5
	Great	189	22.8
	Excellent	164	19.8

Based on the total of students who completed the survey in Table 39 (N=1,085), students rated their interaction as Excellent.

Table 40 provides a breakdown of the number of first year and senior students who rated the quality of their interaction with their academic advisors for the collection years from a range of 2013, 2016, and 2018.

Table 40

Engagement- Quality of Interactions with Academic Advisors

Year	Response	Frequency	Percentage
13	Poor	54	5.4
	Neutral	59	5.9
	Fair	66	6.6
	Somewhat Okay	118	11.8
	Okay	164	16.4
	Great	159	15.9
	Excellent	228	22.9
16	Poor	55	4.7
	Neutral	72	6.1
	Fair	89	7.6
	Somewhat Okay	128	10.9
	Okay	203	17.3
	Great	196	16.7
	Excellent	274	23.3
18	Poor	36	4.3
	Neutral	37	4.5
	Fair	58	7
	Somewhat Okay	89	10.7
	Okay	147	17.7
	Great	110	13.3
	Excellent	193	23.3

Based on the total of students who completed the survey in Table 40 (N= 695), students rated their interaction as Excellent.

Table 41 provides a breakdown of the number of first year and senior students who rated the quality of their interaction with faculty for the collection years from a range of 2013, 2016, and 2018.

Table 41

Engagement- Quality of Interactions with Faculty

Year	Response	Frequency	Percent
13	Poor	54	5.4
	Neutral	59	5.9
	Fair	66	6.6
	Somewhat Okay	118	11.8
	Okay	164	16.4
	Great	159	15.9
	Excellent	228	22.9
16	Poor	55	4.7
	Neutral	72	6.1
	Fair	89	7.6
	Somewhat Okay	128	10.9
	Okay	203	17.3
	Great	196	16.7
	Excellent	274	23.3
18	Poor	36	4.3
	Neutral	37	4.5
	Fair	58	7
	Somewhat Okay	89	10.7
	Okay	147	17.7
	Great	110	13.3
	Excellent	193	23.3

Based on the total of students who completed the survey in Table 41 (N=695), students rated their interaction as Excellent.

Table 42 provides a breakdown of the number of first year and senior students who rated the quality of their interaction with student services staff for the collection years from a range of 2013, 2016, and 2018.

Table 42

Engagement- Quality of Interactions with Student Services Staff

Year	Response	Frequency	Percent
13	Poor	62	6.2
	Neutral	40	4
	Fair	53	5.3
	Somewhat okay	76	7.6
	Okay	145	14.5
	Great	149	14.9
	Excellent	149	14.9
	Poor	48	4.1
	Neutral	45	3.8
16	Fair	55	4.7
	Somewhat okay	130	11.1
	Okay	166	14.1
	Great	196	16.7
	Excellent	184	15.6
	Poor	30	3.6
	Neutral	24	2.9
18	Fair	45	5.4
	Somewhat okay	92	11.1
	Okay	117	14.1
	Great	116	14
	Excellent	112	13.5

Based on the total of students who completed the survey in Table 42 (*N*= 445), students rated their interaction as Excellent.

Table 43 provides a breakdown of the number of first year and senior students who rated the quality of their interaction with other administrative staff and offices for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 43

Engagement- Quality of Interactions with Other Administrative Staff and Offices

Year	Response	Frequency	Percent
	Neutral	126	7.6
10	Fair	140	8.4
	Somewhat Okay	334	20.1
	Okay	346	20.8
	Great	301	18.1
	Excellent	239	14.4
	1 Poor	68	6.8
	Neutral	64	6.4
13	Fair	73	7.3
	Somewhat Okay	100	10
	Okay	189	19
	Great	167	16.8
	Excellent	150	15
	1 Poor	41	3.5
	Neutral	60	5.1
16	Fair	90	7.7
	Somewhat Okay	142	12.1
	Okay	197	16.8
	Great	212	18
	Excellent	212	18
	1 Poor	21	2.5
	Neutral	23	2.8
18	Fair	56	6.7
	Somewhat Okay	109	13.1
	Okay	145	17.5
	Great	126	15.2
	Excellent	142	17.1

Based on the total of students who completed the survey in Table 43 (*N*= 743), students rated their interaction as Excellent.

Table 44 provides a breakdown of the number of first year and senior students who were identified by the survey as participating in co-curricular activities for a certain number of hours per week for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 44

Engagement- Hours Per Week: Participating in Co-Curricular Activities (Organizations, Campus Publications, Student Government, Fraternity or Sorority, Intercollegiate or Intramural Sports, etc.)

Year	Response	Frequency	Percent
	0 Hours per week	938	56.5
	1-5	345	20.8
10	6-10	110	6.6
	11-15	59	3.6
	16-20	35	2.1
	21-25	16	1
	26-30	11	0.7
	More than 30	26	1.6
	0 Hours per week	441	44.2
	1-5	234	23.5
13	6-10	64	6.4
	11-15	29	2.9
	16-20	23	2.3
	21-25	8	0.8
	26-30	5	0.5
	More than 30	5	0.5
	0 Hours per week	471	40.1
	1-5	278	23.6
16	6-10	102	8.7
	11-15	62	5.3
	16-20	33	2.8
	21-25	15	1.3
	26-30	9	0.8
	More than 30	14	1.2
	0 Hours per week	283	34.1
	1-5	188	22.7
18	6-10	91	11
	11-15	46	5.5
	16-20	23	2.8
	21-25	13	1.6
	26-30	5	0.6
	More than 30	9	1.1

Based on the total of students who completed the survey in Table 44, a large percentage of the students (N=1,379) indicated participating 0 hours per week for 2010 and 2013. For 2016 and 2018, the number of students surveyed indicate a slight reduction as compared to 2010 and 2013 when the responses dropped to (N=754) in students not participating.

Research Questions

In order to understand the effects of how participation progresses to engagement, each of the research questions were addressed independently, and the results are presented below.

Research Question 1

Research question one asked: Have reported levels of engagement, motivation, and participation changed between the collection of NSSE data from 2010 & 2013 and the 2016 & 2018 school years? Computed factors were constructed based on the following items below:

Pre-graduation Engagement Score (PGE): Items 11a, 11b, 11c, 11d, 11e. 14i

Have You Done Engagement Score (HDE): Items 1d, 3b, 3c, 11f

Academic Motivation Score (AM): Items 1b, 1c, 1e, 3a, 3d

Work for Education Motivation (WM): Items 15c, 15d, 15h

Academic Participation Score (AP): Items 4a, 4b, 4c, 4d, 4e

Good Student Participation Score (GSP): Items 1a. 2c

University Strategies: Item 14d, 14e, 14f, 14g, 14h

Table 45 provides a breakdown of the mean and standard deviation for each of the categories which have been divided between pre-Student Experience years (2010 & 2013) and with-Student Experience years (2016 & 2018).

Table 45

Pre-Student Experience and With-Student Experience by Factors of Engagement,

Motivation, and Participation

		PGE	HDE	AMS	WM	AP	GSP
Pre-Student							
Experience	Mean	2.28	2.00	2.38	2.67	3.00	2.47
_	SD	0.62	0.71	0.53	1.04	0.62	0.72
With-Student							
Experience	Mean	2.47	1.93	2.27	2.68	2.91	2.35
_	SD	0.67	0.76	0.51	1.05	0.61	0.69

The outcome information from Table 45 is illustrated in the bar graph below.

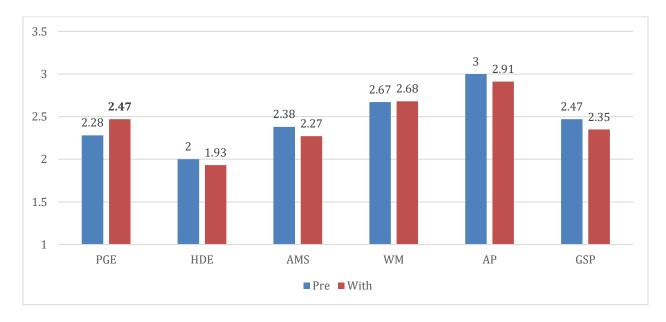


Figure 1. Pre-Student Experience and With-Student Experience by Factors of Engagement,

Motivation, and Participation

As shown in Figure 1, the survey responses of students for 2016 & 2018 (with-Student Experience) shows a slight increase in pre-graduation engagement (PGE). The other factors of HDE, AP, and WM were not statistically significant differences between the years.

Table 46 provides a breakdown of the *t*-test that was performed to show the statistical significance in the differences between the factors of Pre-graduation Engagement Score (PGE), Have You Done Engagement Score (HDE), Academic Motivation Score (AM), Academic Participation Score (AP), Good Student Participation Score (GSP) and Work for Education Motivation (WM).

Table 46

Test of Differences Between Pre- and With-Student Experience

	t	df	Sig. (2- tailed)	Lower	Upper
	·	u.	turiou)	E o w e i	оррег
PGE	-9.28	4209.00	0.000	-0.23	-0.15
HDE	3.23	4593.00	0.001	0.03	0.11
AMS	6.80	4630.00	0.000	0.07	0.14
WM	-0.30	4011.00	0.764	-0.08	0.06
AP	4.73	4352.00	0.000	0.05	0.13
GSP	5.88	4643.00	0.000	0.08	0.16

The results show a statistically significant difference between Pre-graduation Engagement Score (PGE), Have You Done Engagement Score (HDE), Academic Motivation Score (AM), Academic Participation Score (AP), and Good Student Participation Score (GSP) across the pre- and with-Student Experience period. Work for Education Motivation (WM) was not found to be significant.

Research Question 2

Research question two asked: What institutional strategies, as indicated by student responses, reveal a change in engagement, motivation, and participation between each survey? Table 47 provides a breakdown of the number of first year and senior students who

responded to identified questions designed to emphasize engagement, motivation, and participation for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 47

Years by Factors of Engagement, Motivation, and Participation

Year		PGE	HDE	AMS	WM	AP	GSP
10	Mean	2.17	2.04	2.45	2.66	3.02	2.49
	SD	0.57	0.64	0.51	1.02	0.62	0.72
	Skew	0.19	0.55	0.22	0.38	-0.27	0.27
	Kurtosis	0.09	0.00	0.15	0.06	-0.33	-0.47
13	Mean	2.48	1.93	2.26	2.68	2.97	2.45
	SD	0.67	0.81	0.54	1.09	0.63	0.72
	Skew	0.21	0.86	0.59	0.67	-0.17	0.36
	Kurtosis	-0.27	0.02	0.58	1.62	-0.47	-0.35
16	Mean	2.47	1.90	2.27	2.69	2.94	2.33
	SD	0.67	0.75	0.51	1.02	0.60	0.69
	Skew	0.19	0.81	0.33	0.26	-0.09	0.52
	Kurtosis	-0.37	0.00	0.24	-0.08	-0.31	-0.07
18	Mean	2.46	1.97	2.28	2.65	2.87	2.38
	SD	0.67	0.77	0.51	1.11	0.61	0.69
	Skew	0.01	0.70	0.15	0.59	-0.18	0.44
	Kurtosis	-0.32	-0.13	-0.14	0.48	-0.04	-0.20

For each year, the current sample for PGE, HDE, AMS, WM, AP, and GSP all has mean scores as reported in Table 47, with normal levels of skewness and kurtosis that were in the acceptable levels. The information is illustrated in the Figure 2 bar graph.

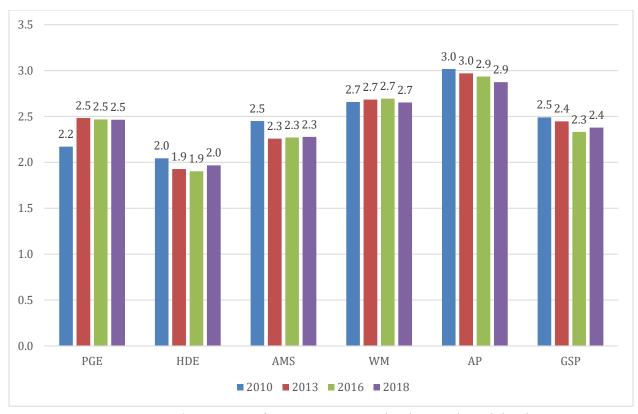


Figure 2. Years by Factors of Engagement, Motivation, and Participation

As shown above, while there is some change in the average responses, the survey responses for the students in each factor indicate no statistical or practical significant differences between 2010, 2013, 2016, and 2018.

Research Question 3

Research question three asked: What were the most effective institutional strategies at YSU as identified by the NSSE data?

Table 48 provides a breakdown of the number of first year and senior students who responded to identified questions designed to emphasize the most effective institutional strategies for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 48

T-test of Institutional Strategies by Pre- and With-Student Experience Years

Item	Value	df	sig.
Providing opportunities to be involved socially	185.64	3	0.000
Provide support for overall wellbeing	5.30	3	0.151
Helping you manage your non-academic	6.87	3	0.076
Attending campus activities	29.22	3	0.000
Encouraging contact among diverse groups of students	2.39	3	0.494

As indicated in Table 48, significant results were found for all strategies except "Provide support for overall wellbeing" and "Encouraging contact among diverse groups of students". This indicated that students felt the institution's emphasis on "Attending campus activities", "Helping you manage your non-academic" and "Providing opportunities to be involved socially" were all the most important strategies of the institution. Figure 3 provides a graphical illustration of "Providing opportunities to be involved socially".

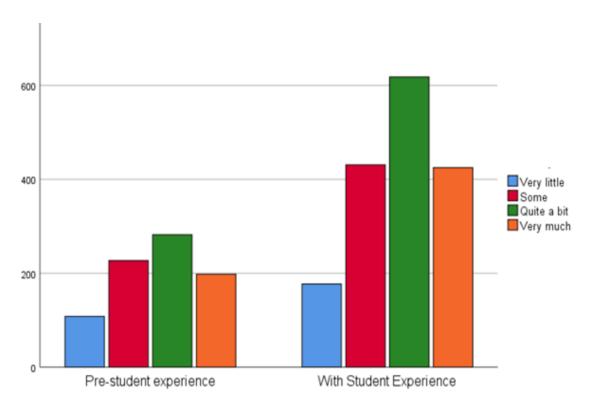


Figure 3. Providing Opportunities to be Involved Socially

As shown in the Figure 3, there is a significant spike in the institutional strategy with-Student Experience that ranged from "Some" to "Quite a bit" and to "Very much" related to opportunities to be involved socially when compared to the strategies used by the institution pre-Sudent Experience.

Figure 4 provides a graphical illustration of Providing support for your overall wellbeing

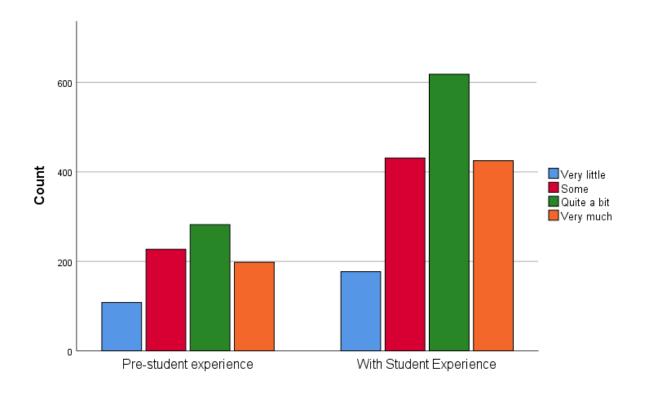


Figure 4. Providing Support for Overall Wellbeing

As shown in the Figure 4, there is a significant spike in the institutional strategy with-Student Experience that ranged from "Some" to "Quite a bit" and to "Very much" related to providing support for overall wellbeing when compared to the strategies used by the institution pre-Student Experience.

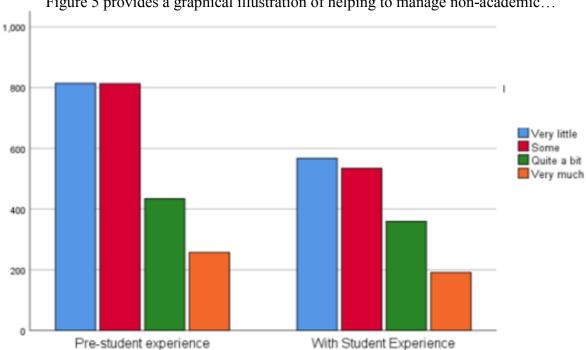
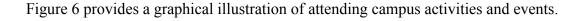


Figure 5 provides a graphical illustration of helping to manage non-academic...

Figure 5. Helping Manage Non-Academic...

As shown in the Figure 5, there is a significant spike in the institutional strategy with pre-Student Experience that ranged from "Very little" to "Some" and to "Quite a bit" related to helping to manage non-academic responsibilities (work, family,etc.) when compared to the strategies used by the institution with-Student Experience.



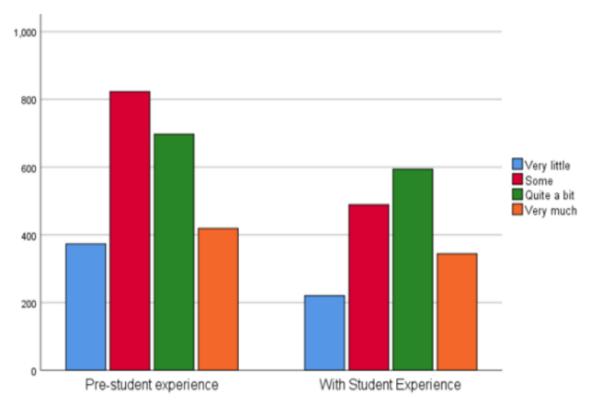


Figure 6. Attending Campus Activities and Events

As shown in the Figure 6, there is a significant spike in the institutional strategy with-Student Experience and pre-Student Experience that ranged from "Some" to "Quite a bit" and to "Very much" related to attending campus activities and events. However, when compared to the strategies used by the institution, the with-Student Experience years showed greater gains based on the responses given.

Figure 7 provides a graphical illustration of encouraging contact among students from different backgrounds.

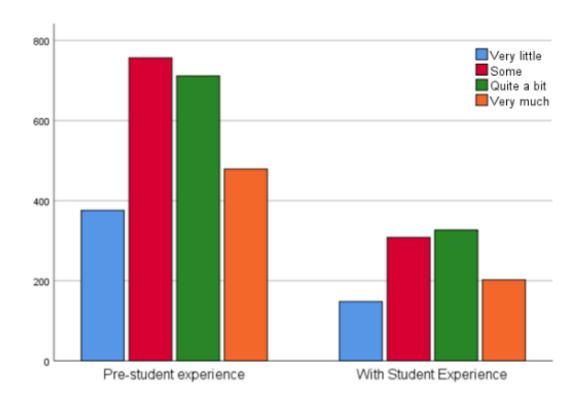


Figure 7. Encouraging Contact Among Students from Different Backgrounds

As shown in the Figure 7, there is a significant spike in the institutional strategy with-Student Experience and pre-Student Experience that ranged from "Some" to "Quite a bit" and to "Very much" related to encouraging contact among students from different backgrounds. However, when compared to the strategies used by the institution, the with-Student Experience years, the number of responses were significantly lower than the pre-Student Experience years.

Table 49 provides a breakdown of the number of first year and senior students who responded to identified questions designed to show differences between Pre-graduation Engagement Score (PGE), Have You Done Engagement Score (HDE), Academic Motivation

Score (AM), Academic Participation Score (AP), Good Student Participation Score (GSP) and Work for Education Motivation (WM) for the collection years from a range of 2010, 2013, 2016, and 2018.

Table 49

Correlation Between Engagement Scores

	PGE	HDE	AMS	WM	AP	GSP
PGE	1	.455**	.221**	.098**	.196**	.246**
HDE		1	.460**	.034*	.303**	.639**
AMS			1	.058**	.319**	.338**
WM				1	0.019	0.019
AP					1	.246**
GSP						1

^{**} Correlation is significant at the 0.01 level (2-tailed)

Based on the significant correlations, it was determined that a multivariate analysis of variance should be used to address the final research question.

Research Question 4

Research question four asked: What differences in engagement, motivation, and participation were identified based on the following student populations: students of color, commuter students, residential students, international students, nontraditional students, and Lesbian, Gay, Bisexual, Transgender, Queer, Intersex (LGBTQI) students? A Pearson's Zero-Order correlation was conducted and revealed that the factors of motivation, engagement, and participation were significantly correlated.

^{*} Correlation is significant at the 0.05 level (2-tailed)

Table 50 provides a breakdown of the number of first year and senior students who responded to questions resulting from the Pre-graduation Engagement Score (PGE), Have You Done Engagement Score (HDE), Academic Motivation Score (AM), Academic Participation Score (AP), Good Student Participation Score (GSP) and a Work for Education Motivation (WM) for the collection years from a range of 2010, 2013, 2016, and 2018.

Engagement Score by Student Type

Table 50

Independent Variable	DV	df	F	Mean Sq	Sig
Traditional Student	PGE	1	1.63	4.08	0.044
	HDE	1	8.09	15.91	0.000
	AMS	1	0.00	0.00	0.975
	WM	1	73.34	69.57	0.000
	AP	1	0.06	0.16	0.694
	GSP	1	15.22	31.94	0.000
Race	PGE	9	1.61	4.11	0.000
	HDE	9	1.52	3.01	0.001
	AMS	9	1.32	5.04	0.000
	WM	9	1.60	1.47	0.152
	AP	9	0.25	0.66	0.747
	GSP	9	0.30	0.63	0.773
LGBTQI	PGE	1	0.44	1.01	0.315
-	HDE	1	1.90	3.33	0.068
	AMS	1	0.95	3.67	0.056

	WM	1	2.84	2.61	0.106
	AP	1	0.92	2.50	0.114
_	GSP	1	0.77	1.66	0.198
Commuter	PGE	1	0.08	0.19	0.663
	HDE	1	0.74	1.46	0.226
	AMS	1	0.25	0.95	0.330
	WM	1	262.21	256.10	0.000
	AP	1	0.04	0.12	0.734
	GSP	1	4.38	9.14	0.003
International	PGE	2	0.39	1.01	0.363
_	HDE	2	1.82	3.59	0.028
	AMS	2	1.01	3.89	0.021
	WM	2	0.83	0.78	0.460
	AP	2	0.01	0.04	0.962
	GSP	2	0.56	1.17	0.309
Residential	PGE	1	0.35	0.88	0.347
- -	HDE	1	2.12	4.16	0.041
	AMS	1	0.02	0.07	0.799
	WM	1	22.20	20.83	0.000
	AP	1	1.98	5.33	0.021
	GSP	1	0.00	0.00	0.996

As indicated in Table 50, there are significant differences found in traditional students whose

Pre-graduation Engagement Score (PGE), You Done Engagement Score (HDE), Work for Education Motivation (WM) and Good Student Participation Score (GSP) were significance at the 0.01 level. When these scores were compared by race (students of color), a significant difference was found in the Pre-graduation Engagement Score (PGE), the Have You Done Engagement Score (HDE), and the Academic Motivation Score (AMS), where significance was at the 0.01 level. The scores that related to students who identified themselves as LGBTQI showed no significant difference. However, commuter students were found to have a significant difference in Work for Education Motivation (WM) and Good Student Participation Score (GSP), where significance was at the 0.01 level.

International students were found to have a significant difference in the Have You Done Engagement Score (HDE) and the Academic Motivation Score (AMS), where significance was at the 0.01 level. Finally, residential students were found to have a significant difference in Have You Done Engagement Score (HDE), Work for Education Motivation Score (WM), and Academic Participation Score (AP) where significance was at the 0.01

Appendix A also provides a comprehensive breakdown of the scores based on Pregraduation Engagement Score (PGE), Have You Done Engagement Score (HDE), Academic Motivation Score (AM), Academic Participation Score (AP), Good Student Participation Score (GSP) and Work for Education Motivation (WM) for the collection years from a range of 2010, 2013, 2016, and 2018 and comparing the means and standard deviation based pre-Student Experience and with-Student Experience as categories.

level.

Summary

In the final analysis, 3,884 students completed the NSSE survey collected by the YSU Office of Assessment for the 2010, 2013, 2016, and 2018 academic years. The conclusion determined that an increase in pre-graduation engagement was significant based on the NSSE survey results between pre-Student Experience (2010 & 2013) and with-Student Experience (2016 & 2018). NSSE survey results were also grouped into the categories of Pre-graduation Engagement Score (PGE), Have You Done Engagement Score (HDE), Academic Motivation Score (AM), Academic Participation Score (AP), Good Student Participation Score (GSP), and Work for Education Motivation (WM). Finally, when comparing engagement categories against student types, the following results were indicated: Pre-graduation Engagement Score (PGE) was significant for Nontraditional and Students of Color (Race) students; Have You Done Engagement Score (HDE) was significant for Traditional, Students of Color (Race) students, International and Residential students; Academic Motivation Score (AMS) was significant for International and Students of Color (Race) students; Academic Participation Score (AP) was significant for Residential students; Good Student Participation Score (GSP) was significant for Nontraditional and Commuter students, and Work for Education Motivation (WM) was significant for Commuters, Residential and Nontraditional students. There was no significant difference for LGBTQI students across all engagement categories. The results showed that when grouping NSSE questions by categories, different student types responded to engagement strategies differently. Therefore, using these groups to enhance the strategies could be considered.

Chapter 5

Discussion

This study was conducted to show that identified institutional strategies contributed to an increased level of engagement by students at YSU. A longitudinal analysis was used since there were a variety of variables used to show a relationship between motivation, participation, and engagement. Data were used from existing survey results from NSSE surveys conducted in 2010, 2013, 2016, and 2018 by the Office of Assessment at YSU. Student types were identified within six different categories to measure the difference in motivation, participation, and engagement. Questions from the NSSE survey were also identified which correlated to motivation, engagement, participation, academic participation, demographics, and strategy. This chapter provides a summary of the major findings from the study, the limitations, and recommendations for further investigation.

Summary of Findings

Research Question One

Research question one asked: *Have reported levels of engagement, motivation, and* participation changed between the collection of NSSE data from 2010 to 2013 and the 2016 to 2018 school years? Results also showed no change in engagement, motivation, and participation based on the institutional strategies for 2010, 2013, 2016, and 2018. However, when comparing results from 2010 and 2013 (pre-Student Experience) and 2016 and 2018 (with-Student Experience) there was a significant increase in pre-graduation engagement for with-Student Experience based on the NSSE data. This indicates that employing key institutional strategies can have some impact on pre-graduation engagement of students. The main reason increased student engagement is so critical relates to the institutional impact it

has on enrollment and retention. Bourdon (2013) predicted there would be a drop in enrollment for the next decade and colleges should not expect to see an upturn until 2021. Bourdon (2013) warned against complacency and counting on enrollment as the only strategy for institutional growth. When discussing the shifting demographics, Bourdon (2013) stated that in addition to the slow growth, colleges will also see a decline in the number of high school students, both Black and White, attending college. This population drop will also be accompanied by an increase in Hispanic and Asian/Pacific Islanders who will enter colleges and universities in record numbers creating a more diverse student body. This new influx of students will require the university to change some of its business practices and support services if they have any hope of attracting these students. Bourbon (2013) stated that some schools may have to change their admission standards to provide access to these students who might not be as prepared as their predecessors because of the cultural and language differences. Therefore, developing institutional strategies with datadriven predictors of engagement, participation, and academic success are what is needed for student affairs' professionals to connect their strategies to increased persistence and retention.

Research Question Two

Research question two asked: What institutional strategies, as indicated by student responses, reveal a change in engagement, motivation, and participation between each survey? NSSE survey results were also grouped into the categories of Pre-graduation Engagement Score (PGE), Have You Done Engagement Score (HDE), Academic Motivation Score (AM), Academic Participation Score (AP), Good Student Participation Score (GSP), and Work for Education Motivation (WM). These results showed an increase in engagement

across all categories with exception of Work for motivation. Research has revealed two types of motivation experienced by individuals: intrinsic and extrinsic motivation. He states that intrinsic motivation involves an internal driver, such as personal pleasure or the excitement of learning something new. Similarly, extrinsic motivation is concerned with external drivers, like the opportunity to win a prize or an increase in salary for positive evaluation (Ryan & Deci, 2000). Regardless of the type, motivation in general is linked to a person's cognitive, social, and physical development. These developmental factors also contribute to an individual's growth in knowledge and skill attainment (Ryan &Deci, 2000). Understanding the reason or root cause behind a person's motivation can provide a tool used to achieve a particular outcome. Therefore regardless of the strategy used by the institution, a student's individual intrinsic and extrinsic motivational factor is key.

Research Question Three

Research question three asked: What were the most effective institutional strategies at YSU as identified by the NSSE data? When comparing institutional strategies between pre-Student Experience (2010 & 2013) and with-Student Experience (2016 & 2018), the results indicated the institutional emphasis on Attending Campus Activities and Events and Encouraging Contact Among Students From Different Backgrounds were more significant with pre-Student Experience than with the with-Student Experience. However, with the Providing Opportunities to be Involved Socially, Providing Support for Overall Wellbeing and Helping You Manage Non-academic responsibilities, the results indicated that these institutional strategies were more significant with the with-Student Experience than the pre-Student Experience. Therefore, some of the strategies implemented by the new Division of Student Experience may have contributed to the increase in these engagement categories.

Quaye and Harper (2014) stated that there are two important components to student engagement, (a) the level of determination and time a student contributes to his/her academic pursuits and out of class activities, and (b) the level of emphasis and financial resources the institution places on the supportive resources, educational outcomes, participation, persistence, and completion. The implementation of institutional strategies requires more than one approach. For example, Harper and Quaye (2014) stated that multiple strategies are needed in collaboration with each other to ensure the success of minority students at a PWI. These multiple strategies include assessment, student success, faculty success, and culturally-responsive, curricular strategies.

Research Question Four

Research question four asked: What differences in engagement, motivation, and participation were identified based on the following student populations: students of color, commuter students, residential students, international students, nontraditional students, and Lesbian, Gay, Bisexual, Transgender, Queer, Intersex (LGBTQI) students? Results showed that when comparing engagement categories against student types; Pre-graduation Engagement Score (PGE) was significant for nontraditional and Students of Color (Race) students. Have You Done Engagement Score (HDE) was significant for Traditional, Students of Color (Race) students, International and Residential students. Academic Motivation Score (AMS) was significant for International and Students of Color (Race) students. Academic Participation Score (AP) was significant for Residential students. Good Student Participation Score (GSP) was significant for nontraditional and Commuter students, and Work for Education Motivation (WM) was significant for Commuters, Residential and Traditional students. There was no significant difference for LGBTQI students across all engagement

categories. The results showed that when grouping NSSE questions by categories different student types responded to engagement strategies differently. Therefore, using these groups to enhance the strategies could be considered. However, research has shown that another underlined element could be at play with these groups. This underlined element is called grit. Duckworth (2016) claimed that when college becomes difficult, grit matters. Grit is the difference-maker that propels some to succeed, while others do not. Each student type may have a different grit level which contributed to their level of participation and commitment. Duckworth (2016) stated that perseverance and passion are the two major critical components of the GRIT® theory. Duckworth (2016) proceeded to claim that passion and perseverance are not synonymous to each other, but both must be present for grit to exist. Therefore, the results showed some student types with statistically significant differences in some engagement categories over others, which might be related to their perseverance and passion toward those categories.

Limitations

There were several limitations to this study. For example, some of the questions from the survey did not align with surveys conducted in previous years of data collection by the YSU Office of Assessment. The NSSE survey was changed between 2010 and 2018. The respondents from each of the four surveys had first year and senior students from four different time periods. Furthermore, the responses given by those students had no connection to the previous surveys and there was no way to determine if students had taken the survey in a different collection year. Given the eight-year difference, generational research has proven that students in 2010 were different from students in 2018. Therefore, the students' expectations of the institution could have been a factor. Scott Jaschik (2018) measured the

slight decline in confidence level in today's colleges and universities by consumers. A recent Gallup Poll showed that 47% of adults in America were confident in the direction of higher education. This was a drop from the 58% universities received in 2015. Most of the confidence drop was among political lines with the largest drop in confidence coming from those who identify themselves as Republicans, which moved from 56% to 39% in only three years (Jaschik, 2018). In addition, there are a number of these graduates who are unemployed. These facts have led to the unconfirmed notion that colleges and universities are not worth the expense anymore.

Since the NSSE survey was administered in 2010, 2013, 2016, and 2018, YSU has also experienced some major changes since the first NSSE survey in 2010. Within this eight-year period, YSU has hired three presidents and numerous faculty and staff. It has also changed the admission requirements and moved away from being an open-access institution. These institutional changes have also contributed to the changes in the YSU student profile. In 2010, the average GPA for a first year student was 2.40 and most students came from a five-county radius (YSU, 2010). By 2018, the average GPA for a first year admitted student was 3.35 and some students were from out of region and even out of state (Archives & Special Collection: History of YSU. (n.d.).

Recommendations for Further Study

If this research study were to be repeated, the researcher should identify the preferred NSSE questions before the survey is administered. The preferred questions must relate to the variable being investigated. If institutional strategies are being evaluated, the preferred questions must be aligned to the institutional programs and initiatives implemented. The NSSE survey should also be administered to a group of participants during their freshmen

year and again when the same cohort of students reach senior status. In the current study, the data were collected in four different periods with no intention of making a correlation between the surveys. Since the data used in the study came from existing data from the YSU Office of Assessment, the researcher had no influence over the collection process. If the researcher had personally collected the data in two different periods, a participant comparison could have been made between the periods.

Conclusion

The implications of this study provide evidence that the NSSE survey can be a useful tool to measure an increase in student engagement when a comparison of the results is conducted. The study also provides support for the implementation of key institutional strategies to increase student engagement. The rationale for conducting this study is to provide evidence to support new strategies that will increase campus engagement of students attending colleges and universities. As previously indicated, increased engagement may assist institutions in meeting enrollment projections, retention and progression goals, and graduation rates. Fulfilling established targets is more critical than ever before. The reason that reaching targets has become so critical is due in part to recent changes in the higher education landscape. The public has defined these changes as (a) the high cost of college and mounting student debt, (b) the loss of public confidence in a traditional college education, (c) the successful era of on-line colleges and universities, and (d) the increased number of college graduates that find themselves unemployed or underemployed after the expense of college.

Traditional brick and mortar institutions are under attack. In order to rebuild public confidence and address previously identified issues, colleges and universities must tap into

triggers that will engage students. Using the identified triggers will enable practitioners to develop intended outcomes relative to out-of-classroom learning that will enhance cognitive and personal development, particularly the soft skills needed in today's workplace. Before these goals are met, colleges and universities must face the realities of the changed higher education landscape. Gone are the days where traditional colleges and universities could stand on their reputation and still see enrollment growth and public support. Mounting student debt and the high cost of tuition have created a more cost-conscious consumer. Therefore, more research is needed to show that a college degree is truly worth the expense.

Attending college and finishing in four years is not an exact science anymore.

Convincing the general public that college is worth the investment is a new concept facing higher education. In an article by Geringer and Jones (2016), it highlighted the differences in earning potential between college graduates and non-graduates. The income differences support the argument that post-secondary education is still a major factor contributing to the income gap between the two parties. Education beyond high school is a key component to generating wealth over time. Geringer and Jones (2016) explained that where non-college graduates had greater job satisfaction, career success and social involvement, college graduates were more civically minded, had a higher degree of voter participation, experienced healthier lifestyles, and were less likely to need public assistance. The documented earning potential, as reported by the National Association of College Employers, of post-secondary educated individuals is higher regardless of the educational level (Geringer & Jones, 2016).

However, Geringer and Jones (2016) warned that not completing college on time and the mismanagement of student loan debt are also important factors. Therefore,

administrators, board members, and even faculty must protect students by monitoring completion and retention rates at their institutions. Geringer and Jones (2016) suggested that board members ask the right questions and require administrators to provide them with federal data collected on their institution and ensure that strategies are developed to help students monitor their debt. Other strategies, like alignment of math courses to a program of study, academic maps, developing academic pathways for all programs, and intrusive advising were also discussed to assist their board members with understanding what is necessary to improve graduation rates. For those who have oversight for public and private institutions as well as state governmental agencies and the general public, this increased accountability is rapidly becoming the new expectation for colleges and universities.

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 $\label{eq:Appendix} A \\ \mbox{ \begin{tabular}{ll} \textbf{Descriptive Statistics: Nontraditional} \end{tabular}}$

Descriptive Statistics. Nontraditional								
	Block	_	Mean	Std. Deviation	N			
Beforegrad_e	Pre-student experience	1.00	2.2998	.60591	1492			
		2.00	2.2875	.61232	747			
		Total	2.2957	.60795	2239			
	With Student Experience	1.00	2.4965	.67402	1182			
		2.00	2.4156	.63191	404			
		Total	2.4759	.66428	1586			
	Total	1.00	2.3867	.64425	2674			
		2.00	2.3325	.62201	1151			
		Total	2.3704	.63804	3825			
Havedone_e	Pre-student experience	1.00	2.0282	.71132	1492			
		2.00	1.9820	.66698	747			
		Total	2.0128	08 .60591 75 .61232 67 .60795 65 .67402 66 .63191 69 .66428 67 .64425 68 .62201 64 .63804 62 .71132 60 .66698 68 .69703 60 .74460 65 .70739 69 .73844 67 .72673 67 .68639 63 .71571 62 .52518 69 .52479 88 .52507 2 .49716 67 .52283 60 .50377 68 .51553 75 .52909 61 .51965 60 .99172 65 1.00962 61 1.07934 66 1.03950 75 .99949	2239			
	With Student Experience	1.00	1.9660	.74460	1182			
		2.00	1.8045	.70739	404			
		Total	1.9249	.73844	1586			
	Total	1.00	2.0007	.72673	2674			
		2.00	1.9197	.68639	1151			
		Total	1.9763		3825			
Motivationscore	Pre-student experience	1.00	2.3762	.71571 .52518	1492			
		2.00	2.4019	.52479	747			
		Total	2.3848	.52507	2239			
	With Student Experience	1.00	2.2712	.49716	1182			
		2.00	2.2467	.67402 .63191 .66428 .64425 .62201 .63804 .71132 .66698 .69703 .74460 .70739 .73844 .72673 .68639 .71571 .52518 .52479 .52507 .49716 .52283 .50377 .51553 .52909 .51965 .99172 .109129 .103327 .100962 .107934 .103950 .99949	404			
		Total	2.2650		1586			
	Total	1.00	2.3298	.51553	2674			
		2.00	2.3475	.52909	1151			
		Total	2.3351	.51965	3825			
work_m	Pre-student experience	1.00	2.5800	.99172	1492			
		2.00	2.8436	1.09129	747			
		Total	2.6679	1.03327	2239			
	With Student Experience	1.00	2.5745		1182			
		2.00	2.9361		404			
		Total	2.6666		1586			
	Total	1.00	2.5775		2674			
		2.00	2.8760		1151			

		Total	2.6674	1.03573	3825
Academic_P	Pre-student experience	1.00	3.0155	.61325	1492
		2.00	2.9790	.62222	747
		Total	3.0033	.61636	2239
	With Student Experience	1.00	2.9114	.59122	1182
		2.00	2.9303	.63332	404
		Total	2.9162	.60208	1586
	Total	1.00	2.9695	.60572	2674
		2.00	2.9619	.62629	1151
		Total	2.9672	.61191	3825
Good_p	Pre-student experience	1.00	2.4199	.71918	1492
		2.00	2.5930	.65881	747
		Total	2.4777	.70422	2239
	With Student Experience	1.00	2.3228	.67814	1182
		2.00	2.4344	.67204	404
		Total	2.3512	.67813	1586
	Total	1.00	2.3770	.70287	2674
		2.00	2.5374	.66750	1151
		Total	2.4252	.69623	3825

Descriptive Statistics: Institution- Reported- Race or Ethnicity

Appendix B

	Block		Mean	Std. Deviation	N
Beforegrad_e	egrad_e Pre-student experience	American Indian or Alaska Native	2.2556	.47295	15
		Asian	2.5882	.52462	34
		Black or African American	2.2681	.70272	212
		Hispanic or Latino	2.2065	.55490	1184
		Native Hawaiian or Other Pacific Islander	2.4167	.38188	3
		White	2.4251	.62837	673
		Other	2.0625	.23936	4
		Foreign or Nonresident alien	2.1574	.70078	27
		Two or more races/ethnicities	2.6563	.53412	32
		Unknown	2.3944	.68283	90
		Total	2.2962	.60761	2274
	With Student Experience	American Indian or Alaska Native	2.7500	.66144	3
		Asian	2.6632	.83604	24
		Black or African American	2.3843	.61023	121
		Hispanic or Latino	2.5321	.76236	52
		Native Hawaiian or Other Pacific Islander	1.8750	.17678	2

		White	2.4803	.66573	1299
		vvinte	2.4003	.00373	1299
		Foreign or Nonresident alien	2.6316	.64655	38
		Two or more races/ethnicities	2.6474	.71109	39
		Unknown	2.1872	.55414	69
		Total	2.4725	.66729	1647
	Total	American Indian or Alaska Native	2.3380	.52118	18
		Asian	2.6193	.66541	58
		Black or African American	2.3103	.67199	333
		Hispanic or Latino	2.2202	.56853	1236
		Native Hawaiian or Other Pacific Islander	2.2000	.41079	5
		White	2.4615	.65359	1972
		Other	2.0625	.23936	4
		Foreign or Nonresident alien	2.4346	.70472	65
		Two or more races/ethnicities	2.6514	.63313	71
		Unknown	2.3045	.63672	159
		Total	2.3702	.63924	3921
Havedone_e	Pre-student experience	American Indian or Alaska	2.1056	.71580	15
		Asian	2.2917	.57525	34
		Black or African American	1.9670	.71264	212

	Hispanic or Latino	2.0362	.64009	1184
	Native Hawaiian or Other Pacific Islander	2.2500	.50000	3
	White	1.9318	.76348	673
	Other	1.9375	.74652	4
	Foreign or Nonresident alien	2.1111	.75885	27
	Two or more races/ethnicities	2.2135	.72306	32
	Unknown	2.1648	.75637	90
	Total	2.0117	.69503	2274
With Student Experience	American Indian or Alaska Native	2.0000	.66667	3
	Asian	2.1806	.83971	24
	Black or African American	1.7865	.66640	121
	Hispanic or Latino	2.1026	.77132	52
	Native Hawaiian or Other Pacific Islander	1.5000	.23570	2
	White	1.9247	.74248	1299
	Foreign or Nonresident alien	2.1579	.67888	38
	Two or more races/ethnicities	1.9615	.69191	39
	Unknown	1.7778	.69702	69
	Total	1.9236	.73703	1647
Total	American Indian or Alaska Native	2.0880	.68984	18

	Asian	2.2457	.69220	58
	Black or African American	1.9014	.70060	333
	Hispanic or Latino	2.0390	.64591	1236
	Native Hawaiian or Other Pacific Islander	1.9500	.55465	5
	White	1.9271	.74952	1972
	Other	1.9375	.74652	4
	Foreign or Nonresident alien	2.1385	.70776	65
	Two or more races/ethnicities	2.0751	.71230	71
	Unknown	1.9969	.75391	159
	Total	1.9747	.71421	3921
Motivationscore Pre-student experience	American Indian or Alaska Native	2.3000	.41404	15
	Asian	2.3824	.48553	34
	Black or African American	2.5149	.58435	212
	Hispanic or Latino	2.4253	.50259	1184
	Native Hawaiian or Other Pacific Islander	2.9167	.14434	3
	White	2.2576	.51910	673
	Other	2.6875	.37500	4
	Foreign or Nonresident alien	2.5556	.49678	27
	Two or more races/ethnicities	2.5286	.47548	32

	Unknown	2.3898	.56531	
	Total	2.3853	.52381	2
With Student Experience	American Indian or Alaska Native	2.7500	.25000	
	Asian	2.4792	.53627	
	Black or African American	2.2762	.49289	
	Hispanic or Latino	2.3542	.45490	
	Native Hawaiian or Other Pacific Islander	2.1250	.53033	
	White	2.2550	.51063	1
	Foreign or Nonresident alien	2.2763	.45689	
	Two or more races/ethnicities	2.3333	.54812	
	Unknown	2.2101	.44226	
	Total	2.2642	.50538	1
Total	American Indian or Alaska Native	2.3750	.42227	
	Asian	2.4224	.50482	
	Black or African American	2.4282	.56396	
	Hispanic or Latino	2.4223	.50071	1
	Native Hawaiian or Other Pacific Islander	2.6000	.51841	
	White	2.2559	.51340	1
	Other	2.6875	.37500	

		Foreign or Nonresident alien	2.3923	.49008	65
		Two or more races/ethnicities	2.4214	.52230	71
		Unknown	2.3118	.52170	159
		Total	2.3344	.51954	3921
work_m	Pre-student experience	American Indian or Alaska Native	2.6889	1.42242	15
		Asian	2.5441	1.04391	34
		Black or African American	2.6281	1.20828	212
		Hispanic or Latino	2.6829	.97414	1184
		Native Hawaiian or Other Pacific Islander	2.3333	.88192	3
		White	2.6578	1.02394	673
		Other	2.1667	1.00000	4
		Foreign or Nonresident alien	2.1420	.87303	27
		Two or more races/ethnicities	2.4896	1.19132	32
		Unknown	2.8759	1.31958	90
		Total	2.6654	1.03561	2274
	With Student Experience	American Indian or Alaska Native	3.3333	.66667	3
		Asian	2.6111	1.25751	24
		Black or African American	2.7961	1.22370	121
		Hispanic or Latino	2.6603	1.04264	52

		Native Hawaiian or Other	1.8333	.23570	2
		Pacific Islander White	2.6845	1.02321	1299
		Foreign or Nonresident alien	2.5044	1.09358	38
		Two or more races/ethnicities	2.5171	1.14503	39
		Unknown	2.5314	1.17340	69
		Total	2.6765	1.05364	1647
	Total	American Indian or Alaska Native	2.7963	1.33401	18
		Asian	2.5718	1.12698	58
		Black or African American	2.6892	1.21476	333
		Hispanic or Latino	2.6819	.97668	1236
		Native Hawaiian or Other Pacific Islander	2.1333	.69121	5
		White	2.6754	1.02328	1972
		Other	2.1667	1.00000	4
		Foreign or Nonresident alien	2.3538	1.01658	65
		Two or more races/ethnicities	2.5047	1.15778	71
		Unknown	2.7264	1.26601	159
		Total	2.6701	1.04310	3921
Academic_P	Pre-student experience	American Indian or Alaska Native	3.0067	.79975	15
		Asian	3.0000	.49190	34

	Black or African American	2.9922	.66642	212
	Hispanic or Latino	3.0291	.61115	1184
	Native Hawaiian or Other Pacific Islander	3.2500	.75000	3
	White	2.9721	.61943	673
	Other	2.8125	.37500	4
	Foreign or Nonresident alien	3.0278	.62578	27
	Two or more races/ethnicities	3.0063	.64129	32
	Unknown	2.9413	.55976	90
	Total	3.0043	.61684	2274
With Student Experience	American Indian or Alaska Native	2.4000	.80000	3
	Asian	3.0917	.53072	24
	Black or African American	2.8802	.69634	121
	Hispanic or Latino	2.8615	.59874	52
	Native Hawaiian or Other Pacific Islander	2.4000	.00000	2
	White	2.9277	.59748	1299
	Foreign or Nonresident alien	2.8053	.68100	38
	Two or more races/ethnicities	2.8718	.60782	39
	Unknown	2.8188	.46146	69
	Total	2.9142	.60225	1647

	Total	American Indian or Alaska Native	2.9056	.81003	18
		Asian	3.0379	.50578	58
		Black or African American	2.9515	.67855	333
		Hispanic or Latino	3.0220	.61132	1236
		Native Hawaiian or Other Pacific Islander	2.9100	.70569	5
		White	2.9429	.60527	1972
		Other	2.8125	.37500	4
		Foreign or Nonresident alien	2.8977	.66288	65
		Two or more races/ethnicities	2.9324	.62227	71
		Unknown	2.8882	.52140	159
		Total	2.9665	.61230	3921
Good_p	Pre-student experience	American Indian or Alaska Native	2.4333	.82086	15
		Asian	2.5000	.71774	34
		Black or African American	2.4976	.71460	212
		Hispanic or Latino	2.4658	.70493	1184
		Native Hawaiian or Other Pacific Islander	2.5000	.86603	3
		White	2.4963	.69996	673
		Other	2.5000	1.08012	4
		Foreign or Nonresident alien	2.4630	.67832	27
		Two or more races/ethnicities	2.4219	.58350	32
		Unknown	2.4556	.74065	90
		Total	2.4771	.70455	2274

With Student Experience	American Indian or Alaska Native	2.5000	.50000	3
	Asian	2.3333	.80307	24
	Black or African American	2.2645	.64250	121
	Hispanic or Latino	2.3173	.61858	52
	Native Hawaiian or Other Pacific Islander	1.7500	.35355	2
	White	2.3661	.68536	1299
	Foreign or Nonresident alien	2.2895	.56511	38
	Two or more races/ethnicities	2.4487	.61553	39
	Unknown	2.1957	.69778	69
	Total	2.3491	.67850	1647
Total	American Indian or Alaska Native	2.4444	.76483	18
	Asian	2.4310	.75189	58
	Black or African American	2.4129	.69740	333
	Hispanic or Latino	2.4595	.70192	1236
	Native Hawaiian or Other Pacific Islander	2.2000	.75829	5
	White	2.4105	.69296	1972
	Other	2.5000	1.08012	4
	Foreign or Nonresident alien	2.3615	.61560	65
	Two or more races/ethnicities	2.4366	.59719	71
	Unknown	2.3428	.73161	159
	Total	2.4234	.69651	3921

Appendix C

Descriptive Statistics: Residential

	Block		Mean	Std. Deviation	N
Beforegrad_e	Pre-student experience	.00	2.2687	.64498	134
		1.00	2.2961	.60490	2121
		Total	2.2945	.60724	2255
	With Student Experience	.00	2.4215	.72077	86
		1.00	2.4787	.66395	1513
		Total	2.4756	.66701	1599
	Total	.00	2.3284	.67813	220
		1.00	2.3721	.63646	3634
		Total	2.3696	.63890	3854
Havedone_e	Pre-student experience	.00	1.9229	.69921	134
		1.00	2.0145	.69326	2121
		Total	2.0091	.69380	2255
	With Student Experience	.00	1.8159	.74625	86
		1.00	1.9312	.74002	1513
		Total	1.9250	.74058	1599
	Total	.00	1.8811	.71818	220
		1.00	1.9798	.71418	3634
		Total	1.9742	.71469	3854
Motivationscore	Pre-student experience	.00	2.3657	.54275	134
		1.00	2.3839	.52204	2121
		Total	2.3829	.52318	2255
	With Student Experience	.00	2.2994	.61189	86
		1.00	2.2625	.49911	1513
		Total	2.2645	.50566	1599
	Total	.00	2.3398	.57032	220
		1.00	2.3334	.51603	3634
		Total	2.3337	.51921	3854
work_m	Pre-student experience	.00	2.9030	1.03071	134
		1.00	2.6473	1.02642	2121
		Total	2.6625	1.02823	2255
	With Student Experience	.00	3.0601	1.12631	86
		1.00	2.6457	1.03514	1513
		Total	2.6680	1.04406	1599
	Total	.00	2.9644	1.06932	220
		1.00	2.6466	1.02992	3634

		Total	2.6648	1.03469	3854
Academic_P	Pre-student experience	.00	3.0072	.66784	134
		1.00	3.0039	.61297	2121
		Total	3.0041	.61621	2255
	With Student Experience	.00	3.1035	.62274	86
		1.00	2.9065	.59978	1513
		Total	2.9171	.60248	1599
	Total	.00	3.0448	.65085	220
		1.00	2.9634	.60933	3634
		Total	2.9680	.61198	3854
Good_p	Pre-student experience	.00	2.3918	.64412	134
		1.00	2.4816	.70753	2121
		Total	2.4763	.70411	2255
	With Student Experience	.00	2.4360	.68081	86
		1.00	2.3457	.67662	1513
		Total	2.3505	.67694	1599
	Total	.00	2.4091	.65752	220
		1.00	2.4250	.69796	3634
		Total	2.4241	.69564	3854

Appendix D

Descriptive Statistics: LGBTQI

	Block		Mean	Std. Deviation	N
Beforegrad_e	Pre-student experience	.00	2.5000	.65778	703
		1.00	2.3148	.55209	36
		Total	2.4910	.65392	739
	With Student Experience	.00	2.4756	.66593	1375
		1.00	2.5331	.68498	146
		Total	2.4812	.66777	1521
	Total	.00	2.4839	.66313	2078
		1.00	2.4899	.66515	182
		Total	2.4844	.66314	2260
Havedone_e	Pre-student experience	.00	1.9296	.79363	703
		1.00	1.9907	.60415	36
		Total	1.9326	.78524	739
	With Student Experience	.00	1.9045	.74024	1375
		1.00	2.1073	.72072	146
		Total	1.9240	.74058	1521
	Total	.00	1.9130	.75863	2078
		1.00	2.0842	.69919	182
		Total	1.9268	.75531	2260
Motivationscore	Pre-student experience	.00	2.2500	.52366	703
		1.00	2.0602	.41767	36
		Total	2.2408	.52037	739
	With Student Experience	.00	2.2640	.50519	1375
		1.00	2.2666	.50795	146
		Total	2.2642	.50529	1521
	Total	.00	2.2593	.51143	2078
		1.00	2.2257	.49721	182
		Total	2.2566	.51027	2260
work_m	Pre-student experience	.00	2.6588	1.05382	703
		1.00	2.4259	1.02233	36
		Total	2.6475	1.05283	739
	With Student Experience	.00	2.6749	1.03777	1375
		1.00	2.5845	1.05031	146
		Total	2.6662	1.03897	1521

	Total	.00	2.6695	1.04300	2078
		1.00	2.5531	1.04396	182
		Total	2.6601	1.04333	2260
Academic_P	Pre-student experience	.00	2.9873	.62196	703
		1.00	2.8653	.70769	36
		Total	2.9813	.62642	739
	With Student Experience	.00	2.9288	.59599	1375
		1.00	2.8664	.63235	146
		Total	2.9228	.59964	1521
	Total	.00	2.9486	.60538	2078
		1.00	2.8662	.64590	182
		Total	2.9420	.60901	2260
Good_p	Pre-student experience	.00	2.4673	.69721	703
		1.00	2.5000	.68661	36
		Total	2.4689	.69628	739
	With Student Experience	.00	2.3335	.66868	1375
		1.00	2.4692	.72212	146
		Total	2.3465	.67493	1521
	Total	.00	2.3787	.68125	2078
		1.00	2.4753	.71348	182
		Total	2.3865	.68424	2260

Appendix E

Descriptive Statistics: Commute/ Non- commute

	Block		Mean	Std. Deviation	N
Beforegrad_e	Pre-student experience	non-commute	2.3825	.57742	156
		commute	2.2853	.60871	2181
		Total	2.2918	.60704	2337
	With Student Experience	non-commute	2.3607	.64161	207
		commute	2.4885	.66959	1440
		Total	2.4725	.66729	1647
	Total	non-commute	2.3701	.61412	363
		commute	2.3662	.64129	3621
		Total	2.3665	.63879	3984
Havedone_e	Pre-student experience	non-commute	2.0358	.69870	156
		commute	2.0107	.69379	2181
		Total	2.0124	.69399	2337
	With Student Experience	non-commute	1.9855	.77118	207
		commute	1.9147	.73184	1440
		Total	1.9236	.73703	1647
	Total	non-commute	2.0071	.74032	363
		commute	1.9725	.71062	3621
		Total	1.9757	.71335	3984
Motivationscore	Pre-student experience	non-commute	2.3606	.53281	156
		commute	2.3916	.52413	2181
		Total	2.3896	.52465	2337
	With Student Experience	non-commute	2.2424	.51019	207
		commute	2.2673	.50479	1440
		Total	2.2642	.50538	1647
	Total	non-commute	2.2932	.52260	363
		commute	2.3422	.52003	3621
		Total	2.3377	.52039	3984
work_m	Pre-student experience	non-commute	1.7821	.96063	156
		commute	2.7309	1.01289	2181
		Total	2.6676	1.03672	2337
	With Student Experience	non-commute	1.9300	.98577	207
		commute	2.7838	1.01934	1440

		Total	2.6765	1.05364	1647
	Total	non-commute	1.8664	.97646	363
		commute	2.7520	1.01565	3621
		Total	2.6713	1.04362	3984
Academic_P	Pre-student experience	non-commute	2.9612	.63199	156
		commute	3.0068	.61703	2181
		Total	3.0037	.61800	2337
	With Student Experience	non-commute	2.9338	.62208	207
		commute	2.9114	.59952	1440
		Total	2.9142	.60225	1647
	Total	non-commute	2.9456	.62563	363
		commute	2.9688	.61183	3621
		Total	2.9667	.61305	3984
Good_p	Pre-student experience	non-commute	2.5224	.73032	156
		commute	2.4729	.70252	2181
		Total	2.4763	.70436	2337
	With Student Experience	non-commute	2.5097	.65166	207
		commute	2.3260	.67938	1440
		Total	2.3491	.67850	1647
	Total	non-commute	2.5152	.68562	363
		commute	2.4145	.69703	3621
		Total	2.4237	.69652	3984

Descriptive Statistics: Are you an International Student?

Appendix F

	Block		Mean	Std. Deviation	N
Beforegrad_e	Pre-student experience	No	2.4844	.66248	779
		Yes	2.1885	.54834	1444
		Total	2.2922	.60735	2223
	With Student Experience	No	2.4727	.66558	1556
		Yes	2.6250	.65329	36
		Total	2.4761	.66549	1592
	Total	No	2.4766	.66443	2335
		Yes	2.1991	.55497	1480
		Total	2.3689	.63865	3815
Havedone_e	Pre-student experience	No	1.9365	.78769	779
		Yes	2.0517	.63865	1444
		Total	2.0113	.69652	2223
	With Student Experience	No	1.9161	.73860	1556
		Yes	2.1296	.68673	36
		Total	1.9210	.73795	1592
	Total	No	1.9229	.75523	2335
		Yes	2.0535	.63972	1480
		Total	1.9736	.71540	3815
Motivationscore	Pre-student experience	No	2.2479	.52647	779
		Yes	2.4572	.50869	1444
		Total	2.3839	.52447	2223
	With Student Experience	No	2.2625	.50483	1556
		Yes	2.2708	.46049	36

		Total	2.2627	.50374	1592
	Total	No	2.2576	.51208	2335
		Yes	2.4527	.50824	1480
		Total	2.3333	.51931	3815
work_m	Pre-student experience	No	2.6660	1.05245	779
		Yes	2.6565	1.00440	1444
		Total	2.6598	1.02127	2223
	With Student Experience	No	2.6639	1.04113	1556
		Yes	2.4491	1.09096	36
		Total	2.6590	1.04241	1592
	Total	No	2.6646	1.04469	2335
		Yes	2.6515	1.00671	1480
		Total	2.6595	1.03001	3815
Academic_P	Pre-student experience	No	2.9709	.62649	779
		Yes	3.0253	.60937	1444
		Total	3.0063	.61583	2223
	With Student Experience	No	2.9165	.59997	1556
		Yes	2.8389	.68255	36
		Total	2.9147	.60183	1592
	Total	No	2.9346	.60935	2335
		Yes	3.0208	.61167	1480
		Total	2.9681	.61162	3815
Good_p	Pre-student experience	No	2.4782	.70129	779
		Yes	2.4844	.70681	1444
		Total	2.4822	.70473	2223
	With Student Experience	No	2.3512	.67753	1556
		Yes	2.2500	.55420	36
		Total	2.3489	.67501	1592
	Total	No	2.3936	.68801	2335
		Yes	2.4787	.70427	1480
		Total	2.4266	.69551	3815

APPENDIX G



One University Plaza, Youngstown, Ohio 44555

www.ysu.edu

January 13, 2020

Dr. Karen Larwin, Principal Investigator Mr. Eddie Howard, Co-investigator Department of Counseling, School Psychology & Educational Leadership UNIVERSITY

RE: HSRC PROTOCOL NUMBER: 084-2020

TITLE: Institutional Strategies of Identified Involvement Triggers that

Increase Campus Engagement: A Interrupted-Time Series Meta-Analysis Base on Individual National Survey of Student Engagement

Responses

Dear Dr. Larwin and Mr. Howard:

The Institutional Review Board has reviewed the abovementioned protocol and determined that it meets the criteria of DHHS 45 CFR 46.101(b)(4) and therefore is exempt from full committee review and oversight. Your project is approved

Any changes in your research activity should be promptly reported to the Institutional Review Board and may not be initiated without IRB approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly reported to the IRB.

The IRB would like to extend its best wishes to you in the conduct of this study.

Sincerely,

Dr. Severine Van slambrouck Director Research Services, Compliance and Initiatives Authorized Institutional Official

SVS:cc

c: Dr. Jake Protivnak, Chair Department of Counseling, School Psychology & Educational Leadership

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