Examining Student Retention and Online Instructors with Online Student Experience: A Correlational Study

by

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Abstract

Institutions of higher education have experienced increased student enrollment in online courses for the past several years with no indication of slowing down. The problem institutions are experiencing is retention rates in online courses are typically lower than retention rates in the same courses delivered in a face-to-face environment. The purpose of the non-experimental, quantitative correlational study was to examine the statistical significance of the relationship between online instructors with experience as an online college student and retention rates in the instructor's online course. Student retention rates of 50 individual courses taught by online adjunct instructors were examined. Twenty-five out of the 50 courses were taught by instructors with personal experience as an online learner. Twenty-five out of the 50 courses were taught by instructors without personal experience as an online learner. All instructors in the sample population taught general education courses, completed the same online faculty orientation, and the first course taught at the institution of study was examined to maintain a common baseline. The theoretical framework guiding the study focused on servant leadership and dimensions of social constructivism in online courses. There is a gap in the literature exploring the instructor's personal experience as an online learner as the experience relates to student satisfaction and retention. A point-biserial correlation along with a post hoc independent *t*-test was run between instructors and student retention rates, determining no statistically significant correlation between instructors and student retention rates.

Dedication

Words cannot express the gratitude and appreciation I have for my family, friends, and colleagues who have supported me throughout this three-year journey. From the idea of starting the doctoral journey to the final approval of my dissertation, the support and love my family has provided me kept me motivated. Todd, Sydney, Mom, Dad, Chrissy, Maria, and all my colleagues and peers, this dissertation is dedicated to you.

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Chapter 1: Introduction

Providing students with options to online learning, similarly referred to as distance education, has become commonplace in many higher learning institutions. Each year, higher learning institutions choosing to provide students with distance education options increases. Many institutions report online learning is crucial to long term strategic planning (Allen, Seaman, Poulin, & Straut, 2016). Student satisfaction and retention in online courses need to be foci and priorities of institutions of higher learning. Research has shown student satisfaction affects and influences the retention of traditional and non-traditional students (Markle, 2015). Typically, retention rates in online courses are lower than the retention rates in the same courses provided in a face-to-face modality (Cole, Shelley, & Swartz, 2014). A few of the factors related to low student retention in online courses consist of difficult course work, lack of time management, and diminutive support from instructors (Travers, 2016). Research suggests students who feel connected to faculty have higher retention rates than students who do not feel connected (Post, Mastel-Smith, & Lake, 2017).

Distance education has become a preferred modality of many higher educational institutions, with students taking more than one-quarter of their courses online (Allen et al., 2016). Although students choosing to enroll in online courses has increased, some students are enrolled in online courses without choice. Students new to an online learning environment may struggle in an unfamiliar, less preferred method of learning. Students taking courses in a face-to-face environment experience a live instructor and social presence. Garrison, Anderson, and Archer (1999) determined face-to-face interaction may have a more positive effect on student's

self-efficacy. In an online environment, student self-efficacy is the key to success in online learning (Peechapol, Na-Songkhla, Sujiva, & Luangsodsai, 2018).

An online instructor with experience as an online learner is familiar with the expectations of an online student and understands how to navigate learning management systems. Such online student experience may result in the sense of empathy, understanding, and connectedness of the student experience in an online environment. Instructors who displayed personal consideration, empathy, caring, intellectual stimulation, motivation, and inspiration tended to have more satisfied students in online courses (Ladyshewsky, 2013; Sahawneh & Benuto, 2018). Sutton (2014) stated students who interactively engage with faculty within the online learning community may have higher satisfaction resulting in higher retention rates. The present quantitative correlational study examined the statistical significance of the relationship between online instructors with experience as an online college student and retention rates in a respective instructor's online course.

Background of the Problem

Many higher learning institutions have continued to experience increased student enrollment in online courses each year (Allen et al., 2016). Higher learning institutions measure student retention rates as a vital metric of the institution's success (Millea, Wills, Elder, & Molina, 2018). With the increase in online enrollment emanates the challenge of retaining students through graduation. Research has shown lower retention rates contribute to lower completion rates in online courses compared to traditional face-to-face courses (Muljana & Luo, 2019). For institutions offering online education, finding opportunities to increase retention rates

in online courses is crucial. Page and Kulick (2016) concluded positive student satisfaction could result in higher retention with an increased frequency of student-instructor interactions.

Studies have shown retention rates in online courses are typically lower than retention rates in face-to-face courses (Doe, Castillo, & Musyoka, 2017; Muljana & Luo, 2019; Nash, 2005). Much of the research related to student satisfaction and retention relates to online course design, academic rigor, method of delivery, cognitive and technological challenges, lack of time management, social connectiveness, and motivation (Bawa, 2016; Li, Marsh, & Rienties, 2016; Travers, 2016). Retention rates are typically higher in courses with students who are academically prepared, perform well or have merit-based and athletic scholarships (Millea et al., 2018).

The theoretical framework for the study further focused on the theory of servant leadership and social constructivism in online courses. Review of literature discussing student and faculty perceptions of online learning had significance for the study. Determining if a correlation between an online instructor with experience as an online learner and student retention in a respective instructor's online course has not been researched. Determining if a correlation exists between retention and instructors having experience as an online learner, can provide valuable insight related to faculty hiring and training for institutions with online programs. The study can offer insights into the effectiveness or value of having faculty with online experiences for institutional leaders.

Statement of the Problem

The problem is student retention is lower in an online environment compared to an on-ground, face-to-face environment (Doe et al., 2017; Muljana & Luo, 2019; Nash, 2005). Higher learning institutions seek to find opportunities to combat declining retention rates. Research shows the presence, personal contact, and communication of an online instructor has an impact on learning and influencing student satisfaction (Ladyshewsky, 2013). Higher student satisfaction has shown a correlation with higher retention rates (Markle, 2015; Post et al., 2017). Franklin (2015) shared students who were more satisfied with the educational experience were more likely to stay enrolled. Another study found students feeling unprepared using the technology associated with the online learning management system, and other software embedded in courses, negatively affected student satisfaction and success (Pomerantz & Brooks, 2017). Rios, Elliott, and Mandernach (2018) discussed student satisfaction was positively impacted when instructors understood the needs of students.

Purpose of the Study

The purpose of the non-experimental, quantitative correlational study was to examine the statistical significance of the relationship between online instructors with experience as an online college student and retention rates in the instructor's online course. The results of the study could provide academic leaders with insight into the value of hiring faculty with existing online experience to teach online courses. The study may inform hiring practices and faculty onboarding, training, and professional development techniques to increase student retention.

The study examined if an online instructor's educational background played a role in student retention in the first online course the instructor taught at the institution of study. A

quantitative correlational research study was chosen, because the research questions aligned most effectively in determining a correlation between variables and confirmation of the hypotheses (Price, Jhangiani, & Chiang, 2013). The study consisted of both independent and dependent variables. Independent variables were online instructors with and without experience as an online learner teaching courses in general education for the first time at the institution of study. The dependent variable was the percentage rate of student retention within the instructor's courses. To maintain a baseline within the study, the sample population of instructors completed the same online faculty orientation, and the first general education course taught at the institution of study was assessed. Student retention within the instructor's courses was measured and assessed for statistical correlation without implying cause and effect. A point-biserial correlation was selected to determine if there was a statistically significant relationship between the dichotomous variable and the dependent variable (Laerd Statistics, 2018).

Significance of the Study

Most institutions rely heavily on adjunct faculty to teach online courses due to financial motives (Franklin, 2015). Because of the high number of adjunct instructors teaching online courses, institutions of higher learning, may find the results of the research study valuable in the hiring and training of new online faculty. There is limited research examining the statistical significance of online instructors having experience as an online student and retention rates in the instructor's course. The study is significant in providing research to fill the literature gap by examining if a correlation exists between the instructor's background and retention.

Student enrollment in distance education continues to increase each year in higher

learning institutions (Allen et al., 2016). Over 75% of institutions, conferred offering distance education programs, are critical to the institution's long-term strategy (Allen et al., 2016). As enrollment continues to rise in distance education, finding opportunities to increase student retention is vital for the long-term strategies of institutions in higher education. Instructors play a significant role in student satisfaction and retention. Research shows online students are more satisfied when positive interaction with fellow students and the instructor takes place (Cole et al., 2014). The research is of importance for past studies discuss student satisfaction influences student retention (Franklin, 2015; Markle, 2015; Post et al., 2017).

Research Questions and Hypotheses

Limited research has been revealed on the focus of instructors' personal experience as an online learner and student retention in the instructor's online courses. The literature review positioned a lack of emphasis on the instructor's personal experience as an online learner in relation to student satisfaction and retention, creating a gap in the literature. The research question and hypotheses below guided the present non-experimental, quantitative correlational study.

Research Question: To what extent does an online instructor's experience as an online student correlate to student retention in the instructor's online course?

H1$_0$: No significant correlation exists between an online instructor's experience as an online college student and student retention in a respective instructor's online course.

H1a: A significant correlation exists between an online instructor's experience as an online college student and student retention in a respective instructor's online course.

Theoretical Framework

The theories of servant leadership and social constructivism in online courses served as the theoretical framework for the study. Greenleaf's (1977) theory of servant leadership centers on leaders putting the needs, goals, and professional development of followers ahead of themselves. Warren (2016) stated leaders possess the ability to influence others to believe in the leader's vision, resulting in followers abandoning individual ideas to align with the leader's vision. Because instructors influence students to learn in an academic setting, instructors are leaders (Warren, 2016). Instructors, taking on the role of leaders, who demonstrate servant leadership behaviors, positively correlate with student satisfaction in an online environment (Sahawneh & Benuto, 2018). The practice of servant leadership on the part of the instructor encourages students to work towards being successful in school and in life (Chan, 2016).

Social constructivist theory, coined by Vygotsky (1978), is an integration of behavioralist and cognitive ideals related to learning. Social constructivist theory values collaborative learning through the social interaction of learners within the knowledge community (Amineh & Asl, 2015). Online instructors who provide an active, learner-centered online environment while demonstrating social constructivism portray a sense of caring (Robinson, Kilgore, & Warren, 2017). Cole et al. (2017) discussed student satisfaction was higher in courses with higher engagement and positive interactions with peers and the instructor. Student satisfaction led to higher retention and a desire to take future courses with instructors demonstrating a supportive and caring climate (Cole et al., 2017). Instructors demonstrating a supportive climate and caring attitude in an online course may be embracing servant leadership principles. There is research on

the learning theories of servant leadership and constructivism related to student satisfaction and retention. There is a gap in the literature exploring the instructor's personal experience as an online learner in relation to student satisfaction and retention.

Definitions of Terms

Throughout the research, specific verbiage referenced in studies associated with online learning and higher education were noted. There are key terms or words used within the present study commonly associated with higher educational institutions. The following definitions provide clarification for terms which are not common but are used in the study.

Online college students: College students acquire course content remotely utilizing a computer connected to the Internet (Graber & Chodzko-Zajko, 2014). The types of course content typically consist of readings, videos, weekly graded discussions, and assignments.

Non-traditional student: A student with characteristics such as delayed college enrollment, no high school diploma, part-time enrollment, financially independent, having dependents, and being a single parent (Conway, Hachey, & Wladis, 2016).

Retention: For the study, retention is defined as completing one course with a passing grade and proceeding to the next course (Ali & Leeds, 2009).

Self-efficacy: The belief in one's capabilities needed to organize and execute the essential actions required to produce results (Peechapol et al., 2018).

Adjunct Instructor: An instructor contracted to teach part-time at an institution of higher learning (Coughlan, 2015).

Assumptions

Products such as Survey Monkey assist researchers in conducting online surveys (Tao et al., 2017). Two factual questions were sent out via Survey Monkey to adjunct faculty who met specific criteria used to obtain a common baseline at the institution of study. Criteria for instructors to participate consisted of the following: faculty type, which illustrates adjunct versus non-adjunct instructors, school of general education, years within 2015, 2016, 2017, 2018, and 2019 as the hire date for the first term taught; and online faculty orientation completed. The online faculty orientation at the institution of study included policies and processes associated with academic affairs within the institution, navigation of the learning management system, and aspects of online pedagogy incorporating faculty presence and student engagement. Historical data extracted from the faculty management system at the institution of the study was used to produce the list of faculty.

Assumptions help to adapt one's thinking about the research study's problem, significance, and approach to contributing to a solution (Kivunja & Kuyini, 2017). There were four assumptions assumed to be true in the study. The first assumption was the two factual survey questions were answered correctly and truthfully. One factual question asked for the instructor's name, and the other factual question asked if the instructor had experience as an online learner, which was answered with yes or no. A definition of an online learner was provided to the participants for clarity. The second assumption was all historical data manipulated in the faculty management system of the institution of study was completed accurately. The third assumption was all historical data related to retention rates were assessed accurately. The last assumption was the anonymity of instructors was kept throughout the study.

Scope and Delimitations

The sample population was determined through self-selection. After reading over the recruitment letter and informed consent, participants of the target population decided to participate by providing their name and completing one dichotomous survey question through Survey Monkey. There was no need for a reliability test for the survey because the answers received from the survey instrument were derived from factual questions consisting of providing a name and yes or no. Callegaro, Murakami, Tepman, and Henderson (2015) found when participants are asked factual questions; respondents tend to answer with more reliability if presented as yes or no. There was confidence the sample population for the study shared similar characteristics to the entire population of adjunct instructors at the institution of study. Because the sample population was small, increasing the sample population, in turn, could increase external validity.

Two groups were analyzed in the study. Group A consisted of instructors with experience as an online learner, and Group B without experience. Historical data mined from the institution's faculty management system associated with both groups were analyzed. There was no influence or control over the data except for the interpretation of the retention rates. The retention rate associated with each instructor in both Group A and Group B was analyzed reflective of the research question using SPSS for Windows analysis program version 26. For reliability and consistency, after the data analysis was completed in SPSS, re-analysis was performed. The retention rates were recalculated twice for validity. The survey question presented to instructors was not used for data analysis in the study, resulting in no pretest or

randomly assigned participants assuming equality (DeMoulin & Kritsonis, 2009).

Limitations

The size of the study was a limitation. Reliability could be improved by increasing the sample size, or the number of independent variables could be increased to dismiss the lowest correlation to increase the alpha coefficient (DeMoulin & Kritsonis, 2009). For internal validity, having a common baseline of instructors was important. The baseline consisted of the same types of courses, the same average class size, the first course taught at the institution of study and completed the same faculty orientation. For future studies, the increase in size and variables should be considered.

Chapter Summary

Distance education has become the preferred learning method at many higher learning institutions (Allen et al., 2016). A problem with the preferred learning method is retention rates tend to be lower in online courses than face-to-face courses (Doe et al., 2017; Muljana & Luo, 2019; Nash, 2005). The purpose of the study was to examine the problem statement by investigating if a correlation existed with online instructors with experience as an online college student and retention rates in the instructor's online course. The results of the study may provide institutions in higher education valuable insight related to hiring and training online faculty.

In chapter two, the literature review consisted of student satisfaction and retention in an online environment, faculty perceptions of online learning, and online faculty training. The theoretical framework for the study focused on the theory of servant leadership and dimensions of social constructivism in online courses. The literature review positioned a lack of emphasis on

the instructor's personal experience as an online learner in relation to student satisfaction and retention, creating a gap in the literature. The study may contribute to the knowledge base by providing research to fill the gap.

Chapter three focused on the methodology framing the quantitative correlational study using a point-biserial correlation for a dichotomous categorical variable and continuous variable. Research design principles, research questions and hypotheses, target and sample population, and sampling strategy were discussed. Additional sections of chapter three consist of instrumentation, data collection, preparation, and analysis. The conclusion of chapter three discussed ensuring reliability and validity, as well as provisions for ethical assurances.

Chapter four presented the findings of the data collection and analysis while addressing the research question and hypotheses. A prelude to chapter five was provided and linked the problem statement to the findings. Chapter five addressed the purpose of the study, interpretation and conclusions of the findings and provided recommendations for further studies.

Chapter 2: Literature Review

Student enrollment in distance education continues to increase each year in higher learning institutions (Allen et al., 2016). Higher educational institutions measure student retention rates as a key metric of the institution's success (Millea et al., 2018). Since retention is vital to an institution's success, there is a concern with the increase in enrollments compared to student retention in distance education programs in higher education. The problem is retention rates in online courses are typically lower than retention rates in the same courses delivered in a face-to-face environment (Doe et al., 2017; Muljana & Luo, 2019; Nash, 2005). Lower retention rates contribute to lower completion rates in online courses compared to traditional face-to-face courses (Muljana & Luo, 2019). Research indicates positive student satisfaction can result in higher retention (Post et al., 2017). The purpose of the quantitative correlational study was to examine the relationship between online instructors with personal experience as an online college student and retention rates in the respective instructor's online course.

Throughout the literature review, concerns affecting student satisfaction and retention in online courses were identified. The concerns were related to online course design, academic rigor, method of delivery, cognitive and technological challenges, social connectiveness, and motivation (Bawa, 2016; Li et al., 2016). The theoretical framework for the research study focused on the theory of servant leadership and social constructivism in online courses. Servant leadership centers on leaders embracing service to followers putting the needs, goals, and professional development of the followers ahead of the leader (Greenleaf, 1977; Noland &

Richards, 2015). Social Constructivism values the process of social interaction of learners through cognitive functions within the knowledge community (Vygotsky, 1978).

The problem of lower student retention in online courses compared to face-to-face courses drove the completion of the quantitative correlational study. A quantitative correlational research design chosen for the research study aligned most effectively with the research question and confirmation of the hypotheses. The literature reviewed for the study focused on factors related to student satisfaction and retention in an online environment. Emphasis on student and faculty perceptions of online learning had significance in the research and hence, part of the literature review.

The study explored online retention rates in selected courses of online instructors with and without personal experience as an online college student. The main sections of the literature review consisted of student satisfaction and retention in an online environment, faculty perceptions of online learning, and online faculty training. The theoretical framework focused on the theory of servant leadership and dimensions of social constructivism in online courses.

Literature Search Strategy

Research for the literature review was completed through a variety of sources, including online college libraries and databases consisting of EBSCO, ERIC, Google Scholar, and the Online Learning Consortium research database. Much of the peer-reviewed articles and research studies related to the research study's problem were published within the last five years. Terms such as student satisfaction, retention, and attrition in an online environment, distance education, online education, online learning, faculty perceptions to online learning, servant leadership,

faculty training, and social constructivism were searched for the study relevant to the major topics. Other topics researched for the present study consisted of successful strategies to online learning, theories to online learning, online andragogy and pedagogy, instructor presence, and student motivation in online environments.

Theoretical Framework

The theoretical framework for the study had relevance to servant leadership. Servant leadership theory, coined by Robert K. Greenleaf in 1970, suggests great leaders be servants first as the key to one's greatness (Greenleaf, 1977). Leaders who practice servant leadership embrace service to followers. Such leaders put the needs, goals, and professional development of followers ahead of themselves (Greenleaf, 1977; Noland & Richards, 2015; Sahawneh & Benuto, 2018). Characteristics of servant leaders consist of listening actively, showing empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, and committing to the growth of others (Fields, Thompson, & Hawkins, 2015).

Instructors influence student learning in an academic setting. Warren (2016) stated leaders possess the ability to influence others to believe in the vision of the leader. Instructors are leaders, influencing students or follows to align with their vision to achieve the desired outcomes (Warren, 2016). Noland and Richards (2015) provided evidence of a relationship between instructors demonstrating servant leadership in the classroom and student outcomes. Instructors engaging in servant teaching had a positive correlation with student outcomes related to learning and engagement. Demonstrating servant leadership by putting the needs of the students first in the classroom was found to impact student development positively (Noland & Richards, 2015).

Sahawneh and Benuto (2018) concluded relationships exist between online student satisfaction and servant leadership behaviors of the instructor. The study consisted of 155 online students who completed the Servant Leadership Questionnaire and Student Evaluation of Teaching surveys. Using Spearman's correlations, a strong positive correlation between all servant leadership behaviors and student satisfaction was determined. Instructors demonstrating servant leadership behaviors positively correlated with student satisfaction in an online environment (Sahawneh & Benuto, 2018). The quantitative, correlational study argued servant leadership is a style of leadership with the potential to improve student satisfaction and retention in online learning (Sahawneh & Benuto, 2018).

Servant leadership applied to the present study emphasizing instructors' concern with the well-being of the students. Instructors leading the class provide care, concern, and support to the students with anticipated results of producing positive outcomes (Noland & Richards, 2015). Instructors practicing servant leadership focus on the needs of the student first, encouraging student development. Noland and Richards stated focusing on students first had shown evidence of higher confidence and a positive impact on student motivation. In an online environment, instructors practicing principles of servant leadership may be a good approach because online learners face unique challenges. Such challenges are social isolation and high attrition rates compared to learners in a face-to-face environment (Sahawneh & Benuto, 2018). The practice of servant leadership by instructors improves the overall academic environment (Russell, 2012). Chan (2016) discussed instructors practicing servant leadership provided students with encouragement, constructive feedback, and were by the side of the students who struggled. An

instructor practicing servant leadership provided mentorship and guidance to students while equipping the students with knowledge and skills (Chan, 2016). The practice of servant leadership has the potential to improve student satisfaction in online courses resulting in higher retention (Sahawneh & Benuto, 2018).

Along with servant leadership theory, the theory of social constructivism in an online environment aligned with the present research study and needs a mention. Lev Vygotsky (1978), a Soviet psychologist, coined the theory of social constructivism, accentuating collaborative learning. Vygotsky (1978) argued all cognitive functions originate through social interactions being process learners integrating into a knowledge community. Social constructivist theory is an assimilation of both behavioralist and cognitive ideals relevant to learning. Watson (1913) coined the term behaviorism contending students learn through stimulus and response versus the mind and consciousness (Picciano, 2017). Cognitive theorists recognized the mind plays an essential role in learning as related to environmental stimuli and student responses associated with motivation and imagination (Picciano, 2017). Another major contributor to the social constructivist theory other than Vygotsky was Piaget. Piaget (1977) asserted learning does not occur passively; rather, learning occurs by active construction of meaning. Vygotsky believed learning is mediated by social aspects and not through development alone; whereby, Piaget believed development precedes learning (Amineh & Asl, 2015).

Active learning in an online learning environment is dependent on students and instructors socializing, collaborating, and interacting by sharing ideas and information (Mbati, 2012). Teaching and learning are interactive social approaches between teachers and students,

with teachers facilitating and presenting content in various ways and perspectives (Karkar-Esperat, 2018). In an online environment, instructors encourage a social environment for learners to interact and share the knowledge necessary to complete assignments (Picciano, 2017).

Cheng and Chau (2016) completed an empirical study surveying 78 undergraduate students partaking in a hybrid general education course. All students had to participate in specific online activities within the course. The study first explored the relationship between each student's learning styles and the student's participation in the course. Cheng and Chau then explored the relationship students' online participation had with achievement and course satisfaction. The results of the study were two-fold regarding effective online learning. Students were more satisfied participating online when the assignment or engagement was related to the student's preferred learning style. Students taking part in a constructivism and socially interacting environment were more satisfied than students who did not take part in such an interactive environment (Cheng & Chau, 2016).

Pruitt (2017) examined a constructivist approach of the instructor and the constructivist process of students. Pruitt's qualitative study compared two sections of child development courses. One section was face-to-face, and one was online both with curriculum similarly designed following principles of constructivist education. The face-to-face course had 19 students enrolled and the online course had 11 enrolled students. A portion of each group of students completed surveys for the study as part of the methodology. Pruitt concluded constructivist principles could be employed in both face-to-face and online courses similarly.

The study recognized constructivist principles served to facilitate the construction of knowledge online in a manner face-to-face courses cannot (Pruitt, 2017).

Research associated with social constructivism helped identify opportunities for collaboration between students and instructors. As Robinson et al. (2017) suggested, social constructivism is not easy to implement in the classroom. Online instructors need to understand theories and principles related to constructivist pedagogy to provide an active learner-centered environment. From a student perspective, instructors demonstrating social constructivism portray a sense of caring (Robinson et al., 2017).

Servant leadership and social constructivism aligned well with the present study. Demonstrating a supportive climate in an online course was part of the study's examination of online adjunct instructors with experience as an online college student. Instructors practicing servant leadership embrace service, put the needs, goals, and professional development of the followers ahead of themselves (Noland, & Richards, 2015; Sahawneh & Benuto, 2018). Student satisfaction has a strong positive correlation with servant leadership behaviors (Sahawneh & Benuto, 2018). Whereas, social constructivism theorizes increased student satisfaction is attributed to engagement and interaction on the part of instructors and peers (Picciano, 2017). Students actively involved in classrooms promoting social constructivism, with interaction is becoming crucial in learning (Amineh & Asl, 2015).

Research Literature Review

Distance education has become a preferred modality of many higher educational institutions, with students taking more than one-quarter of courses online (Allen et al., 2016).

Enrollments in distance education continue to increase year over year, growing faster than in the past several years (Seaman, Allen, & Seaman, 2018). With the increase of students enrolling in online courses, the total number of students not taking any distance education courses dropped by over a million students between 2012 and 2016 (Seaman et al., 2018). With the increasing enrollment in distance education, hiring credentialed and qualified faculty to teach courses online is an ongoing process. Academic leaders surveyed for pertinent information related to distance education reported slightly over 60% felt faculty accept online learning as valuable and legitimate (Allen et al., 2016). Faculty who accept online learning as a valuable option in education understand appropriate faculty presence is essential to student satisfaction. Online instructors' presence, personal contact, and communication has an impact on learning and influencing student satisfaction (Ladyshewsky, 2013).

Student satisfaction is of importance for positive student satisfaction can result in higher retention (Post et al., 2017). The notion of positive student satisfaction resulting in higher retention is true in both online and face-to-face class instruction. Page and Kulick (2016) further explored online student satisfaction and retention sampling 2729 students who completed the Priorities Survey for Online Learners (PSOL). The survey results collected in an online for-profit undergraduate institution found no significant relationships between overall satisfaction, referring to the PSOL questions and subsequent retention status one year later (Page & Kulick, 2016). The study concluded student satisfaction is not a significant predictor of subsequent student retention. Students who are satisfied or dissatisfied with one aspect of the institution,

such as faculty presence, are likely to respectively be satisfied or dissatisfied with all other aspects of the institution (Page & Kulick, 2016).

Although both online and face-to-face instruction are effective, some students thrive in an online modality while others languish (Cole et al., 2014). Online students are more satisfied with the online experience when positive interactions with fellow students and the instructor take place (Cole et al., 2014). Enhancing an integrated support system for online students and faculty have made an impact on improving retention rates in community colleges (Travers, 2016). Colleges and universities should seek to find opportunities to support both students and faculty to increase satisfaction and retention. Supporting students with a student orientation before starting online courses designed to encourage interaction with peers and instructor increase retention (Travers, 2016). Students and faculty who understand the importance of interacting with each other in an online course have a sense of connection. Post et al. (2017) stated online students feeling connected to faculty have higher retention rates than online students not feeling connected. Student's perceptions of feeling connected are associated with interaction with faculty and faculty caring (Post et al., 2017).

Servant leadership, as the theoretical framework, was evident in the present study. There are several studies on student perceptions of online learning, student satisfaction to online learning, and characteristics of an online learner related to student success (Kauffman, 2015; Millea et al., 2018; Phirangee, 2016). Due to challenges students face in an online environment such as a feeling of social isolation, servant leadership has the potential to improve student satisfaction and retention (Serdyukov, 2015). Instructors with a passion for teaching in an online

environment believe fostering relationships with students, along with demonstrating empathy, are essential to student success (Bailey & Card, 2009).

The Babson Survey Research Group, documenting online higher education in the United States, found 29.1% of chief academic officers believed faculty accept the value and legitimacy of online education (Allen et al., 2016). There are many studies analyzing faculty perceptions of online learning and teaching. Wingo, Ivankova, and Moss (2017) completed one analysis reviewing 67 empirical studies published between 1995 and 2015 related to faculty teaching online. The review found factors influencing faculty's perceptions of online teaching included support, experience, volunteerism, image, job relevance, and output quality (Wingo et al., 2017). Another study analyzing the levels of importance to five specific characteristics of the online teaching environment resulted in different factors. Online faculty responded to the reliability of technology as most important with the accessibility of students to the online course as the second (Walters, Grover, Turner, & Alexander, 2017). Participants consisting of 87 faculty members from a southwestern state public university, concluded faculty who had successfully taught courses online were advocates for distance education, while faculty who had not taught online had reservations to distance education (Fish & Gill, 2009).

Themes researched for the study included student satisfaction and retention in an online environment, faculty perceptions related to online learning, and servant leadership theory. The theme of student satisfaction in relation to student retention presented subthemes of faculty presence, and motivation. Students who were motivated and have self-efficacy were more successful in online learning (Peechapol et al., 2018). How the instructor perceives online

learning as an effective learning and teaching method influenced student satisfaction levels (Allen et al., 2016; Bunk, Li, Smidt, Bidetti, & Malize, 2015). Because faculty perceptions towards online learning have an influence on student satisfaction, faculty perceptions were included in the literature review. Faculty perceptions provided the foundation for the subthemes of class size, social constructivism, empathy, and faculty training in an online environment.

Online Student Satisfaction and Retention

A key metric of higher educational institutions' success is the measure of student retention rates (Millea et al., 2018). Retention rates have posed a challenge for institutions offering online courses with student course withdrawal rates being 10 to 20% higher than withdrawal rates in face-to-face courses (He, Xu, & Kruck, 2014). Students with positive satisfaction with online courses tend to result in higher retention (Post et al., 2017). Institutions offering online courses should focus on student satisfaction in the online environment. Focusing on student satisfaction specifically in online courses can be a challenge for institutions providing different learning modalities such as face-to-face, online, and hybrid methods of instruction. Platt, Raile, and Yu (2014) concluded student satisfaction levels varied based on the level of experience the student had in an online environment. Students with no previous online experience stated there was more interaction in a face-to-face course versus an online course. Students with previous online course experience had positive and favorable views of overall interaction in the online class (Platt et al., 2014). Positive interaction between students and instructors has been shown to be a factor in student satisfaction in online learning. A survey of 138 online undergraduate and graduate students at a medium-sized state university depicted a

positive correlation between instructor and student interaction and student success and outcomes (Lammers & Gillaspy, 2013). A qualitative research study surveying nine online nursing students suggested online students feeling connected to instructors had higher retention rates than online students not feeling connected (Post et al., 2017). Two main themes emerged from the Post et al. (2017) study consisting of students' perceptions to value in an online classroom and faculty caring. A subtheme of student perceptions related to connectedness with instructors emerged (Post et al., 2017).

Finding factors influential to an online student's satisfaction and the decision to not drop a course or not drop out completely is key to retention. If an institution can determine which factors are prevalent with increasing student satisfaction, faculty training on embracing those factors to increase student satisfaction are crucial (Martin & Bolliger, 2018; Page & Kulick, 2016). Yu-Chun, Walker, Belland, and Schroder (2013) found significant predictors which influenced student satisfaction were student interaction with instructors, content in the course, and internet self-efficacy. Students feeling unprepared in using the technology associated with the learning management system and other software embedded in courses, could be essential to student satisfaction and success (Pomerantz & Brooks, 2017). These student concerns associated with student dissatisfaction could be an advantage to institutions who have instructors with personal experience as an online learner. Having experience as an online learner may result in a sense of empathy, understanding, and connectedness of the student experience in an online environment. Instructors with personal experience as an online learner can empathize with student concerns while providing guidance and motivation. Manasia and Chicioreanu (2017)

assessed empathy levels of future teachers and found a complex relation between virtual empathy and real-world empathy with teachers understanding another's emotional state or context. Other positive impacts on student satisfaction were course structure, availability of tutors, and the quality of technology used in the online course (Harsasi & Sutawijaya, 2018). The instructor's understanding of individual students' needs further impacted student satisfaction (Rios et al., 2018).

Cole et al. (2014) contended the absence of interaction with instructors and peers was a common reason for student dissatisfaction in online courses. With the research conducted by Cole et al. (2014), instructors needed to find methods to increase faculty presence, promoting peer-to-peer interaction in online courses with social constructivism methods. Increasing faculty presence provided students with a feeling of interaction and engagement with the instructor and peers. Student's perception of the relationship between instructor and student may predict the likelihood of a student to enroll in another online course (Cole et al., 2017). Building the student and instructor relationship was vital in building a sense of trust within the class. Gehlbach (2017) found students conveying anxiety with socializing for fear of ridicule from peers, had a difficult time learning in a socially connected environment, such as distance education. Instructors need to motivate students, selecting learning strategies to offset these fears. Instructors with experience as an online learner understand the significance of motivation in an online class more than an instructor with no online learning experience.

There is a counterargument that higher retention rates are not solely based on student satisfaction. Franklin (2015) shared students who are more satisfied with the overall educational

experience may become less likely to withdraw. Furthermore, determinates other than student satisfaction can contribute to retention. Such determinates associated with student retention in an online modality related to low GPA, high loan balance, and repeat drops, meaning students who had withdrawn previously in courses (Franklin, 2015).

Faculty Presence

One impact to student satisfaction and retention in an online environment is faculty presence. Garrison et al. (1999) introduced a model called community of inquiry. The model established three elements essential in learning and teaching: cognitive presence, social presence, and teaching presence. Cognitive presence relates to the student's ability to critically think and effectively communicate with peers and instructors. The element of social presence in learning and teaching is noted when students share emotion, have open communication, and interact within the community of learners (Kanuka & Garrison, 2004).

Teaching presence demonstrates instructional management and instructional skills to build student understanding resulting in success (Garrison et al., 1999). In an educational setting, the binding element in creating a community of inquiry was teaching presence, for appropriate cognitive and social presence was dependent upon the presence of a teacher (Garrison et al., 1999). Two main functions of teaching presence consist of design and facilitation. Design relates to the structure, content, and organization of the course. Facilitation related to establishing the conditions for learning through communication prompts, feedback, and support (Armellini & De Stefani, 2016). Faculty teaching predeveloped courses may not focus attention on the design of the course, because the instructor contributed no input to the master course design. The focus

should be on faculty presence when facilitating the course. When faculty focused on presence in the course, an increase in cognitive learning took place (Armellini & De Stefani, 2016).

Armellini and De Stefani (2016) suggested an adjustment to the framework of Garrison et al. (1999) model called community of inquiry, which established three elements essential in education. Although all three elements were still noted as essential by Armellini and De Stefani, social presence was revered as the more prominent element of the three. This adjustment, making social presence the more prominent of the three elements, was suggested because teaching presence and cognitive presence had become more social in relation to engagement, sense-making and peer support (Armellini & De Stefani, 2016). The element of social presence encourages engagement and peer support. Vygotsky (1978) argued all cognitive functions are a product of social interactions where learners integrate into a knowledge community. The knowledge community is dependent on students and instructors socializing, interacting, and collaborating in an active learning environment (Mbati, 2012).

Faculty presence is essential in the knowledge community and researched to be a factor of student satisfaction in an online course. Schroeder, Baker, Terras, Mahar, and Chiasson (2016) found online graduate students' desired and experienced more connectivity with instructors who engaged students in the course. Instructors perceived as having more presence in the course fulfill the desire of connectivity with students resulting in higher student satisfaction. Students value instructors who engage students in the course regardless of the instructor's professional experience (Buzwell, Farrugia, & Williams, 2016). Conclusions of Cutsinger, Wall, and Tapps' (2018) study of 65 students completing a 15-question survey found students' perception of

instructor presence was the same in both online and face-to-face courses. Students indicated similar instructor encouragement, facilitation, feedback, assistance, and guidance in both an online course and face-to-face course was received (Cutsinger et al., 2018).

Another finding was instructor presence related to timely feedback on assignments and getting to know the instructor personally was of great importance in an online course (Cutsinger et al., 2018). Instructors who have experience teaching online understand the importance of engaging students. Students enrolled in online courses desired engaging opportunities, understanding, and personal presence of online instructors (Schroeder et al., 2016). Experienced online instructors understand the importance of increasing presence in the online classroom. Faculty presence can be achieved by creating an environment where students perceive to be supported and confident (Robinson et al., 2017).

Motivation

Characteristics of online learners tend to consist of non-traditional learners who work while attending college, have delayed college enrollment after graduating from high school or have a GED, female, married with other responsibilities or active military (Conway et al., 2016; Wladis, Hachey, & Conway, 2015). Many online learners tend to be first-generation college students, meaning family members preceding these students do not have any college experience. Being a first-generation college student may be challenging for the student with little guidance or understanding from the family of how to be a successful college student. Self-direction and self-motivation are key aspects of such students. Factors associated with online learning such as the time needed to complete assignments, lack of relatable content in course materials, and

difficulties understanding how or where to access resources and support create motivational constraints (Bawa, 2016). These factors associated with online learning are factors an instructor with experience as an online learner can relate with students. Providing encouraging motivation can be helpful to student satisfaction. Students with experience in an online environment achieving higher grades have shown a correlation with self-direction and self-motivation related to the student's success (Serdyukov, 2015; Travers, 2016). The same conclusion was found in face-to-face courses (Conway et al., 2016). For online learners, having self-motivation is essential, along with motivation from instructors. Peechapol et al. (2018) research found self-efficacy was particularly important in challenging learning environments such as online learning. Having self-efficacy attributed to success in an online learning environment. Many online courses follow a constructivist approach leaving students overwhelmed with individually solving problems when only provided content and aids within the course (Bawa, 2016). With no motivation provided by instructors, students not feeling comfortable with the constructivist approach may experience demotivation, forcing students to quit (Bawa, 2016).

Faculty engagement is a vital contributor to motiving student performance in an online class resulting in student satisfaction (Martin & Bolliger, 2018). There is significance in faculty motivating students to complete work on time each week to be successful. In addition, motivating students is an essential component of social connectiveness. Students who fear the social aspects of attending class have a difficult time learning, for social connectedness and motivation are prerequisites for desired learning (Gehlbach, 2017). Without motivation in an educational setting, establishing goals and pursuing such goals may be difficult for some

students. Furthermore, students more socially connected to instructors and classmates tend to engage more significantly and have higher achievement than less well-connected peers (Gehlbach, 2017).

For many students, the experience of online learning is quite different from face-to-face learning. Students in an online environment need appropriate levels of self-motivation, instructor, and peer motivation, along with time management skills, to become successful independent learners. If an instructor does not see the value of online learning or motivation to become a better online instructor, motivating students online may be scarce. Pomerantz and Brooks (2017) presented an Educause quantitative study with results of 11,141 survey responses from faculty from 131 U.S. institutions. According to the 2017 Educause survey, only nine percent of instructors surveyed preferred to teach online courses. One reason instructors did not prefer to teach online was due to not having experience in an online environment nor having the time to learn (Pomerantz & Brooks, 2017). If instructors are not motivated to learn how to be a better online instructor, the desire to motivate students to be successful online may decrease.

Motivation can have both intrinsic and extrinsic factors. To provide a more specific context on intrinsic and extrinsic self-motivation on the part of the student, Eom and Ashill (2016) completed a qualitative study with 72 students who have completed at least one online course at a university in the Midwestern United States. The results of the study showed no significant relationship with students' intrinsic motivation related to the overall usability and satisfaction in online courses. Students' intrinsic motivation did have a significant relationship with learning outcomes (Eom & Ashill, 2016). Interesting to note, instructors practicing servant

leadership emphasized the importance of validating student intrinsic value by helping students generate personal goals to succeed (Noland & Richards, 2015). As related to extrinsic student motivation, Eom and Ashill (2016) found no significant relationship to learning outcomes or overall satisfaction. The study mentioned above recognizes an opportunity for instructors to influence student intrinsic and extrinsic motivation. The instructor's influence may effectively improve satisfaction in the course. Instructors with experience teaching online or with experience as an online learner can present past successful strategies and understanding of online learning. Such an approach may stimulate engagement and goal setting to increase student motivation. Servant leadership can be noted in such an approach as faculty who express concern for student's well-being provide support and motivation (Noland & Richards, 2015).

Faculty Perceptions of Online Learning

Instructors who have taught for many years in the traditional face-to-face format hold to the traditional pedagogy and experience of teaching face-to-face. These instructors typically have little knowledge of technology and little desire to master new methods of online learning. Such instructors lack motivation, perseverance, learning skills, and work ethic needed to master new pedagogy for the online learner (Serdyukov, 2015). The lack of knowledge and comfort level with technology coupled with instructors' perceptions of the value of online education plays a significant role in a willingness to teach online (He et al., 2014). Instructors' comfort level teaching traditional face-to-face courses with traditional pedagogy results in a preference for not teaching online (He et al., 2014).

Understanding faculty perceptions related to online education is important to academic leaders who plan to offer online programs (Wingo et al., 2017). Faculty teaching courses online have concerns about apparent obstacles students have to be successful in online classes (Kebritchi, Lipschuetz, & Santiague, 2017). Such obstacles related to student success in online education are student's discomfort using technology, the perception of online education being self-directed, lack of time management skills, and preferring courses in a face-to-face modality versus an online modality (Cole et al., 2017). Furthermore, faculty have concerns related to the management of high enrollments in online courses, technical support, and uncertainty about faculty image as an online instructor (Wingo et al., 2017).

Walters et al. (2017) completed a study on faculty satisfaction of teaching pre-developed online courses. The study analyzed satisfaction relative to the number of years the instructor taught online, the number of online courses the instructor developed, and if the instructor taught a fully online program (Walters et al., 2017). The study found instructors with greater experience teaching online had higher confidence and satisfaction levels compared to instructors with fewer years of online teaching. In addition, the study found instructors with greater experience teaching online described student engagement to be higher in the online course the instructor taught (Walters et al., 2017). The study had no mention of instructors having personal experience as an online learner. There was no mention of online training faculty received before or during the years of teaching online.

There is a high level of skepticism to online learning among faculty, despite the growth in distance education over the past decade (Wingo et al., 2017). Luongo (2018) conducted an online

survey capturing responses of 17 full-time and part-time instructors related to faculty satisfaction and perceived barriers to online learning. The study found faculty perceived barriers to teaching online as poor compensation for time, workload needed to prepare, increased class sizes, inadequate training and resources, lack of promotion and tenure guidelines, lack of support, lack of experience with online teaching, and fear of teaching online (Luongo, 2018).

Chiasson, Terras, and Smart (2015) examined faculty experiences developing and teaching a course online after doing the same in a face-to-face modality. Many of the participants taking part in the study felt more work was involved in developing and teaching the course online. Participants made note students in online courses require more clarity and detail to complete assignments. Chiasson et al. (2015) found class size comes into consideration with faculty satisfaction. The larger the class size, the more work was needed to provide substantive feedback to students. In addition, faculty teaching online expressed a sense of isolation compared to teaching face-to-face. Interesting to note, the feeling of isolation was a factor in student dissatisfaction to online learning (Huss, Sela, & Eastep, 2015; Kauffman, 2015; Phirangee, 2016). Participants discussed the feeling of being sidelined versus part of the learning community when teaching online courses (Chiasson et al., 2015). There was no mention of faculty being online learners before teaching online.

Although there are many studies discussing faculty perceptions, skepticism, and barriers to online learning, other studies illustrated positive faculty perceptions. Results of a survey completed by 152 universities part-time and full-time faculty discussed feelings of excitement, outweighed feelings of fear, related to teaching online (Bunk et al., 2015). Participants consisting

of 12 experienced higher education online faculty reported online courses offered more flexibility, access, and convenience versus the traditional face-to-face method of instruction (Graham, 2019). Graham's (2019) phenomenological research study focused on faculty who began teaching face-to-face, taught online, and then transitioned back to a face-to-face teaching modality. The experience teaching online provided these instructors with essential experience in peer-based learning techniques imposing students to comprehend and gather information independently. When transitioning back to face-to-face teaching, the participants modified teaching practices reflective of the peer-based learning environment. The participants argued peer-based learning resulted in communication and teaching more effective than the traditional teacher-centered environment (Graham, 2019).

Wingo et al. (2017) analysis of 67 empirical studies focused on faculty teaching online. Many of the empirical studies suggested instructors who gained experience in an online environment adapted well and were grateful when institutions provided recognition of the instructor's success. Online instructors found satisfaction in teaching online and valued flexible schedules, professional development opportunities in mastering new technology (Wingo et al., 2017). One conclusion of the multiple case study approach completed by Baran and Correia (2017) was online instructors found satisfaction interacting with nontraditional students. The instructors in the study emphasized the importance of providing online educational opportunities to non-traditional students.

Class Size

Because online courses allow for higher student enrollment compared to the traditional face-to-face format, class size is often a faculty and student concern (Luongo, 2018). High enrollment courses may be a challenge for instructors to manage effectively, provide support, and needed interaction (Kauffman, 2015). Students may find challenges with interacting individually with peers in a high enrollment course. There is a negative impact on high enrollment courses and satisfaction on both student and instructor (Kauffman, 2015).

Class size does have a relationship to satisfaction for both students and faculty. A study examining satisfaction levels of full-time and part-time faculty teaching online noted class size was a barrier to teaching courses online (Luongo, 2018). Furthermore, students identified dissatisfaction with class size. Regardless of a student's academic capabilities, discrepancies between expectations of independent learning and class size were suggested (Ang, Lee, & Dipolog-Ubanan, 2019). Such discrepancies can lead to dissatisfaction with the students' overall experience in the course. There is importance in supporting faculty in overcoming obstacles related to large class sizes in an online course. Providing best practices and training to overcome challenges of large class size for online instructors is an area of opportunity to help increase satisfaction levels.

Millea et al. (2018) evaluated factors of retention, including average class size and performance in general education courses. The quantitative study conducted with over 1200 university students at one midsized university in the southeastern part of the United States, evaluated factors related to online learning, including class size in relation to student

performance in general education courses. The conclusion of the study had a different perspective. There was no significant difference in student performance or retention in relation to class size. Retention rates were higher for students performing well in class due to better academic preparation or receiving merit-based or athletic scholarships (Millea et al., 2018). In the present study, all general education courses taught online had an average class size of 30 students.

Social Constructivism

Social Constructivism values the process of social interaction of learners through cognitive functions within the knowledge community (Vygotsky, 1978). Within an educational setting, social constructivism is demonstrated when instructors consider the student's knowledge and allow the students to put knowledge into practice in a socialized manner (Amineh & Asl, 2015). Social constructivism is prevalent in traditional face-to-face classrooms but occurs in online classrooms. In an online classroom, collaboration takes place in discussion forums, video conferencing, or blogs, both synchronously and asynchronously (Mbati, 2012). By socializing, interacting, and sharing ideas between students and instructors, active learning takes place.

Through social constructivism, students learn the course content reflecting on personal experience and experience of others in the classroom. Instructors need to be conscious of the student's ability to share, retain, and reflect on knowledge for better learning outcomes (Amineh & Asl, 2015). The more interaction and engagement in the classroom, the higher the rate of satisfaction occurs (Picciano, 2017). For instructors to facilitate an engaging environment, there is a need to practice social constructivism. The instructor needs to understand and practice

theoretical principles, and constructivist pedagogy, for students to have a learner-centered environment for active learning (Robinson et al., 2017). Instructors with minimal online teaching experience quickly understand interaction and collaboration in an online course are much different from a face-to-face classroom. Online teaching requires different methods and strategies than instructors have used in face-to-face classroom environments. Instructors recognize not having the ability to see if students understand the content can be challenging. The role of the instructor in an online course is to focus on encouraging student development by stimulating constructivist learning (Mbati, 2012). Faculty need to encourage interaction through engaging processes, provide prompt feedback and assessment, and ensure students have competence in using technology (Mbati, 2012). Such encouragement is reflective of servant leadership. Instructors who put students first, emphasizing student development as a priority along with student welfare, is a practice of servant leadership (Noland & Richards, 2015).

Noland and Richards' (2015) research provided evidence a positive relationship exists between instructors practicing servant leadership and student learning and engagement. In the same study, findings were instructors practicing servant leadership had a negative relationship with student motivation and affect (Noland & Richards, 2015). The study concluded servant leadership does not focus on attitudinal learning of students but on student outcomes. In social constructivism, the value is on social interaction and student learning through engaging cognitive functions within the knowledge community (Vygotsky, 1978). Motivation is still an essential aspect of social constructivism for students who fear the social aspects of attending class may have a difficult time succeeding. Instructors need to find the right balance in practicing servant

leadership and social constructivism in the classroom. Gehlbach (2017) found social connectedness and motivation were prerequisites for desired learning. Building a sense of community through student to peer and student to faculty interactions are part of the instructor's role in keeping students feeling less isolated (Phirangee, 2016).

Empathy

Characteristics of instructor servant leaders consist of the ability to listen actively, show empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of others, and build a community (Fields et al., 2015). The characteristic of empathy is an attribute of individuals seeking to improve the human experience (Matthews, Williams, Yanchar, & McDonald, 2017). Empathy is of significance as cultural awareness in society is increasing in a global society (Matthews et al., 2017). With distance education being available as a global commodity, cultural awareness has increased more in higher education. Instructors in an online environment believe fostering relationships between instructor and student, along with demonstrating empathy, is of importance to help students be successful at the university level (Matthews et al., 2017).

A phenomenological study of South Dakota online instructors described the success of students was associated with the instructors' passion for teaching, empathy, and overall desire to help students achieve success (Bailey & Card, 2009). One of the benefits as an online learner in higher education is the opportunity to interact with individuals from a variety of cultural and ethnic backgrounds. Unfortunately, the same online environment can present a challenge for culturally unaware faculty not prepared to interact with diverse student class enrollment.

Although faculty may have the best intentions, a lack of empathy between faculty and students and vice versa is highly likely with a significantly diverse enrollment (Bawa, 2016).

Vann (2017) completed a phenomenological study with twelve expert online instructional designers indicating empathy towards adult learners was an important notion to recognize. The importance of providing opportunities for empathy in the course design, and strategies for instructors to reflect on empathy centered on diverse student enrollment, emerged from the study (Vann, 2017). Opportunity for strategies to develop and increase empathy in both the course design and with instructors can aid with the experience of an online learner. Displaying empathy towards students is possible with few resources if not available in the course design. Showing a caring attitude or referencing personal experience enables instructors to connect with students with a sense of understanding of the learners' struggle or frustration within the course (Matthews et al., 2017).

Faculty Training

Most institutions with online programs rely heavily on adjunct instructors to teach online courses due to the financial motives of cost-saving measures (Franklin, 2015). In higher learning institutions, over 68% of instructors teaching students were adjunct faculty instead of full-time faculty (Hanson, Savitz, Savitz, & Rauscher, 2018). Hiring the right credentialed adjunct instructor with specific attributes and skills to increase student satisfaction is imperative to student retention. Portugal (2015) found not all faculty possess attributes and essential skills to be an effective instructor in an online environment. Before starting a career in academia, many instructors may have spent years of experience serving as practitioners in specific areas of

expertise (Hanson et al., 2018). For such instructors, training and development may be more intensive, focusing online pedagogy on being effective in the classroom. Successful online instructors manage time well, deal effectively with troubled students, and provide timely feedback (Portugal, 2015). Instructors with experience teaching online understand the importance of engaging students through faculty presence, creating an environment where students feel supported and confident (Robinson et al., 2017).

Understanding faculty perspectives and beliefs related to teaching online courses help determine training needs and professional development of faculty. Bringing the origin of faculty beliefs into the consciousness of the instructor can be a good start in developing successful online teaching (McQuiggan, 2012). Some instructors teaching online courses for the first time find challenges in determining what types of interaction may be most effective in an online course compared to the type of interaction used in a face-to-face course (Phirangee, 2016). Online teaching requires a different approach and strategy to achieve a sense of community through interaction. By providing a sense of community, both instructors and students do not sense a feeling of isolation. Phirangee (2016) found faculty need to create specific types of positive communication to interact with online students resulting in richer online discussions.

In 2011, according to the Online Learning Consortium, six percent of higher education institutions surveyed did not provide training or mentoring programs for faculty teaching online (Allen & Seaman, 2011). A similar survey conducted in 2018 by Learning House and the American Association of State Colleges and Universities shared information on online faculty training. The 2018 survey stated 97% of the institutions taking part in the survey provided

faculty training related to the learning management system used to facilitate courses. Ninety percent surveyed provided pedagogical training, with only 34% providing formal or standardized training (Magda, 2019).

Inadequate training and resources for faculty teaching online have an impact on faculty satisfaction. Institutions providing distance education should not make assumptions all instructors can teach effectively online. Instructors need guidance and training on the importance of factors associated with student satisfaction, such as interacting with students early and consistently, and constructive, clear, and prompt feedback (Miller, 2015). Eight award-winning online faculty members from across the United States highlighted online faculty training. The study suggested online training needs to address the challenges associated with student learning, best practices used in online pedagogy, new technology, and engagement strategies (Martin, Budhrani, Kumar, & Ritzhaupt, 2019).

A phenomenological study by Bailey and Card (2009) conferred instructors believe fostering relationships with students is an essential and effective practice for online teaching. Instructors noted empathy for students, passion for teaching, and desire to help students be successful as key to faculty and student satisfaction (Bailey & Card, 2009). Challenges arise when institutions do not provide training and support with a focus on social constructivism, technology, and online pedagogy. Focus on empathy and servant leadership in training sessions can provide instructors teaching online a better edge in student satisfaction. Sahawneh and Benuto (2018) published a quantitative correlational study of 155 online students who completed a survey at a major community college in the southcentral United States. The study examined

relationships between facets of perceived servant leadership style of instructors and student satisfaction. The results of the student responses through a Spearman's correlation showed a strong positive correlation between the instructor's behaviors associated with servant leadership style and student satisfaction (Sahawneh & Benuto, 2018).

Portugal (2015) completed a phenomenological study with faculty who taught online for at least three years, examining online faculty experiences and factors associated with job burnout and stress in master's programs in education. The lack of value-based training such as effectively managing student behaviors, providing useful feedback, and time management skills were more desirable by instructors than training received in the use of software and other related technology for online courses. Buzwell et al. (2016) surveyed 525 first-year psychology students assessing which characteristics students' value in instructors teaching online. The instructor characteristics rated as least important were being an active scholar and working professionally in the subject matter taught. Buzwell et al. (2016) reported students' most desirable instructor characteristic was formal training in teaching along with credentials in the discipline instructors are teaching. Post et al. (2017) found a caring attitude of the instructor and student interaction as desirable instructor characteristics by students. These findings coincide with the instructor's desire for more value-based training versus technology training when teaching courses online. Value-based training for faculty provides new recommendations to facilitate a socially interactive environment for learners. Faculty need training on how to encourage and support active learning in online courses (Picciano, 2017).

Gap in Literature

Both student and faculty characteristics related to retention in online courses have been studied throughout the years. Much research concludes student satisfaction has a strong positive correlation with servant leadership behaviors (Sahawneh & Benuto, 2018). A servant leader embraces service, puts the needs, goals, and professional development of the followers ahead of themselves (Greenleaf, 1977; Noland & Richards, 2015; Sahawneh & Benuto, 2018). Instructors practicing servant leadership in the classroom improve the overall academic environment (Russell, 2012). Servant leadership has the potential to improve student satisfaction in online courses resulting in higher retention (Sahawneh & Benuto, 2018). Instructors who display characteristics of a servant leader with a caring attitude, and share personal experience, have a better connection with students (Matthews et al., 2017). Throughout the literature review, the lack of emphasis on an instructor's personal experience as an online learner in relation to student satisfaction creates a gap in the literature. The present study may help to close the gap in the literature by examining the relationship between online instructors with experience as an online learner and retention rates.

Literature Review Summary

The main themes of the literature review consisted of student satisfaction and retention in an online environment and faculty perceptions of online learning. The theme of student satisfaction related to student retention with subthemes of faculty presence and motivation were presented. Student satisfaction is of great importance for positive student satisfaction can result in higher retention (Post et al., 2017). Retention is a key metric of higher educational institutions' success (Millea et al., 2018). Faculty presence is essential in the knowledge community and a

factor of student satisfaction in distance education. Engagement is attributed to faculty presence, a vital contributor to motiving student performance in an online class, leading to student satisfaction (Martin & Bolliger, 2018). Instructors with experience as an online learner may understand the significance of faculty presence and motivation in an online class more than an instructor with no online learning experience.

Perceptions of faculty provided the foundation for the subthemes of class size, social constructivism, empathy, and faculty training in an online environment. Faculty perceptions of online learning vary based on experience teaching in an online environment. Some faculty perceived skepticism or barriers of online learning and teaching relate to the lack of experience in an online environment or with new technology. Others found online learning and teaching to be satisfying with flexibility, convenience, and professional development opportunities. Faculty perception of class size has shown to have a relationship to dissatisfaction for both students and faculty. Supporting faculty in overcoming obstacles related to large class sizes in an online course is significant. Research further discussed class size as an important aspect of social constructivism with more interaction and engagement in the classroom, resulting in higher satisfaction (Picciano, 2017). The research concluded instructors practicing aspects of social constructivism have a learner-centered environment conducive to active learning (Robinson et al., 2017).

Faculty training in online pedagogy and technology has shown to provide higher satisfaction with both students and faculty. Portugal (2015) found not all faculty possess attributes and essential skills to be an effective instructor in an online environment. With

Portugal's findings, providing faculty with training in online pedagogy, new technology, and empathy concepts related to the importance of cultural awareness in an online environment. Such training was found to be imperative to student satisfaction.

The theoretical framework for the present research study focused on the theory of servant leadership embracing service, putting the needs, goals, and professional development of the followers ahead of the leader (Greenleaf, 1977; Noland, & Richards, 2015; Sahawneh & Benuto, 2018). Instructors possess the ability to influence students in the learning process. The ability to influence others resonates with being a leader. Leaders possess the ability to influence others in believing and aligning with the leader's vision (Warren, 2016). Social constructivism was further explored as a subtheme to faculty perceptions recognizing increased student satisfaction is attributed to engagement and interaction on the part of instructors and peers (Picciano, 2017).

Chapter 3 focused on the methodology framing the quantitative correlational study using point-biserial correlation for dichotomous categorical variable and a continuous variable. The chapter begins with research design principles, including the research question and hypotheses, target and sample population, and sampling strategy. Additional sections cover instrumentation, data collection, preparation, and analysis. The chapter concludes with a discussion of efforts to ensure reliability and validity, as well as provisions for ethical assurances.

Chapter 3: Methodology

The purpose of the non-experimental, quantitative correlational study was to examine the statistical significance of the relationship between online instructors with experience as an online college student and retention rates in the instructor's online course. The problem was student retention is reduced in an online environment compared to an on-ground, face-to-face environment. The research analyzed if a correlation existed between online retention rates in selected courses of online instructors with and without personal experience as an online college student. The theoretical framework focused on the theory of servant leadership and dimensions of social constructivism in online courses. Institutions with online programs are focusing more attention on student retention in online courses, which are typically lower than the same course provided in a face-to-face modality (Cole et al., 2014).

For consistency, instructors in the sample population taught a general education course as the first course taught at the institution of study to maintain a common baseline. Experience as an online college student for the study was defined as one who had completed college-level online courses requiring weekly graded discussions and assignments accessed and submitted remotely. Graber and Chodzko-Zajko (2014) described online education as enabling learners to acquire course content remotely using a computer connected to the Internet. A quantitative correlational methodology was chosen for the research study aligns most effectively with the research question determining a correlation between variables and confirmation of the hypotheses (Price et al., 2013). The rationale for choosing a quantitative correlational design was the study used non-experimental research which measures two or more variables and assesses a statistical

relationship without implying cause and effect (Price et al., 2013).

A quantitative correlational design was appropriate for the relationship between two or more variables was analyzed (Creswell & Poth, 2018). Another variable of class size could be linked to and help determine if a relationship exists between specific variables. Although class size can be an important variable, the variable was not part of the analysis in the study. The justification for not including class size in the analysis was the class size in all general education courses at the institution of study average 30 students with little variance.

Chapter three focused on the methodology framing the quantitative correlational study using point-biserial correlation for categorical and continuous variables. A point-biserial was used to determine the strength of a linear relationship between one continuous variable and dichotomous categorical variable (Laerd Statistics, 2018). For the present study, the continuous variable was retention rates and the dichotomous categorical variable was adjunct faculty with and without experience as an online learner. The chapter begins with research design principles, including the research question and hypotheses, target and sample population, and sampling strategy. The following research question and hypotheses guided the study:

Research Question: To what extent does an online instructor's experience as an online college student correlate to student retention in the instructor's online course?

$H1_0$: No significant correlation between an online instructor's experience as an online college student and student retention in a respective instructor's online course.

H1a: A significant correlation between an online instructor's experience as an online college student and student retention in a respective instructor's online course.

Additional sections cover instrumentation, data collection, preparation, and analysis. The chapter concludes with a discussion of efforts to ensure reliability and validity, as well as provisions for ethical assurances. The findings of the research study may provide academic leaders with insight into the value of hiring faculty with existing online experience to teach online courses. The value is associated with increased student retention achieved from academic leaders adopting new hiring practices, faculty onboarding, training, and professional development techniques.

Research Design and Rationale

A quantitative correlational methodology was selected to determine if a statistical relationship existed between online instructors with experience as an online college student and student retention in the instructors' courses. The quantitative correlational methodology aligned most effectively with the research question determining a correlation between variables and confirmation of the hypotheses (Price et al., 2013). Choosing a quantitative correlational design was effective for non-experimental research, with analysis of a statistical relationship between two or more variables without implying cause and effect (Price et al., 2013). The point-biserial correlation coefficient (rpb) was used to determine if there was a statistically significant relationship between the independent dichotomous variable of adjunct instructors and the dependent variable of retention rates. A qualitative method was not preferred for no interviews or ethnographies were used in the study, and the analysis was shown through statistical analysis versus described and theorized (Bansal & Corley, 2012).

The significance of the quantitative non-experimental correlational research study was to

gain insight into student retention rates in an online instructors' course who has personal experience as an online college student. The results of the study can provide academic leaders insight and value on hiring instructors with existing online experience to teach online courses. The dichotomous independent variable of instructors was analyzed for correlation with the dependent variable of retention.

A correlational research design is optimal for scholars seeking to determine the degree of correlation between two variables (Buckley, 2015). Correlational research may not aid in determining the existence of a relationship, but rather reveal the direction and strength of relationships between the study variables (Blackstone, 2012). A correlational research design was relevant for the study, which included identifying the variables to be studied for relationships and comparisons, selecting the relevant samples, measuring and assessing data for a statistical relationship without implying cause and effect. Fontaine (2014) completed a correlational study evaluating the effects of a retention program on nursing students' persistence in obtaining an associate degree, demonstrating a relationship between demographic variables and degree completion. Fanfarelli and McDaniel (2017) completed a correlational study examining relationships related to several badges' students earned in a pilot course to performance and engagement-related metrics. The problem of lower student retention in online courses compared to face-to-face on-ground courses led to the completion of the quantitative correlational study. The present study was to determine if a statistical relationship existed between online instructors with experience as an online college student and retention rates in the respective instructor's online course.

Research Procedures

Choosing a quantitative correlational design for the current study allowed for the examination of student retention rates in courses taught by the instructors with and without experience as an online college student. The theoretical framework focused on the theory of servant leadership and dimensions of social constructivism in online courses. A correlational design was selected as the best choice for analyzing multiple variables in one study (Laerd Statistics, 2018). Many correlational studies in educational research have been done measuring the strength of association between two or more variables, such as determining factors predicting student performance on exams (Maher, Markey, & Ebert-May, 2013). The point-biserial correlation is a special type of the Pearson correlation used when one variable is dichotomous, and one variable is continuous. The point-biserial correlation is used to determine the strength of a linear relationship between a continuous variable and a dichotomous variable (Laerd Statistics, 2018).

A survey with two factual questions was sent out via Survey Monkey to all adjunct faculty at the institution of study, having specific criteria used to obtain a common baseline with instructors. All instructors volunteering to complete the survey were sent a consent form to participate in the study. The verbiage on the survey stated by completing the survey the participant agreed to participate in the study. The sample size was targeted to at least 50 participants consisting of instructors with and without an online college student background. The researcher, an employee of the institution of study, had access to the faculty management system and created a report to filter data needed to obtain the target population. The report listed

instructors with specific criteria based on historical data in the faculty management system at the institution of study. Criteria for the common baseline of instructors to participate in the two-question online survey consisted of the following: faculty type, which illustrated adjunct versus non-adjunct instructors, school of general education, years within 2015, 2016, 2017, 2018, and 2019 as the hire date for the first term taught, and online faculty orientation completed. All criteria are historical data in the faculty management system, and none of the instructors had a current or prior reporting relationship to the researcher.

All requests pertaining to the study abided by the American College of Education's Institutional Review Board (IRB) requirements. The primary function of the IRB is to protect human subjects and ensure minimal risk is involved with the participants (Enfield & Truwit, 2008). Institutional Review Board oversight requirements are based upon federal government regulations developed from the Belmont Report of 1978 and the Common Rule for which educational institutions follow (Enfield & Truwit, 2008). After approval from both the American College of Education's IRB (Appendix E) and the IRB of the College of study (Appendix D), the following procedures for the non-experimental correlational quantitative study were discussed, including population and sample selection, instrumentation, data collection, data preparation, and analysis.

Population and Sample Selection

The accessible population included adjunct instructors teaching at the online college of study. The target population included adjunct instructors meeting the criteria of being hired to teach in the fall 2015 quarter through fall 2019; completion of an online faculty orientation in the

Blackboard learning management system; taught general education courses online related to English, communication, humanities, natural sciences, social sciences and math; and had or had not been an online college student. Instructors not meeting every criterion listed did not participate. The instructors in the target population self-selecting to participate in the study completed a survey through Survey Monkey determining group assignment resulting in the sample population. Participants of the study were provided an informed consent form (Appendix B) and a recruitment letter (Appendix A) before completing the survey instrument. The only participation in the study by the participant was to provide their name and answer one factual question. The answer to the factual question was needed to determine the group associated with the dichotomous variable. All data used for analysis were historical data. Obtaining written consent from faculty or students was not necessary for the study because data being collected from the faculty management system and student information systems, existed as historical numeric data, with no personal or demographic information recorded. Although not necessary, a consent form with information related to the study was sent to all adjunct instructors volunteering to participate. Further, the verbiage on the survey stated by completing the survey, the participant agreed to participate. Participants agreed the results of the study can be published without using the participant's name, the course title, or student names in the study.

Since the study was to determine the correlation between a dichotomous categorical independent variable and a continuous dependent variable, a point-biserial correlation was selected for analysis. The sample population consisted of a dichotomous variable taking only two possible values for the analysis coded as *0* for not having college online student experience and *1*

as having college online student experience. The study focused on determining a significant result ($p < 0.05$) or no significance ($p > 0.05$) (DeMoulin & Kritsonis, 2009).

Statistically, to have a good correlational study, a sample size of 20 or more is needed (DeMoulin & Kritsonis, 2009). The target sample population for the study was 25 participants in each group totaling 50 participants in total who self-selected by providing the participant's name and completing one factual question survey. The sample population of 50 was within reason for a correlational study. Kim Bartel Sheehan (2001) stated the average survey response rate is 31% with a follow-up email to participants to complete the survey increasing the response rate up an additional 25%. Hence, in order to achieve a sample population of 50 participants in total, at least 150 adjunct instructors needed to be the target population. The institution of study employs over 1200 adjunct faculty. If 50 participants in total were not achieved for the sample population, additional courses other than general education courses would have been added to the criterion. The added population of adjunct instructors would have been sent the recruitment letter, informed consent, and survey to self-select into the study.

The dichotomous independent variables for the study were adjunct instructors categorized as Group A and Group B. Group A consisted of adjunct instructors identified as having personal experience as an online college student and the other participatory criteria mentioned, coded as *1* in the analysis of the study. Group B consisted of adjunct instructors identified as having no personal experience as an online college student, and other participatory criteria mentioned coded as *0* in the analysis of the study. The retention rate was the continuous dependent variable.

Instrumentation

A stratified random sample was used to determine strata (groups) within the target population (Laerd Statistics, 2018). All adjunct instructors in the accessible population at the institution of study do not possess all the criteria desirable for the study. Generating a report in the institution's faculty management system was the research instrument used. The faculty management system houses data used to access the target population needed for the research. Adjunct faculty information housed in the institution's faculty management system was exported and sorted in an Excel document. The Excel document listed adjunct instructors for the target population using the following filters to obtain a common baseline: faculty type, school of general education, date of hire in the years 2015, 2016, 2017, 2018, and 2019, online faculty orientation completed. All criteria are historical data within the faculty management system at the institution of study. Instructors not meeting every criterion mentioned were not selected for the target population.

Instructor credentials and education history are documented in the faculty management system. Official educational transcripts do not confirm how courses were completed by the instructor, such as online or on-ground. To achieve the stratified sample population of two groups, determining which instructors have experience as an online college student and instructors who did not was needed. One dichotomous question to be answered with *yes* or *no* was presented to instructors via an online survey question. The question in the survey asked if the instructor completed online college work in the past as a college student. A recruitment letter and informed consent were sent to the target population, followed by the survey sent through

Survey Monkey. Survey Monkey is a web-based tool used to design and implement surveys to obtain data. Lowe-Madkins (2016) used Survey Monkey for questions related to the characteristics of participants in a research study determining if social presence impacted student satisfaction and retention in online learning. Strengths of using an online survey include convenience, flexibility, speed, timeliness, and controlled sampling. There can be a low response rate and a perception of the survey being junk mail, which results in a weakness of such surveys (Evans & Mathur, 2018). Communication via email went to all adjunct instructors in the target population before the Survey Monkey was sent. The email communicated a survey would be sent to combat the perception of unsolicited junk mail.

The survey through Survey Monkey was sent to the target population of adjunct instructors to volunteer to participate. A timeline of two weeks was provided to complete the survey. As the surveys were completed, each self-selected participant was assigned to Group A or Group B based on the instructor's background. Each instructor in both groups was coded with a number. The researcher was the only individual who knew which instructor was associated with each number; no names were used in the study. Group A consisted of adjunct instructors identified as having personal experience as an online college student and the other participatory criteria mentioned. Group B consisted of adjunct instructors identified as having no personal experience as an online college student and other participatory criteria mentioned. Because online surveys are self-administered, the reason why the survey is needed, and questions presented should be clear. If questions are not clear, participants may exit a survey without finishing (Evans & Mathur, 2018). The survey stated the reason behind the study and clarified

experience as an online college student. An online college student for the study was defined as one who had completed college-level online courses requiring weekly graded discussions and assignments accessed and submitted remotely. The following question was asked in the survey to determine strata: As a college student, did you complete college-level online courses for credit?

Data Collection

Once the two groups were determined, further research in the faculty management system pertaining to all courses taught by instructors was completed. All course titles with terms and years taught by the instructors in both groups were available in the faculty management system and exported into an Excel spreadsheet. The process was completed by exporting data into an Excel document choosing fields in the faculty management system related to the instructors in the sample population. The fields consisted of term taught, year taught, and the course taught associated with each instructor. In the Excel document, each course the instructor taught was sorted by term and year. Determining the first course taught online at the institution was easily attained once filtered out through sorting in the spreadsheet. The first online course taught at the institution was identified for each instructor for each group and was used for analysis. The necessary information was documented in an Excel spreadsheet in preparation for data analysis. The first column of the spreadsheet was titled instructors and categorized as Group A or Group B based on instructor background. No instructor names were displayed on the spreadsheet for each instructor was assigned a number in succession as the surveys were returned. A separate spreadsheet was kept which associated the instructor with an assigned number. Once all documentation was completed, the instructors categorized as Group A were coded with *1* and

Group B with *0* to be exported in SPSS.

Nationally, retention rates are presented as a percentage for analysis and are related to an institution's first-time, first-year undergraduate student population who continues at the institution in the next academic year (U.S. Department of Education, 2019). The retention rate used in the present study depicted the students completing each course analyzed. Students completing the course and eligible to continue onto the next term established retention. Student enrollment at the start of the course in comparison to the enrollment at the end of the course determined the retention rate. Enrollment information is documented in the faculty management system and the student information system at the institution of study. Each course associated with each instructor in the sample population was identified in the faculty management system. Course census numbers were in the faculty management system and recorded in relation to the instructor's course. The course drop report associated with each course taught at the institution was in the student information system. The course drop report for each course showed the number of all students who dropped the course during the quarter the course was taught. The retention rate was derived by dividing the number of students completing or ending the course by the number of students enrolled at the beginning of the term. No student names were used in the study. The retention rate was noted as a percentage and documented as retention in column two of the Excel spreadsheet for later export to SPSS.

All variables were systematically documented on the Excel spreadsheet. Each instructor's name was replaced with the letter associated with the group assigned and succession number to keep the anonymity of the instructor. Data collected consisted of existing factual data with no

personal or demographic information recorded in the study. The study did not identify subjects directly or through any identifiers linking to subjects (Electronic Code of Federal Regulations, 2018).

Data collection from the faculty management system was stored on a personal external hard drive and password protected. The link to Survey Monkey sent to faculty to answer the two factual survey questions was sent and collected via email, stored on an external hard drive and password protected. No information may be disclosed to the public or any unauthorized individuals. All data stored on the external hard drive may be deleted from the hard drive after three years of completion of research per federal regulations (Electronic Code of Federal Regulations, 2018). Information explaining the rationale and benefits of the study was provided in the recruitment letter to participants. Since the participants in the study only answer factual questions, debriefing, which involves giving study information after the study has ended, may be kept short with further information made available to participants if requested. McCambridge, Kypri, and Wilson (2012) found with an online study, providing debriefing information to participants either within the text of an email or a link to the information showed no difference in mean time spent reading the debriefing information. Debriefing information to online participants will be kept short, with results of the study made available if requested.

Data Preparation

Data management is a significant step in the analysis process (Creswell, 2013). In a quantitative research study, emphasis is on objective measurement and statistical analysis of data to answer research questions and to define hypotheses (Kyngäs, Mikkonen, & Kääriäinen, 2019).

The following research question guided the analysis: To what extent does an online instructor's experience as an online student correlate to student retention in the instructor's online course? Once data from the survey was collected and the two groups of instructors were determined as Group A and Group B, additional data was collected from the faculty management system.

Data related to retention for each instructor's course was archived in the faculty management system and student information system housed within the institution of study. Although the researcher is an employee at the institution of study and has access to the data, permission to pull data was needed from the institution's IRB (Appendix D). Once approval was granted, appropriate data related to the study was extracted and transferred onto an Excel spreadsheet associating instructors in both Group A and Group B to retention rates. The data collected was correlated to retention rates for each instructor's first general education course taught at the institution of study and prepared for statistical analysis. The retention rate per course was determined by course enrollment number at census and course enrollment number at the end of the quarter. The retention variable was listed as a percentage.

Data Analysis

The point-biserial correlation was used to determine if there was a statistically significant relationship between the dichotomous categorical variable of adjunct instructors and the continuous variable of retention rates (Laerd Statistics, 2018). The Pearson correlation coefficient is commonly used to describe relationships between variables. Such variables using Pearson correlation are two continuous, normally distributed variables (Babchishin & Helmus, 2016). The study did not have two continuous variables, but one continuous and one

dichotomous categorical variable. The point-biserial correlation is a special type of the Pearson correlation used when one variable is a dichotomous categorical or nominal variable, and one variable is continuous (Laerd Statistics, 2018). Although Pearson correlation coefficient and point-biserial have different terms, both are mathematically equivalent for calculating the Pearson's *r* (Babchishin & Helmus, 2016). Retention associated with each instructor in both Group A and Group B was analyzed reflective of the research question using SPSS for Windows analysis program. The value associated with the Pearson's *r* can range from -1 to +1. The relationship is stronger as the coefficient values approach ±1, and a coefficient value of 0 reflects no linear relationship between the two variables (Laerd Statistics, 2018). The research question guided the analysis. Research Question: To what extent does an online instructor's experience as an online student correlate to student retention in the instructor's online course? The analysis provided data to answer if a linear relationship existed between the dichotomous variable of adjunct instructors and retention rates, the continuous variable.

An Excel spreadsheet was utilized to input data related to the dichotomous variable and continuous variable. Instructors were identified only by the number and letter initially associated with the instructor's name. For analysis and input into SPSS, instructors with experience were coded with a *1* and instructors without experience with a *0.* The Excel spreadsheet had an additional column showing student retention rates associated with the first course taught by the instructor. No student or instructor names were contained within the Excel spreadsheet. After the Excel spreadsheet was completed in preparation for data analysis, data were transferred to SPSS. The SPSS program does not provide an analysis labeled a point-biserial correlation. Because the

point-biserial correlation is a special type of Pearson correlation, using the equivalent to the Pearson *r*, was completed. The point-biserial correlations in SPSS was completed by choosing the Bivariate correlations dialog box, then opening the options Analyze, Correlate, and Bivariate in order. Both dichotomous and continuous variables were input and analyzed using the Pearson correlation coefficient along with a two-tailed test of significance. Data analysis was completed using data output showing standard error, *t*-score, *p*-value, and confidence interval using 95% (Meyer, n.d.). When determining statistical significance, the *p*-value is compared to the alpha level of .05. Although the *p*-value does not provide certainty, the value does describe probability and a measure of confidence (Andrade, 2019). All correlation coefficients have interdependency measures, not expressing a causal relationship. Data were extracted with accuracy. The process of exporting the data was completed again to ensure no inherent technical error of the measurement instrument was tainted. Data cleaning was focused on outliers shown to constitute a significant shift within or beyond the population distribution (Van den Broeck, Cunningham, Eeckels, & Herbst, 2005).

Reliability and Validity

Reliability and validity in a quantitative study rely on consistency and the extent to which a concept is measured (Heale & Twycross, 2015). The quantitative correlational study focused on identifying instructors teaching general education online courses for the first time at the institution of study with experience as an online college student. The process of self-selection determined the sample population. All instructors in the target population who participated completed the survey by providing the instructor's name and answering one dichotomous

question survey through Survey Monkey, a web-based tool for surveys. Instructors self-selected into the study by completing the survey within a specific time. There was no need for a reliability test for the study because the answers received from the survey instrument contained a factual question of yes and no. Callegaro et al. (2015) found when participants are asked factual questions; respondents tend to answer with more reliability if presented as yes or no.

The reliability and validity of data presented in a research study depend on careful attention to detail. After the analysis was completed in the SPSS, a re-analysis was performed for reliability and consistency. The sample size could be increased to improve reliability. When increasing the size of the study, the alpha coefficient is increased (DeMoulin & Kritsonis, 2009). Keeping the common baseline of instructors teaching the same types of courses for the first time at the institution of study and completed the same faculty orientation was essential for internal validity. For future studies, the increase in sample size and variables should be considered.

External Validity

Generalizations were used based on the statistical analysis performed for the correlational study. The extent of the conclusions generalized affects external validity (Laerd Statistics, 2018). The sample size is referred to as the participants selected from the target population. Results of the sample population can be generalized if related to the overall population (Creswell & Poth, 2018). The sample population used to complete the research was closely related to all instructors in the institution hired to teach in the winter 2015 quarter through the fall of 2019; for all completed the online faculty orientation, taught in the same learning management system and may or may not have had experience as an online learner. There is confidence the sample

population shares similar characteristics to the target population of adjunct instructors at the institution of study. All adjunct instructors of the target population had the same criteria of completing the online faculty orientation in Blackboard, taught general education courses, and had or had no experience as an online college student. The sample population share similar characteristics of online instructors teaching general education courses at colleges and universities who provide some online training. The Sloan Consortium report shared only 6% of universities surveyed did not provide some type of training and or mentoring program to online instructors (Allen & Seaman, 2011). To increase external validity, the sample population for the study would need to be increased.

Internal Validity

Internal validity is concerned with any manipulation of the independent variable, which could have affected the dependent variable. Internal validity is focused on a causal relationship between the independent and dependent variables (DeMoulin & Kritsonis, 2009). The analysis could be influenced by the process used to gather the data associated with each instructor. The data collected was extracted from the faculty management system and student information system and considered historical data. There was no influence or control over the data except for the interpretation of the retention rates. The retention rates were recalculated twice for validity. The survey question was not used for data analysis in the study, resulting in no pretest or randomly assigned participants assuming equality (DeMoulin & Kritsonis, 2009).

Ethical Procedures

The Code of Federal Regulations from the Department of Health and Human Services

concerning Protection of Human Subjects was abided by throughout the study. All human subjects taking part in research studies should be treated equitably and with basic ethical principles. The basic ethical principles are respect for persons, beneficence, and justice (U.S. Department of HHS, 2009).

A review of the American College of Education's Institutional Review Board (IRB) application process was completed, and application for approval was submitted. Once IRB approval was granted by both the American College of Education (Appendix E) and the institution of study (Appendix D), the instructor survey was administered through Survey Monkey. Data was collected via the email, stored on an external hard drive and password protected. No information can be disclosed to the public or any unauthorized individuals.

Participants of the study were provided an informed consent form (Appendix B) and a recruitment letter (Appendix A) before completing the survey instrument. The verbiage in the survey stated by completing the survey, the participant agreed to participate. By completing the survey, participants acknowledged the only participation was to provide the participants name and answer one factual question with all data used for analysis being of historical data. Participants agreed the results of the study can be published without using the participant's name, the course title, or student names in the study. The benefits of the research to examine if there was a correlation with instructors having personal experience as an online learner and retention rates in the instructor's online courses were discussed in the recruitment letter. All data stored on an external hard drive may be deleted from the hard drive after three years of completion of research per federal regulations (Electronic Code of Federal Regulations, 2018).

Chapter Three Summary

The purpose of the non-experimental, quantitative correlational study was to examine the statistical significance of the relationship between online instructors with experience as an online college student and retention rates in the instructor's online course. A quantitative correlational methodology was chosen for the research study aligned most effectively with the research question determining a correlation between variables and confirmation of the hypotheses (Price et al., 2013). The research study determined the correlation between two variables, and the results compared to the hypotheses. The results of the analysis either supported or not supported the hypotheses using a significance level of 0.05. The focus was to obtain a significant result ($p < 0.05$). Traditional risk levels for research studies were set at .05, meaning five percent of the time, conclusions are the result of chance alone and not due to experimental conditions (DeMoulin & Kritsonis, 2009). A point-biserial correlation was used to determine if there was a statistically significant relationship between the dichotomous variable of adjunct instructors and the continuous variable of retention rates. Chapter 4 analyzed the processes of data collection, data analysis, and interpretation of results as related to study questions and hypotheses.

Chapter 4: Research Findings and Data Analysis Results

The purpose of the non-experimental, quantitative correlational study was to examine the statistical significance of the relationship between online instructors with experience as an online college student and retention rates in the instructor's online course. A point-biserial correlation was deemed the appropriate test for the study in defining if a relationship existed between the paired observations of a continuous and dichotomous variable (Laerd Statistics, 2018). The continuous variable for the study was retention rates measured as a ratio and the dichotomous nominal categorical variable of adjunct instructors with and without online learner experience.

The study examined student retention rates in the first general education course taught by online adjunct instructors hired to teach in 2015 through the fall of 2019. Exploring student satisfaction and retention in an instructor's course who has experience as an online learner prompted the research study. The following research question guided the study: To what extent does an online instructor's experience as an online college student correlate to student retention in the instructor's online course? The assumptions considered to determine the relevance of the test are detailed below.

Assumptions

The following assumptions considered when determining a point-biserial correlation were appropriate. Assumption #1: One variable, the dependent variable of retention rate, is a measurement of continuous scale as a ratio. The dependent variable was student retention rates in the form of a ratio. Assumption#2: The independent variable is a dichotomous nominal variable with two categories. Adjunct instructors were the dichotomous nominal variable consisting of

two groups who answered a factual question with yes or no regarding the online learner experience. Assumption #3: The two variables are paired, meaning each instructor has two values: one for each variable. Each instructor was paired with the continuous variable of retention rate ratio. Other assumptions related to the data in the point-biserial correlation model. Assumption #4: There should be no significant outliers in the continuous dependent variable of retention rates in either group of the dichotomous independent variable. In the SPSS output for the study, one extreme outlier was noted for instructor coded number 16 and established to be a genuinely unusual data point. Instructor coded number 16 was in group B. There was another outlier in Group A, coded as instructor number 5. A decision was made to remove the extreme outlier in Group B and the outlier in Group A in the data, keeping the sample size equal in the two groups. Assumptions 5 and 6 in a point-biserial correlation were dependent on the decision to remove the outliers. The data would not be normally distributed based on skewness and kurtosis if the outliers remained. Assumption #5: The variance of the continuous dependent variable in both Group A and Group B, the dichotomous variable, were equal. A Levene's test for equality of variance performed determined the *p*-value was greater than .05, indicating the assumption of homogeneity of variances had been met. There was homogeneity of variances, as assessed by Levene's test for equality of variances ($p = .770$) noted in Table 1. Assumption #6: The continuous dependent variable is approximately normally distributed in Group A and Group B of the dichotomous variable (Laerd Statistics, 2018). When determining the normal distribution of a small sample size, a Shapiro Wilk test should be done to determine normal distribution. Student retention rates were not normally distributed, as assessed by Shapiro-Wilk's

test ($p > .05$), shown in Table 2. Another analysis to determine normal distribution is the analysis of skewness and kurtosis to determine a z-value. The z-value was determined by dividing the skewness by the standard error. The next step was to divide kurtosis by the standard error for both groups. When data is normally distributed, the z-value should be between -1.96 and 1.96 (Laerd Statistics, 2018). The calculation was first done on the data with the outliers present and determined the data was not normally distributed. When completing the same analysis on the data without the two outliers, there was an approximate normal distribution. The skewness z-values were -1.66 and -1.23 and kurtosis z-values of 1.17 and -1.09 for the dichotomous variable.

Table 1

Test of Homogeneity of Variance for the Continuous Dependent Variable in Both Group A and Group B Without Two Outliers

		Levene Statistic	df1	df2	Sig.
Retention rate in %	Based on Mean	.086	1	46	.770
	Based on Median	.019	1	46	.892
	Based on Median and adjusted df	.019	1	45.774	.892
	Based on trimmed mean	.084	1	46	.774

Table 2

Shapiro-Wilk Test for Normality Displays p < .05 Depicting the Assumption of Normality is Violated

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	With experience or without experience	Statistic	df	Sig.	Statistic	df	Sig.
Retention rates w/o outliers	No online learner experience	.110	24	.200	.916	24	.048
	Yes, online learner experience	.168	24	.077	.888	24	.012

Within chapter four, the findings of the data collection and analysis are presented. The analysis presented addresses the research question. The major sections reviewed in the chapter include the results of the research and the analysis of findings. The chapter concludes with a summary of the key findings of the study.

Target Population

After IRB approval on December 3, 2019, the process to determine the target population to obtain the sample population of instructors began. All requirements pertaining to the study from the American College of Education's Institutional Review Board (IRB) and the institution of study's IRB were abided by throughout the research. The primary functions of the IRB in protecting human subjects and ensuring minimal risk were followed when involving the participants (Enfield & Truwit, 2008).

An Excel spreadsheet listing the instructors to target for the sample population was created by collecting data from the institution of study faculty management system. Data was exported pertaining to instructors teaching at the institution of study. The institution of study has

over 1200 instructors comprising full-time and part-time referred to as adjunct instructors. The number of adjunct instructors coded as teaching at least one course online, or an online component to a residential course was 684. For the study, maintaining a common baseline of instructors was important. All instructors in the study completed the same online faculty orientation the institution implemented in 2015 and taught similar courses in general education. Out of the 684 adjunct instructors, 402 were hired to teach in the year 2015 through the fall of 2019. The 402 faculty was filtered by courses taught to achieve the target population. The target population resulted in 114.

The first course taught by each instructor in the target population was verified as being taught online. Out of the 114 instructors, 19 instructors were noted as not being part of the study based on the modality courses were taught. The institution of study has a competency-based education modality and a campus connect hybrid modality not used in the study. By illuminating the two modalities, the number of participants in the target population was reduced to 95 instructors. The sample size obtained from the target population for the study was 50 participants consisting of 25 with experience as an online learner and 25 without experience. When the two outliers were removed, the sample size consisted of 48 instructors. Statistically, to have a good correlational study, a sample size of 20 or more is needed (DeMoulin & Kritsonis, 2009). Although the study presents a small sample size, De Winter (2013) stated there is no fundamental objection to applying a *t*-test with extremely small sample sizes. A *t*-test was completed for the study as a post hoc study.

Sample Population

Obtaining the sample population started with an email sent to the group of 95 instructors by blind copying each instructor. The subject line for the email labeled: *Opportunity to participate in a dissertation research study being completed by Lynne Croteau.* The first email discussed the purpose of the dissertation, provided the recruitment letter as an attachment, and mentioned another email with the link to the Survey Monkey and informed consent, as an attachment was to follow. A second email sent contained the informed consent form and the Survey Monkey link. There was a challenge in sending the email from a private email account, which may have resulted in the email going to the recipient's junk mail file resulting in few responses. A follow-up email was sent ten days later to all individuals who did not respond to the survey. The subject line for the follow-up email was *Reminder: Opportunity to support Lynne Croteau with a research study*.

After five weeks, the sample size for the research study of 50 participants consisting of 25 instructors with experience as an online student learner and 25 without experience as an online student learner was achieved. The timing of emails going out during the institution of study's break week and the holidays were not beneficial to achieve the approved sample size in two weeks. The period originally expected and approved by the DRR and IRB to collect responses adjusted from two weeks to five weeks.

Data Collection

After attaining 50 participants, data were collected by exporting the responses from Survey Monkey into an Excel spreadsheet. There is importance to state; the survey questions

presented to instructors were not used for data analysis in the study but for classification of the dichotomous variable. The survey consisted of one factual question to answer, along with providing the instructor's name. The survey was sent out via Survey Monkey to adjunct faculty in the target population to determine groups. The Excel spreadsheet had columns representing survey start date, survey end date, IP addresses of the participant, name of the participant, and answer to the dichotomous question. A filter was added to the Excel spreadsheet to sort the data associated with the participants.

The column titled: *As a college student, did you complete college-level online courses for credit prior to teaching at the institution of study?* was filtered. The filtered column was used to separate the responses into two groups labeled Group A and Group B. A new column inserted to the right of the filtered column was used to define the group associated with each participant. Each *yes* response was coded with the letter A for Group A. The process was repeated, coding each *no* response with the letter B for Group B in the same adjacent column. Group A consists of instructors with an online college student background, and Group B does not have such a background. Each participant in each group was assigned a number to maintain anonymity. The Electronic Code of Federal Regulations (2018) was followed by not identifying subjects directly or through any identifiers linking to subjects. No course names nor identities of students enrolled in each course were presented in the study.

Next, the column containing the participant's start date and time of survey completion, from oldest to newest, was sorted. Along with the sorted feature, each group was sorted depicting the response of yes or no. The process completed allowed for a stratified random sample

determining strata (groups) within the target population (Laerd Statistics, 2018). The first 25 viable surveys completed, based on the timestamp of completion, were used in the study. There are five important notes regarding the coding of participants. In Group A, one participant had to be removed from the sample due to the participant's first course taught was in a different modality from all others and was not noted prior to adding to the target population. The participant was coded as A4, resulting in the participant coded A26 being added to the sample population. Participant coded as A23 was found to have not taught online courses. Participant coded A27 was added to commit to 25 participants in each group. In Group B, one participant, coded B23, was removed due to the participant's first course taught in a different modality from all others. Participant B12 was removed due to the first course not being taught online. Both were not noted prior to adding to the target population. Participants B26 and B27 were added to the sample population to maintain 25 participants. Participant coded A22 sent an email with the response to the dichotomous question. The reason for the email was due to a technical error in the survey resulting in the participant's response not being recorded in Survey Monkey.

The data needed for the research study included the first course the instructor taught, student enrollment at census, and the number of student drops within the course. The census enrollment number at the institution of study refers to the number of students who have verified enrollment. Additional columns added to the spreadsheet were titled: class, section, start number of students, number of drops, and retention percentage. With the groups identified and presented on the Excel spreadsheet, the course each instructor taught was found in the faculty management system. The first course taught by each instructor was identified and documented on the

spreadsheet. The course details in the faculty management system disclose the course census number depicting the number of students enrolled in the course. Census numbers were documented as the start number of students in the spreadsheet.

The next step to collecting the data necessary for the study was to collect the number of student drops related to each course. The process was started utilizing the student information system of the institution of study. To extract the data, the academic records report feature of the student information system was accessed, and the final grade report was selected. The report allowed the opportunity to filter results related to all campuses, time, depicting the quarter and year the course was taught, and instructor name. All courses taught by the instructors in the time frame selected were identified. The number of students drops or withdraws related to the first course each instructor taught was documented on the Excel spreadsheet. In addition, the number of students fail grades in each course was documented in the Excel spreadsheet for future research.

Once all the data was collected, data analysis was started. Retention rate was determined for each course by dividing the number of students completing the course after the drops/withdraws by the census or start number. In order to export information into SPSS, all instructors were coded as Group A and Group B with a *0* or *1*. All Group A instructors noted as having experience as an online learner were coded with *1* and Group B, noted as not having experience as an online learner, with *0*. The spreadsheet used for data collection was kept separate from within the study to keep the anonymity of all instructors. All documentation is kept on a password-protected personal computer and personal external hard drive.

After reading over the recruitment letter and informed consent, the 50 instructors provided the instructor's name and completed one dichotomous factual survey question through Survey Monkey. There was no other participation needed from the instructors, and the reason for answering the question was to determine the groups. Only eight of the 50 participants signed the informed consent form and sent the form back. Understanding, not all participants would return the signed informed consent, the verbiage on the survey stated by completing the survey; the participant accepts to self-select. The verbiage on the survey is noted in Appendix C.

The informed consent and recruitment letter indicated to participate was voluntary. If participants agreed to participate, all would be asked to complete a survey through Survey Monkey. The survey had verbiage stating answering the one factual question along with providing the participants' name indicated acceptance to participate.

Data Analysis and Results

The descriptive statistics of the dichotomous independent variable and dependent variable were analyzed. Descriptive statistics for data acquired on the dependent variable of student retention ratio and dichotomous independent variable (instructors with and without experience as an online learner) can be found in Table 3. For the study, after the two outliers were removed, the sample size was 48 (n = 48). The sample consisted of 24 adjunct instructors with experience as an online learner, and 24 adjunct instructors without experience as an online learner. The retention rates from the first course each instructor taught at the institution of study were analyzed. The mean scores for both groups were closely related, with Group A having a 92.48 mean, and Group B having a 91.32 mean. The standard deviation resulted slightly higher for

Group B, referring to a slightly higher degree of variability. The descriptive statistics depict M = 92.48 (SD = 6.90) for instructors with experience vs. M = 91.32 (SD = 7.08) for instructors without experience.

Table 3

Descriptive Statistics of Instructors With and Without Online Learner Experience and Retention Rates Without Outliers.

			Statistic	Std. Error
No online learner experience	Mean		91.32	1.445
	95% Confidence Interval for Mean	Lower Bound	88.33	
		Upper Bound	94.31	
	5% Trimmed Mean		91.84	
	Median		92.10	
	Variance		50.146	
	Std. Deviation		7.081	
	Minimum		71	
	Maximum		100	
	Range		29	
	Interquartile Range		12	
	Skewness		-.785	.472
	Kurtosis		1.076	.918
Yes, with online experience	Mean		92.48	1.409
	95% Confidence Interval for Mean	Lower Bound	89.56	
		Upper Bound	95.39	
	5% Trimmed Mean		92.78	
	Median		94.03	
	Variance		47.626	
	Std. Deviation		6.901	
	Minimum		79	
	Maximum		100	
	Range		21	
	Interquartile Range		13	
	Skewness		-.581	.472
	Kurtosis		-1.004	.918

Data Visualization

Two box plots were completed to visualize the retention rates side by side for both groups of adjunct instructors with the outliers and without the outliers. In the upper 25-percentile, the highest retention rate in both groups was 100%. Each group has a similar amount of retention rates within the upper 25-percentile. In the 50-percentile, including the mean, again,

there were similarities in the number of retention rates. The lower 25-percentile does show some difference, with more retention rates from 71 to 83 percent. One box plot shows the data maintaining the two outliers, and the other with the outliers removed. The box plot in Figure 1 displays the outliers of instructors coded 17 and 5 retention rates. Instructor coded number 17 was from Group B (instructors with no online learner experience), with a retention rate being an extreme outlier at 56%. Instructor coded number 5 had a retention rate of 70% and was from Group A (instructors with experience as an online learner). The box plot visualizing the retention rate percentages after the outliers were removed, shown in Figure 2. Another visualization of retention rates of both groups of adjunct instructors prior to taking out the outliers is noted in Figure 3 as a histogram. A histogram showing retention rates of both groups of adjunct instructors after removing the two outliers is found in Figure 4.

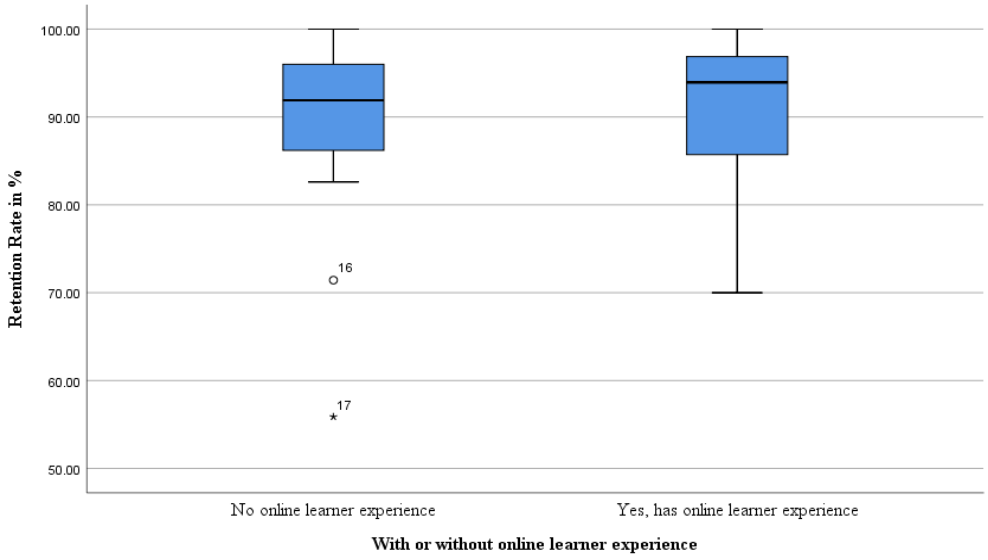

Figure 1. Box plot for retention rates for the first course taught by instructors with and without an online background prior to removing number 17 (56%) in Group B and number 5 in Group A (70%) out of the data

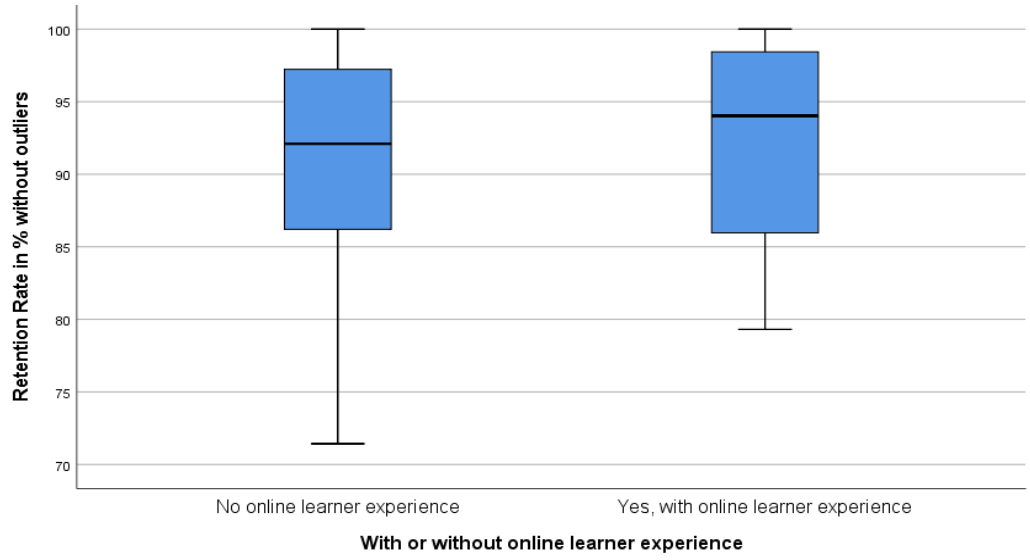

Figure 2. Box plot for retention rates for the first course taught by instructors with and without an online background after taking outliers number 17 (56% in Group B) and number 5 (70% in Group A) out of the data

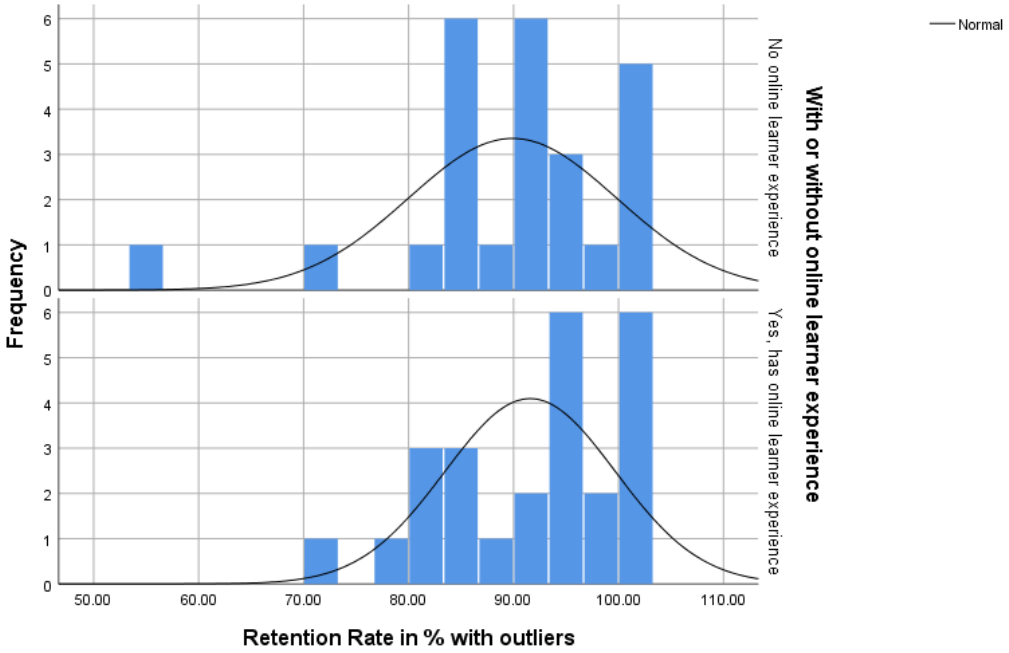

Figure 3. Comparison histogram depicting retention rates for the first course taught by instructors with and without an online background before outliers were removed

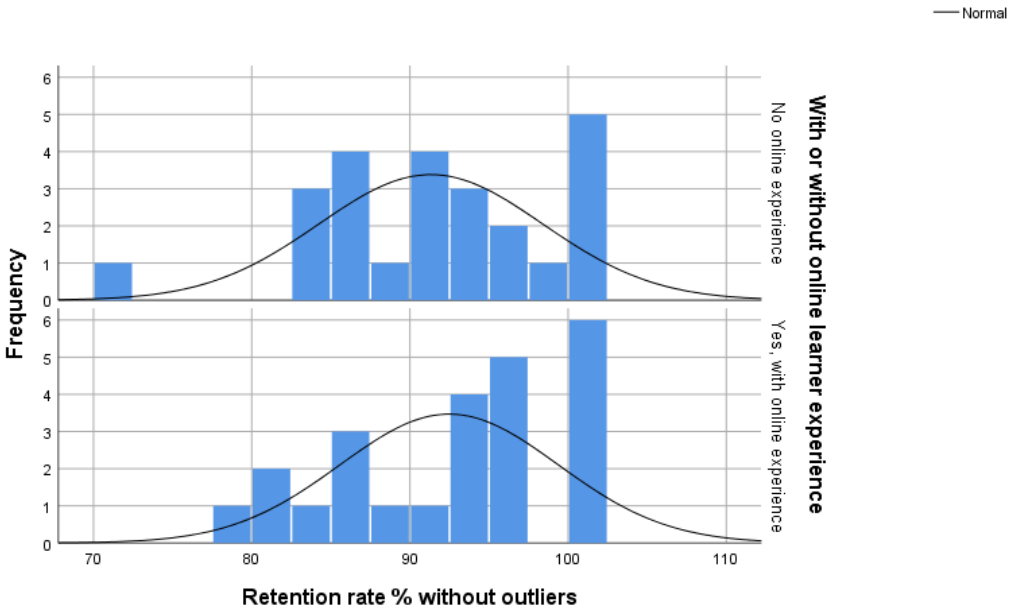

Figure 4. Comparison histogram depicting retention rates for the first course taught by instructors with and without an online background after outliers were removed

Homogeneity of Variances

To decrease the chance of making a Type 1 error, the two groups' variances must be equal in population in the point-biserial correlation (Laerd Statistics, 2018). To determine if the variance of student retention rates was equal for instructors in Group A and Group B, homogeneity of variances was performed. As assessed by Levene's test for equality of variances, $p = .770$ was noted. Levene's test for equality of variance performed determined the $p = .770$. When $p > .50$, the assumption of homogeneity of variances has been met. Group A and Group B were determined to have homogeneity of variances.

Point-biserial Correlation

A point-biserial correlation was performed on the independent dichotomous variable of instructors and the dependent variable of retention rates and can be found in Table 4. The point-biserial correlation, r_{pb} (46) =.084 determines the strength of a linear relationship between the continuous variable of student retention rates and the dichotomous variable of adjunct instructors (Laerd Statistics, 2018). The r_{pb} value ranges from -1 to +1 with a stronger relationship as the values approach ±1. The $r_{pb} = .084$ indicates no strength in a linear relationship between the two variables. Schober, Boer, and Schwarte (2018) shared interpreting a correlation coefficient of 0.00–0.10 is considered an insignificant correlation, meaning unimportant relationship.

Table 4

Point-biserial Correlation for Student Retention Ratio in Courses Taught by Instructors With and Without Experience as an Online Learner.

		Instructors with and without online learner experience	Retention rate in %
Instructors with and without online learner experience	Pearson correlation	1	.084
	Sig. (2-tailed)		.569
	N	48	48
Retention rate in %	Pearson correlation	.084	1
	Sig. (2-tailed)	.569	
	N	48	48

Post-hoc Analysis

An independent *t*-test can be performed to find significant difference between the means of two independent samples (Choudhary, 2018). Along with the point-biserial correlation, an independent *t*-test was performed on the independent variables of adjunct instructors with and without an online background and the dependent variable of retention rates. The *p*-value with equal variances assumed resulted in $p = .569$. When determining statistical significance, the *p*-value is compared to the alpha level of .05. Although the *p*-value does not provide certainty, the value does describe probability and a measure of confidence (Andrade, 2019). If the *p*-value is greater than the test alpha level ($p > \alpha$) of .05, then the test is determined to be statistically non-significant (DeMoulin & Kritsonis, 2009). Statistical non-significance indicates weak evidence against the null hypothesis, meaning, failure to reject the null hypothesis (McLeod, 2019b). For the study, the $p = .569$ is greater than the test alpha level and determined to be statistically non-significant as noted in Table 5.

Table 5

Independent Sample Test Showing Significance (p-value)

		Levene's Test for Equality of Variances		*t*-test for Equity of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Retention rate in %	Equal variances assumed	.086	.770	.574	46	.569	1.159	2.018	-2.904	5.222
	Equal variances not assumed			.574	45.969	.569	1.159	2.018	-2.904	5.222

The coefficient of determination, r_{pb}^2, was calculated to determine the proportion of variance. Calculating r_{pb}^2 provides a measure of effect size. The calculation was useful to determine effect size after performing a point-biserial correlation and a post hoc independent *t*-test. The formula for the coefficient of determination is $r_{pb}^2 = r_{pb} \times r_{pb}$. Using the data from the point-biserial correlation $r_{pb}^2 = .084 \times .084 = .0070$. The value is typically expressed as a percentage by multiplying the value by 100, resulting in 70%. The coefficient of determination or measure of effect size is the percentage of variance in one variable, which is explained or accounted for the variance in the other variable (Laerd Statistics, 2018). For the study, instructors account for 70% of the variability in retention rates.

Cohen's *d*, the appropriate effect size measure of two groups with similar standard deviations and size was performed. Calculating the mean difference between the two groups of instructors, and then dividing the result by the pooled standard deviation provided Cohen's *d* (Social Science Statistics, 2020). Using the equation of Cohen's $d = (M2 - M1) / SDpooled$, the

results for the study reflected, Cohen's d = (92.48 - 91.32)/6.991579 = 0.165914., resulting in a small effect size. Cohen suggested a small effect size as d=0.2, d= 0.5 being a medium effect size, and d=0.8 being a large effect size (McLeod, 2019b). In addition, G*Power, a tool to compute statistical power analyses, was used to determine how powerful the Cohen d test was to determine if there was any difference. Using G*Power with an effect size of 0.165914, an alpha of .05, and a sample size of 24 for each group, the power of the test was weak. A much larger sample size would need to be used for the study to pick up any differences. Increasing the sample size may have allowed for a larger effect size.

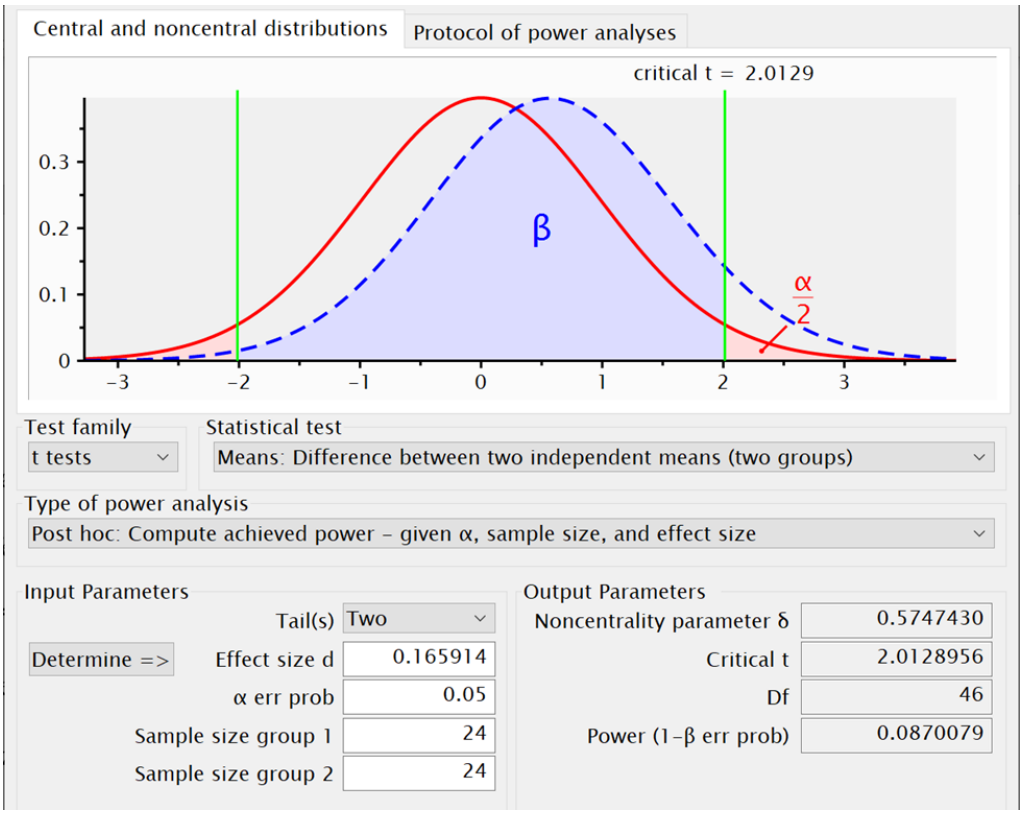

Figure 5. G*Power for *t*-test showing power of effect size being extremely low

Evaluation of Findings

A point-biserial correlation was concluded to be the appropriate test for the study to determine the strength of a linear relationship between the paired observations of a continuous and dichotomous nominal variable (Laerd Statistics, 2018). The point-biserial correlation is a special type of the Pearson correlation used when one variable is dichotomous and one variable is continuous (Laerd Statistics, 2018). The results of the analysis were used to address the hypotheses for the research question, determining if there was a statistically significant correlation between retention rates and instructors with experience as an online learner. A point-biserial correlation was run between instructors and student retention rates. There was no statistically significant correlation between instructors and student retention rates, $r_{pb}(48) = .084$, with instructors with online learning experience showing no correlation to student retention rates than instructors without online learner experience, M = 92.48 (SD = 6.90) vs. M = 91.32 (SD = 7.08). The $r_{pb} = .084$ indicated there was an insignificant correlation, meaning there was an unimportant relationship.

The effect size is a method to measure practical significance of the result (Laerd Statistics, 2018). The effect size using coefficient of determination of $r_{pb}^2 = .084 \times .084 = .0070$, expressed as 70% was determined. The effect size is the percentage of variance in one variable, which is explained or accounted for the variance in the other variable (Laerd Statistics, 2018). For the present study, instructors account for 70% of the variability in retention rates.

Student retention rates measured as a ratio was the continuous variable and the dichotomous nominal categorical variable of instructors with and without online learner

experience. The purpose of the study was to examine the statistical significance of the relationship between online instructors with experience as an online college student and retention rates in the instructor's online course. Guiding the study was the research question: To what extent does an online instructor's experience as an online college student correlate to student retention in the instructor's online course? The hypotheses for the study:

$H1_0$: No significant correlation between an online instructor's experience as an online college student and student retention in a respective instructor's online course.

H1a: A significant correlation between an online instructor's experience as an online college student and student retention in a respective instructor's online course.

The findings of the investigation revealed no significant correlation between an online instructor's experience as an online college student and student retention in a respective instructor's online course. Based on the findings of the study, the determination was to fail to reject the null hypothesis. A point-biserial correlation was run between instructors and student retention rates. Data are mean ± standard deviation unless stated differently. Initial analyses showed there were (a) two outliers, as assessed by boxplot; (b) student retention rates were approximately normally distributed, as assessed by skewness and kurtosis z-values between -1.96 and 1.96 after outliers were removed, and (c) with a Levene's test for equality of variances, there was homogeneity of variances. There was no statistically significant correlation between instructors and student retention rates, $r_{pb}(48) = .084$, $p = .569$, with instructors with online learning experience showing no more of a correlation to student retention rates than instructors without online learner experience, M = 92.48 (SD = 6.90) vs. M = 91.32 (SD = 7.08). Instructors

account for 70% of the variability in retention rates.

Reliability and Validity

The instructors in the target population who self-selected to participate determined the 50 participants in the sample population with outliers and 48 without the outliers. After reading over the recruitment letter and informed consent, all participants in the sample population provided their name and completed one dichotomous survey question through Survey Monkey. The survey was only needed for classification of the dichotomous independent variable. There was no need for a reliability test for the survey used to determine the participants, for the answers received from the survey instrument contains a factual question of yes and no. Callegaro et al. (2015) found when participants are asked factual questions; respondents tend to answer with more reliability if presented as yes or no.

The target population was established as 95 instructors after filtering out criteria for a common baseline. All instructors in the target population completed the institution of study's online faculty orientation instituted in 2015. Instructors hired prior to the year of 2015 did not complete an online faculty orientation provided by the institution of study. There is confidence the sample population shares similar characteristics to the adjunct instructor population hired before 2015 at the institution of study, except for the online faculty orientation. The sample population for the study was small, increasing the sample population, in turn, can increase external validity and reliability. De Winter (2013) stated there is no fundamental objection to applying a *t*-test with extremely small sample sizes. Furthermore, De Winter discussed the *t*-test can provide acceptable power for small sample sizes, given the population effect size is large. As

determined by the G*Power test, the study had an extremely small effect size and could have benefited with a larger sample size. A common baseline of instructors was maintained for internal validity. The baseline consisted of the same types of courses taught, the first course taught online at the institution of study and completed the same online faculty orientation.

For future studies, increasing the sample size should be considered to increase validity and reliability. The sample size could be increased by adding other types of courses such as business courses or nursing courses taught by adjunct instructors.

Chapter Four Summary

The purpose of the non-experimental, quantitative correlational study was to examine the statistical significance of the relationship between online instructors with experience as an online learner and retention rates in the instructor's online course. A point-biserial correlation analysis was conducted on the data associated with student retention rates in both groups of instructor's courses. The research question used to guide the study was: To what extent does an online instructor's experience as an online college student correlate to student retention in the instructor's online course? Descriptive statistics for data acquired for the dependent variable of student retention rates and two independent variables (Group A and Group B) displayed the mean score showing little variance. The mean scores for both groups were closely related with the standard deviation being slightly higher for Group B, referring to a slightly higher degree of variability. When outliers were removed from the data, the mean score for the independent variables resulted in a closer relation. A point-biserial correlation was run between instructors and student retention rates, determining no statistically significant correlation between

instructors and student retention rates. An independent *t*-test was run, resulting in $p = .569$, which is greater than the test alpha level of .05. The independent *t*-test found the relationship of instructors in both groups and retention rates as statistically non-significant. McLeod (2019a) discussed a statistically non-significant result concludes weak evidence against the null hypothesis. Based on the findings of the study, the determination was to fail to reject the null hypothesis. There was no significant correlation between an online instructor's experience as an online college student and student retention in a respective instructor's online course. The following chapter concludes the findings, interpretations, and conclusions of the study.

Chapter 5: Discussion and Conclusion

Each year, higher learning institutions continue to experience increased student enrollment in online courses (Allen et al., 2016). A vital metric to the success of higher learning institutions is the measurement of student retention rates (Millea et al., 2018). The problem is student retention is lower in an online modality compared to an on-ground, face-to-face modality (Doe et al., 2017; Muljana & Luo, 2019; Nash, 2005). Discovering opportunities to increase retention rates in online courses is crucial to the success of institutions offering distance education. Research shows positive student satisfaction can result in higher retention with an increased frequency of student-instructor interactions (Page & Kulick, 2016). An online instructor's presence, personal contact, and communication has an impact on learning and influencing student satisfaction (Ladyshewsky, 2013).

The purpose of the non-experimental, quantitative correlational study was to examine the statistical significance of the relationship between online instructors with experience as an online college student and student retention rates in the instructor's online course. Most institutions rely heavily on adjunct faculty to teach online courses due to financial motives (Franklin, 2015). Determining if a relationship exists between student retention and instructors having experience as an online learner could provide valuable insight related to faculty hiring and training for institutions with online programs. The effectiveness and value of hiring faculty with online experience concerning student retention can offer insight to institutional leaders.

The information provided in the previous chapters addressed the study's research question, hypothesis, literature review, methodology and data analysis. Findings, interpretations,

and conclusions related to the study are further discussed in the present chapter. A review of the study and theoretical framework related to servant leadership is presented. Limitations of the present study and recommendations for future studies are addressed.

Findings, Interpretations, Conclusions

The sample size for the study consisted of 50 adjunct instructors comprising 25 with experience as an online learner and 25 without experience. All instructors were hired to teach the instructor's first course online at the institution of study between 2015 and the fall quarter of 2019. Each instructor completed the same online faculty orientation at the institution of study and taught similar general education courses. The sample population for the research study was closely related to all instructors at the institution of study.

The research question applied to guide the study was: To what extent does an online instructor's experience as an online college student correlate to student retention in the instructor's online course? The independent variable for the study was a dichotomous variable of adjunct instructors with and without online learner experience as a college student. The dichotomous variable was labeled as Group A, representing instructors with online learner experience, and Group B, depicting instructors without online learner experience. The dependent variable was student retention rates associated with the dichotomous independent variable. Data analysis in chapter four shared descriptive statistics for both the dependent and dichotomous independent variable. The mean score showed little variance between the dependent variable for each group in the dichotomous independent variable. The mean scores for both groups were closely related to the standard deviation being slightly higher for Group B, referring to a slightly

higher degree of variability. The hypothesis for the study was as follows:

$H1_0$: No significant correlation between an online instructor's experience as an online college student and student retention in a respective instructor's online course.

H1a: A significant correlation between an online instructor's experience as an online college student and student retention in a respective instructor's online course.

To address the hypothesis, a point-biserial correlation was deemed most appropriate due to the assumption testing. Furthermore, a determination was made to remove two outliers in the data to satisfy the assumption testing appropriately. The assumptions considered appropriate when determining a point-biserial correlation were (a) the dependent variable was a measurement of continuous scale (retention rate); (b) the independent variable was a dichotomous nominal variable with two categories (adjunct instructors in group A and B); (c) the two variables were paired (each instructor was paired to a dependent variable); (d) there were no significant outliers (the two outliers were removed); (e) the variance of the dependent variable in the dichotomous variable were equal (Levene's test for equality of variance performed determined assumption of homogeneity of variances was met); and (f) the continuous dependent variable was approximately normally distributed (skewness and kurtosis determined normal distribution). The final sample size used in the study consisted of 48 instructors without the two outliers.

A point-biserial correlation was run and determined there was no statistically significant correlation between instructors and student retention rates. A post hoc independent *t*-test was run, resulting in $p = .569$, which is greater than the test alpha level of .05. The post hoc test

further verified no statistically significant relationship existed between adjunct instructors with and without online learner experience and student retention rates. After data analysis, the sample size was found to be too small. De Winter (2013) discussed the *t*-test can provide acceptable power for small sample sizes, given the population effect size is large. Based on Winter's study, a G*Power test was preformed, finding the study had an extremely small effect size and could have benefited with a larger sample size. McLeod (2019a) discussed a statistically non-significant result concludes weak evidence against the null hypothesis. The interpretation of results of the point-biserial correlation and the independent t-test for the present study determined no statistically significant relationship was found between adjunct instructors with and without online learner experience and student retention rates.

Theoretical Implications

Servant leadership and dimensions of social constructivism in online courses were the theoretical framework for the study. Servant leadership theory centers on leaders putting the needs, goals, and professional development of followers ahead of themselves (Greenleaf, 1977). Warren (2016) shared because instructors influence students to learn in an academic setting, instructors are leaders. The theory of servant leadership applied to the study emphasizing the instructor's concern for the well-being of the student. Sahawneh and Benuto (2018) theorized leaders demonstrating servant leadership behaviors have a positive correlation with student satisfaction in an online environment. Instructors in both groups may have demonstrated servant leadership, which could have accounted for little difference in retention rates from one group to the other. Instructors in both groups had similar retention rates. Students feeling connected to

faculty have higher retention rates than students not feeling connected (Post et al., 2017). Modeling behaviors of servant leadership may have been demonstrated in both groups regardless of the instructor having or not having experience as an online learner. Sahawneh and Benuto's research may be confirmed, sharing servant leadership as a good fit in an online environment for online learners face unique challenges such as social isolation and high attrition rates compared to learners in a face-to-face environment. Chan (2016) discussed instructors practicing servant leadership provided students with encouragement, constructive feedback, and were by the side of the students when students struggled. An instructor practicing servant leadership provides mentorship and guidance to students while equipping students with knowledge and skills (Chan, 2016). Servant leadership has been shown to have a connection with providing empathy. Sharing personal experience enables instructors to connect with students empathizing learners' struggle or frustration within an online course (Matthews et al., 2017). In addition to servant leadership, when social constructivism is present, collaboration and dialogue between students and instructors allow students to create ideas based on other's opinions. The more experience and knowledge students have, the more sharing in a social environment takes place. Instructors who encourage and guide students to engage within the online course promote active learning through collaboration, which is evidenced in social constructivism (Picciano, 2017). The institution of study provided all instructors in the sample population content in online pedagogy related to faculty presence and student engagement within the online faculty orientation. For this study, due to the required completion of the online faculty orientation by all instructors in the sample population, there may be no relevance with instructors having experience as an online learner

when instructors practice servant leadership and social constructivism.

Faculty Presence

Faculty need to be present in an online course to engage students. Engaging students is a vital contributor to motiving student performance in an online class resulting in student satisfaction (Martin & Bolliger, 2018). There is a social connectiveness aspect associated with motivating and engaging students. Research has shown faculty presence is a factor of student satisfaction in an online course. Schroeder et al. (2016) found online students' desired and experienced more connectivity with online instructors who engaged students in the course. Faculty with more presence in the course fulfilled the desire of connectivity with students resulting in higher student satisfaction. Students enrolled in online courses desired engaging opportunities, understanding, and personal presence of online instructors (Schroeder et al., 2016). Presence can be achieved and perceived by creating an environment where students feel supported and confident (Robinson et al., 2017). Bailey and Card (2009) shared, essential to faculty and student satisfaction is the ability for instructors to foster relationships with students by demonstrating empathy, and the desire to help students be successful. Focus on empathy and servant leadership in training sessions can provide instructors teaching online a better edge in student satisfaction. Sahawneh and Benuto (2018) examined relationships between facets of perceived servant leadership style of instructors and student satisfaction. A positive correlation between the instructor's behaviors associated with servant leadership style and student satisfaction were found (Sahawneh & Benuto, 2018). Picciano (2017) noted faculty needed training on how to encourage and support active learning in online courses. Many institutions

provide online faculty with training related to online pedagogy and technology. Challenges arise when institutions do not provide faculty training and support related to social constructivism and servant leadership principles. The institution of study provided an online faculty orientation for all instructors in the sample population. The orientation included policies and processes associated with academic affairs within the institution, navigating the learning management system, and online pedagogy incorporating faculty presence and student engagement. All instructors at the institution of study must successfully complete the online faculty orientation course before teaching their first online course. All instructors in the sample population successfully completed the faculty orientation course. Because content related to faculty presence was part of the online faculty orientation, faculty presence may have been demonstrated in both groups of instructors. There may be little relevance to the instructors' background as an online learner in relation to student satisfaction and retention.

Limitations

A limitation recognized in the study was the sample size. After data analysis, G*Power was used to determine the power of the test used for analysis. The effect size of 0.165914 with an alpha of .05 along with the sample size of 24 for each group determined the power of the test was weak. If a larger sample size was used for the study, there might have been a greater ability to recognize any differences. Increasing the sample size may have allowed for a larger effect size. For future studies, increasing the sample size should be considered to increase validity and reliability. The sample size could be increased by adding other types of courses such as business courses or nursing courses taught by adjunct instructors.

Recommendations

There are a few recommendations for further studies. The recommendations are based upon the research findings in relation to the research question: To what extent does an online instructor's experience as an online college student correlate to student retention in the instructor's online course? One recommendation is to replicate the study with a larger sample population, including courses other than general education courses.

Another recommendation is to replicate the study with a larger sample size and add another group of instructors without formal online faculty training. The sample population for both groups in the current study had formal online faculty training by the institution of study. Comparing two larger sample sizes with the same type of dichotomous groups used in the study along with another dichotomous group of instructors, with and without online learner experience, who have no formal online faculty training, could provide further insight related to faculty training. Teaching online courses for the first time is challenging for instructors to ascertain the type of interaction as being most effective in an online course compared to the type of interaction used in a face-to-face course (Phirangee, 2016). Online teaching requires a different approach and strategy when building a sense of community through interaction. Phirangee (2016) found online instructors need to create positive opportunities for communication with online students for richer online discussions. Formal online faculty training can enhance these opportunities. Determining if training has any relationship with instructors with and without online learner experience and retention is a research opportunity.

A further recommendation is replicating the study at another institution of study with

lessor faculty expectations than the high faculty expectations at the institution of study used for the present research study. Faculty presence is paramount and an expectation at the institution of study researched. Each instructor at the institution of study is observed by a dean each quarter. All instructors have the same faculty expectations, including the type and cadence of faculty presence. Adjunct instructors wishing to continue teaching at the institution of study should abide by the expectations or lose the opportunity to re-contract. Completing a study at another institution without such expectations is a recommendation.

Conclusions

The sample size for the study was determined to be too small, resulting in the power of the test being weak. The sample size of 50 instructors as the dichotomous independent variable was reduced to 48 when two outliers were removed from the data. Hence, assumption testing was satisfied. A point-biserial correlation was determined to be the appropriate test. The test was run between instructors and student retention rates, determining no statistically significant correlation between instructors and student retention rates. An independent *t*-test was run post hoc, finding the relationship of instructors in both groups and retention rates as statistically non-significant.

Based on the theoretical framework of the study, instructors, who demonstrate servant leadership behaviors in the classroom, positively correlate with student satisfaction in an online environment (Sahawneh & Benuto, 2018). Research shows instructors demonstrating servant leadership encourage students to work towards being successful in school and in life (Chan, 2016). The practice of servant leadership was found to have potential in improving student

satisfaction in online courses resulting in higher retention (Sahawneh & Benuto, 2018). Increased student satisfaction has been attributed to engagement and interaction on the part of instructors and peers as a practice of social constructivism (Picciano, 2017). Focus on empathy and servant leadership in training sessions can provide instructors teaching online a better edge in student satisfaction (Sahawneh & Benuto, 2018). Noland and Richards (2015) found instructors exhibiting servant leadership principles by putting the needs of the students first, had a positive correlation with student outcomes related to learning and engagement. When putting the needs of students first, increased faculty presence creates an environment where students feel supported and confident (Robinson et al., 2017). The institution of study provided an online faculty orientation with content in online pedagogy emphasizing faculty presence and student engagement. Instructors in both groups had similar retention rates with no statistical significance in retention rates in comparison to one group or the other. Servant leadership could have been practiced by instructors in both Group A and Group B, regardless of having experience as an online learner. Leaders demonstrating servant leadership behaviors have a positive correlation with student satisfaction in an online environment (Sahawneh & Benuto, 2018). Based on the findings of the study, the determination was to fail to reject the null hypothesis. There was no significant relationship between an online instructor's experience as an online college student and student retention in a respective instructor's online course.

Implications for Leadership

The results of the study showed no statistical significant relationship between instructors with or without experience as an online college student and retention rates in the instructor's

course. The knowledge gained from the study may be beneficial to future scholars and academic leaders within higher education providing distance education. Although one group within the dichotomous variable did not stand out as having a significant difference in retention rates, the results of the study can lead to continued examination. The theory of servant leadership may have significance in a larger sample size when comparing instructors with and without an online learner background. Noland and Richards (2015) shared instructors demonstrating servant leadership found a positive correlation to student outcomes and satisfaction. Instructors with a passion for teaching online understand the importance of fostering relationships with students, and demonstrating empathy is essential to student success (Bailey & Card, 2009). Perhaps, the instructors in the study all had a passion for teaching regardless of having experience as an online college student. Implementing the recommendation of replicating the study using a larger sample size may result in statistical significance.

Faculty training may have played an essential role in both groups of instructors. Miller (2015) found many institutions assume instructors who teach effectively in a face-to-face environment can do the same online. Instructors need training on how to engage students in an online environment resulting in student satisfaction. Areas important in online faculty training include interacting with students early and often and providing constructive, clear, and prompt feedback (Miller, 2015). These areas may not be assumed to be noteworthy by an instructor without experience as an online learner. If online training is provided to all instructors, the assumption may be recognized by all. Implementing the recommendation to replicate the study with an institution not providing online faculty training should be considered.

The study did not close the gap in the literature by examining the relationship between online instructors with experience as an online learner and retention rates. The study did provide the foundation for future studies. As online enrollments continue to rise, leaders in higher education have a responsibility to find factors related to online student satisfaction to result in higher retention rates. Hiring credentialed adjunct instructors with the skills and right characteristics to increase student satisfaction in online courses is imperative to student retention.

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Appendix A: Recruitment Letter

(Date)

(Instructor Email address)

Dear XXXX,

I am a doctoral student at the American College of Education. I am writing to let you know about an opportunity to participate in a dissertation research study. The study will examine the statistical significance of the relationship between online instructors with experience as an online college student and retention rates in the instructor's course. Student retention rates have been researched and found to be lower in an online environment compared to an on-ground, face-to-face environment. This problem has motivated this researcher to complete a quantitative correlational study.

The benefit of the study is to examine if there is a correlation with instructors having personal experience as an online learner and retention rates in the instructor's online courses. As a result of this study, higher educational institutions providing online programs may find the results valuable in relation to faculty hiring and training practices. Results could increase student satisfaction and retention.

You will be receiving another email with a link to Survey Monkey to provide your name and answer one question. The question is "As a college student, did you complete college level online courses for credit?"
Your participation to answer this one question is voluntary. There are no other questions for you to answer in this study. All other information needed for the study will come from historical data housed in the faculty management system and student information systems at the college.

I may publish the results of this study; however, I will not use your name, course title or student names in the study. Your information will remain confidential. If you would like additional

information about this study, please call me at 407-484-2849.

Thank you again for considering this dissertation research opportunity.

Lynne Croteau

Appendix B: Informed Consent

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Prospective Research Participant: Read this consent form carefully and ask as many questions as you like before you decide whether you want to participate in this research study. You are free to ask questions at any time before, during, or after your participation in this research.

Research Information

Dissertation Title: Examining Student Retention and Online Instructors with Online Student Experience: A Correlational Study

Researcher: Lynne Croteau
Email: croteaulynne@hotmail.com
Telephone: 407-484-2849

Introduction

I am Lynne Croteau, and I am a doctoral candidate student at American College of Education. I am doing research under the guidance and supervision of my Chair, Dr. Scott Bailey. Although I am an employee at the institution of study, this research is separate from and external to my role at the College. The research is being conducted in my role as a graduate student at the American College of Education. I will provide you with information about the research study and invite you to be part of this research. Before you decide, you can talk to anyone you feel comfortable with about the research. Please ask me any questions before, during or after the study is completed.

Purpose of the Research

You are being asked to participate in a research study which will examine the statistical significance of the relationship between online instructors with experience as an online college student and retention rates in the instructor's online course. Results of the study can provide academic leaders with insight into the value of hiring faculty with existing online experience to teach online courses. The study may inform hiring practices and faculty onboarding, training, and professional development techniques to increase student retention. This study examines if an online instructor's educational background plays a role in student retention in the course's instructors teach online.

Research Design and Procedures

The study will use non-experimental, quantitative correlational methodology. The study will comprise of 50 participants who opt in by completing a survey consisting of: name and answering yes or no to one factual question. The researcher will export historical data in the faculty management system associated with your first course taught at the institution of study. Your name and name of course will not be used in the completed dissertation. No names will be published, and courses will be referenced numerically. The study will examine the statistical significance of online instructors with or without experience as an online college student and retention rates in the instructor's first online course taught at the institution of study.

Participant selection

You are being invited to take part in this research because of your experience as an online instructor and meeting the criteria for this study. Participant selection criteria: Adjunct instructors hired to teach in winter 2015 through fall 2019; completed online orientation in the Blackboard learning management system; taught general education courses online; and has or has not been an online college student. Instructors not having every criterion listed do not participate.

Voluntary Participation

Your participation in this research is entirely voluntary. It is your choice whether to participate. If you choose not to participate, there will be no punitive repercussions. If you select to participate in this study, you may change your mind prior to the completion of the study.

Procedures

You are invited to participate in this research study. If you agree, you will be asked to complete a survey which will be emailed to you through Survey Monkey. The type of questions asked will consist of your name and answering one factual question with yes or no. The factual question is: "As a college student, did you complete college level online courses for credit?" For this study, experience as an online college student is defined as one who has completed college-level online courses requiring weekly graded discussions and assignments accessed and submitted remotely.

Duration

The survey portion of the research study will require approximately one minute for the participants to complete. There is no other time needed as a participant of the study.

Risks

The researcher will ask you one factual question for you to answer yes or no. You do not have to answer the question if you do not wish to do so. You do not have to give any reason for not

responding to the survey question.

Benefits

While there will be no direct financial benefit to you, your participation is likely to help provide valuable insight related to online faculty hiring and training opportunities for institutions of higher learning. The insights may increase student satisfaction and retention.

Confidentiality

Information about you or your association with courses being analyzed will not be shared outside of the researcher. During the defense of the doctoral dissertation, data collected will be presented to the dissertation committee. The data collected will be stored on the researcher's personal external hard drive and will be deleted from the hard drive after three years of completion of research. Any information about you will be coded and will not have a direct correlation, which directly identifies you as the participant. Only the researcher will know what your number is and will secure your information.

Sharing the Results

At the end of the research study, the results will be available for each participant as requested. It is anticipated the researcher will publish the results so others interested may learn from the research.

Right to Refuse or Withdraw

Participation is voluntary. At any time, you wish to end your participation in the research study, you may do so without repercussions.

Questions About the Study

If you have any questions, you may ask them now or later. If you wish to ask questions later, you may contact the researcher at croteaulynne@hotmail.com or by phone at 407-484-2849. This research plan has been reviewed and approved by the Institutional Review Board of American College of Education. This is a committee whose role is to make sure research participants are protected from harm. If you wish to ask questions of this group, email IRB@ace.edu.

Certificate of Consent

Lynne Croteau, the researcher, has explained to me the purpose and benefits of her research study and has explained to me:

1. My participation is voluntary.

2. I am assured my information is confidential.
3. Data involving student retention from the first course I taught at the institution of study will be analyzed. The names of the students in my courses and the course titles will be kept confidential.
4. I am assured I will remain anonymous, and my name will not be shared with any other organizations or anyone except the researcher.
5. I understand the researcher expects to publish the study, and the findings of the research study will be managed so the sources of information cannot be identified.
6. I can contact the researcher at croteaulynne@hotmail.com or 407-484-2849

I have read the information about this study, or it has been read to me. I acknowledge why I have been asked to be a participant in the research study. I have been provided the opportunity to ask questions about the study, and any questions have been answered to my satisfaction. I certify I am at least 18 years of age. I consent voluntarily to be a participant in this study.

Print or Type Name of Participant: _____

Signature of Participant: _____

Date: _____

I confirm the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered to the best of my ability. I confirm the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily. A copy of this Consent Form has been provided to the participant.

Print or type name of lead researcher: _____

Signature of lead researcher: _____

PLEASE KEEP THIS INFORMED CONSENT FORM FOR YOUR RECORDS.

Appendix C: Survey Monkey

You have accepted to answer one question to participate in a dissertation research study. You accepted to provide your name to only be used by Lynne Croteau, the researcher, to identify your first course taught at the institution of study to be used for analysis. The researcher will export historical data in the faculty management system associated with your first course taught at the institution of study. Your name and name of course will not be used in the completed dissertation. No names will be published, and courses will be referenced numerically. The study will examine the statistical significance of online instructors with or without experience as an online college student and retention rates in the instructor's first online course taught at the institution of study. For this study, experience as an online college student is defined as one who has completed college-level online courses requiring weekly graded discussions and assignments accessed and submitted remotely.

1. First name, Last name
2. As a college student, did you complete college level online courses for credit?

   Yes or No

Thank you for participating.

Appendix D: IRB Approval (Institution of Study)

RASMUSSEN COLLEGE – EST. 1900 –

December 5, 2019

Dear Ms. Croteau:

This letter provides you final approval to begin a study at Rasmussen College to examine the statistical significance of the relationship between online instructors with experience as an online college student and retention rates in said instructor's online course. As required, you obtained approval from the Institutional Review Board (IRB) at the American College of Education, and sent such official approval to me on December 5, 2019.

You must also adhere to the stipulations stated in my letter to you, dated November 11, 2019. Among those stipulations, please recall that all possible steps must be taken to protect the names and identities of faculty members that choose to participate in your study. No participants can have a current or prior reporting relationship to you. Too, as we discussed, the College's analytics department may not be asked to help with data mining for this study.

Please remember that Rasmussen College must have access to the final dissertation and findings from your study. The name of Rasmussen College may not be used in any documents or publications related to your study or dissertation.

I wish you all the best as you conduct this research and complete your dissertation and degree. I look forward to updates on your progress.

Sincerely,

Matthew Segaard, Ph.D. / Assistant Vice President of Institutional Research and Assessment
Rasmussen College – Twin Cities Office
Office: 952-806-3913

Appendix E: IRB Approval (American College of Education)

ACE
AMERICAN COLLEGE of EDUCATION

December 3, 2019

To: Lynne Croteau
Scott Bailey, Dissertation Committee Chair

From: Becky Gerambia
Becky Gerambia
Assistant Chair, Institutional Review Board
Office of Institutional Analytics

Re: IRB Approval

"Examining Student Retention and Online Instructors with Online Student Experience: A Correlational Study"

The American College of Education IRB has reviewed your application, proposal, and any related materials. We have determined that your research provides sufficient protection of human subjects.

Your research is therefore approved to proceed. The expiration date for this IRB approval is one year from the date of review completion, December 3, 2020. If you would like to continue your research beyond this point, including data collection and/or analysis of private data, you must submit a renewal request to the IRB.

Our best to you as you continue your studies.