Student-Faculty Interactions as Predictors of Retention and Satisfaction among Generation Z College Students

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STUDENT-FACULTY INTERACTIONS AS PREDICTORS OF RETENTION AND SATISFACTION AMONG GENERATION Z COLLEGE STUDENTS

BY

STEPHANI JARECKE

A thesis submitted in partial fulfillment of the requirements for the

Master of Science

Major in Counseling and Human Development

Specialization in Clinical Mental Health Counseling

South Dakota State University

2020
This thesis is approved as a creditable and independent investigation by a candidate for
the master’s degree and is acceptable for meeting the thesis requirements for this degree.
Acceptance of this does not imply that the conclusions reached by the candidate are
necessarily the conclusions of the major department.

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ACKNOWLEDGMENTS

First, I would like to express my sincere appreciation to my advisor, Dr. Katelyn Romsa, for the continuous support with this thesis and throughout my entire graduate program. I am grateful for her patience, motivation, and immense knowledge. Her guidance helped me in all the research and writing of this thesis. I could not have imagined having a better advisor and mentor for my graduate experience. Along with my advisor, I would like to thank the rest of my thesis committee: Dr. Andrea Bjornestad and Dr. Lori Hendrickx, for their insightful comments, encouragement, and questions that challenged me to strengthen my thesis.

My sincere thanks also goes to Jessie Hendricks for her knowledge and support with the research design and statistical analysis. I value the time and effort she put into my thesis and helping me grow in this area. I would also like to acknowledge Dr. Jana Hansen, Director of Institutional Assessment, for her time and expertise of NSSE as it relates to SDSU. I want to take a moment to express my gratitude for the faculty of the Counseling and Human Development Department at SDSU for their unconditional support, wisdom, and kindness. They have shown me what it means to be an extraordinary professor and mentor.

Lastly, I would like to thank my family for their endless love and belief in me while I pursued my dreams. To my big sister, I am forever appreciative for the never-ending encouragement, advice, and friendship. I am so grateful to have her as a role model.

Thank you.
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ABSTRACT

STUDENT-FACULTY INTERACTIONS AS PREDICTORS OF RETENTION AND SATISFACTION AMONG GENERATION Z COLLEGE STUDENTS

STEPHANI JARECKE

2020

Student retention has historically been an important discussion in higher education. While the importance of student retention remains, a new generation of students have filled colleges and universities. This study examines how interactions with faculty influence Generation Z college students’ overall satisfaction and student retention. The quantitative study used the NSSE survey instrument at a public land-grant institution in the Midwest. The results of a Mann-Whitney U analysis indicated a significant difference in student satisfaction reported between students who returned to the same institution the following year and students who did not return. A multiple linear regression analysis indicated that student-faculty interactions significantly predicted student satisfaction. The results provide clear support of the correlation between student-faculty interactions, student satisfaction, and student retention. The study also provides discussion for recommendations for professionals and suggestions for further research.
CHAPTER ONE: INTRODUCTION

Background of the Study

As the nation’s work force has evolved, the need for degree attainment is stronger than ever. In the past two decades there has been a shift in the idea of postsecondary education as simply an option for young adults, most accessible to the affluent, to a requirement for many occupations in the job market. The Bureau of Labor Statistics (2019) reports the difference in unemployment rates and median weekly earnings between individuals that have a Bachelor’s degree, unemployment rate: 2.2% and median weekly earnings: $1,198, compared to those that only have a high school diploma, unemployment rate: 4.1% and median weekly earnings: $730. While this alone shows the benefits of obtaining a degree, institutions across the United States continue to struggle with student retention.

The U.S. Department of Education’s (2011) mission emphasizes the importance of student achievement, preparation for the global market, and equal access. The National Center for Education Integrated Postsecondary Education Data System (IPEDS) provides data on graduation rates, student enrollment, student retention rates, and more on higher education institutions across the United States. Current trends in retention among students in higher education do not reflect the nation’s mission in education. For instance, in 2016, the six-year graduation rate for first time, full time degree seeking students at 4-year public institutions was 59 percent. This means that of the students who started seeking a bachelor’s degree at a public institution in 2010, 41 percent did not complete their degree by 2016. The retention rate for 4-year public institutions with open admissions from 2015 to 2016 was 62 percent. This was measured by the rate of students who started the
institution in 2015 and returned the following year (U.S. Department of Education, 2018).

Research on student attrition has discovered many different reasons that can have an impact on a student’s decision to leave an institution (Braxton, 2014). Some students leave college for reasons such as financial barriers or poor academic progress while other times students leave for reasons that are not as explicit such as low motivation, lack of social integration, or low self-esteem (Braxton, 2014; Hoffman, 2014; Sass et al., 2018).

Higher education scholars have explored various factors that influence a student’s persistence to finish their education. One factor that has received attention by researchers is student interactions with faculty (Halawah, 2006; Romsa et al. 2017; Lillis, 2011; Kim & Lundberg, 2016).

Student-faculty relationships have been determined to influence students’ experiences, especially during their first year (Romsa et al., 2017). Many historical researchers have discovered that faculty interactions positively impact student persistence (Tinto, 1987, 1993; Astin, 1984; Terenzini & Pascarella, 1980). Along with higher retention rates, researchers have also examined there to be various positive outcomes from increased student-faculty interactions that include academic GPA, motivation, interpersonal skills, and intellectual growth (Halawah, 2006; Kim & Lundberg, 2016, Romsa et al., 2017). While existing research has given scholars a greater understanding of the important role student-faculty interactions play in student retention and student success, further research is needed as higher education professionals are faced with a new generation of students with different characteristics, perspectives, and worldview (Seemiller & Grace, 2017).
Seemiller and Grace (2017) explain that children of the Generation Z have been shaped by technological advances, public violence and terrorism, and social justice movements. Moreover, this population is the most diverse group the United States has seen in history and with the help of technology this group is more connected socially, politically, and culturally (McCarthy, 2017). These factors alone are influencing these students in the way they learn and grow. However, little research has been done to better understand Generation Z students in higher education. As this new group continues to fill college campuses, it will be crucial for faculty to better understand their interpersonal skills, values, and learning styles in order to connect with students (Mendoza, 2018).

To further the understanding of the importance of student-faculty interactions and specifically look at these connections in relation to Generation Z students, this study examined the National Survey of Student Engagement (NSSE) to analyze student experiences and outcomes. This study examined how Generation Z college student interactions with faculty influenced their retention and satisfaction at a public land-grant institution in the Midwest. This study provides understanding to the ways in which student-faculty interactions impact student retention and overall satisfaction.

**Theoretical Framework**

Student retention has an extensive amount of theoretical groundwork that has shaped educational researchers over the past four decades. Student attrition has always been a concern for higher education personnel, but prior to the 1970s, it was seen as a problem within the student not the institution (Tinto, 2006). A shift in the literature occurred when scholars began focusing on the relationship between institutional factors

Early scholars in higher education focused their theoretical framework on many factors both academic and non-academic. Some academic factors that have been found influential in student retention include GPA, type of academic programs offered, and faculty interactions with students. Theorists also emphasize non-academic factors that lead to the student’s level of satisfaction that may influence their decision to stay or leave an institution. These factors include out of classroom experiences such as student involvement, campus culture, and student services. Tinto (1975) emphasized that the integration of these factors influenced students’ ultimate decision to voluntarily depart from an institution.

Researchers have established that student-faculty interactions play a significant role in the overall experience students have in college. Initial studies revealed that faculty interactions with students positively impacted student persistence (Pascarella & Terenzini, 1980). More recent scholars have found that student-faculty interactions impact a range of different aspects including academic achievement as well as student growth and development (Halawah, 2006; Kim & Lundberg, 2016; Lillis, 2011; Thiele, 2016).

This thesis will be guided by Tinto’s Theory of Student Departure (Tinto, 1975, 1987) and Astin’s Student Involvement Theory (Astin, 1975, 1993). The theoretical framework of Tinto (1975) and Astin (1975) both address the multidimensional factors that influence student persistence or student departure. These theorists have been used by
many scholars in higher education as groundwork in all areas of higher education (Hoffman, 2014).

**Purpose of the Study**

A dense history of student retention research has given higher education professionals many factors that relate to student success. Despite the attention student retention has received over the past four decades, retention rates in the United States have decreased only minimally (U.S. Department of Education, 2019). While these rates alone are sufficient evidence for improvement in our higher education systems, the generational change in the student population increases the demand for a better understanding of the areas that bolster student success. Therefore, further research is needed to better understand factors that increase student persistence.

This study analyzes how the amount of student-faculty interactions predict Generation Z college students’ decision to leave or stay at an institution. This study uses the NSSE instrument to examine the relationship between those variables. The purpose of this study is to provide guidance for student retention and satisfaction efforts to benefit the active efforts of a comprehensive public university in the Midwest and to build on existing research of student retention. This thesis provides a theoretical framework and literature review to provide a foundation for this study. The methodology section explains the design of the studying including the: setting, participants, instrument, variables, and data analysis. Lastly, the results and conclusion sections discuss the outcomes and provides directions for future studies.
Research Questions

This study analyzes how student-faculty interactions predicted student retention and student satisfaction. Two research questions provide direction for this study:

Research question one. Did the quantity of Generation Z college students’ (a) course-related interactions with faculty, (b) out-of-class interactions with faculty, and (c) overall satisfaction during their freshman year of college differ between students that decided to stay at the institution and students that decided to depart?

Research question two. Did the amount of Generation Z college students’ course-related interactions and out-of-class interactions with faculty during their freshman year of college significantly predict their overall satisfaction of the institution?

Definitions of Key Terms

This study uses specific terminology. The following terms related to this study are defined:

Freshman/first-year student. A first-year student is often defined as a student attending a postsecondary education institution for the first year. Freshman is a term often used in lieu of the phrase first-year student. A Freshman student is also identified as a student with freshman status meaning has obtained thirty credits or less. For consistency, first-year student will be used in this study.

Generation Z. Generation Z is a term used to describe the generation of individuals born in or after the year 1995 (Seemiller & Grace, 2016).

Student Retention. Retention can be explained as the active effort by higher education professionals to influence students to return to the institution until the student has graduated with a degree.
**Student Attrition.** Attrition can be explained as the act of a student leaving an institution. This may be to attend a different university or not attend postsecondary education at all.

**National Survey on Student Engagement.** The National Survey of Student Engagement is an instrument that provides the opportunity for students to report on their experiences at their institution. The tool is used to measure context on student engagement at comprehensive colleges and universities. It allows participating institutions to compare their students’ responses to peer institutions (NSSE, 2019).

**Student-faculty Interactions.** Student-faculty interactions can be explained as any interaction a student has with a faculty professor. These interactions can be in the classroom before, during or after class. They can also be outside the classroom such as during a professor’s office hours or working together on research or projects.

**Overall Satisfaction.** Overall satisfaction can be explained as the students’ personal satisfaction of their college experience at the institution. This study used two questions within the NSSE survey to determine overall satisfaction: How would you evaluate your entire educational experience at this institution? If you could start over again, would you go to the same institution you are now attending?

**Summary**

Chapter one introduced the historical background of this research, the theoretical foundation, the problem and purpose of this study, and definitions of key terms. This thesis illustrates an in-depth analysis of the relationship between Generation Z college student-faculty interactions and student satisfaction and retention. Chapter two presents a comprehensive review of the literature. Chapter three explains the design and methods of
the study. Chapter four presents the results of the research questions. Chapter 5 discusses the findings, limitations, and considerations for future research.
CHAPTER TWO: REVIEW OF LITERATURE

Introduction

In 2017, 1.9 million recent high school graduates, or 67%, were enrolled in some type of post-secondary education by the following October that year (U.S. Department of Education, 2019). Entering into college is a big investment financially, physically, and psychologically. This statistic from the Department of Education is particularly important because it explains the direction society is going with education and occupation. The Bureau of Labor Statistics (2019) reports the difference in unemployment rates and median weekly earnings between individuals that have a Bachelor’s degree, unemployment rate: 2.2% and median weekly earnings: $1,198, compared to those that only have a high school diploma, unemployment rate: 4.1% and median weekly earnings: $730. While this alone shows the benefits of obtaining a degree, institutions across the United States continue to struggle with student retention. The demand for postsecondary education is not decreasing making it crucial for higher education researchers and professionals to focus their efforts on student retention.

Student retention efforts have been around as long as higher education services have existed. A rich history building on four decades of research has made student retention a widely focused topic in higher education research and a strong determinant in institutional success. This chapter provides a comprehensive review of literature focusing on three main areas of research: student retention, student-faculty interactions, and generation Z students. In addition, this chapter discusses the theoretical framework of the study and an overview of the NSSE survey instrument.
Student Retention

Student retention has been a long-standing topic of discussion for higher education professionals and researchers. Retention efforts have been the foundation of changing higher education models and programs. Research dates back to the 1970s when scholars began to formulate theories to understand student attrition. Prior to 1970, most studies attempting to understand student attrition were focused on the individual rather than the institutions and the interactions between the two (Aljohani, 2016). By the early 1970s retention research was making a shift from a psychological to sociological framework. Spady (1970) created the first sociological model that explained the relationship between academic and social factors that influenced a student to leave or stay at an institution.

Following Spady’s (1970) work, many student retention theories and models have been developed. The major theoretical models found in many studies today include; Tinto’s Theory of Student Departure (1975), Bean’s Student Attrition Model (1978), Student-Faculty Informal Contact Model (Terenzini & Pascarella, 1980), and Astin’s Student Involvement Model (1975). Although these studies all have unique features that have helped develop a rich understanding of student engagement and retention, they all emphasize the multidimensional process of integrating into college through academic and non-academic factors.

Academic factors that have been shown to influence student retention traditionally include GPA, standardized tests scores, and high school rank (Romsa et al. 2017). In addition, studies have indicated other academic factors to be influential, such as student-
faculty interactions (Kim & Lundberg, 2016; Romsa et al., 2017; Trolian et al., 2016), the educational programs offered (Tinto, 2012), and the quality of instruction (Tinto, 2012).

There is a broad range of non-academic factors that may impact a student’s desire to leave an institution. Some of these factors include financial reasons, campus culture, social integration, and personal characteristics (Braxton, 2014; Kuh, 2009; Romsa et al., 2017). This list can be expanded to be much longer as researchers have begun to explore all aspects of the college experience. However, these factors tend to be more difficult to measure because many students give unclear reasons or no reason at all when leaving an institution.

While research on student retention is expanding from the original theoretical models developed in the 70s, many higher education professionals and researchers are beginning to focus in on specifics, such as at-risk populations, specific educational programs, and learning techniques, as they relate to student retention. The following studies are examples of current research in student retention. Pratt et al. (2019) studied retention rates among first-generation students. The study explored specific factors that impacted a first-generation student to continue their education or even succeed. A common concern that first-generation students expressed was their need to work outside of school reduces their ability to engage in college related activities, therefore feeling less connected to the university. Thus, the less interactions a student has, the less connected they feel.

Biddix, Singer, and Aslinger (2016) analyzed the impact joining a Greek organization during the first year had on student retention. Researchers used predictive analysis to find that females who joined a sorority during their first year were three times
likely to stay at the institution. Joining a formal Greek organization supported academic and social integration, and those students were likely to experience the benefits associated with that (Biddix, Singer, and Aslinger, 2016).

Another study compared the differences among the use of university services such as visits to university and personnel offices, visits to faculty offices, and student organization involvement between veteran students and civilian students (Southwell et al. 2018). Additionally, the study examined the associations between the use of university services and student retention outcomes such as academic persistence, expectation of degree completion, and perception of university environment. Notably, the results indicated that visits to faculty members and student organizations were positively associated with academic persistence (Southwell et al., 2018).

Additional studies have been published to continue to add to this dense material of research helping institutions and higher education professionals evaluate, change, and progress current practices to better meet the needs of students today. The next section will continue to look at student retention practices in relationship to student-faculty interactions.

**Student-Faculty Interactions**

Student-faculty interactions have been determined to play a critical role in a student’s college experience. Faculty members are seen as primary agents for the social integration of a student (Kim & Lundberg, 2016). Positive interactions have been associated with positive student outcomes, such as student success, satisfaction, and retention. This link can be explained by the socialization process of college students as displayed by retention theories and models (Astin, 1984; Terenzini & Pascarella, 1980;
Some positive benefits that have been linked to increased faculty interactions include enhanced academic achievement, intellectual growth, personal development, and college persistence (Halawah, 2006).

Interactions between students and faculty have been divided into two domains by researchers: formal or in-class interactions and informal or out-of-class interactions. Both domains show positive correlation with positive student outcomes (Terenzini & Pascarella, 1980), but the interactions made outside the classroom have been determined to be the strongest factor in student retention (Kim & Lundberg, 2016). Formal interactions can include conversations had inside the classroom that can be about class projects, academic performance, feedback, class discussions, etc. (Romsa et al., 2017). Informal interactions are encounters that occur outside the classroom. Some examples may be working on research with a faculty member, discussing career goals, visiting a faculty during office hours, or participating in a service-learning project together (Hoffman, 2014).

The current literature is expanding the understanding of the benefits faculty interactions are having on students. Trolian et al. (2016) examined the influence student-faculty interactions had on academic motivation. The researchers used secondary data from the Wabash National Study of Liberal Arts Education to conduct a multi-institutional, longitudinal study measuring students over their four years of college. They looked at many different student-faculty interactions: quality of student–faculty contact, frequency of faculty contact, whether students worked on a research project with a faculty member, whether students had discussed a personal problem or concern with a faculty member, and whether faculty were willing to spend time outside of class to
discuss issues of interest and importance to students (Trolian et al., 2016). Results indicated that all student-faculty interactions were positively associated with an academic motivation. This is important because academic motivation has been shown to predict student retention (Braxton, 2014).

Similar to academic motivation, students’ confidence and overall grades were found to be correlated with positive relationships with faculty members. Micari & Pazo (2012) were interested in the influence of students’ perception of their relationship with faculty to grades, course confidence, and academic identity in a highly challenging, difficult course. The more a student thought he/she had a positive relationship with the professor, the higher the student’s confidence as well as final grade was. Moreover, the three student-faculty related elements that correlated to positive student outcomes were the student looking up to the professor, feeling comfortable approaching the professor, and feeling that the professor respects the students. This correlation emphasizes the importance of the quality of the relationship in addition to the quantity of the relationship.

As higher education progresses technologically, these interactions have to be reevaluated. Digital communication is becoming a priority method of interaction and primary way of communication for many of the younger generations. Eighty-four percent of students from a multi-institutional survey said that they used the Internet as an easy way to communicate with a professor for issues like absences, grades, and class assignments (Jones et al., 2008). More recently, Seemiller & Grace (2016) have discovered that Generation Z students would rather use text messaging rather than email as they find email is too slow compared to text message. It is important for faculty members to understand these dynamics to better serve students who may have different
communication styles. The next section of this review discusses the new generation of students entering into higher education.

**Generation Z Students**

Higher education practices and research has been around for many decades. The literature is rich in old foundational models, theories, ideas, and successful programs. It is, indeed, important to study and understand this as we look to strive to improve higher education for future students. However, it is also important to understand the new implications and challenges professionals are facing which includes the characteristics of students entering college. As a new generation has begun to fill college campuses, professionals need to be aware of the differences in this generation compared to previous ones and how to best meet the needs of these students.

Current literature has helped higher education professional understand the generational profile of these students. One study by Seemiller & Grace (2016) has been the leading gateway to understanding Generation Z students. This study aimed to look at characteristics, outlooks, and trends of Generation Z students. There have been some discrepancies in defining the exact year for Generation Z, but for the purpose of this study, this group will be defined as individuals born on or after 1995 (Seemiller & Grace, 2016). Seemiller and Grace partnered with 15 institutions across the United States to reach a wide array of college students. The study started with 1,143 eligible participants and just over 600 students responded fully to the survey. An online survey was used for quantitative measurements and open-ended questions to best understand the common themes of personal characteristics, learning styles, communication, relationships, and career decisions (Seemiller & Grace, 2016).
Seemiller & Grace’s research has revealed an extensive understanding about many different aspects of this generation. This generation has grown up in a very unique society including Post-9/11, mass shootings and public violence, social justice movements such as same-sex marriage and black lives matter, and advancement of technology. For the purpose of this paper, I will highlight three topics that I find necessary as it relates to student-faculty interactions and student retention: technology, learning preferences, and communication styles.

First, this generation has grown up in the most digital age to date (Seemiller & Grace, 2017). There is no doubt technology has influenced other generations, but this generation is unique in that technology is all they have ever known. Shatto and Erwin (2016) reported that Generation Z students spend an average of nine hours a day using multimedia. Whether it is connecting to wireless internet wherever they go or constantly having resources or answers instantly from their phone, this generation is always connected through technology. They grew up learning, socializing, and playing through electronic devices. Seemiller and Grace (2016) emphasized that “this highly technological era has helped make them smart, efficient, and in tune with the world.” This important factor has shaped their learning and communication styles.

Seemiller and Grace (2017) found that Generation Z students describe themselves as intrapersonal learners. With the access of technology, many students prefer to learn independently and at their own pace. This could possibly make it a challenge for faculty when encouraging students to communicate with them when needing help. Although these students were found to prefer individual learning, the researchers were quick to point out that these students also placed value on classmates and professors as important
resources and useful to collaborate with and discuss important topics (Seemiller & Grace, 2017).

Additionally, Generation Z students prefer applied learning and more specifically learning through hands-on experience or observation. Many students from this study expressed the use of videos as a way to learn concepts from their classes and how-to tasks such as changing a tire or cooking. Students also reported the desire to understand how their education can be applied to their own personal life and future career (Seemiller & Grace, 2016).

The last important factor to be noted is the communication style that many students in this generation primarily use. Digital technology has been the only communication this generation has known. They have the capability to communicate with anyone via text, email, or social media instantly through their mobile device. Researchers note the concerns many older generations have for the lack of social skills this generation has due to the use of technology for communication, however, Seemiller and Grace (2016) point out that their study discovered that 83 percent of student preferred face-to-face communication over digital communication. More than three quarter of the students have the desire for in-person social interactions. Despite this desire, studies show that most Generation Z students are relying on technology for communication. Seemiller and Grace’s study found that 1 in 3 Generation Z students report sending over three thousand texts per month. Moreover, these students find email to not be quick and efficient. In this same study, a quarter of students reported they do not like email and nearly half reported they only somewhat like email (Seemiller & Grace, 2016).
With a better understanding of the generational characteristics and preferences, researchers and higher education professionals have explored ways to better communicate with and effectively teach this generation of students. Faculty are encouraged to adjust their communication styles and explore innovative teaching strategies to better connect with students. These students have adapted to understanding complex visual imagery and receive instant gratification (Shatto & Erwin, 2016). Using YouTube videos, web-based games such as Kahoot, movies, and social media is highly suggested to help students learn and keep them engaged in and out of the classroom (Mohr & Mohr, 2016; Seemiller & Grace, 2016; Shatto & Erwin, 2016).

Another approach is creating a flipped classroom. A flipped classroom is a concept were the student watches the lecture or is provided direction to understand the material outside of the classroom and comes to class to participate in the activities that are normally homework (Murillo-Zamorano, Lopez Sanchez, Godoy-Caballero, 2019). A recent study by Murillo-Zamorano, Lopez Sanchez, Godoy-Caballero explored the effects of a flipped classroom. The study was conducted at a university in Spain where the flipped classroom model was employed in a macroeconomics course with 160 students. The results indicated positive effects on students’ knowledge and skills, which additionally impacted the students’ satisfaction (Murillo-Zamorano, Lopez Sanchez, Godoy-Caballero, 2019). Students prefer the ability to learn on their own and find it more beneficial to learn experientially in the classroom (Seemiller & Grace, 2016).

In addition to adjusting teaching approaches, communication techniques look different for this generation. While these students are more prone to technology, professors should consider altering their ways of communicating with students. Rather
Student Retention Theories

While it is important to understand the new generation of students and evolving structure of higher education institutions, the theories that have influenced the foundation of student retention efforts are an essential component to growing the literature. The following section provides the theoretical framework used in this study. The theories used as a foundation for this study are Tinto’s Theory of Student Departure (Tinto, 1975) and Astin’s Model of Student Involvement (Astin, 1975).

Tinto’s Theory of Student Departure

Tinto developed a theoretical model of student dropout (1975) as a result of determining how dropout rates related to measures of individual ability and dropout and how the rates have changed over time. His original theoretical development was grounded by two theories: Durkheim’s theory of suicide and the theory of cost-benefit analysis related to economics (Tinto, 1975). Therefore, the basic understanding of this
model is that college dropout is a complex process that involves elements from both the individual and institution and how they interrelate.

Tinto created a longitudinal model that described the various factors that influence the process of a student leaving an institution before graduating. The multidimensional model starts with the unique characteristics and traits a student has when entering college. This includes family background (socioeconomic status, spiritual beliefs, race, ethnicity, etc.), skills and abilities (academic achievement, extracurricular activity achievement, etc.), and prior schooling (dual credit opportunity, specific skills training, accelerated high school courses, etc.). Tinto believed that these preexisting characteristics influenced a student’s personal intentions, commitments, and goals.

Furthermore, the combination of a student’s background characteristics and original goals influence how a student would interact and integrate into the institution. Tinto’s model distinguishes two key concepts with institutional interaction and integration; academic and social (1987). Tinto broke these down further into formal and informal interactions. Formal academic interactions represent a student’s academic performance and in class activities, whereas interactions with faculty and staff members are considered informal. Formal social interactions are described as the extracurricular activities and campus groups that students choose to join while informal interactions are the day to day experiences and peer interactions a student has. Tinto postulated that the more positive formal and informal interactions a student has, the more integrated the student becomes with the institution. Additionally, together the amount of social and academic integration a student experiences impacts their initial goals and may raise or
lower their commitments to their education and to the institution (Tinto, 1975, 1987, 1993).

Tinto’s model, first crafted in 1975, has been developed and revised into the late 90s and early 2000s to strengthen its validation and overall theory. Many researchers and higher education professionals have used Tinto’s model (1975) to formulate their own research on student retention and best practices for institutions. In summary, the model considers a person’s preexisting characteristics and attributes as they relate to the social and academic experiences one has during college. The stronger social and academic integration a student experiences leads to a stronger commitment to the institution.

**Astin’s Model of Student Involvement**

After researching student development for two decades, Astin (1975) saw a need for the development of a theoretical framework to organize and guide future research in higher education. Astin established a theoretical model that largely focused on the impact of student involvement on student satisfaction and retention. He constructed the idea of involvement as the physical and psychological energy one exerts into their college experience. Furthermore, Astin (1975, 1984) hypothesized that the degree of involvement a student has at an institution will impact their decision to stay at the institution and complete their degree.

The core concepts of the theory are composed of three elements: inputs, environment, and outcomes. Students’ inputs include their demographics, their background, and any previous experiences. Student's environment accounts for all of the experiences a student would have during college. Students outcomes covers their
characteristics, knowledge, attitudes, beliefs, and values that exist after they graduated college.

Astin also created five basic postulates to help explain involvement. First, involvement is defined as the psychological and physical energy toward anything involving the institution. Second, there are many different ways and varying degrees a student can be involved. Third, involvement can be measured both in quantitative and qualitative manners. For example, one could measure the hours a person spent at a library while they could also measure what students learned from studying the material. Fourth, the amount of student learning and development offered within an educational program is directly linked to the quantity and quality of involvement students put forth. Lastly, the effectiveness of student policies and practices is related to the degree of student involvement (Astin, 1984).

The theory of student involvement therefore implies that the more involved a student is, the more likely they will stay in college (Astin, 1984). Thus, it is emphasized for administrators and educators to focus more on ways to provide involvement for a student rather than enriching the course content or increasing the material to learn. Among the various ways to be involved, Astin stresses that involvement with academics and faculty connects most with student success (Astin, 1997). A student who becomes deeply involved in their academics will invest time and energy in relationships and activities.

The theory of student involvement is grounded by a longitudinal study examining student dropouts (Astin, 1975). Research indicated a significant connection among those who left an institution and a lack of school-related involvement in many different forms.
Many additional studies have concluded in the support of Astin’s theory of student involvement. Astin’s work has been a foundation for better understanding the complex factors that influence student satisfactions and student retention.

**Overview of NSSE**

Research within higher education largely focuses on college student. To obtain valuable data, colleges and universities heavily rely on student surveys to measure and evaluate the effectiveness of different programs, policies, and services. There are many surveys that have been created to measure different aspects of retention and engagement models. One tool is the National Survey of Student Engagement (NSSE).

NSSE is a student survey used at over 500 colleges and universities across the United States annually to better understand how student spend their time and what benefits they are getting from college (NSSE website, 2019). The student survey uses first-year students and senior-year students to collect information on how well different programs and activities the university offers are improving students’ learning and personal development. The instrument was first created and funded by the Pew Charitable Trust. The purpose of the survey was to find a better way to understand the quality of higher education institutions using empirical data rather than speculation and reputation. The survey, first composed in 1998, aimed for feedback from undergraduate students on their educational experiences related to their educational outcomes. NSSE piloted its first survey in 1999 with 75 institutions with its first successful launch in the following year that included approximately 275 participating colleges and universities. NSSE began to be funded by participating institutions. The numbers for participating
colleges and universities have continued to grow since 2000 with a total of 511 institutions who participated in 2018.

The NSSE instrument previously used five benchmarks to organize student engagement into separate categories which included: level of academic challenge, active and collaborative learning, student-faculty interactions, enriching educational experiences, and supportive campus environment. In 2013, the questionnaire went through a change based on research and prior testing feedback. The NSSE was updated with four goals in mind; (a) develop new measures related to effective teaching and learning; (b) refine existing measures and scales; (c) improve the clarity and applicability of survey language; (d) update terminology to reflect current educational contexts.

The questionnaire is composed of four engagement themes that are further broken down into a total of ten engagement indicators. The engagement themes are Academic Challenge, Learning with Peers, Experiences with Faculty, and Campus Environment. Furthermore, the engagement indicators include higher-order learning, reflective and integrative learning, quantitative reasoning, learning strategies, collaborative learning, discussion with diverse others, student-faculty interactions, effective teaching practices, quality of interactions, and supportive environment.

Another feature of the survey is the high impact practices. Kuh et al. (2005) indicated the positive association with high impact opportunities and student success and retention. The NSSE asks questions about their experience and involvement with different activities that have been deemed high impact practices (HIPs). The following is a list of activities the NSSE uses as HIPs; learning community or some other formal program where groups of student take two or more classes together, course that included
a community-based project (service learning), work with a faculty member on a research project, internship, co-op, field experience, student teaching, or clinical placement, study abroad, culminating senior experience (capstone, thesis, portfolio, etc.).

NSSE offers participating institutions with a variety of reports to interpret and use the data collected. The most useful report is a snapshot of the institution’s frequencies and means related to comparison groups. Comparison groups are defined by the institution’s Carnegie classification. The survey results are used to help institutions understand the quality of experiences students are having inside and outside the classroom. The engagement indicators and themes help group similar topic questions together to easily identify areas for improvement or strengths within the institution.

**Summary**

This chapter explains the importance of studying student-faculty interactions and student satisfaction in an effort to increase student retention in higher education institutions. The history of student retention was addressed leading to the current efforts for gaining new insights on student retention in the 21st century. The review of literatures also examined the characteristics of Generation Z students and provided discussion for best practices in higher education. This chapter explained the theoretical framework of this study: Tinto’s Theory of Student Departure (Tinto, 1975), and Astin’s Model of Student Involvement (Astin, 1975). The chapter also provided an overview of the NSSE, the instrument used in this study. The next chapter will discuss the research design and methodological approach.
CHAPTER THREE: METHODOLOGY

Introduction

Chapter three describes the research design and methodological approach used to study faculty interactions with students and student retention at a public university in the Midwest. More specifically, this section discusses the setting and participants, instrument, and variables. The chapter also provides a thorough understanding of the research questions and data analysis.

Restatement of Purpose

The goal of this study is to analyze how the amount of student-faculty interactions predicts Generation Z college students’ satisfaction and decision to leave or stay at an institution. This study uses the NSSE instrument to examine the relationship between those variables. The purpose of this study is to provide guidance for student retention and satisfaction efforts to benefit the active efforts of a comprehensive public university in the Midwest and to build on existing research of student retention. A quantitative study using secondary data collection was the most appropriate method for this study.

Setting and Participants

The university used for this study is a comprehensive public land grant institution in the Midwest. The student population for graduate and undergraduate programs combined is around 12,000 students. The university consists of over 650 teaching faculty and 2,000 employees. This study uses a convenient sample of 342 first-year students who responded and completed the NSSE survey that was emailed to all first-year students during their spring semester. The total number of students who were emailed the survey was 1,951 making the response rate for this study 17.5%.
The students could access the survey through their email. Students could start and stop the survey at any point in the process, therefore, there were some students who failed to complete the entire survey. The sample used in this survey was concluded after a process of cleaning and removing data of incomplete surveys. NSSE uses a unique number id to ensure anonymity in student responses. The survey asks a series of questions to obtain demographic information. The unique id did allow for the institutional-reported data to be matched to the self-reported data by the students. This allowed for the university to still obtain this information despite a student not completing the demographic questions. There were students in this study’s sample who did not complete the demographic questions, therefore, the institution-reported data were used in this study to ensure the most accurate report.

The sample of students was categorized into seven different racial/ethnic categories (see Table 1). White made up the majority of the sample (n=313). Foreign or international students were the second largest group (n=8), followed by two or more races (n=7), Asian or Pacific Islander (n=5), Black or African American (n=4), Hispanic or Latino (n=4), and unknown (n=1). Although the sample does not represent a very diverse group, the demographics do accurately portray the student population of the university. The students in this sample included almost all full-time first-year students (n=341) and one part-time student (n=1) (see Table 2). A full-time student is defined by being enrolled in six or more credits, whereas, a part-time student is someone enrolled in less than 6 credits. This study specifically analyzed Generation Z students, students who were 18 or 19 years old when they took the survey. The gender of the students in the sample was
made up of 66% female (n=227) and 34% male (n=115) (see Table 2). Tables 1 and 2 provide the demographic characteristics of the first-year students in this study.

**Instrument**

The instrument used for this study was the National Survey of Student Engagement (NSSE). The NSSE is a survey designed to collect information from first-year and senior students at 4-year colleges and universities to better understand their participation in programs and activities that institutions offer students for academic and personal development. Appendix A provides a complete copy of the 2018 survey given to the first-year students in this study. The NSSE administration describes student engagement as having two critical features. The first is the amount of time and energy students spend on their studies or academic related activities. The second component is how the institution uses resources and designs learning opportunities to get students to participate in academic activities (About NSSE, 2019).

NSSE serves to assist higher education institutions in assessing and improving the quality of the undergraduate experience. NSSE offers valuable data to help student affairs administrators, professionals, and faculty understand student perceptions of academic opportunities and activities as well as their overall attitude toward the institution (NSSE Annual Results, 2018). NSSE is administered annually to participating colleges and universities. It typically takes 12 months of involvement to administer the survey starting with planning in the fall, administering the survey in the spring, and ending with final reports in the summer and following fall. The survey administration can be sent out in paper format through postal mail or electronic form through email. Participation in the
survey comes with a NSSE Project Service Team to assist with the entire process, customizable options on the survey, and a comprehensive report of the data results.

The NSSE survey is composed of questions divided into five categories. The categories are as followed: (a) participation in dozens of educationally purposeful activities, (b) institutional requirements and the challenging nature of course work, (c) perceptions of the college environment, (d) estimates of educational and personal growth since starting college, and (e) background and demographic information. The survey uses Likert scale questions except to gather background and demographic information. Each Likert scale question is designed to measure some aspect of student engagement.

In order to best approach the complexity of student engagement, NSSE developed ten engagement indicators categorized into four different engagement themes (see Table 3). The four themes are: Academic Challenge, Learning with Peers, Experiences with Faculty, and Campus Environment. The engagement indicators include: (a) Higher-Order Learning, (b) Effective & Integrative Learning, (c) Learning Strategies, (d) Quantitative Reasoning, (e) Collaborative Learning, (f) Discussions with Diverse Others, (g) Student-Faculty Interactions, (h) Effective Teaching Practices, (i) Quality of Interactions, (j) Supportive Environment. Table 3 displays the engagement themes and indicators. Each question is placed into one of the ten engagement indicators to help administrators better analyze results. This study uses the student-faculty interactions and effective teaching practices engagement indicators along with the student’s response to their overall satisfaction.
Validity and Reliability

The validity and reliability of the NSSE survey have been examined by many researchers in the field (Kuh et al. 2006; Pascarella et al., 2010; Pike, 2006, 2013; Zilvinski, Masseria, & Pike, 2017). The NSSE administration has taken many steps and a great deal of time to ensure the quality of the survey. Because of that, it has been found to have a high degree of validity and reliability. NSSE experts have assessed the psychometric properties thoroughly. This was measured by using cognitive interviews, focus groups, and data analysis (NSSE: Reliability, 2019).

Validity is determining if the test or instrument measures what it was intended to measure. From the beginning pilot survey to the most recent 2013 revision, NSSE has been making continuous efforts to strengthen validity by changing phrases, adding and removing items, and changing the overall construct of the survey (Pike, 2013). The most recent change was the shift from using scalelets to engagement indicators. The revision was started by feedback that terminology needed to be updated (Zilvinski, Masseria, & Pike, 2017). Zilvinski, Masseria, & Pike (2017) concluded that the newly revised NSSE survey is a strong improvement because the survey not only proves strong content and face validity but also provides evidence of convergence and discrimination.

Reliability, much like validity, is approached carefully by NSSE administration. Reliability refers to the consistency of a measurement. NSSE reports data collection each year on the reliability of the scale (NSSE: Reliability, 2019). The internal consistency of the engagement indicators is measured using Cronbach’s Alpha. The analyses are shown by class, sex, major, and institution. By measuring the different classifying information
shows that the survey measures consistently for students who are different. All in all, the reports show strong internal consistency of the engagement indicators.

**Research Questions**

This study analyzes how student-faculty interactions relates to student retention and student satisfaction. Two research questions provide direction for this study:

Research question one. Did the quantity of Generation Z college students’ (a) course-related interactions with faculty, (b) out-of-class interactions with faculty, and (c) overall satisfaction during their freshman year of college differ between students that decided to stay at the institution and students that decided to depart?

Research question two. Did the amount of Generation Z college students’ course-related interactions and out-of-class interactions with faculty during their freshman year of college significantly predict their overall satisfaction of the institution?

**Data Cleaning**

First, a proposal was submitted to the Institutional Review Board (IRB) before obtaining the data. Upon IRB approval, the NSSE and student retention data were collected from the Office of Institutional Research and Assessment. A copy of the Human Subjects Approval is provided in Appendix B. The Statistical Package for the Social Sciences (SPSS) was used to analyze the data. Along with the statistical tests, descriptive statistics were run through SPSS.

Prior to the analysis, steps were taking to clean and prepare the data. First, I filtered the data to obtain only students with a birth year of 1995 or later to represent Generation Z students only. Next, the retention information was filtered to ensure there
was no missing data. After the data cleaning, the next step was to create variables from the items on the NSSE.

The first variable created was course related interactions. This variable included four items from the survey: (a) During the current school year, how often have you discussed your academic performance with a faculty member, (b) During the current school year, to what extent have your instructors done the following: provided feedback on a draft or work in progress, (c) During the current school year, to what extent have your instructors done the following: provided prompt and detailed feedback on tests or completed assignments, (d) During the current school year, how often have you discussed course topics, ideas, or concepts with a faculty member outside of class.

The second variable was out of class interactions. This variable included three items: (a) During the current school year, how often have you talked about career plans with a faculty member, (b) During the current school year, how often have you worked with a faculty member on activities other than coursework, (c) During the current school year, how often have you done the following: work with a faculty member on a research project.

**Descriptive Statistics**

After the data cleaning was finished, the next step in the process was obtaining descriptive statistics. Prior to conducting the statistical analysis, analyzing the assumptions of the tests is necessary to assure there are no problems in the data and test statistic. This involved running descriptive statistics, such as means, standard deviations, range of scores, skewness, and kurtosis of the variables. Descriptive statistics were obtained for each variable and several graphs were created to thoroughly assess and
comprehend the data set. The descriptions and graphs for the test assumptions are described later in this chapter.

**Test Statistics**

Quantitative methods were used to analyze the data for this study. The statistical tests that were used included the Mann-Whitney U test and a linear multiple regression.

The statistical test used to measure the first research question was the Mann-Whitney U Test. The Mann-Whitney U Test is a nonparametric test used to compare two independent samples (Corder & Foreman, 2014). In this study, the independent variables were students who returned and students who did not return to the university the following year. The dependent variables were overall satisfaction, course-related interactions, and out-of-class interactions. Figure 1 provides a diagram of these variables.

Three Man-Whitney U tests were run to assess each of the dependent variables. The tests were used to study the difference in the distribution of the dependent variables between students that returned to the university and those that did not.

The hypothesis for this research question is that the distribution of the dependent variables, overall satisfaction, course-related interactions, and out-of-class interactions, are significantly different between the students that returned to the university and those that did not. Whereas, the null hypothesis is that the distribution of the dependent variables is the same among the two groups of students.

The Mann-Whitney U test was found to be the best statistical option to approach this research question. A nonparametric test is found to be more suitable for smaller sample sizes and for ordinal data (Corder & Foreman, 2014). The data lacking representation of a normal distribution violates one of the assumptions of parametric
tests, therefore, a logistic regression could not be used. Four assumptions needed to be verified for the Mann-Whitney U test to be valid.

The first assumption was that the dependent variables are ordinal. This was satisfied because the data used comes from a Likert scale. The data satisfies the second assumption that the two groups are independent from one another. The students that did not return and the students that did return the following year are independent of one another. The third assumption was that the students are independent of one another. The last assumption was that the dependent variables are not normally distributed which is satisfied as mentioned previously. The assumptions were satisfied; therefore, the test was validated for this study.

The second research question was analyzed using a multiple regression for the statistical analysis. Multiple regression is a statistical test used to predict the value of a variable based on the value of one or more other variables. The independent variables for this research question were students’ course-related interactions and out-of-class interactions with faculty. The dependent variable is students’ overall satisfaction of the institution. Figure 2 provides a diagram of these variables. The hypothesis for this research question was that course-related interactions and out-of-class interactions with faculty will significantly predict students’ overall satisfaction of the institution. Therefore, the null hypothesis was that course-related interactions and out-of-class interactions with faculty will not significantly predict students’ overall satisfaction of the institution.

Seven assumptions needed to be verified for the multiple linear regression to be valid. First, there must have been linear relationship between independent and dependent
variables. Next, the observations must have been independent. The third assumption was having little to no multicollinearity among the independent and dependent variables. Multicollinearity occurs when the independent variables are highly correlated with one another. The next assumption was that the data set should be a normal distribution. Next is that there was homoscedasticity of the error terms. The sixth assumption was that there were no outliers influencing the distribution. Last, the sample size needed to be large enough to generalize the specific population. All seven assumptions were assessed and proven for this study; therefore, multiple regression was found appropriate to use for research question two.

**Summary**

This chapter described the research design and methodology that were utilized for this study. The setting and participants, instrument, research questions, and data analysis were each explained in detail to understand the process of this study. The next chapter presents the findings and discussion.
CHAPTER FOUR: FINDINGS

Student retention has been an important topic among higher education and student affairs professionals since the 1970s. Researchers have indicated many factors both academic and non-academic that potentially influence student retention. Among these factors, faculty interactions with students have been determined to influence students’ experience especially during their first year. This study examined how student interactions with faculty influenced student retention and student satisfaction at a public land-grant institution in the Midwest. The data was intended to provide a better understanding to the way student-faculty interactions impact student retention and student satisfaction. This chapter presents the results of the study.

Findings

Descriptive Statistics. Descriptive statistics were obtained for each of the variables (see Table 4). The sample size was n=342. Student retention was evaluated by whether or not the students returned to the institution the following year. Of the 342 students, 307 (89.8%) students returned and 35 (10.2%) students did not return. On a scale ranging from 4-16, with a high score being the best, students’ average course-related interactions with faculty was 9.10 with a standard deviation of 2.33. On a similar scale of 4-12, students’ average out-of-class interactions with faculty was 6.53 with a standard deviation of 1.89. On a scale of 4-8, students’ overall satisfaction of the institution was 6.32 with a standard deviation of 1.42.

Research Question One. The first research question used a Mann-Whitney U Test to determine if there was a difference in the distribution of the dependent variables between students that returned and students that did not return. There were three
dependent variables in this research question: students’ (a) course-related interactions with faculty, (b) out-of-class interactions with faculty, and (c) overall satisfaction during their freshman year of college. Therefore, three separate Mann-Whitney U tests were calculated to examine each variable independently.

*Students’ course-related interactions with faculty.* A Mann Whitney U analysis was conducted to evaluate the null hypothesis that no difference exists in students’ course-related interactions with faculty between first-year students who returned the following year and first-year students who did not return. The mean rank for student who did not return (144.09) was lower than the mean rank for students who did return (171.89) (see Table 5), but it was not statistically significant, $U = 4413.000, p > .05$ (see Table 6). Therefore, there was not enough evidence to reject the null hypothesis.

*Students’ out-of-class interactions with faculty.* A Mann Whitney U analysis was conducted to evaluate the null hypothesis that no difference exists in students’ out-of-class interactions with faculty between first-year students who returned the following year and first-year students who did not return. The mean rank for student who did not return (149.27) was lower than the mean rank for students who did return (171.84) (see Table 5), but it was not statistically significant, $U = 4594.500, p > .05$ (see Table 6). Therefore, there was not enough evidence to reject the null hypothesis.

*Overall Student Satisfaction.* A Mann Whitney U analysis was conducted to evaluate the null hypothesis that no difference exists in students’ overall satisfaction during their freshman year between students who returned the following year and students who did not return. The mean rank for student who did not return (112.57) was lower than the mean rank for students who did return (178.22) (see Table 5). The
difference between students who did return and students who did not return was statistically significant, $U = 4594.000$, $p < .05$ (See table 6). The null hypothesis was rejected.

**Research Question Two.** The second research question used a multiple linear regression to determine if the number of students’ course-related interactions and out-of-class interactions with faculty during their freshman year significantly predicted their overall satisfaction of the institution. The independent variables include students’ (a) course-related interactions with faculty and (b) out-of-class interactions with faculty. The dependent variable in this research question is the overall student satisfaction.

A multiple linear regression was carried out to investigate the null hypothesis that students’ course-related and out-of-class interactions with faculty do not significantly predict overall satisfaction. The results of the regression indicated that 5.5% of the variance of overall satisfaction can be explained by the students’ course-related and out-of-class interactions with faculty. The model showed that there was a significant linear relationship between students’ course-related and out-of-class interactions with faculty and overall satisfaction, $F = 9.548$, df = 2, $p = 0.000$ (see Table 7).

In addition, individual t-tests were run on each coefficient to test the null hypothesis that there is no linear association between the variables. Course-related interactions significantly predicted overall satisfaction, $\beta = .108$, $t = 2.953$, $p < .05$ (see Table 8). Out-of-class interactions with faculty members displayed a positive linear relationship, however it did not show a statistically significant relationship, $\beta = .069$, $t = 1.544$, $p > .05$ (see Table 8).
CHAPTER FIVE: DISCUSSION

This study contributes to the research and understanding of the positive student-faculty interactions. The results of this study were found to be consistent with the existing literature. The following section will discuss the findings of each research question, consider the limitations of the study, and conclude with recommendations for future research.

Research Question One

The first research question examined whether or not student-faculty interactions were predictors of student retention. The findings indicated that students’ overall satisfaction significantly predicted student retention, but course-related interactions and out-of-class interactions with faculty were not significant in predicting student retention. Although the student-faculty interactions were not indicative of significant predictors, the analysis still revealed that the mean score of both student-faculty interactions were higher among students who returned compared to those who did not return.

As discussed in the previous chapter, the Mann-Whitney U Test compares the mean score of the amount of (a) course-related interactions with faculty and (b) out-of-class interactions with faculty between the students who did return and students who did not return. In both instances, the mean score of the amount of interactions with faculty was higher in students who did return than students who did not. In other words, this tells us that on average students who did return the following fall were having more course-related interactions and out-of-class interactions with faculty than those students who did not return. It could be a possibility that with a larger sample size the numbers would become statistically significant.
The findings align with current literature that have determined overall satisfaction to be a significant predictor of retention (Romsa et al., 2017, Sickler, 2013). Tinto, Astin, Kuh, and Terenzini & Pascarella have suggested a positive relationship between student satisfaction and student retention. Romsa et al. (2017) and Sickler (2013) both analyzed overall satisfaction and found it to be a statistically significant predictor of student retention.

Course-related and out-of-class interactions were anticipated to be a significant predictor of retention; therefore, the findings were unexpected. Early researchers and theorists have described student-faculty interactions as a strong predictor of retention (Terenzini & Pascarella, 1980). However, a similar study (Romsa et al., 2017) revealed similar findings to this study where student-faculty interactions were not found to be statistically significant. It is unclear why student-faculty interactions were found to not be a significant predictor in this study.

This study specifically looked only at first-year students, so an assumption could be made that these students are taking larger general education classes. Larger classes could make it more difficult to interact with the professor. Students may also interact and become more involved with professors specific to their major which typically happens after freshman year. Another explanation could be the complexity of a student’s decision to stay or leave.

Braxton (2014) recently reexamined student retention theories adding new insight to factors that influence student persistence. He emphasized the importance of social integration on student persistence. Furthermore, commitment of the institution to student welfare, institutional integrity, and psychosocial engagement were identified as the three
antecedents that influence social integration (Braxton, 2014). Therefore, the more a student perceives these three factors, the more likely they are to feel socially integrated leading to the student persistence. Although faculty were determined to play an influential role, additional factors were identified to influence social integration such as academic advising, extracurricular activities, sense of community, and institutional actions (Braxton, 2014). Thus, while student-faculty interactions did not significantly predict student retention in this specific study, they could be considered to add influence on a larger matter that does significantly impact student retention.

The significant findings in research question one show the importance of student retention efforts. This study shows the positive impact of student satisfaction toward student retention. Knowing this positive correlation helps higher education professionals understand the necessary areas to focus on when providing retention efforts for their respective institution(s).

**Research Question Two**

The second research question examined whether or not the amount of students’ course-related interactions and out-of-class interactions with faculty during their freshman year significantly predicted their overall satisfaction of the institution. The findings indicated that together course-related and out-of-class interactions significantly predicted overall satisfaction. Additionally, course-related interactions with faculty significantly predicted overall satisfaction, but out-of-class interactions did not significantly predict overall satisfaction.

Although out-of-class interactions alone did not significantly predict, it was still determined to have a positive relationship with overall satisfaction. An assumption for
why out-of-class interactions were not statistically significant could be similar to what was discussed with the first research question. As discussed in Chapter two, examples of out-of-class interactions may be working on research with a faculty member, discussing career goals, visiting a faculty during office hours, or participating in a service-learning project together (Hoffman, 2014). It may be that the first-year students in this study have not had the opportunity to engage in these types of interactions at this point in their college experience.

However, the combined student-faculty interactions (out-of-class and course-related) and course-related interactions alone were determined statistically significant in predicting overall student satisfaction. These results build on existing evidence that student-faculty interactions significantly impact satisfaction. The significance of this relationship between student-faculty interactions and student satisfaction is a novel finding in the understanding of Generation Z college students. While Generation Z students are characterized as independent learners, this study provides evidence that student-faculty interactions matter to these students. Furthermore, they increase their satisfaction of their college experience.

Seemiller and Grace (2017) found that students in this generation use technology as a means of learning independently. Students have the ability to research on their own or turn to the internet to help understand concepts by using videos or blogs to find answers. They may not be seeking help for assignments or understanding material from faculty members, but they do want to know how their studies apply to their career aspirations or how they can better themselves to reach goals. It is likely that student-faculty interactions focused on career goals, community engagement, and encouragement
would be most impactful for Generation Z students. Generation Z students want to feel like they are working toward something meaningful and have a hopeful future. Faculty members can foster this by engaging in conversations focused on the student’s goals, needs, and personal life.

Along with the content of interactions, faculty should be willing to adapt to the modes of communication these students have grown up with. Since they have grown up with the most advanced technology yet, they often use technology as their first source of communication. This does not mean that they do not value the interactions any less. These students prefer to communicate through technology, such as email or social media (Hoffman, 2014). As Generation Z students continue to fill higher education institutions, faculty members should understand the common characteristics of the generation to help guide how they interact with students.

More positive outcomes this study revealed are the results of the survey questions that measured student satisfaction. One survey question asked: How would you evaluate your entire educational experience at this institution? Just over half of the students (173 out of 342) ranked the institution as good on a scale of poor, fair, good, and excellent. Additionally, 32.5% ranked the institution as excellent. A second survey question asked: If you could start over again, would you go to the same institution you are attending now? Over eighty percent (286 out of 342) answered yes (probably yes or definitely yes). Thus, course-related interactions with faculty contributing to student satisfaction has led to an above average rating for satisfaction of the institution.
Limitations

It is important to consider the limitations of this study. The first limitation is the sample size of the study. Although there was a large sample size of first-year students that received the survey, the response rate was 17.5%. The total number of first-year students in the spring of 2018 was 1,951, whereas the number who responded to the survey and completed the questions for this study was 342. The low response rate should be considered when trying to generalize this to the entire student population.

Another limitation is that the study only looked at one institution. This study specifically used data from a public institution in the Midwest. Experiences could vary depending on the student demographics and characteristics of the institution. For example, student experiences from a large public institution may be significantly different from a small private institution. Another variation that could potentially provide different experiences for students is residential and commuter colleges. This study also only used data from one first-year cohort. It should be considered that experiences could have been different for previous or later classes.

Recommendations

This study provides additional knowledge and understanding to a long history of research on student retention. This study presented results that were both expected and unexpected. It was expected to see that overall student satisfaction significantly affected student retention. It was also expected to see that the combination of students’ out-of-class interactions and course-related interactions with faculty had a significant, positive relationship with overall satisfaction. Despite the lack of evidence to show that student-faculty interactions are a predictor of student retention, this study supports the idea that
student-faculty interactions are important. This study has underscored the complexity of student retention and the factors that influence it. Student-faculty interactions continue to have a significant role in students’ overall college experience, which further leads to greater satisfaction. Furthermore, this satisfaction leads to student retention.

Future research could benefit from focusing more on a qualitative understanding of student-faculty interactions. Braxton (2014) emphasized the quality of student-faculty interactions over quantity. It could be beneficial to learn student perceptions and opinions of their interactions with faculty. Another suggestion may be to better understand student perceptions of communication with faculty. This study examined the new characteristics Generation Z students bring to college. Learning their communication styles and expectations for student-faculty interactions and relationships would be beneficial to understand. As new students continue to fill universities, student-faculty interactions will continue to change in terms of how they are displayed and how they affect students. It will be important to continue readdressing this topic in student retention with an ever-changing world.

**Conclusion**

This study examined how student interactions with faculty influenced student retention and student satisfaction among Generation Z students at a public land-grant institution in the Midwest. The study used the NSSE instrument to examine the relationship between those variables. The purpose of this study was to provide guidance for student retention efforts to benefit the active efforts of a comprehensive public university in the Midwest and to build on existing research of student retention. This
thesis first provided a theoretical framework and literature review to provide a foundation for this study.

The first research question used a Mann-Whitney U Test to determine if there was a difference in the distribution of the dependent variables between students that returned and students that did not return. The second research question used a multiple linear regression to determine if the number of students’ course-related interactions and out-of-class interactions with faculty during their freshman year significantly predicted their overall satisfaction of the institution.

The results presented a significant relationship between student satisfaction and student retention. The results also displayed a significant relationship between student-faculty interactions and overall satisfactions. Together these findings illustrate the strong relationship between student-faculty interactions, student satisfaction, and student retention. This study casts a new light on understanding Generation Z students and the value they place on interactions with faculty. Although there were limitations to this study, the results contributed to an already large body of research that provides a greater understanding of student retention and Generation Z.

Today, the higher education system is faced with an increasing amount of challenges in our fast-evolving society. Some factors may be out of professionals’ control such as budget-cuts, economic turns, and workforce demands; however, higher education professionals have the ability to control the experience they give students during college. This study shows the positive impact faculty can have by interacting and engaging with Generation Z students. This study provided evidence that the effort of creating a positive
college experience does impact Generation Z students’ perception and satisfaction of the institution.
References


Table 1

*Racial/Ethnic Characteristics of the Participants*

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>5</td>
<td>1.5%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>4</td>
<td>1.2%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>4</td>
<td>1.2%</td>
</tr>
<tr>
<td>White</td>
<td>313</td>
<td>91.5%</td>
</tr>
<tr>
<td>Foreign or Nonresident Alien</td>
<td>8</td>
<td>2.3%</td>
</tr>
<tr>
<td>Two or more races/ethnicities</td>
<td>7</td>
<td>2.0%</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td>.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>342</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Note. All items quoted from the *Office of Institutional Research & Assessment, Student Outcome Data*, (2018).*
Table 2

*Other Characteristics of the Participants*

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>227</td>
<td>66.4%</td>
</tr>
<tr>
<td>Male</td>
<td>115</td>
<td>33.6%</td>
</tr>
<tr>
<td>Full Time</td>
<td>341</td>
<td>99.7%</td>
</tr>
<tr>
<td>Part Time</td>
<td>1</td>
<td>.3%</td>
</tr>
<tr>
<td>Total</td>
<td>342</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Note.* All items quoted from the *Office of Institutional Research & Assessment, Student Outcome Data*, (2018).
<table>
<thead>
<tr>
<th>Theme</th>
<th>Engagement Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Challenge</strong></td>
<td>Higher-Order Learning</td>
</tr>
<tr>
<td></td>
<td>Reflective &amp; Integrative Learning</td>
</tr>
<tr>
<td></td>
<td>Quantitative Reasoning</td>
</tr>
<tr>
<td></td>
<td>Learning Strategies</td>
</tr>
<tr>
<td><strong>Learning with Peers</strong></td>
<td>Collaborative Learning</td>
</tr>
<tr>
<td></td>
<td>Discussion with Diverse Others</td>
</tr>
<tr>
<td><strong>Experiences with Faculty</strong></td>
<td>Student-faculty Interactions</td>
</tr>
<tr>
<td></td>
<td>Effective Teaching Practices</td>
</tr>
<tr>
<td><strong>Campus Environment</strong></td>
<td>Quality of Interactions</td>
</tr>
<tr>
<td></td>
<td>Supportive Environment</td>
</tr>
</tbody>
</table>

*Note. All items quoted from National Survey of Student Engagement, (2019).*
Table 4

*Descriptive Statistics of Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retention</td>
<td>342</td>
<td>0.00</td>
<td>1.00</td>
<td>.89</td>
<td>.30</td>
</tr>
<tr>
<td>Course-related Interactions</td>
<td>342</td>
<td>2.00</td>
<td>8.00</td>
<td>6.32</td>
<td>1.42</td>
</tr>
<tr>
<td>Out-of-class Interactions</td>
<td>337</td>
<td>4.00</td>
<td>16.00</td>
<td>9.10</td>
<td>2.33</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>338</td>
<td>3.00</td>
<td>12.00</td>
<td>6.53</td>
<td>1.88</td>
</tr>
</tbody>
</table>

*Note.* This table indicates the minimum, maximum, mean, and standard deviation for the variables in this study.
Table 5

*Mean Rankings for Mann-Whitney U Test*

<table>
<thead>
<tr>
<th>Retention</th>
<th>N</th>
<th>Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Satisfaction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did Not Return</td>
<td>35</td>
<td>112.57</td>
</tr>
<tr>
<td>Returned</td>
<td>307</td>
<td>178.22</td>
</tr>
<tr>
<td>Total</td>
<td>342</td>
<td></td>
</tr>
<tr>
<td><strong>Course-related Interactions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did Not Return</td>
<td>35</td>
<td>144.09</td>
</tr>
<tr>
<td>Returned</td>
<td>302</td>
<td>171.89</td>
</tr>
<tr>
<td>Total</td>
<td>337</td>
<td></td>
</tr>
<tr>
<td><strong>Out-of-class Interactions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did Not Return</td>
<td>35</td>
<td>149.27</td>
</tr>
<tr>
<td>Returned</td>
<td>303</td>
<td>171.84</td>
</tr>
<tr>
<td>Total</td>
<td>338</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* This table provides the raw numbers and the mean rank for each of the variables divided by students who did not return and student who did return.
Table 6

*Mann-Whitney U Model Summary*

<table>
<thead>
<tr>
<th></th>
<th>Satisfaction</th>
<th>Course-related Interactions</th>
<th>Out-of-class Interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>3310.000</td>
<td>4413.000</td>
<td>4594.500</td>
</tr>
<tr>
<td><em>p</em></td>
<td>.000*</td>
<td>.107</td>
<td>.190</td>
</tr>
</tbody>
</table>

*Note.* * Indicates significance at a .05 level.
Table 7

**Multiple Linear Regression Model Summary**

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>$F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2</td>
<td>18.178</td>
<td>9.548</td>
<td>.000*</td>
</tr>
</tbody>
</table>

*Note.* * Indicates significance at a .05 level.
Table 8

*Multiple Regression Coefficients*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE B</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course-related Interactions</td>
<td>.108</td>
<td>.036</td>
<td>2.953</td>
<td>.003*</td>
</tr>
<tr>
<td>Out-of-class Interactions</td>
<td>.069</td>
<td>.045</td>
<td>1.544</td>
<td>.124</td>
</tr>
</tbody>
</table>

*Note.* * Indicates significance at a .05 level.
Variables of Current Study: Research Question One

Note. Research question one asks “Did the quantity of Generation Z college students’ (a) course-related interactions with faculty, (b) out-of-class interactions with faculty, and (c) overall satisfaction during their freshman year of college differ between students that decided to stay at the institution and students that decided to depart?” The independent variables are students who returned and students who did not return to the university the following year. The dependent variables are overall satisfaction, course-related interactions, and out-of-class interactions.
Research question two asks “Did the amount of Generation Z college students’ course-related interactions and out-of-class interactions with faculty during their freshman year of college significantly predict their overall satisfaction of the institution?”

The independent variables are students’ course-related interactions and out-of-class interactions with faculty. The dependent variable is students’ overall satisfaction of the institution.
Appendix A

National Survey of Student Engagement 2018

This is a facsimile of the U.S. English version of the online NSSE instrument as it appears to the student. A paper-formatted facsimile of the survey which includes item numbering is available on the NSSE Web site: nsse.iub.edu/html/survey_instruments.cfm

During the current school year, about how often have you done the following?

- Asked questions or contributed to course discussions in other ways
  - Very often
  - Often
  - Sometimes
  - Never

- Prepared two or more drafts of a paper or assignment before turning it in
  - Very often
  - Often
  - Sometimes
  - Never

- Came to class without completing readings or assignments
  - Very often
  - Often
  - Sometimes
  - Never

- Attended an art exhibit, play, or other arts performance (dance, music, etc.)
  - Very often
  - Often
  - Sometimes
  - Never

- Asked another student to help you understand course material
  - Very often
  - Often
  - Sometimes
  - Never

- Explained course material to one or more students
  - Very often
  - Often
  - Sometimes
  - Never

- Prepared for exams by discussing or working through course material with other students
  - Very often
  - Often
  - Sometimes
  - Never

- Worked with other students on course projects or assignments
  - Very often
  - Often
  - Sometimes
  - Never

- Given a course presentation
  - Very often
  - Often
  - Sometimes
  - Never

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<table>
<thead>
<tr>
<th>Activity</th>
<th>Very Often</th>
<th>Often</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined ideas from different courses when completing assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connected your learning to societal problems or issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examined the strengths and weaknesses of your own views on a topic or issue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tried to better understand someone else's views by imagining how an issue looks from their perspective</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learned something that changed the way you understand an issue or concept</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connected ideas from your courses to your prior experiences and knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talked about career plans with a faculty member</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worked with a faculty member on activities other than coursework (committees, student groups, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussed course topics, ideas, or concepts with a faculty member outside of class</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussed your academic performance with a faculty member</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
During the current school year, how much has your coursework emphasized the following?

<table>
<thead>
<tr>
<th></th>
<th>Very much</th>
<th>Quite a bit</th>
<th>Some</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memorizing course material</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applying facts, theories, or methods to practical problems or new situations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analyzing an idea, experience, or line of reasoning in depth by examining its parts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluating a point of view, decision, or information source</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forming a new idea or understanding from various pieces of information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>During the current school year, to what extent have your instructors done the following?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clearly explained course goals and requirements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taught course sessions in an organized way</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Used examples or illustrations to explain difficult points</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provided feedback on a draft or work in progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provided prompt and detailed feedback on tests or completed assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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During the current school year, about how often have you done the following?

**Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)**

<table>
<thead>
<tr>
<th>Very often</th>
<th>Often</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
</table>

**Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)**

<table>
<thead>
<tr>
<th>Very often</th>
<th>Often</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
</table>

**Evaluated what others have concluded from numerical information**

<table>
<thead>
<tr>
<th>Very often</th>
<th>Often</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
</table>

During the current school year, about how many papers, reports, or other writing tasks of the following lengths have you been assigned? (Include those not yet completed.)

**Up to 5 pages**

<table>
<thead>
<tr>
<th>None</th>
<th>1-2</th>
<th>3-5</th>
<th>6-10</th>
<th>11-15</th>
<th>16-26</th>
<th>More than 20 papers</th>
</tr>
</thead>
</table>

**Between 6 and 10 pages**

<table>
<thead>
<tr>
<th>None</th>
<th>1-2</th>
<th>3-5</th>
<th>6-10</th>
<th>11-15</th>
<th>16-26</th>
<th>More than 20 papers</th>
</tr>
</thead>
</table>

**11 pages or more**

<table>
<thead>
<tr>
<th>None</th>
<th>1-2</th>
<th>3-5</th>
<th>6-10</th>
<th>11-15</th>
<th>16-26</th>
<th>More than 20 papers</th>
</tr>
</thead>
</table>

During the current school year, about how often have you had discussions with people from the following groups?

**People of a race or ethnicity other than your own**

<table>
<thead>
<tr>
<th>Very often</th>
<th>Often</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
</table>

**People from an economic background other than your own**

<table>
<thead>
<tr>
<th>Very often</th>
<th>Often</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
</table>

**People with religious beliefs other than your own**

<table>
<thead>
<tr>
<th>Very often</th>
<th>Often</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
</table>

**People with political views other than your own**

<table>
<thead>
<tr>
<th>Very often</th>
<th>Often</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
</table>

---

**Screen 1 of 3 (continued)**

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During the current school year, about how often have you done the following?

**Identified key information from reading assignments**
- Very often
- Often
- Sometimes
- Never

**Reviewed your notes after class**
- Very often
- Often
- Sometimes
- Never

**Summarized what you learned in class or from course materials**
- Very often
- Often
- Sometimes
- Never

During the current school year, to what extent have your courses challenged you to do your best work?
- Not at all
- 1
- 2
- 3
- 4
- 5
- 6
- Very much

Which of the following have you done or do you plan to do before you graduate?

** Participate in an internship, co-op, field experience, student teaching, or clinical placement **
- Done or in progress
- Plan to do
- Do not plan to do
- Have not decided

** Hold a formal leadership role in a student organization or group **
- Done or in progress
- Plan to do
- Do not plan to do
- Have not decided

** Participate in a learning community or some other formal program where groups of students take two or more classes together **
- Done or in progress
- Plan to do
- Do not plan to do
- Have not decided

** Participate in a study abroad program **
- Done or in progress
- Plan to do
- Do not plan to do
- Have not decided

** Work with a faculty member on a research project **
- Done in progress
- Plan to do
- Do not plan to do
- Have not decided

** Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.) **
- Done or in progress
- Plan to do
- Do not plan to do
- Have not decided

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About how many of your courses at this institution have included a community-based project (service-learning)?
- All
- Most
- Some
- None

Indicate the quality of your interactions with the following people at your institution.

<table>
<thead>
<tr>
<th>Students</th>
<th>Poor</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Excellent</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Academic advisors</th>
<th>Poor</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Excellent</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Poor</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Excellent</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student services staff (career services, student activities, housing, etc.)</th>
<th>Poor</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Excellent</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other administrative staff and offices (Registrar, financial aid, etc.)</th>
<th>Poor</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Excellent</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Very much</td>
<td>Quite a bit</td>
<td>Some</td>
<td>Very little</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-----------</td>
<td>-------------</td>
<td>------</td>
<td>-------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spending significant amounts of time studying and on academic work</td>
<td></td>
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<td>Providing support to help students succeed academically</td>
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<td>Using learning support services (tutoring services, writing center, etc.)</td>
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<td>Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)</td>
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<td>Providing opportunities to be involved socially</td>
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<td>Providing support for your overall well-being (recreation, health care, counseling, etc.)</td>
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<td>Helping you manage your non-academic responsibilities (work, family, etc.)</td>
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<td>Attending campus activities and events (performing arts, athletic events, etc.)</td>
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<td>Attending events that address important social, economic, or political issues</td>
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</tbody>
</table>
About how many hours do you spend in a typical 7-day week doing the following?

<table>
<thead>
<tr>
<th>Activity</th>
<th>0</th>
<th>1-5</th>
<th>6-10</th>
<th>11-15</th>
<th>16-20</th>
<th>21-25</th>
<th>26-30</th>
<th>More than 30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)</td>
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<td>Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)</td>
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<td>Working for pay on campus</td>
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<tr>
<td>Working for pay off campus</td>
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<td>Doing community service or volunteer work</td>
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<td>Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)</td>
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<tr>
<td>Providing care for dependents (children, parents, etc.)</td>
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<td>Commuting to campus (driving, walking, etc.)</td>
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</tbody>
</table>

Of the time you spend preparing for class in a typical 7-day week, about how much is on assigned reading?

- Very little
- Some
- About half
- Most
- Almost all

Screen 1 of 3 (continued)
How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

Writing clearly and effectively

<table>
<thead>
<tr>
<th>Very much</th>
<th>Quite a bit</th>
<th>Same</th>
<th>Very little</th>
</tr>
</thead>
</table>

Speaking clearly and effectively

<table>
<thead>
<tr>
<th>Very much</th>
<th>Quite a bit</th>
<th>Same</th>
<th>Very little</th>
</tr>
</thead>
</table>

Thinking critically and analytically

<table>
<thead>
<tr>
<th>Very much</th>
<th>Quite a bit</th>
<th>Same</th>
<th>Very little</th>
</tr>
</thead>
</table>

Analyzing numerical and statistical information

<table>
<thead>
<tr>
<th>Very much</th>
<th>Quite a bit</th>
<th>Same</th>
<th>Very little</th>
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</thead>
</table>

Acquiring job- or work-related knowledge and skills

<table>
<thead>
<tr>
<th>Very much</th>
<th>Quite a bit</th>
<th>Same</th>
<th>Very little</th>
</tr>
</thead>
</table>

Working effectively with others

<table>
<thead>
<tr>
<th>Very much</th>
<th>Quite a bit</th>
<th>Same</th>
<th>Very little</th>
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</thead>
</table>

Developing or clarifying a personal code of values and ethics

<table>
<thead>
<tr>
<th>Very much</th>
<th>Quite a bit</th>
<th>Same</th>
<th>Very little</th>
</tr>
</thead>
</table>

Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)

<table>
<thead>
<tr>
<th>Very much</th>
<th>Quite a bit</th>
<th>Same</th>
<th>Very little</th>
</tr>
</thead>
</table>

Solving complex real-world problems

<table>
<thead>
<tr>
<th>Very much</th>
<th>Quite a bit</th>
<th>Same</th>
<th>Very little</th>
</tr>
</thead>
</table>

Being an informed and active citizen

<table>
<thead>
<tr>
<th>Very much</th>
<th>Quite a bit</th>
<th>Same</th>
<th>Very little</th>
</tr>
</thead>
</table>
How would you evaluate your entire educational experience at this institution?
- Excellent
- Good
- Fair
- Poor

If you could start over again, would you go to the same institution you are now attending?
- Definitely yes
- Probably yes
- Probably no
- Definitely no

Do you intend to return to this institution next year? [This question is only asked of non-senior respondents.]
- Yes
- No
- Not sure

How many majors do you plan to complete? (Do not count minors.)
- One
- More than one

Please enter your major or expected major:

**Major**

**Second Major**

Continue
### Why do we ask about your personal background?

#### What is your class level?
- Freshman/first-year
- Sophomore
- Junior
- Senior
- Unclassified

#### Thinking about this current academic term, are you a full-time student?
- Yes
- No

#### How many courses are you taking for credit this current academic term?
- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7 or more

#### Of these, how many are entirely online?
- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7 or more

#### What have most of your grades been up to now at this institution?
- A
- A-
- B+
- B
- B-
- C+
- C
- C- or lower

#### Did you begin college at this institution or elsewhere?
- Started here
- Started elsewhere
Since graduating from high school, which of the following types of schools have you attended other than the one you are now attending? (Select all that apply.)

- Vocational or technical school
- Community or junior college
- 4-year college or university other than this one
- None
- Other

What is the highest level of education you ever expect to complete?

- Some college but less than a bachelor's degree
- Bachelor's degree (B.A., B.S., etc.)
- Master's degree (M.A., M.S., etc.)
- Doctoral or professional degree (Ph.D., J.D., M.D., etc.)

What is the highest level of education completed by either of your parents (or those who raised you)?

- Did not finish high school
- High school diploma or G.E.D.
- Attended college but did not complete degree
- Associate's degree (A.A., A.S., etc.)
- Bachelor's degree (B.A., B.S., etc.)
- Master's degree (M.A., M.S., etc.)
- Doctoral or professional degree (Ph.D., J.D., M.D., etc.)

What is your gender identity?

- Man
- Woman
- Another gender identity, please specify: [Input Field]
- I prefer not to respond

Enter your year of birth (e.g., 1994):


Are you an international student?

- Yes
- No

What is your country of citizenship?


What is your racial or ethnic identification? (Select all that apply.)

- American Indian or Alaska Native
- Asian
- Black or African American
- Hispanic or Latino
- Native Hawaiian or Other Pacific Islander
- White
- Other
- I prefer not to respond

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How would you describe yourself? (Select all that apply)

- American Indian, Alaska Native, First Nations, or Indigenous
- Asian or Asian American
- Black or African American
- Hispanic or Latina/o
- Middle Eastern or North African
- Native Hawaiian or other Pacific Islander
- White
- Other
- I prefer not to respond

Are you a member of a social fraternity or sorority?

- Yes
- No

Which of the following best describes where you are living while attending college?

- Campus housing (other than a fraternity or sorority house)
- Fraternity or sorority house
- House, apartment, or other residence within walking distance to campus
- House, apartment, or other residence further than walking distance to campus
- Not applicable: No campus, entirely online program, etc.
- Not applicable: Homeless or in transition

Are you a student-athlete on a team sponsored by your institution's athletics department?

- Yes
- No

On what team(s) sponsored by your institution's athletics department are you an athlete? (Select all that apply.)

- Baseball
- Basketball
- Bowling
- Cheerleading or Dance/Pom Squad
- Cross Country
- Fencing
- Field Hockey
- Football
- Golf
- Gymnastics
- Ice Hockey
- Lacrosse
- Rifle
- Rowing
- Skiing
- Socc er
- Softball
- Swimming & Diving
- Tennis
- Track & Field
- Volleyball/Boris Volleyball
- Water Polo
- Wrestling
- Other, please specify:

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Are you a current or former member of the U.S. Armed Forces, Reserves, or National Guard?

☑ Yes
☑ No

Have you been diagnosed with any disability or impairment?

☑ Yes
☑ No
☑ I prefer not to respond

Which of the following has been diagnosed? (Select all that apply.)

☐ A sensory impairment (vision or hearing)
☐ A mobility impairment
☐ A learning disability (e.g., ADHD, dyslexia)
☐ A mental health disorder
☐ A disability or impairment not listed above

Which of the following best describes your sexual orientation?

☑ Straight (heterosexual)
☑ Bisexual
☑ Gay
☑ Lesbian
☑ Queer
☑ Questioning or unsure
☑ Another sexual orientation, please specify:

☑ I prefer not to respond

Continue
Prompt for Additional Comments (Institutions select one of four questions for the end of the NSSE questionnaire.)

If you have any additional comments or feedback that you'd like to share on the quality of your educational experience, please enter them below. (5,000 character limit)
What has been most satisfying about your experience so far at this institution, and what has been most disappointing? (5,000 character limit)
Please describe the most significant learning experience you have had so far at this institution. (5,000 character limit)
What one change would you most like to see implemented that would improve the educational experience at this institution, and what one thing should not be changed? (5,000 character limit)
Hello Stephani Jarecke,

Your application Student-Faculty Interactions as Predictors of Retention and Satisfaction of Generation Z College Students is exempt from further review by the Institutional Review Board of South Dakota State University. Exemption is claimed under exemption criterion #4 outlined in 45 CFR 46, section 104(d).

Note: If the project is changed, it should be re-submitted to the IRB for a determination of whether it still satisfies exemption criteria.

Your approval number is: IRB-1902004-EXM. Please add this to your recruitment and consent material.

I wish you the best in your study.

Sincerely,

Dianne Nagy
Research Integrity and Compliance Officer