

I THINK I CAN; I KNOW I CAN: SELF-EFFICACY AS AN INDICATOR
OF LEARNER SELF-SATISFACTION WITH THE LEARNING
EXPERIENCE IN AN ONLINE MASTER OF
SOCIAL WORK PROGRAM

by

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DEDICATION

I dedicate this dissertation to my family and friends, whose continual support and encouragement as I navigated my way throughout this process, now share in this accomplishment along with me.

To my parents Tomas and Yolanda Perez, for teaching me the value of an education and satisfaction in hard work. To my husband Jesse, son Nicholas, and daughter Emma, this would not have been possible without their collective sacrifices and support. To my sister Stephanie, for consistently providing me with words of encouragement. To all my friends for understanding why I missed so many functions and continued to invite me anyway.

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ABSTRACT

The purpose of this predictive non-experimental quantitative research was to determine if self-efficacy as a Master-of-Social-Work (MSW) student and/or self-efficacy as an online learner impacts learner self-satisfaction in an exclusively online MSW program. The study also examined characteristics associated with social work or online learner self-efficacy and learner self-satisfaction. Social Cognitive Theory was used as the theoretical perspective. The research was conducted at a small liberal arts college with a well-established online MSW program. A non-probability convenience sample of 43 incoming online MSW students was used as the study population. The findings suggest that there is not a significant relationship between Social Work Self-Efficacy and Self-Satisfaction or Online Learning Self-Efficacy and Self-Satisfaction. This study found that while students may be highly efficacious as MSW Students and Online Learners, they were not necessarily self-satisfied with their online learning experience. The study also found that students had an increase in their Social Work Self-Efficacy and persisted onto course completion. This persistence indicates that self-efficacy alone, and not self-satisfaction, may be a more accurate factor leading to student attrition. The findings indicate that the track — foundation for students with a bachelors in an unrelated field or advanced for students with a bachelors in social work — enrolled and social work experience are good predictors of Social Work Self-Efficacy and experience with online learning as being a good predictor of Online Learning Self-Efficacy. The findings of this research are relevant to institutions of higher learning seeking to establish or improve upon their online Master-

of-Social-Work program. Implications for practice and recommendations for future research surrounding variables that predict or create high self-efficacy are suggested.

I. INTRODUCTION

The growth in numbers of people of advanced age within the nation, coupled with the psychosocial needs of a diverse population which includes persons with an opioid addiction and families with child welfare concerns, has created a growing need for trained social work professionals. According to Moore, et al. “Evidence indicates that the current and projected supply of professional social workers with a master’s degree will not keep pace with demand” (2015, p. 506). To address this issue, representatives from various national organizations for social work professionals, governmental agencies, and public health organizations have created initiatives to increase accessibility to higher education for individuals interested in pursuing a career in social work.

In response, institutions of higher learning are broadening how social workers are educated by creating Master-of-Social-Work programs and in some instances offering these programs exclusively online. Such online Master-of-Social-Work programs are growing rapidly on a national level. Although the creation of online programs is not new to higher education, the human element of social work creates unique challenges for institutions looking to expand their reach through online programs.

The literature on social work education is in agreement that online learning creates accessibility for individuals looking to grow in the field who would otherwise not have the opportunity due to limited availability of program and/or flexibility of schedule. “As more colleges use distance courses to attract new students, administrators are trying to figure out how to keep those students enrolled” (Carr, 2000, p. 1). According to Artino (2008), student satisfaction with online learning is a strong indicator of a students’ intent to drop a course or enroll in online courses in the future. Given the recent growth of

online Master-of-Social-Work programs and the uniqueness of the field, this research seeks to determine if an individual's Self-Efficacy as an Online Learner in a Master-of-Social-Work program is an indicator of Learner Self-Satisfaction in the program.

Background of the Study

The social work profession is seeing tremendous growth due in part to an aging population and changes in the psychosocial needs of the population, however, there is a lack of adequately trained professionals to fill those gaps. The Bureau of Labor Statistics, U.S. Department of Labor (n.d.), estimates that the social work field will see up to a 16 % growth between 2016 and 2026, noting that some specializations may see up to a 20 % growth during the same time period. Specifically, Texas is among the top three states projected to have the most extreme shortage of social work professionals by 2030 (Lin et al., 2016, p. 9). Professional organizations, governmental agencies, and institutions of higher learning are working towards alleviating this shortage by increasing access to higher education. These initiatives have resulted in accelerated social work programs, higher school enrollment, and greater recruitment of college graduates into the field (Lin et al., 2016). However, according to Blackmon (2013), social work is behind in implementing online learning.

Masters-of-Social-Work programs who are offered exclusively online provide an opportunity to individuals that want to pursue their education but have not done so due to barriers in accessing a program. This includes individuals that reside in areas where an accredited Masters- of-Social-Work program is non-existent and “who cannot or do not want to move to attend school as a result of financial, familial or career restrictions” (Moore, et al., 2015, p. 507). In addition to expanding accessibility to a program, online

learning provides an opportunity for developing digital literacy. According to Blackmon (2013), she suggests that online learning should be encouraged to develop technological skills which are and will continue to be required of practitioners. In fact, the National Association of Social Workers (NASW) Code of Ethics were recently revised (2017) to include ethical responsibilities when using technology in practice.

The literature is consistent in indicating that the social work profession and institutions of higher learning are ready for online learning; what remains unclear is if students are ready. To assess a students' readiness for online learning, we should evaluate their capabilities to successfully complete an online program by determining their level of self-efficacy. According to Holden et al. "ratings of self-efficacy have repeatedly been shown to be predictive of a range of future behaviors" (1999, p. 464). The ways in which students see themselves and their self-efficacy as online learners contribute to their sense of readiness. As a helping profession, "social work educators and practitioners often describe themselves as 'people persons' who value human encounters" (Vernon et al., 2009, p. 269). This sentiment may impact a learner's self-efficacy in an exclusively online Master-of-Social-Work program given that these programs employ a different form of interaction and often on a more limited basis (Vernon et al., 2009) from what learners are accustomed to.

The way a learner perceives their ability to succeed at a task plays a significant role in their acceptance or rejection of any new undertaking (Mahoney, 2009). Self-efficacy as defined by Albert Bandura is the "belief in one's capabilities to organize and execute the course of action required to produce given attainments" (1997, p. 3). According to Schunk (1991), individuals with low self-efficacy for success may avoid

tasks, work lackadaisically, and/or put out little effort on difficult undertakings; while individuals with high self-efficacy for success participate willingly in tasks, persist longer and put out substantial effort on difficult projects. Holden et al. state that “Self-efficacy is a particular kind of assessment, and as such, is related to self-awareness, which has been a long-standing goal of social work education” (2002, p. 116). Institutions looking to increase student success, must have an understanding of how students experience online coursework (Varner, 2013) and design programs to increase efficacy (Solberg et al., 1993).

Statement of the Problem

Social work professional organizations, institutions of higher learning, and incoming students are turning to online learning as a viable way to pursue education in social work. The interest in online learning stems from a shortage of qualified social workers (Lin et al., 2016) and lack of available programs in areas where students live and work (Blackmon, 2013). Additionally, institutions of higher learning see online learning as a critical component to their long-term success (Allen & Seaman, 2016). Online programs offering a master’s degree in social work are an attractive option for students who would otherwise not have the opportunity to pursue their education (Braun, 2008).

The social work profession, however, has some unique instructional challenges with an online platform which could impact a student’s sense of self-efficacy in an exclusively online Master-of-Social-Work program. Self-efficacy is instrumental in goal setting and attainment (Hodges, 2008) and has been positively related to student persistence (Jan, 2015). Gaining a better understanding of the self-efficacy of student’s entering an online master’s degree in social work program and its relationship with

learner self-satisfaction after the first term may provide insight into understanding the motivation of successful academic behaviors, as well as into potential strategies to increase student retention (Solberg et al., 1993).

Purpose of the Study

The purpose of this study was to determine if self-efficacy as a Master-of-Social-Work student impacts learner self-satisfaction in an exclusively online Master-of-Social-Work program; if self-efficacy as an online learner impacts learner self-satisfaction in an exclusively online Master-of-Social-Work program; and if self-efficacy as both a Master-of-Social Work student and an online learner impacts learner self-satisfaction in an exclusively online Master-of Social-Work program. Additionally, the study examined if there were characteristics associated with social work self-efficacy and learner self-satisfaction or online learner self-efficacy and learner self-satisfaction upon entering their first term in the program.

Research Questions

This study sought to address the following questions:

1. Is there a significant relationship between Social Work Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?
2. Is there a significant relationship between Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?

3. Do students in an exclusively online Master-of-Social-Work program need high Self-Efficacy as both a Master-of-Social-Work student and an Online Learner to experience Self-Satisfaction with their educational experience?
4. Are there characteristics that have a significant relationship with Social Work Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?
 - a) Demographic characteristics (i.e. age, social economic status, parents' level of education, marital status, number of children, employment status, program track enrolled, and enrollment hours)
 - b) Experience as a social work professional
5. Are there characteristics that have a significant relationship with Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?
 - a) Demographic characteristics (i.e. age, social economic status, parents' level of education, marital status, number of children, employment status, program track enrolled, and enrollment hours)
 - b) Experience as an online learner

Directional hypotheses:

1. There is a significant relationship between Social Work Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program such that, as Social Work Self-Efficacy goes up, so will Learner Self-Satisfaction.

2. There is a significant relationship between Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program such that, as Online Learner Self-Efficacy goes up, so will Learner Self-Satisfaction.
3. Students in an exclusively online Master-of-Social-Work program need high Self-Efficacy as both a Master-of-Social-Work student and an Online Learner to experience Self-Satisfaction with their educational experience such that, as Social Work and Online Learner Self-Efficacy go up, so will Learner Self-Satisfaction.
4. There are characteristics that have a significant relationship with Social Work Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program.
 - a) Demographic characteristics (i.e. age, social economic status, parents' level of education, marital status, number of children, employment status, program track enrolled, and enrollment hours)
 - b) Experience as a social work professional
5. There are characteristics that have a significant relationship with Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program.
 - a) Demographic characteristics (i.e. age, social economic status, parents' level of education, marital status, number of children, employment status, program track enrolled, and enrollment hours)
 - b) Experience as an online learner

Significance of the Study

The results of this study highlight the effect Self-Efficacy has on Learner Self-Satisfaction for students enrolled in an exclusively online Master-of-Social-Work program as well as identify specific learner characteristics associated with Social Work Self-Efficacy and Learner Self-Satisfaction or Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program. Although student attrition rates for online programs have not been tracked in a standardized way (Carr, 2000), learner satisfaction in an online program has been identified in the literature as an important factor to student persistence in an online program and ultimately in their success.

The insight gained from this study may help inform institutions of higher learning in identifying students that may require additional support as they begin their career as an online learner, increasing a student's chance of successfully completing the program. Varner (2013), asserts that in order for programs to be successful they must balance learner satisfaction and achievement as both play a part in student retention. The successful integration of exclusively online Master-of-Social-Work programs will contribute much needed qualified social work professionals into the field.

Theoretical Perspective

This study looked at Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program from the perspective of *social cognitive theory* (Bandura, 1986).

According to Bandura:

In the social cognitive view people are neither driven by inner forces nor automatically shaped and controlled by external stimuli. Rather, human

functioning is explained in terms of a model of triadic reciprocity in which behavior, cognitive and other personal factors, and environmental events all operate as interacting determinants of each other. (1986, p. 18)

Social cognitive theory endorses triadic reciprocal determinism which assumes that personal factors, environmental factors, and behavior influence each other bidirectionally (Figure 1). This triadic reciprocity of influence does not mean that the different factors are of equal strength-or that they occur at the same time (Bandura, 1986).

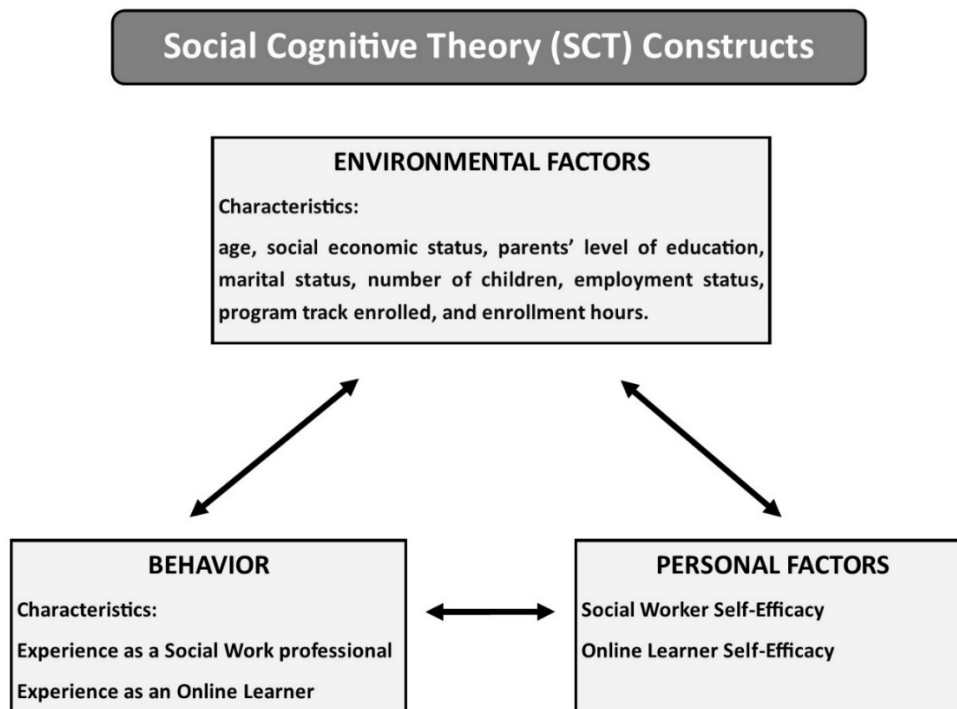


Figure 1

Conceptual Model

Self-efficacy may be the most well-known construct of social cognitive theory

and refers to the way individuals evaluate their abilities and how that belief affects their motivation and behavior (Bandura, 1986). Social cognitive theory assumes a relationship between self-efficacy and occupational interests' (Bandura, 1977) predicting not only performance outcomes, but persistence to task completion, as well (Jan, 2015). According to Hodges (2008), self-efficacy is vital to both goal setting and goal attainment. Self-efficacy is the driving force behind an individual's decision to pursue or not pursue a task (Puzziferro, 2008) and continues to impact an individual's motives, actions, plan, and performance in completing the task.

Research Design

This predictive non-experimental quantitative research uses Bayesian probability to address the research questions. Individuals were invited to participate based on a convenience sample of those entering an exclusively online Master-of-Social-Work program from a small liberal arts college. Participants were asked to complete surveys consisting of two phases, a pre-assessment phase and a post-assessment phase. The pre-assessment phase consisted of, a Learner Characteristics (Appendix A) portion, a Social Work Self-Efficacy (Appendix B) portion, and an Online Learning Self-Efficacy (Appendix C) portion and was administered the week prior to students beginning their first course. The post-assessment phase which was administered during the last week of the course, consisted of a Social Work Self-Efficacy (Appendix B) portion and Learner Self-Satisfaction Survey (Appendix D). Morkov Chain Monte Carlo (MCMC) resampling was used to address the issue of low sample size.

Assumptions, Limitations, and Delimitations

The axiological assumption is that Self-Efficacy as an online learner is correlated

to an individual's perception of Self-Satisfaction with online learning. This research may provide institutions of higher learning with insight into potential motivation of successful academic behaviors and potentially point out strategies for increasing student retention.

A limitation of this study is that survey respondents may have reacted to their experience with the professor, learning management system, or the institution rather than in a manner purely reflecting their Self-Satisfaction with their role as an online learner. Additionally, Self-Efficacy and Self-Satisfaction are subjective measurements which can vary given a person's psychological and physiological state (Petrovich, 2004). Another limitation of the study is that participants who elected to participate in the study may have done so because they have a higher self-efficacy with online learning or social work education than others who did not voluntarily participate, which may provide a skewed view of the findings.

A delimitation of this study is the choice to conduct the research at one institution. This was done in an attempt to streamline the research process due to the various start times and program structures that may have impacted the study by using multiple institutions.

Definition of Terms

The literature available on online learning is not consistent in the way commonly associated terms are applied. For the purpose of clarity, the following definitions of terms will be used in this study:

Distance Education: "Teaching and planned learning in which the teaching normally occurs in a different place from learning, requiring communication through technologies, as well as special institutional organization" (Moore & Kearsley, 2012,

p.2).

Exclusively Online Program: An educational program with 100% of the content and interactions delivered in an online platform.

Online Course: “A Course where most (80+ %) or all of the content is delivered online. Typically have no face-to-face meetings” (Allen & Seaman, 2016, p.7).

Online Learning: Computer mediated communication that is used both asynchronously and synchronously for the purpose of learning (Garrison, 2016).

Online Program: A program where 90% of classes are delivered online. This definition was adopted from the definition for *primarily online institution* used by The U.S. Department of Education National Center for Education Statistics (2016).

Self-efficacy: An individual’s belief in his or her capability to execute behaviors necessary to produce specific performance attainments. (Bandura, 1997)

Organization of the Remainder of the Study

Next, the Literature Review chapter provides a summation of relevant literature consisting of empirical studies and critical literature reviews on social worker education, current status of online learning in higher education, the role of online learning in social work education, self-efficacy as a student in a Master-of-Social-Work program, self-efficacy as an online student, and learner characteristics associated with learner satisfaction in an online program. Chapter Three on Methodology provides an outline of the research including details regarding the research site, sample selection, data collection instruments and procedure, and data analysis. Chapter Four on Data Analysis will discuss the analytical approach used on collected data. Finally, Chapter Five on Conclusion and Discussion will discuss research implications and recommendations.

II. LITERATURE REVIEW

Several factors such as aging populations, increasing poverty levels, an opioid epidemic, and increased demand in child welfare (Lin et al., 2016) have contributed to the national shortage of specialized social workers. Further exacerbating this problem is the lack of accessibility to advanced degrees such as a Master-of-Social-Work (MSW), which are required for individuals looking to work in these specialized fields. Institutions of higher learning are responding to this need by further developing, and in some instances, creating exclusively online programs, which are in high demand.

Advances in technology have made pursuing a master's degree more accessible for the adult learner and are advantageous for institutions of higher learning vying for student enrollment. Adults who have previously abstained from pursuing their education due to barriers such as time, distance, and available educational offerings, are now taking advantage of online programs (Blackmon, 2013; Braun, 2008). Programs offered exclusively online provide an opportunity for both the adult learner interested in furthering their education and careers, and the institution of higher learning interested in filling this gap.

Online learning is seen as a crucial avenue for educating future social workers by institutions of higher learning (Jones, 2015) and leaders in the field of social work (Blackmon, 2013). The literature offers empirical evidence for strategies for online teaching (Jones, 2015) including anecdotal perspectives from institutions finding success with their MSW programs (Moore, et al., 2015; Noble & Russell, 2013). Additionally, empirical evidence is offered regarding learner satisfaction with online programs (Jan, 2015; Kaufman, 2015; & Puzzifero, 2008). Although the literature on learner satisfaction

with online learning is abundant, the variables are inconsistent and often used in a variety of combinations. Two of the more prominent variables as predictors of learner satisfaction in an online learning environment are learner characteristics (Jan, 2015) and self-efficacy (Hodges, 2008).

This literature review looks at the relationship between self-efficacy and learner self-satisfaction with an exclusively online Master-of-Social-Work (MSW) program. The goal of this literature review is to explore the outlook of social work education, investigate the current status of online learning in higher education, identify the role of online learning in social work education, explore self-efficacy as a student in a Master-of-Social-Work program as well as self-efficacy as an online student, and identify characteristics associated with learner satisfaction in an online program.

Online learning, distance education, online readiness, learner readiness, self-efficacy, master's student, master's program, social worker, social work education, and student satisfaction were the key words used in conducting this literature review. Additionally, a Boolean search strategy was used to refine search results. The Albert B. Alkek Library (<http://www.library.txstate.edu/>), Elton B. Stephens Co. (EBSCO) (<https://www.ebsco.com/>), Education Resources Information Center (ERIC) (www.eric.ed.gov), and Google Scholar (<http://scholar.google.com/>) electronic databases were the primary source for locating articles and books for this literature review. A date range of 2009 to 2019 was set for this research. References were also identified through reference lists of relevant articles and texts with dates extending beyond the preset search criteria. The exclusion criteria included articles with research conducted outside the higher and continuing education sphere.

The State of Master's Degree Education in Social Work

According to the Bureau of Labor Statistics, U.S. Department of Labor (n.d.), the social work field is projected to see a 16 % growth between 2016 and 2026, with some specializations seeing as much as a 20 % growth within the same time period. According to The United States Census Bureau (2018), three cities in Texas were in the top five for population growth between July 2016 and July 2017. The state of Texas is also among the top three states with the most extreme shortage of social work professionals projected by 2030 (Lin et al., 2016, p. 9).

Specializations within the field requires practitioners to hold a Master-of-Social-Work (MSW) degree. While many institutions are adding a Master-of-Social-Work (MSW) program on campus, many have turned to online learning to meet this growing demand. As of January 2020, Texas had 18 universities accredited or in candidacy for accreditation by the Council on Social Work Education (n.d.) that offered an MSW program, six of which also offered participation exclusively online. However, this is an estimate, as institutions self-report this information on a volunteer basis.

Online programs such as these are more accessible to individuals that may not reside near an institution offering a Masters-of-Social-Work (Vernon et al., 2009; Moore et al., 2015). The online program at Texas State University in San Marcos, Texas previously stipulated that prospective students that live greater than 50 miles from an accredited institution offering a master's degree in social work be given priority for enrollment into the program (Council on Social Work Education, n.d.). Additionally, online programs are more convenient for those unable to attend with a fixed location and schedule due to work and/or familial responsibility. Blackmon (2013) stated that students

with career and family obligations desire access to online programs to allow them to more effectively balance associated responsibilities. The desire to develop online degrees and programs are largely impacted by these types of needs.

An additional benefit of an online Master-of-Social-Work program is the opportunity to become proficient with technology. As the field grows so will the integration of technology. In research conducted by Moore, et al. (2015), they concluded that given the increasing use of technology within the field, students immersed in technology as part of their educational experience may have an advantage over those students without that exposure. According to Blackmon:

The need for workforce development using online technologies is further demonstrated by a call that went out from the National Governors Association (NGA) to universities and colleges requesting that they take the lead improving online education designed to meet the workforce demands. In fact, 39 states [including Texas] are implementing strategies to ensure that higher education institutions are collaborating in the development and expansion of online and web-assisted learning opportunities. (2013, p. 511)

Institutions of higher learning track changes in workforce needs in an attempt to ensure that they are offering educational programs that promote growth and success in the job market. Moore, et al. (2015) have found the growth of online Master-of-Social Work programs to be a beneficial and efficient way to address the growing demand for social work professionals entering the field. Additionally, by reaching students in typically underserved areas such as rural communities, online programs allow individuals to remain in the community they are currently providing services to (Blackmon, 2013;

Vernon et al., 2009).

Online Learning in Higher Education

The growing popularity of online and distance education has stimulated the need for more institutions of higher learning to incorporate distance learning technology into their practice. The Sloan Consortium reports and the U.S. Department of Education are the prominent data sources for online learning trends in higher education. The data provided however, are incomplete and inconsistent with no standardized way of evaluating online programs or online learners. The U.S. Department of Education, National Center for Education Statistics (NCES) offers little in the way of statistics related to online learning in post-secondary education and even less for graduate studies. The Sloan Consortium reports and publishes updates on online learning in the United States and these are heavily cited in the online education research. While this report offers the most conclusive information in online learning available, the standards used to categorize the data do not match the growing trends. For example, Allen and Seaman (2016), define an online course as having 80% or more of the content delivered online. Allen and Seaman (2013), stated that there was a dramatic shift in online course offerings, with an 81% increase in institutions moving from offering course only to creating exclusively online programs between 2002 and 2012. By their own definition the Sloan Consortium report is misleading and does not consider the nuances of participating in an exclusively online program.

According to Allen and Seaman (2013), nearly 70% of university chief academic leaders stated that online education is critical to the long-term strategy of the institution. This metric has seen continual growth since first being reported back in 2002,

demonstrating that institutions of higher learning have come to realize that fully online programs are necessary for them to remain competitive in the higher education and job training market. This report found that in the span of ten years there has been an undeniable growth in both online courses and online programs. These data however, do not distinguish between courses offered online and programs offered online, thus missing an accurate representation of the trend for programs offering degrees exclusively online. According to The U.S. Department of Education, National Center for Education Statistics (NCES) in 2016, there were 80 institutions that identified as a primarily online institution; reporting that more than 90% of their student population attend classes exclusively online. These online institutions graduated over 53,000 masters-level students in 2016 alone. The ability of a traditionally on-campus institution to tap into the interest of students in a fully online program is beneficial for schools offering a Master-of-Social Work degree as it fills a need for the students and represents a significant opportunity for tuition revenue (Moore, et al., 2015).

Student attrition in exclusively online programs is not well reported. The research is currently not distinguishing between students completing an online course from students completing an exclusively online program. Additionally, institutions reporting on their student attrition rates for online programs do not use the same metrics to do so.

Student Motivation for Online Learning

Online learning and the ability to pursue and earn a master's degree without physically attending classes on campus provides options and opportunities for individuals that would otherwise not have the ability to pursue their education. It also provides an alternative to students who do have access to attending classes at an institution, but who

chose to attend an online program for any of a variety of reasons. In a qualitative study conducted by Braun (2008), he surveyed 90 online students identified through purposive sampling to explore reasons why a student would elect to participate in an online course given the availability of face-to-face courses. According to the findings, students enrolled in an online course because they felt that the advantage of flexibility in their learning exceeded any potential downside such as lack of peer and/or instructor interaction.

There are several considerations for students interested in online learning. Among the advantages are flexibility both in time and space, financial incentives, and instructional preference (Braun, 2008; Kowalski et al., 2014). The flexibility to work off campus in a location and at a time that is most convenient allows adult students to continue their responsibilities at home, work, and other settings. Braun noted “that this flexibility allowed them to take care of their families without feeling they were sacrificing school over loved ones” (2008, p. 69). Online students also have the added advantage of saving on their commuting and parking fees, with some online programs offering reduced tuition and books for students (Braun, 2008; Jones, 2015). The ability for students to reflect on the content and participate in online discussion, as well as the exposure to individuals with a more varied background than they would otherwise encounter, also provide advantages to students in online programs.

Paradoxically time commitment, financial burden, and lack of connection with other students and faculty are some of the disadvantages. Students have noted that online course work is more time intensive and requires additional self-regulation. In Braun’s (2008) study, “seventy-seven percent of the whole group said the online courses were much more demanding or slightly more demanding than traditional courses” (p. 71). In

the same study, while some students found a cost savings associated with online learning, some found it to be cost prohibitive due to additional fees and equipment associated with the online environment. The physical disconnect from peers and faculty has also been noted as a barrier to online learning (Noble, 2013).

Online learning provides students with more choices and flexibility than they have had in the past, (Milligan & Buckenmeyer, 2008) providing students who would otherwise not pursue their education an opportunity to do so (Jones, 2015). Additionally, Braun (2008) found that nearly 80% of respondents stated that they would suggest online learning to a colleague. Online learning, however, is not the platform of choice for all learners. In fact, multiple researchers have noted explicitly that online learning is not for everyone (Kauffman, 2015; Milligan & Buckenmeyer, 2008).

Student Readiness for Online Learning

Blayone (2018) conducted a critical review of literature of 76 studies on digital learning readiness and noted that the literature is lacking clarity, with inconsistent conceptualizations and unidimensional operationalization. The research on student readiness for online learning points to several skills needed by students to become successful online learners. According to Mahoney (2009), students need hard skills such as computer use, learning management system (LMS) use, and internet navigation as well as soft skills such as self-direction, organization, motivation, and time management.

Institutions looking to create exclusively online programs must possess an understanding of how students experience online education. Even for students that have never taken an online course, their perceptions of online learning will impact their experience and play a role in how they engage as an online learner (Varner, 2013). It is

also important to consider that students are drawn to online learning due to the availability and/or the flexibility that online programs provide, not necessarily the idea of being an online learner. Student perceptions of online learning and their self-efficacy of themselves as online learners also contributes to the readiness factor for online learning.

Learner Self-Efficacy

Albert Bandura defines perceived self-efficacy as the “belief in one’s capabilities to organize and execute the course of action required to produce given attainments” (1997, p. 3). According to Bandura (1977), there are four major sources of efficacy information: performance accomplishments, vicarious experience, verbal persuasion, and emotional arousal. Performance accomplishments, the strongest source, refers to the individuals own mastery experience. Vicarious experience, which is experience gained by observing others similar to us achieve mastery of a task is the next strongest source. Next is verbal persuasion, which is the positive suggestion that the task can be successfully accomplished. The final source is emotional arousal, which involves visceral reactions such as excitement or fear.

Self-efficacy expectations are related to both performance outcomes and persistence (Bandura, 1977), are context specific (Hodges, 2008), and represent a subjective belief over actual skill and talent for one’s ability to succeed at a task (Petrovich, 2004, p. 429). According to Jan (2015), persistence and self-efficacy are positivity correlated. Self-efficacy is instrumental in goal setting and attainment (Hodges, 2008). In fact, one’s self-efficacy is the reason why a person chooses to engage or not engage in a task (Puzziferro, 2008). An individual’s self-efficacy beliefs also impact that individual’s motivation, action plan, and performance. Self-efficacy is also specific to

one task or goal. High self-efficacy in one area does not translate into another area. The subjective nature of self-efficacy means that self-efficacy is not achieved once a specific skill has been obtained, but rather when the belief that a task can be effectively completed under a variety of circumstances (Solberg et al., 1993).

According to Bandura (1997), “People’s level of motivation, affective state, and actions are based more on what they believe than on what is objectively true” (p. 2). Unlike self-esteem, which is concerned with judgments of self-worth, self-efficacy is concerned with the judgement of personal capability (Bandura, 1997). Additionally, an individual’s mood as well as their emotional and physiological state impacts their perceptions and affects self-efficacy (Petrovich, 2004).

Academic self-efficacy then pertains to a student’s confidence in their ability to perform successfully in academic undertakings (Hodges, 2008). Calderon (2013) conducted a survey study using a convenience sample to determine if direct and indirect evaluation assessments are measuring the same thing. She found that students’ actual success in an educational setting and the way that they perceive their success are separate constructs. She further went on to discuss that students’ perception of learning may reflect the students’ satisfaction with their experiences and not necessarily related to their actual learning.

Self-Efficacy in Master-of-Social-Work Programs

Social work is a helping profession that is dependent on the individual’s ability to be introspective and self-aware as well as possess the ability to build relationships and communicate effectively (Vernon et al., 2009, p. 273). The social work profession is charged with improving the quality of life for individuals and effecting system-wide

change through the pursuit of social justice. Social workers serve in a variety of roles and settings and work with individuals experiencing both internal and external struggles. They also work within systems and policies to help address challenges in an effort to impact change, The National Association of Social Workers, (2013).

Social work self-efficacy as defined by Holden et al. (1999) is “an individual’s confidence in their ability to carry out a wide variety of professional tasks” (p. 465). Holden et al. (2002) assert that individuals who choose to enter a profession do so because they are confident that they possess the skills necessary for that profession. For example, a social worker with high self-efficacy regarding his or her research abilities will feel more empowered in their role as a social worker (Holden, et al., 1999, p. 465). Likewise, a student with high self-efficacy regarding their ability to cognitively process the content will be positively motivated to learn (Schunk, 1991).

The social work profession does have some unique instructional challenges with an online platform which could impact a student’s self-efficacy as a social work student. Specifically, researchers question the ability of students to demonstrate self-awareness, cultural competency, rapport-building, empathic communication, active listening skill and relationship skills without face to face interaction (Jones, 2015). Role play activities which are heavily used in clinical instruction also present a significant challenge. Although research does show that there are no differences in student grades between online and traditionally taught clinical courses, student perception of effectiveness of online courses are lower than they are for on campus courses (Jones, 2015).

Self-Efficacy in Online Learning

The research on self-efficacy in online learning is highly focused on the learner’s

self-efficacy with online and computer technologies (DeTure, 2004), such as computer use, internet use, learning management systems, (Alqurashi, 2016) and information seeking through digital libraries (Tang & Tseng, 2013). However, in the correlational study conducted by DeTure (2004), she found that self-efficacy with online technologies was a poor predictor of student success. While the primary focus of the research in this area has been on technology, some studies looked at learner satisfaction as a factor as well as on general self-efficacy in online learning environments (Alqurashi, 2016). The results of the various studies illustrate the multidimensional nature of online learning self-efficacy as well as the complexity of online learning (Shen et al., 2013).

What is consistent in the literature is that it is not just one aspect of online learning self-efficacy that plays a role in a student's overall belief in their satisfaction and performance in online learning. Alqurashi (2016), noted that variations in computer self-efficacy, prior experience with online learning, and academic self-efficacy were mostly positively and significantly correlated. Self-efficacy has an impact on student performance, meaning that when confidence levels increase, performance levels also increase (DeTure, 2004, p. 23). According to Schunk (1991), the higher an individual's self-efficacy the more motivation they will have to engage in learning strategies that will lead to the desired outcome. The success created by implementing these additional strategies creates a cyclical effect as a result of the success the individual is then more motivated to continue.

Students with high internet self-efficacy are more likely to perform better academically (DeTure, 2004), possess higher information searching skills (Tsai & Tsai, 2003), and feel more positively towards the online learning environment (Alqurashi,

2016). Students who possess high internet self-efficacy will also display a more self-assured attitude towards their decision making and information processing abilities, leading to improved learning outcomes (Tang & Tseng, 2013).

In general, people do not attempt an activity if they do not think they can succeed. Artino (2010) found that the higher a student's self-efficacy for online learning the more likely they will be to take online courses, while students with low self-efficacy are not motivated to learn. A student's recent experience with online learning also plays a large role in their decision to continue in an online capacity. In order to gain competencies however, student's must stay in the program, which will only happen if they are satisfied with their experience.

Student Satisfaction with Online Learning

There are several variables identified in the literature related to student satisfaction in online learning. These variables range from pedagogical approaches, online community, isolation, self-regulated learning, and faculty involvement to name a few. Self-efficacy has also been identified as a variable for student satisfaction in online learning. In a correlational study conducted by Shen et al., (2013) they noted that self-efficacy has been used in the literature as a consistent predictor of an individual's satisfaction with their online learning experience. Similarly, Artino (2010) found specifically that those individuals with high self-efficacy for online learning as well as a high satisfaction with their recent online learning experience indicated a preference for online learning platforms.

Satisfaction with online learning as well as persistence with online courses is likely related to academic self-efficacy, computer self-efficacy, and prior experience with

online learning (Jan, 2015). According to research conducted by Calderon:

The findings indicate a consistency between students' perceptions of their learning (indirect measure of learning) and their attainment of practice skills as rated by their field instructors (direct measures of learning). The findings suggest that students believe that they have achieved the program learning objectives to a great degree, and they have also demonstrated satisfactory presence of practice behaviors associated with those learning objectives. (2013, p. 416)

In the correlational study conducted by Jan (2015), she found that a student's self-efficacy regarding their ability to complete an online course was a better predictor of satisfaction with online learning than any other type of self-efficacy. In a quantitative study conducted by Kuo et al. (2013), they looked at student satisfaction given various types of interaction, internet self-efficacy, and self-regulated learning and reported that "Internet self-efficacy was [also] positively related to satisfaction ($r = .437, p < .01$). Students who had a higher self-efficacy in performing internet actions tended to be more satisfied with the course" (p. 26).

However in dissertation work by Puzziferro (2006) and Rodriguez Roble (2006), both looked at self-efficacy and satisfaction and found that not to be the case. According to results presented by Rodriguez Roble (2006) "there was no statistical relationship between satisfaction and internet self-efficacy $t(93) = .717, p = .475$ " (p.63). Puzziferro (2006) found that there was "no statistically significant differences between OTSES [Online Technologies Self-Efficacy Scale] score by grade performance or satisfaction" (p. 140). While self-efficacy was positively correlated with student satisfaction, it was not a significant predictor.

Something not well discussed in the literature that warrants some attention are student expectations of the learning environment or the learning experience and the effect these have on learner self-efficacy. Mahoney, (2009) found that students' outlook impacted how they saw and performed in an online learning environment. Students who perceive that online learning is not equivalent to face to face learning, even questioning the legitimacy of online learning, can be negatively impacted. This impression may lead students to believe that online learning will require less work and thus a lesser time commitment (Mahoney, 2009) which is not the case. This dis-alignment can impact self-efficacy with online learning negatively and lead to student's dissatisfaction in a program.

In a quantitative study conducted by Shen et al., (2013), they set out to determine the extent of online learner self-efficacy and found that an individual's self-efficacy to succeed in an online environment was most significantly associated with learning satisfaction. Their study highlighted the complexity and variations involved in online self-efficacy and learner satisfaction. These finding reinforced previous studies (Artino, 2007), that identified a positive relationship between self-efficacy and satisfaction for online learners (Artino, 2008).

Conclusion

The social work field is seeing and is projected to continue to see a shortage of qualified professionals. This high demand from the work sector has created movement from higher education to further develop, and in some cases create, online programs to meet the needs of prospective students. In research conducted by Vernon et al., (2009), they reported that eight university programs currently offering a Master-of-Social-Work

planned to offer fully online degrees. This is however self-reported data with only a 27% survey response rate and does not provide a full picture of the current growth of online programs. According to Online MSW Programs (2020), nationally there are currently 27 fully online Master-of-Social-Work programs accredited through the Council on Social Work Education, highlighting a sharp increase in the number of online programs available to students. It is important to note that “the [Master of Social Work] MSW programs appear to be substantially more active in developing courses than the [bachelor in social work] BSW programs” (Vernon et al., p. 267). According to Blackmon (2013), online programs are changing the way that social workers are educated by providing learners with an opportunity to engage with technology, building competency that is needed to better assist clients in this technologically driven society.

This shift towards online learning is intended to attract students that normally would not attend college due to their inability to travel to an on-campus institution, lack available programs within their area, or have personal responsibilities such as family, work, or other commitments prohibiting them from attending. As a helping profession, social work has a unique set of skills that students must learn and demonstrate proficiency in. Institutions of higher learning currently offering an online Master-of-Social-Work program have been creative in implementing strategies that work for their students and their program.

The theory of self-efficacy is well established with empirical support from a variety of fields covering a host of variables. Self-efficacy as a theory also lends itself well to the field of social work (Holden et al., 2002). Researchers in the field of self-efficacy tend to agree that a student’s self-efficacy can predict academic involvement

including, participation in activities, academic effort, and academic achievement (Artino, 2010; Bandura & Schunk, 1981).

In 2016, Alqurashi conducted a literature review on self-efficacy in online learning environments, this article consisted of 31 total studies, the majority of which were published within the current decade. Yet due to the scarcity of research looking at the relationship between online learning and self-efficacy she concludes her search with a call for additional research to further our understanding of the relationship between online learning and self-efficacy. DeTure (2004) noted that a one size fits all self-efficacy measurement will not offer a good predictor of outcome performance measures because self-efficacy is task specific. With a better understanding of self-efficacy as it relates to online learning, we can turn our attention to interventional strategies to foster student self-efficacy in an online program (Solberg et al., 1993).

III. METHODOLOGY

The purpose of this study is to empirically determine the probability that the level and type of Self-Efficacy a student possess prior to entering an exclusively online Master-of-Social-Work program will impact their Level of Self-Satisfaction with their educational experience upon completing their first term in the program. This quantitative research used Bayesian probability to address the following questions:

1. Is there a significant relationship between Social Work Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?
2. Is there a significant relationship between Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?
3. Do students in an exclusively online Master-of-Social-Work program need high Self-Efficacy as both a Master-of-Social-Work student and an Online Learner to experience Self-Satisfaction with their educational experience?
4. Are there characteristics that have a significant relationship with Social Work Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?
 - a) Demographic characteristics (i.e. age, social economic status, parents' level of education, marital status, number of children, employment status, program track enrolled, and enrollment hours)
 - b) Experience as a Social Work professional

5. Are there characteristics that have a significant relationship with Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?
 - a) Demographic characteristics (i.e. age, social economic status, parents' level of education, marital status, number of children, employment status, program track enrolled, and enrollment hours)
 - b) Experience as an Online Learner

Directional hypotheses:

1. There is a significant relationship between Social Work Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program such that, as Social Work Self-Efficacy goes up, so will Learner Self-Satisfaction.
2. There is a significant relationship between Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program such that, as Online Learner Self-Efficacy goes up, so will Learner Self-Satisfaction.
3. Students in an exclusively online Master-of-Social-Work program need high Self-Efficacy as both a Master-of-Social-Work student and an Online Learner to experience Self-Satisfaction with their educational experience such that, as Social Work and Online Learner Self-Efficacy go up, so will Learner Self-Satisfaction.

4. There are characteristics that have a significant relationship with Social Work Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program.
 - a) Demographic characteristics (i.e. age, social economic status, parents' level of education, marital status, number of children, employment status, program track enrolled, and enrollment hours)
 - b) Experience as a Social Work professional
5. There are characteristics that have a significant relationship with Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program.
 - a) Demographic characteristics (i.e. age, social economic status, parents' level of education, marital status, number of children, employment status, program track enrolled, and enrollment hours)
 - b) Experience as an Online Learner

Research Design

A predictive non-experimental quantitative research was conducted to address the research questions. This research used a self-administered survey as the data collection instrument that then underwent a correlational analysis. Surveys were designed to provide statistical descriptors about attitudes and opinions of the target population (Creswell & Creswell, 2018; Fowler, 2014). According to Creswell & Creswell (2018), a survey design aids in addressing questions regarding the relationship between two variables. An additional benefit to using a self-administered survey is the anonymity provided to the respondents which “are thought to be best because the respondent does not have to admit

directly to an interviewer a socially undesirable or negatively valued characteristics or behavior” (Fowler, 2014, p. 65).

Research Site

The study was conducted at a small liberal arts college with a well-established online Master-of-Social-Work (MSW) program. This award-winning program has maintained accreditation status by the Council on Social Work Education (CSWE) since its inception. In Fall 2016 the MSW program received a total of 474 applications into their program, 208 of which were for the online program. That fall, the university extended an acceptance into the program to 187 applicants, 154 of whom enrolled into the program. By Fall of 2018, 47 students successfully graduated from the program.

The Master-of-Social-Work program offers two tracks, an advanced standing track for those with a bachelor’s degree in social work and a foundation track for those with a bachelor’s degree in an unrelated field. There are a total of six terms a year with each term lasting a total of seven weeks. The program enrolls new students on a continuous basis starting every term. All students regardless of track, must complete the MSW New Student Orientation prior to being allowed entry into the first course.

Students have the option of taking up to two courses per term. However, all students enrolled in the foundation track must start with the General Social Work Practice course and all students enrolled in the advanced standing track must start with the Social Work Practice with Hispanic Families course.

Research Participants and Sample Selection

A non-probability convenience sample was used to identify individuals for the study. The target population for this study included all incoming students of the online

Master-of-Social-Work program; specifically, those enrolling in the Summer 2019 Term II session, Fall 2019 Term I session, and Fall 2019 Term II session. Given the low number of available study participants a target sample size between 20 to 50 respondents was chosen with the goal of reaching a relatively low margin of error. All participants were given the opportunity to elect to receive a \$15.00 Amazon E-gift card for their participation in the study. A final question was posed at the end of the post-assessment phase asking if they would like to receive an Amazon E-gift card. Those that choose yes, received their E-gift card within 48 hours after the close of the post-assessment survey.

Participation in the study was voluntary with participants able to opt out of participation at any point during the study. An application for approval for research with human subjects was applied for and approved by both the office of Institutional Review Board (IRB) at Texas State University and at the research site.

Data Collection Instruments

A measurement instrument was developed specifically for this research due to the specificity of self-efficacy for online learning in social work. Bandura's 2006 *Guide for Constructing Self-Efficacy Scales* provided the structure for the self-efficacy tool development. As recommended by Bandura's guide, items are phrased as *can successfully* instead of *will successfully* to accurately reflect the construct and a 100-point response scale was used to provide a "stronger predictor of performance" (Bandura, 2006, p. 312). The Council on Social Work Education (2015) competencies were used as foundational requirements for the Social Work Self-Efficacy (Appendix B) portion of the scale. Major themes from Shen et al., (2013) and Artino & McCoach, (2008) were incorporated into the development of the Online Learning Self-Efficacy (Appendix C)

portion of the scale. Both Shen et al., (2013) and Artino & McCoach, (2008) relied on expert input to validate content for their self-efficacy instruments. The Texas State University IT Assistance Center Student Perceptions Survey was used as the basis for the Learner Self-Satisfaction Survey (Appendix D) instrument. In addition, relevant literature in social work education, online learning, and self-efficacy as well as learner satisfaction was used to inform instrument development.

The data collection instrument was reviewed by one content expert in social work, one content expert in online learning, one content expert in adult learning, and one content expert in survey methodology. The instrument underwent a systematic question review (Fowler & Cosenza, 2009) and was revised accordingly. The instrument next went through cognitive testing by three students currently enrolled in the Master-of-Social-Work program at the research site and was revised as necessary. Cognitive testing aids in determining an individual's understanding of the question and is done by asking volunteers to read the questions aloud and explain in their own words what they think the question is asking. They are then asked to answer the question and explain how they chose that answer over others (Fowler, 2014, p. 103).

Finally, the instrument was field tested by ten students currently registered in the online Master-of-Social-Work program at the research site. An email requesting volunteers for field testing went out to all eligible students, with the first ten interested individuals being selected. The field test requested individuals to comment on instrument instructions, readability, understanding of questions, and length of time it took them to complete the survey. Students that participated in cognitive testing were offered a \$20.00 Amazon E-gift card and students that participated in the field testing were offered a

\$15.00 Amazon E-gift card for their time.

Data Collection Procedures

The study took place over the course of three terms. The first round of data collection was in the Summer 2019 Term II, the second round was in the Fall 2019 Term I, and the third round was in the Fall 2019 Term II. Study participants were given up to one week prior to the start date of the program to complete the initial portion of the assessment. Study participants were given one full week to complete the final portion of the assessment; with access to the survey being granted during the final week of the program.

The online Master-of-Social-Work program at the research site provided email addresses for incoming students for each term of the study one week and one day prior to the start of the term. This was done to ensure that there were no late enrollees that might be missed by receiving student information early and that everyone had equal access to the study. Email addresses are generated by the university and contain the first initial of the student first name, a portion of the last name, and numeric characters. Email addresses were used to match the pre-assessment with the post-assessment survey. Once the assessments were matched, the responses were assigned a non-descriptive number and the participant email was deleted.

A link to study information, along with the pre-assessment which included the participant consent form was included in the MSW New Student Orientation as well as in an email to all students. A one-minute video introducing the purpose and procedure for the study, amount of time required, participant rights, and other pertinent information was also made available to participants via a YouTube link included in the email to

participants and in the course orientation. Additionally, a one-minute informational video was created and made available to faculty, informing them of the study details. Qualtrics® (<https://www.qualtrics.com/>) an online data collection software program was used to collect data at all phases of the study. The post-assessment was sent via email to all participants that completed the entire pre-assessment, respondents with partially completed pre-assessments were not given access to the post-assessment.

Bayesian Analysis

Bayesian analysis — a probability distribution — served as the analytical approach. Bayesian analysis allows for prior knowledge of possibilities — referred to as priors — to be taken with newly received information to create a new understanding — referred to as posterior (Kruschke, 2015; Lambert, 2018; Withers, 2002). According to Lambert, the posterior “represents our post-analysis belief in the hypothesis” (2018, p. 21). A benefit of Bayesian analysis is the use of Markov Chain Monte Carlo (MCMC) resampling. Unlike bootstrapping, Markov Chain Monte Carlo resampling simulates data by repeating sub-samples and analyzing cumulative results which reduces issues with sample size (Loehlin, 2004). Critics of Bayesian claim that the prior distribution is too subjective, however, it is that subjective nature of the priors that proponents of Bayesian assert as its strength. According to Bolstad & Curran, “Bayes’ theorem is the only consistent way to modify our beliefs about the parameters given the data that actually occurred” (2017, p. 7).

Bayesian Theorem is:

$$P(A|B) = \frac{P(B|A)P(A)}{P(B)}$$

Where:

$P(A|B)$ is the probability of A given B

$P(B|A)$ is the probability of B given A

$P(A)$ is the unconditional probability of A

$P(B)$ is the unconditional probability of B

Bayesian theorem was applied to the probability of Learner Self Satisfaction where S is Self-Satisfaction and E is Self-Efficacy as follows:

$$P(S|E) = \frac{P(E|S)P(S)}{P(E)}$$

Where:

$P(S|E)$ is the probability of S given E

$P(E|S)$ is the probability of E given S

$P(S)$ is the unconditional probability of S

$P(E)$ is the unconditional probability of E

van de Schoot and Depaoli (2014) identified four reasons for choosing Bayesian, two of which — incorporating background knowledge and small sample size — influenced the decision to select Bayesian as the analytical approach. In the current study, the researcher had an understanding of likely relationships that may have existed between social work and online learning self-efficacies and self-satisfaction based on literature of previously conducted research. Incorporating this prior knowledge, also allowed for reliable results given the small sample size.

According to Lambert (2018):

For Bayesians, the parameters of the system are taken to vary, whereas the known part of the system — the data — is taken as given. Frequentist statisticians, on the other hand, view the unseen part of the system — the parameters of the

probability model – as being fixed and the known parts of the system — the data — as varying. (p. 19)

The inductive nature of Bayesian allows for the creation of parameters, which are flexible, unlike the deductive nature of frequentist which are fixed. “Thus, the key difference between Bayesian statistics and conventional (e.g., maximum likelihood) statistics concerns the nature of the unknown parameters in a statistical model” (van de Schoot & Depaoli, 2014, p. 75).

Summary

In summary, this correlational quantitative research was used to determine if Self-Efficacy impacts a student’s sense of Self-Satisfaction with their educational experience in an exclusively online Master-of-Social-Work program. A convenience sample of students entering an online Master-of-Social-Work Program from a small liberal arts college were asked to participate in this study. The data were collected in two phases. Phase one, the pre-assessment, consisted of a Learner Characteristics (Appendix A) portion, a Social Work Self-Efficacy (Appendix B) portion and an Online Learning Self-Efficacy (Appendix C) portion and was administered prior to students beginning their first course. Phase two, the post-assessment, consisted of a Learner Self-Satisfaction Survey (Appendix D) and a repeat of the Social Work Self-Efficacy portion (Appendix B) and was completed during the last week of the course. Bayesian theory was used to analyze the probability distribution derived from collected data.

IV. DATA ANALYSIS

This study collected demographic information on students recently enrolled into an exclusively online Master-of-Social-Work program which included age, social economic status, parents' level of education, marital status, number of children, employment status, program track enrolled and enrollment hours. The independent variables of Social Work Self-Efficacy and Online Learner Self-Efficacy are determined by the Social Work Self-Efficacy (Appendix B) and Online Learning Self-Efficacy (Appendix C) portions of the survey. Both instruments were reviewed by content experts and underwent systematic review and field testing by the target population. The dependent variable of Learner Self-Satisfaction is determined by any statistical relationships found between the Social Work Self-Efficacy and Learner Self-Satisfaction, Online Learner Self-Efficacy and Learner Self-Satisfaction, and Learner Characteristics and Learner Self-Satisfaction. A Multiple Regression analysis was conducted on collected data to measure relationships between the dependent and independent variables. A path analysis was used to describe any direct relationships found.

Variables underwent a correlational analysis with significant correlations of outcome variables included. Cronbach's alpha was used to measure the strength of consistency of survey items. All items were within the .8 to .95 range, however, question 15 from the Learner Self-Satisfaction Survey (Appendix D) was negatively correlated. This is an indication that as Student Self-Satisfaction goes up, this item tends to go down. For this reason, question 15 was eliminated from analysis.

Table 1 shows the item-analysis output for the multi-item scale for the Pre-Social Work Self-Efficacy (Appendix B) item, Table 2 shows the item-analysis output for the

multi-item scale for Pre-Online Learning Self-Efficacy survey (Appendix C), Table 3 shows the item-analysis output for the multi-item scale for the Post-Social Work Self-Efficacy (Appendix B) item, and Table 4 shows the item-analysis output for the multi-item scale for Learner Self-Satisfaction Survey (Appendix D).

Table 1

Pre-Social-Work Self-Efficacy Scale

		N	%		
Cases	Valid	42	100.0		
Processing	Excluded ^a	0	.0		
Summary	Total	42	100.0		
Item	Total	Scale Mean	Scale Variance if	Corrected	Cronbach's
Statistics	Deleted	if Item	Item	Item-Total	Alpha if Item
		Deleted	Deleted	Correlation	Deleted
	Q16_1	673.45	16565.278	.455	.925
	Q16_2	678.83	16292.874	.465	.924
	Q16_3	687.02	13512.268	.850	.901
	Q16_4	692.17	14695.654	.606	.918
	Q16_5	689.81	13064.109	.865	.899
	Q16_6	678.40	15628.247	.658	.915
	Q16_7	685.74	13103.320	.902	.896
	Q16_8	684.86	13329.199	.895	.897
	Q16_9	686.86	13481.150	.739	.910
Reliability Statistics		Cronbach's Alpha		N of Items	
		.920		9	

a. Listwise deletion based on all variables in the procedure.

Table 2*Pre-Online Learning Self-Efficacy Scale*

		N	%		
Cases	Valid	42	100.0		
Processing	Excluded ^a	0	.0		
Summary	Total	42	100.0		
Item	Total	Scale Mean	Scale	Corrected	Cronbach's
Statistics	Statistics	if Item	Variance if	Item-Total	Alpha if Item
		Deleted	Item	Correlation	Deleted
			Deleted		
	Q24_1	442.83	3455.167	.566	.809
	Q24_2	451.24	2944.918	.521	.817
	Q24_3	450.10	3054.088	.550	.807
	Q24_4	450.36	2638.186	.774	.754
	Q24_5	448.83	2791.752	.663	.782
	Q24_6	444.50	3336.207	.563	.806
Reliability Statistics		Cronbach's Alpha		N of Items	
		.825		6	

a. Listwise deletion based on all variables in the procedure.

Table 3*Post Social Work Self-Efficacy Scale*

		N	%		
Cases	Valid	42	100.0		
Processing	Excluded ^a	0	.0		
Summary	Total	42	100.0		
Item Total Statistics	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	
Q1_1	720.48	5948.890	.658	.926	
Q1_2	724.67	5589.593	.693	.922	
Q1_3	726.67	5526.472	.672	.924	
Q1_4	731.86	5355.296	.641	.928	
Q1_5	729.74	5332.637	.751	.919	
Q1_6	722.55	5496.107	.857	.914	
Q1_7	726.00	5157.512	.867	.911	
Q1_8	726.45	5222.595	.899	.910	
Q1_9	728.74	5266.686	.695	.924	
Reliability Statistics		Cronbach's Alpha		N of Items	
		.928		9	

a. Listwise deletion based on all variables in the procedure.

Table 4*Learner Self-Satisfaction Scale*

		N	%		
Cases	Valid	42	100.0		
Processing	Excluded ^a	0	.0		
Summary	Total	42	100.0		
Item		Scale			
Total	Scale Mean	Variance if	Corrected	Cronbach's	
Statistics	if Item	Item	Item-Total	Alpha if Item	
	Deleted	Deleted	Correlation	Deleted	
Q2_1	23.50	51.671	.560	.889	
Q2_2	23.57	54.202	.580	.891	
Q2_3	23.17	50.435	.647	.886	
Q2_4	22.62	50.095	.502	.894	
Q2_5	23.21	53.099	.436	.894	
Q2_6	22.83	48.435	.533	.894	
Q2_7	23.38	51.461	.568	.889	
Q2_8	23.52	50.695	.754	.883	
Q2_9	23.45	51.181	.709	.884	
Q2_10	23.21	48.758	.678	.884	
Q2_11	23.26	51.564	.562	.889	
Q2_12	23.26	53.174	.461	.893	
Q2_13	23.12	48.644	.723	.882	
Q2_14	23.50	51.817	.675	.886	
Reliability Statistics		Cronbach's Alpha		N of Items	
		.896		14	

a. Listwise deletion based on all variables in the procedure.

Sample

A total of 144 students entered the online MSW program over the course of three terms. All 144 students were invited to participate in the study. A total of 53 students, or 37 percent of the overall population, responded to the invitation to participate in the study

by completing the pre-assessment. Of those, 42 completed the post-assessment with the remaining 11 incomplete responses discarded leaving a total of 42 valid responses. Study analysis was conducted using valid responses only. The low participant response rate of 29 percent is a potential threat to validity due to possible bias in the feelings of people that responded versus those that did not. However, this low response rate was expected due to the longitudinal nature of the pre and post assessments. Also, some of the students may have felt that the demographic data collected threatened the confidentiality of their responses. Table 5 provides a detail of the sample characteristics of note used for this study. Characteristics are displayed by frequency counts and indicate that more than 80 percent of respondents were between the ages of 22-37 and the majority, 28 students, were enrolled in the foundational track. The table also shows experience levels highlighting that 59 percent of students had up to five years social work experience. All but three participants had experience as online learners, with the majority, 55 percent, having taken between one and nine online courses previously.

Table 5

Demographic Characteristics

Variable	Values
Current age	
22-29	N = 22 (52.3%)
30-37	N = 13 (30.9%)
38-45	N = 3 (7.14%)
46-53	N = 3 (7.14%)
54-61	N = 1 (2.38%)
62-69	N = 0 (0.0%)
Current program track	
Foundation	N = 28 (66.6%)
Advanced	N = 14 (33.3%)
Years' experience as social work professional	
No experience	N = 0 (0.0%)
0-2 years	N = 14 (33.3%)
2-5 years	N = 11 (26.1%)
5-10 years	N = 7 (16.6%)
10-15 years	N = 8 (19.0%)
15-20 years	N = 1 (2.38%)
20+ years	N = 1 (2.38%)
Number of courses taken online	
0	N = 3 (7.14%)
1-3	N = 13 (30.9%)
4-6	N = 10 (23.8%)
7-9	N = 6 (14.2%)
10-12	N = 2 (4.76%)
12+	N = 8 (19.0%)

Bayesian Results

The BLAAVIN package in RStudio (<https://rstudio.com/>) was used to analyze the data for Bayesian path analysis. The results reported provided the R-Square measurement, BRMSEA, Regression, and Covariance.

R² or (R-Square)

R² is a statistical measure that tells us how close the data are to the fitted regression line. “R² is the proportion of the total variance that can be accounted for (‘explained’) by the independent (treatment) variable and is a number between 0 and 1” (Hurlburt, 2012, p. 374). A model with an R² estimate of 1.00 would indicate a perfect predictor of one of these variables. Table 6 provides the R-Square estimates for Self-Satisfaction (SelfSatisfactn), Pre-Social Work Self-Efficacy (PreSoWoSE) and Online Learning Self-Efficacy (PreOLLSE). The table shows that 25 percent of Self-Satisfaction can be explained by Self-Efficacy in both Social Work and Online Learning categories, 81 percent of Pre-Social Work Self Efficacy can be explained by track, social work experience, and age, and 64 percent of Pre-Online Learning Self-Efficacy can be explained by age and experience as an online learner. Namely, the model seems to predict Social Work Self-Efficacy (SoWoSE) and Online Learner Self-Efficacy (OLLSE) well.

Table 6

R-Square

	Estimate
SelfSatisfactn	0.249
PreSoWoSE	0.808
PreOLLSE	0.643

BRMSEA

The root mean square error of approximation (RMSEA) is a measurement that determines the goodness of fit for the model. The Bayesian alternative (BRMSEA) is better suited to large sample sizes which provides better information on the reliability and validity of measurement instruments (Hoofs et al., 2017). In the case of Bayesian analysis, the Monte Carlo Markov Chain (MCMC) technique uses many resamples of existing individuals which creates a large sample size. Because of the large number of “samples”, BRMSEA is a better choice than RMSEA. According to Hoofs et al., “90 [percent] posterior probability interval of the BRMSEA is valid for evaluating model fit in large samples ($N \geq 1,000$), using cutoff values for the lower ($<.05$) and upper limit ($<.08$) as guideline” (2017, P. 537). With a BRMSEA value of 0.560 (see table 7), the current model is a poor fit.

Table 7

Posterior mean (EAP) of devm-based fit indices:

BRMSEA	BGammaHat	adjBGammaHat	BMc
0.560	0.439	-0.377	0.107

Findings

The highest posterior density interval (HPD) illustrates which points of a distribution are most credible and which cover most of the distribution. Table 8 shows the HPD.025 of PreSoWoSE to be -0.01 and the HPD.975 to be 0.00 and the HPD.025 of PreOLLSE to be -0.03 and the HPD.975 to be 0.00 both of which, cross the zero line. Given these values, we cannot assert that there is a significant relationship between Social Work Self-Efficacy and Self-Satisfaction or Online Learning Self-Efficacy and

Self-Satisfaction.

Table 8 also shows relationships of significance. With an Estimate value of 11.29 and a standard deviation of 4.64, Track is a high predictor of Social Work Self-Efficacy. With an Estimate value of 3.91 and a standard deviation of 1.11, Online Course experience is a predictor of Online Learning Self-Efficacy. Social Work Experience is a predictor of Track with a value of 5.19 and a standard deviation of 1.97.

Table 9 shows variable correlations. At an Estimate of 1.60. Track is correlated with Age, at 2.99 Social Work Experience is correlated with Age, and with an Estimate of 2.40 Age is correlated with Online Learning Experience. Track and Social Work Experience are also correlated with an Estimate of 3.23. Social Work Self-Efficacy and Online Learning Self-Efficacy, however, are not correlated with an Estimate of 49.36, which is an indication that these two variables are not related.

Table 8*Regressions*

	Estimate	Post.SD	HPD.025	HPD.975	Std.lv	Std.all	PSRF	Prior
SelfSatisfaction								
~ PreSoWoSE	-0.003	0.006	-0.014	0.008	-0.003	-0.181	1.000	normal(0,10)
~ PreOLLSE	-0.014	0.008	-0.03	0.002	-0.014	-0.427	1.000	normal(0,10)
PreSoWoSE								
~ Track	11.295	4.644	2.619	20.637	11.295	0.426	1.000	normal(0,10)
~ SoWoExperience	5.199	1.974	1.412	9.139	5.199	0.376	1.000	normal(0,10)
~ Age	3.672	2.673	-1.345	9.178	3.672	0.726	1.001	normal(0,10)
PreOLLSE								
~ Age	1.913	2.091	-1.713	6.451	1.913	0.165	1.003	normal(0,10)
~ OnlineCourses	3.912	1.115	1.92	6.318	3.912	0.726	1.003	normal(0,10)

Table 9*Covariances*

	Estimate	Post.SD	HPD.025	HP.975	Std.lv	St.all	PSRF	Prior
Track	1.607	0.481	0.84	2.736	1.607	0.659	1.003	Beta(1,1)
~~ Age								
SoWoExperience	2.999	0.876	1.604	5.027	2.999	0.640	1.002	Beta(1,1)
~~ Age								
Track	3.232	0.756	2.039	4.987	3.232	0.859	1.003	Beta(1,1)
~~ SoWoExperience								
Age	2.402	1.079	0.557	4.811	2.402	0.368	1.001	Beta(1,1)
~~ OnlineCourses								
.PreSoWoSE	49.367	35.835	-10.769	128.841	49.367	0.252	1.002	Beta(1,1)
~~ .PreOLLSE								

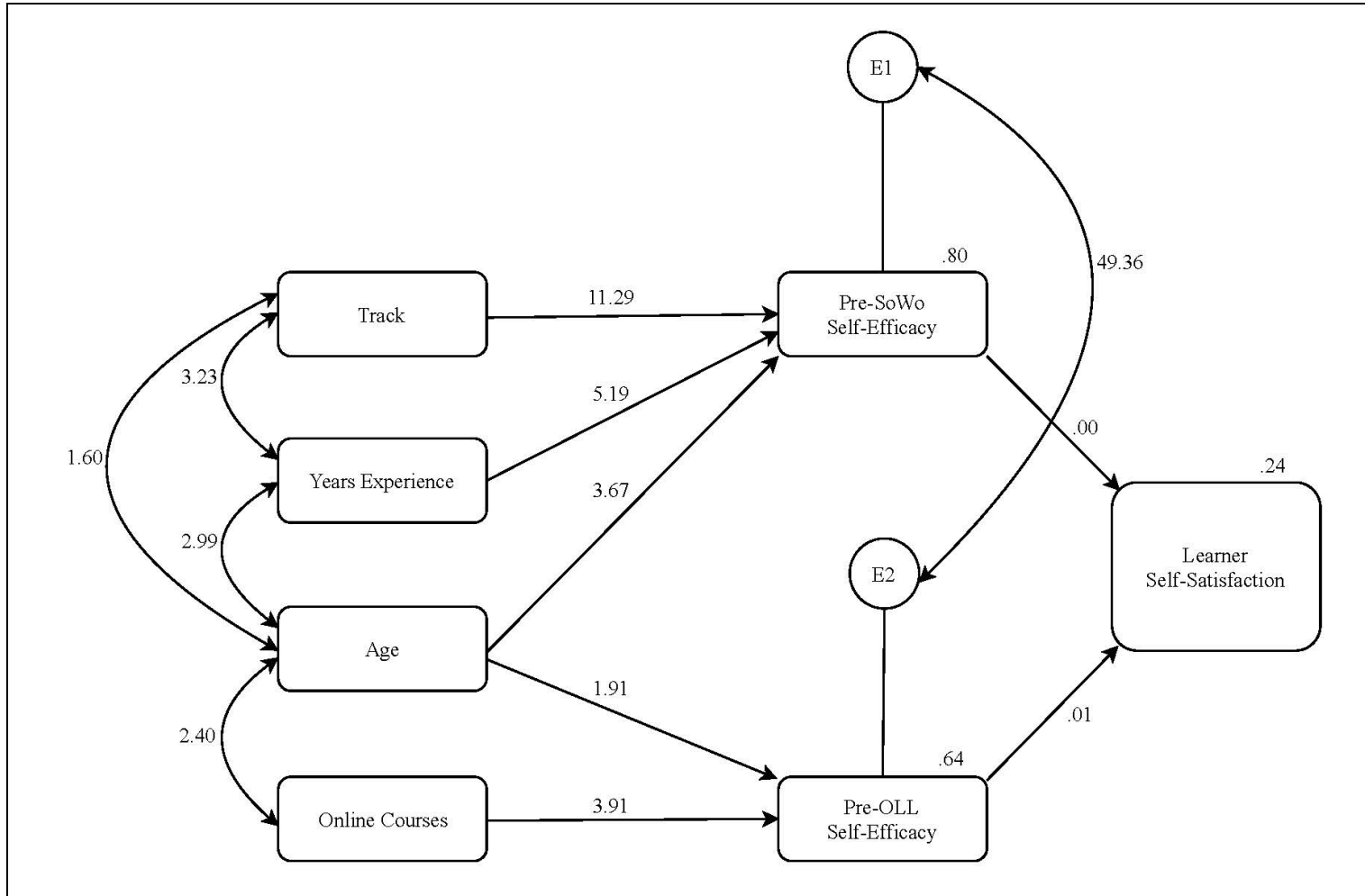


Figure 2

Path Diagram

Table 10 shows t-test results for Post-Social Work Self-Efficacy (PostSoWoSE) and Pre-Social Work Self-Efficacy (PreSoWoSE). Results from the Pre-Assessment Social Work Self-Efficacy (M = 90.79, SD = 9.17) and the Post-Assessment Social Work Self-Efficacy (M = 85.51, SD = 14.92) indicate that there was an increase in Self-Efficacy, $t(41) = 2.53$, $p = .015$ over the course of the term.

Table 10

T-test pairs

Paired Samples Statistics	Mean	N	Std. Deviation	Std. Error Mean					
Pair 1 PostSoWoSE	90.793650793650800	42	9.172329578014924	1.415321180844084					
PreSoWoSE	85.515873015873030	42	14.929298828885939	2.303640821882236					
Paired Samples Correlations	C	Correlation	Sig.						
Pair 1 PostSoWoSE & PreSoWoSE	42	.454	.003						
Paired Differences									
Paired Samples Test					95% Confidence Interval of the Difference				
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)	
Pair 1 PostSoWoSE - PreSoWoSE	-5.27	13.51	2.08	1.06	9.48	2.530	41	.015	

Research Questions, Directional Hypotheses, and Findings

This study posed five research questions and stated corresponding directional hypothesis which resulted in the following findings.

Research Question 1

Is there a significant relationship between Social Work Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?

Directional Hypotheses 1. There is a significant relationship between Social Work Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program such that, as Social Work Self-Efficacy goes up, so will Learner Self-Satisfaction.

Finding for Research Question 1. No, there is not a significant relationship between Social Work Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program.

Research Question 2

Is there a significant relationship between Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?

Directional Hypotheses 2. There is a significant relationship between Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program such that, as Online Learner Self-Efficacy goes up, so will Learner Self-Satisfaction.

Finding for Research Question 2. No, there is not a significant relationship between Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program.

Research Question 3

Do students in an exclusively online Master-of-Social-Work program need high Self-Efficacy as both a Master-of-Social-Work student and an Online Learner to experience Self-Satisfaction with their educational experience?

Directional Hypotheses 3. Students in an exclusively online Master-of-Social-Work program need high Self-Efficacy as both a Master-of-Social-Work student and an Online Learner to experience Self-Satisfaction with their educational experience such that, as Social Work and Online Learner Self-Efficacy go up, so will Learner Self-Satisfaction.

Finding for Research Question 3. No, there is not a significant relationship between possessing a high Self-Efficacy as both a Master-of-Social-Work student and an Online Learner and a Learners sense of Self-Satisfaction.

Research Question 4

Are there characteristics that have a significant relationship with Social Work Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?

Directional Hypotheses 4. There are characteristics that have a significant relationship with Social Work Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program.

Finding for Research Question 4. Yes, there are characteristics that have a significant relationship with Social Work Self-Efficacy. The higher level track a student is enrolled and greater number of years of social work experience are associated with higher levels of Self-Efficacy as a Social Worker.

Research Question 5

Are there characteristics that have a significant relationship with Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?

Directional Hypotheses 5. There are characteristics that have a significant relationship with Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program.

Finding for Research Question 5. Yes, there are characteristics that have a significant relationship with Online Learner Self-Efficacy. The number of courses a student has taken online the higher their level of Self-Efficacy as an Online Learner.

Summary

Data collected underwent a Multiple Regression analysis to determine relationships between variables. Variables underwent a correlational analysis to identify significant correlations. Cronbach's alpha was used to measure the study instrument. A total of 144 students were invited to participate which resulted in 42 valid responses. The BLAAVIN package was used for analysis with results reported as R^2 , BRMSEA, Regression and Covariance.

Self-Efficacy as either a Master-of-Social-Work student or Online Learner is not an indicator of Learner Self-Satisfaction with the learning experience in an online Master-of-Social-Work program. Track enrolled, social work experience, and age are good predictors of Social Work Self-Efficacy and experience with online learning and age are good predictors of Online Learning Self-Efficacy. The relationships of significance are Track and Social Work Self-Efficacy, Online Course Experience and Online Learning Self-Efficacy, and Social Work Experience and Track.

V. CONCLUSION

Currently, there is a shortage of trained social work professionals with a master's degree in social work. Representatives from various national organizations for social work professionals, governmental agencies, and public health organizations are leading a call to action for expanded accessibility to higher education for individuals interested in pursuing a career in social work. Institutions of higher learning have responded by creating Master-of-Social-Work (MSW) programs exclusively online. The human element of social work, however, creates unique instructional challenges with online learning which could impact a student's self-efficacy in an exclusively online Master-of-Social-Work program.

The literature is consistent in suggesting that the field of social work and institutions of higher learning are ready for online learning; what remains uncertain, is the readiness of students. To find out, this research looked at the level of self-efficacy of students entering an exclusively online Master-of-Social-Work program to determine if self-efficacy as an MSW student or as an online student was predictive of Self-Satisfaction. Satisfaction was chosen as the dependent variable because the literature (Artino, 2008; Jan, 2015; Kuo, et al, 2014; & Shen et al., 2013) identifies learner satisfaction in an online program as an important component to a student persisting and ultimately acting as a major determinant in their success.

A predictive non-experimental quantitative study was designed to investigate the impact on learner satisfaction of participants' self-efficacy as an online learner along with their self-efficacy as a social work student, and to explore the relationship of various learner demographic characteristics with both learner self-efficacy and satisfaction. A

self-administered survey which was measured for strength of consistency using Cronbach's alpha, was used as the data collection instrument. A non-probability convenience sample was used to identify participants. One hundred forty-four students — across a period of three terms — were invited to participate. Participants were asked to complete a pre-assessment — which was made available to them one week prior to the start of the program — and complete a post-assessment — which was made available to them during the final week of the course. Fifty-three students responded to the invitation by completing the pre-assessment, of the 53 who completed the pre-assessment, 42 completed the post-assessment. The 11 incomplete responses were discarded leaving a total of 42 valid responses for analysis.

Bayesian analysis was the analytical approach used for this study. The survey was subjected to a correlational analysis to determine if there were associations among the variables. A path analysis was conducted to measure relationships between the dependent and independent variables. The dependent variable of Learner Self-Satisfaction is determined by any relationships found between Social Work Self-Efficacy and Learner Self-Satisfaction, Online Learner Self-Efficacy and Learner Self-Satisfaction.

Summary of Findings

The purpose of this study was to determine if Self-Efficacy as a Master-of-Social-Work Student and/or Self-Efficacy as an Online Learner impacts Learner Self-Satisfaction in an exclusively online Master-of-Social-Work Program. Additionally, the study examined whether certain characteristics were associated with Social Work Self-Efficacy and/or Online Learner Self-Efficacy upon entering their first term in the program.

The research questions guiding this study were:

1. Is there a significant relationship between Social Work Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?
2. Is there a significant relationship between Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?
3. Do students in an exclusively online Master-of-Social-Work program need high Self-Efficacy as both a Master-of-Social-Work student and an Online Learner to experience Self-Satisfaction with their educational experience?
4. There are characteristics that have a significant relationship with Social Work Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?
 - a) Demographic characteristics (i.e. age, social economic status, parents' level of education, marital status, number of children, employment status, program track enrolled, and enrollment hours)
 - b) Experience as a Social Work professional
5. There are characteristics that have a significant relationship with Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?
 - a) Demographic characteristics (i.e. age, social economic status, parents' level of education, marital status, number of children, employment status, program track enrolled, and enrollment hours)

b) Experience as an Online Learner

Directional hypotheses:

1. There is a significant relationship between Social Work Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program such that, as Social Work Self-Efficacy goes up, so will Learner Self-Satisfaction.
2. There is a significant relationship between Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program such that, as Online Learner Self-Efficacy goes up, so will Learner Self-Satisfaction.
3. Students in an exclusively online Master-of-Social-Work program need high Self-Efficacy as both a Master-of-Social-Work student and an Online Learner to experience Self-Satisfaction with their educational experience such that, as Social Work and Online Learner Self-Efficacy go up, so will Learner Self-Satisfaction.
4. There are characteristics that have a significant relationship with Social Work Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?
 - a) Demographic characteristics (i.e. age, social economic status, parents' level of education, marital status, number of children, employment status, program track enrolled, and enrollment hours)
 - b) Experience as a Social Work professional

5. There are characteristics that have a significant relationship with Online Learner Self-Efficacy and Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program?
 - a) Demographic characteristics (i.e. age, social economic status, parents' level of education, marital status, number of children, employment status, program track enrolled, and enrollment hours)
 - b) Experience as an Online Learner

The findings suggest that there is not a significant relationship between Social Work Self-Efficacy and Self-Satisfaction or Online Learning Self-Efficacy and Self-Satisfaction. However, the program track the student was enrolled in — foundation for those with a bachelor's in a field other than social work and advanced for those with a bachelor's in social work — as well as years' experience as a social worker, had a significant relationship with Social Work Self-Efficacy. Additionally, the number of courses previously taken online also had a significant relationship with Online Learner Self-Efficacy. Track is correlated with Age, Social Work Experience is correlated with Age, and Age is correlated with Online Learning Experience. Track and Social Work Experience are also correlated. Social Work Self-Efficacy and Online Learning Self-Efficacy, however, are not correlated with an Estimate of covariance of 49.3, which is an indication that these two variables are not related.

The current study findings contradict previous assertions made by Artino (2007), Artino (2008), and Shen et al., (2013). In Artino's 2007 and 2008 studies, he found a positive relationship between self-efficacy and satisfaction for online learners, which did not occur in this study. This is also the case with research conducted by Shen et al.,

(2013). They found that an individual's self-efficacy to succeed in an online environment was most significantly associated with learning satisfaction, however, that was not the case in this study.

Strengths and Weaknesses

The study focused on participants from one institution which was both a strength and weakness of the study. Focusing on participants from one institution allowed for logistical ease as programs have various start, end, and run times. Additionally, this minimized the risk of various learning management systems, differences in course rigor, and course expectations impacting the participants responses regarding their self-satisfaction. However, due to this selection bias, study results cannot be generalized beyond the sample population. Additionally, while the use of a self-administered survey allowed for participant convenience which permitted more students to participate, it does not allow for participants to expand on their understanding of Self-Efficacy or Self-Satisfaction. An additional weakness of the study is that, Self-Efficacy and Self-Satisfaction are subjective measurements and can be impacted by an individual's mood as well as their emotional and physiological state (Petrovich, 2004).

Implications

This study looked at Learner Self-Satisfaction in an exclusively online Master-of-Social-Work program from the viewpoint of *social cognitive theory* (Bandura, 1986). Self-efficacy, the most well-known construct of *social cognitive theory*, refers to the way people assess their abilities and how that assessment affects their motivation and behavior (Bandura, 1986). Self-efficacy is vital in an individual's decision to pursue or not pursue a task (Puzziferro, 2008) and continues to affect an individual's motives, actions, plan, and

performance in accomplishing the task. The insight gained from this study can inform institutions of higher learning by providing theoretical, practical, and future implications that can increase a student's chance of successfully completing the program.

Theoretical

Social cognitive theory states that individuals are not driven by any single motivator — internal or external stimuli — but by triadic reciprocity. The research finding suggest that students were motivated multi-directionally by environmental factors such as program track, by behavior such as level of experience as online learners and social work students and by personal factors such as level of self-efficacy. That a students' past experiences and expectations impact whether they will take on a specific action.

The literature discusses student satisfaction with online learning, which is different from an individual's self-satisfaction with the online learning experience. But given the absence of literature looking at self-satisfaction to inform this research, satisfaction with online learning was used as the basis. In that same vein, academic self-efficacy is not the same as self-efficacy as a social work student. This study found that while students may be highly efficacious as Master-of-Social-Work Students and Online Learners, they were not necessarily self-satisfied with their online learning experience. Yet, they persisted onto course completion. This persistence indicates that self-efficacy alone, and not self-satisfaction, may be a more accurate factor leading to student attrition.

Practical

Perhaps whether self-efficacy leads to satisfaction may not matter as much as has been reported in the literature. Perhaps the focus should be on identifying which types of

self-efficacies leads to student persistence and ultimately to program completion. The goal should be to increase self-efficacy throughout the student's educational experience, leading into their professional careers. This study found that prior experience as a social work professional and as a social work student are strong predictors of Social Work Self-Efficacy. The study also found that prior experience with online courses is a strong predictor of Online Learning Self-Efficacy. This would imply that prior experience would likely be associated with academic success.

Future

There is a likelihood that future research may find a strong correlation between self-efficacy and persistence. For example, when a student's self-efficacy increases or decreases so will their persistence behavior. Given that self-efficacy expectations are context specific (Hodges, 2008) — as evident by the lack of correlation between Social Work Self-Efficacy and Online Learning Self-Efficacy — it is prudent to identify those context areas most prevalent in successful students of exclusively online Master-of-Social-Work programs, then identify in which areas students are less efficacious and work to develop practical strategies for increasing their self-efficacy in those areas.

Recommendations

A better understanding of the self-efficacies of online Master-of-Social-Work students and how various self-efficacies relate to student success is necessary to develop strategies to increase a student's chances of successfully completing an online program. "Self-efficacy [also] can affect effort expenditure, persistence, and learning. Students who feel efficacious about learning generally expend greater effort and persist longer than students who doubt their capabilities, especially when they encounter difficulties. In

turn, these behaviors promote learning” (Schunk, 2012, p147). While the level of self-efficacy a student possess is not an indication of skillset, it is an important precursor to skill building and ultimately serves as a compelling predictor of future performance (Simmons et al., 2017). Given previously conducted research, coupled with the current study findings, the researcher makes the following recommendations for future practice and future research.

Future Practice

The study findings suggest that older students are more likely to have both professional social work experience and online learning experience prior to entering the program. This is an indication that program administrators might target recruitment and/or selection efforts for online MSW programs to applicants that are older and with more experience. Also, program administrators might recognize that younger students with less in-field experience and online learning experience may need additional academic support to develop a strong sense of self-efficacy and ultimately be more successful in completing the program. Programs may also benefit by creating a cohort of students that are a mix of students that are both experienced in online learning and social work and those that are not. This will allow administrators to allocate appropriate time and resources to support those students that are not as experienced.

There are four major sources of efficacy information; performance accomplishments, vicarious experience, verbal persuasion, and emotional arousal. To increase Social Work Self-Efficacy and Online Learning Self-Efficacy, opportunities should be created to build these four sources. One way of increasing students’ performance accomplishments is by incorporating an orientation that includes basic skill

building tasks related to social work and online learning. This may aid in establishing an environment that allows the student to be successful as both an online, and social work student early in the program. To build on vicarious experiences, programs should develop and support peer mentor programs with the goal of pairing students that are more experienced with those that are less experienced. Exposure to peers with similar goals and then observing those peers become successful, may increase a student's belief in their ability to also become successful. By modeling positive reinforcement, faculty can create a culture of positive feedback within the class, creating opportunities for students to encourage each other. This positive reinforcement will likely lead to students attempting a task in the future providing additional opportunities for the student to succeed. Finally, goal setting is a great way to increase emotional arousal. Programs can encourage students to create small, measurable, attainable, realistic, and time-based (SMART) goals at the onset of the program. Then check in periodically to reassess and update those goals.

Future Research

While this study focused significantly on personal factors within Bandura's Social Cognitive Theory, it also suggests directions for other research that would also advance the field of online learning and social work education. As one example, research might be planned investigating other dimensions of Bandura's Social Cognitive Theory which may predict or create high levels of self-efficacy. For instance, culture may impact a student's level of Social Work Self-Efficacy and/or Online Learning Self-Efficacy. Educational training practices such as role-play and communication techniques widely employed in social work education developed by the dominant culture may have a different impact on

the level of self-efficacy of those from a minority culture, particularly as implemented within an exclusively online environment. Additional research is also needed to identify contextual areas of importance for Master-of-Social-Work students attending an exclusively online program, such as, computer self-efficacy, graduate student self-efficacy, social work clinical practice self-efficacy, and information seeking self-efficacy. Moreover, a longitudinal study of students entering an exclusively online Master-of-Social-Work program would yield better information regarding a student's perseverance and chances of successfully completing a program. Examining programs that have implemented suggested practices for increasing self-efficacy then re-evaluating those students upon completion of coursework, then again after completion of field work, offers the potential to contribute much to our understanding of best practices. Furthermore, following up with students that chose to leave the program could offer valuable information into missed opportunities. This study used Bandera's (1986) triadic reciprocity determinism focusing on personal factors. Additional studies should also focus on environmental factors and behavior since all factors influence each other bidirectionally.

Conclusion

The findings from this study contribute to the existing literature regarding the predictive nature of self-efficacy on student's satisfaction with their online learning experience. While some researchers claimed that self-efficacy is predictive of student satisfaction, this study agrees with findings from previous research conducted by Rodriguez Robles (2006) and Puziferro (2006) stating that self-efficacy is not predictive of student satisfaction. This study is also significant because it found that while self-

efficacy was not predictive of satisfaction, students did have an increase in their level of self-efficacy from starting the course to ending the course which is an indication that self-efficacy alone is likely a better predictor of student success. Additionally, this increase in self-efficacy also points to the readiness for online learning of Master-of-Social-Work students.

APPENDIX SECTION

APPENDIX A: Characteristics

What is your current age?

- 21 years or younger
- 22-29
- 30-37
- 38-45
- 46-53
- 54-61
- 62-69

Which of the following is your primary source for funding your education?

- Financial Aid
- Personal loan
- Scholarship
- Self-funded
- Other

What is your mothers' highest level of education?

- Unknown
- Less than high school
- Some high school
- Completed high school
- Some college
- Associates degree
- Bachelor's degree or higher

What is your fathers' highest level of education?

- Unknown
- Less than high school
- Some high school
- Completed high school
- Some college
- Associates degree
- Bachelor's degree or higher

Which of the following best describes your marital status?

- Single
- Married/committed/significant other
- Separated
- Divorced
- Widowed

How many children are you guardian for?

- 0
- 1-2
- 3-4
- 5-7
- 8-10
- 10+

What is your current employment status?

- Unemployed
- Employed part time
- Employed full time

Which program track are you currently enrolled in?

- Foundation Track
- Advanced Track

How many hours are you enrolled in for this term?

- 3 hours
- 6 hours

How many years' experience do you have as a social work professional?

- No experience
- 0-2 years
- 2-5 years
- 5-10 years
- 10-15 years
- 15-20 years
- 20+ years

How many courses have you previously taken online?

- 0
- 1-3
- 4-6
- 7-9
- 10-12
- 12+

Did you receive your bachelor's degree through an exclusively (100%) online program?

- Yes
- No

APPENDIX B: Social Work Self-Efficacy

Instructions: The goal of this survey is to determine how confident you are in your ability to perform specific social work tasks. After you consider each task, please rate your confidence in your ability to perform that task successfully, by selecting the number from 0 to 100 that best describes your level of confidence. What is meant here by successfully, is that you would be able to perform the specific task in a manner that a social work supervisor would consider excellent. The phrases above the numbers [0 = cannot do at all; 50 = moderately certain can do; and 100 = Certain can do] are only guides. You can use these numbers or any of the numbers in between to describe your level of confidence. The goal is to know how confident you are that you could successfully perform these tasks today.

How confident are you that you can successfully...	Cannot do at all			Moderately certain can do						Highly Certain can do	
	0	10	20	30	40	50	60	70	80	90	100
Demonstrate ethical and professional behavior?	0	10	20	30	40	50	60	70	80	90	100
Engage diversity and difference in practice?	0	10	20	30	40	50	60	70	80	90	100
Advance human rights and social, economic, and environmental justice?	0	10	20	30	40	50	60	70	80	90	100
Engage in practice informed research and research informed practice?	0	10	20	30	40	50	60	70	80	90	100
Engage in policy Practice?	0	10	20	30	40	50	60	70	80	90	100
Engage with individuals, families, groups, organizations, and communities?	0	10	20	30	40	50	60	70	80	90	100
Evaluate individuals, families, groups, organizations, and communities?	0	10	20	30	40	50	60	70	80	90	100
Intervene with individuals, families, groups, organizations, and communities?	0	10	20	30	40	50	60	70	80	90	100

Evaluate practice with individuals, families, groups, organizations, and communities?	0	10	20	30	40	50	60	70	80	90	100
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APPENDIX C: Online Learning Self-Efficacy

Instructions: The goal of this survey is to determine how confident you are in your ability to perform as an online learner. After you consider each task, please rate your confidence in your ability to perform that task successfully, by selecting the number from 0 to 100 that best describes your level of confidence. What is meant here by successfully, is that you would be able to perform the specific task in a manner that an instructor would consider excellent. The phrases above the numbers [0 = cannot do at all; 50 = moderately certain can do; and 100 = Certain can do] are only guides. You can use these numbers or any of the numbers in between to describe your level of confidence. The goal is to know how confident you are that you could successfully perform these tasks today.

How confident are you that you can successfully...	Cannot do at all			Moderately certain can do				Highly Certain can do			
*Complete an online course?	0	10	20	30	40	50	60	70	80	90	100
*Interact socially with your classmates?	0	10	20	30	40	50	60	70	80	90	100
*Navigate the Wiley learning management system?	0	10	20	30	40	50	60	70	80	90	100
*Interact with instructors in an online course?	0	10	20	30	40	50	60	70	80	90	100
*Interact with your classmates for academic purposes?	0	10	20	30	40	50	60	70	80	90	100
**Perform well in a self-paced, online course?	0	10	20	30	40	50	60	70	80	90	100

*Shen, Cho, Tsai, & Marra, (2013)

** Artino & McCoach, (2008)

APPENDIX D: Learner Satisfaction Survey

Instructions: The goal of this survey is to determine how satisfied you are in your experience as an online learner in a Master of Social Work program. Please consider each item as it pertains to your experience as a learner and not as a reflection of the professor, administration, or university.

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
Satisfaction with online learning experience					
I am satisfied with my experience in the program.					
I am satisfied with my progress in the program.					
I am satisfied with the format of the course.					
I prefer online courses over in-person courses.					
I am satisfied with the level of peer interaction.					
I am satisfied with the level of instructor interaction.					
I am satisfied with my ability to navigate through the course.					
I have a positive attitude toward online learning at the end of this term.					
I would recommend an online program to others.					
I am satisfied with the course workload.					
I am satisfied with the pace of the course(s).					
The difficulty level of the course(s) was about right for me.					
The workload for the course(s) was manageable.					
The course(s) effectively presented the subject matter.					
If given the choice, I would switch to an in-person course in place of an online course?					

APPENDIX E: Study Consent

I THINK I CAN; I KNOW I CAN: SELF-EFFICACY AS AN INDICATOR OF LEARNING SELF-SATISFACTION IN AN ONLINE MASTER-OF-SOCIAL-WORK PROGRAM

You are invited to take part in this research study. The information in this form is meant to help you decide whether or not to take part. If you have any questions, please ask.

The goal of this research study is to determine if Self-Efficacy as a Master-of-Social-Work Student and/or as an Online Learner impacts Self-Satisfaction with learning experience in an exclusively online Master-of-Social-Work Program. You are being asked to complete this survey because you are an incoming online Master-of-Social-Work student.

The study consists of two-parts, a pre-assessment and post-assessment. The pre-assessment is currently available and will take approximately 10 minutes or less to complete. The post-assessment will be made available to you during the final week of the term and will take approximately 5 minutes or less to complete. Your responses are anonymous. You must be at least 22 years old to take part in this survey.

You will receive a \$15.00 Amazon E-Gift card claim code to your email within 48 hours after the close of the post-assessment for your participation.

There are no known risks to you from being in this research study. You are not expected to get any benefit from being in this research study. Possible benefits from this study are insight gained that may help inform institutions of higher learning in identifying students that may require additional support as they begin their career as an online learner, increasing a student's chance of successfully completing the program.

There is no cost to you to be in this research study.

Reasonable steps will be taken to protect your privacy and the confidentiality of your study data. Your university assigned email address will be used to match your pre-assessment to your post-assessment after which a randomized number will be assigned and your email information will be deleted.

Participation in this study is completely voluntary. If you choose to participate, you may stop participation at any time without penalty and without losing any benefits that are a part of this study.

If you have any questions or concerns during or after this study, you may contact:

Jessica M. Quintero, Doctoral Student
Adult, Professional, & Continuing Ed.

Robert F. Reardon, Professor
Adult, Professional, & Continuing Ed.

You can speak to the researcher or you can contact the [REDACTED] Institutional Review Board at [REDACTED], or by email, at [REDACTED]

APPENDIX F: Email Recruitment Message

From: jmq13@txstate.edu

BCC: [participant addresses]

Subject: Research Participation Invitation: Self-Efficacy as an Online Master-of-Social-Work Student

Dear Student,

You are invited to take part in this research study. The information in this form is meant to help you decide whether or not to take part. If you have any questions, please ask.

The goal of this research study is to determine if Self-Efficacy as a Master-of-Social-Work Student and/or as an Online Learner impacts Self-Satisfaction with learning experience in an exclusively online Master-of-Social-Work Program. You are being asked to complete this survey because you are an incoming online Master-of-Social-Work student.

The study consists of two-parts, a pre-assessment and post-assessment. The pre-assessment is currently available and will take approximately 10 minutes or less to complete. The post-assessment will be made available to you during the final week of the term and will take approximately 5 minutes or less to complete. Your responses are anonymous. You must be at least 22 years old to take part in this survey.

You will receive a \$15.00 Amazon E-Gift card claim code to your email within 48 hours after the close of the post-assessment for your participation.

There are no known risks to you from being in this research study. You are not expected to get any benefit from being in this research study. Possible benefits from this study are insight gained that may help inform institutions of higher learning in identifying students that may require additional support as they begin their career as an online learner, increasing a student's chance of successfully completing the program.

There is no cost to you to be in this research study.

Reasonable steps will be taken to protect your privacy and the confidentiality of your study data. Your university assigned email address will be used to match your pre-assessment to your post-assessment after which a randomized number will be assigned and your email information will be deleted.

Participation in this study is completely voluntary. If you choose to participate, you may stop participation at any time without penalty and without losing any benefits that are a part of this study.

If you have any questions or concerns during or after this study, you may contact:

Jessica M. Quintero, Doctoral Student
Adult, Professional, & Continuing Ed.

Robert F. Reardon, Professor
Adult, Professional, & Continuing Ed.



You can speak to the researcher or you can contact the [redacted] Institutional
Review Board at [redacted], or by email, at [redacted].

<<LINK TO SURVEY>>

APPENDIX G: Participant Verbal Script

Hi, my name is Jessica Quintero. I am a doctoral student at Texas State University.

I am conducting a research study to determine if Self-Efficacy as a Master-of-Social-Work Student and/or as an Online Learner impacts Self-Satisfaction with learning experience in an exclusively online Master-of-Social-Work Program.

You are being asked to complete this survey because you are an incoming online Master-of-Social-Work student.

Your participation in this study is voluntary. The study consists of two-parts, a pre-assessment and post-assessment. The pre-assessment is currently available and will take approximately 10 minutes or less to complete. The post-assessment will be made available to you during the final week of the term and will take approximately 5 minutes or less to complete. Your responses are anonymous. You must be at least 22 years old to take part in this survey.

You will receive a \$15.00 Amazon E-Gift card claim code to your email within 48 hours after the close of the post-assessment for your participation in this study.

This study involves no foreseeable serious risks or benefits to you. Your professor or program staff will NOT be informed of your decision to participate or not participate in this study and your grade will not be affected.

Thank you!

APPENDIX H: Faculty Verbal Script

Hi, my name is Jessica Quintero. I am a doctoral student at Texas State University. I am conducting a research study to determine if Self-Efficacy as a Master-of-Social-Work Student and/or as an Online Learner impacts Self-Satisfaction with learning experience in an exclusively online Master-of-Social-Work Program. Students entering your course are being asked to complete this survey because they are incoming online Master-of-Social-Work students.

Their participation in this study is voluntary. The study consists of two-parts, a pre-assessment and post-assessment. The pre-assessment is currently available and will take approximately 10 minutes or less to complete. The post-assessment will be made available to them during the final week of the term and will take approximately 5 minutes or less to complete. All responses are anonymous. Participants must be at least 22 years old to take part in this survey.

Study participants will receive a \$15.00 Amazon E-Gift card claim code by email within 48 hours after the close of the post-assessment for their participation.

This study involves no foreseeable serious risks or benefits to them. They have been informed that neither you, the professor nor program staff will be informed of their decision to participate or not participate in this study and their grade will not be affected.

If you have any questions, please feel free to email me at jmq13@txstate.edu or call me at [REDACTED]. If a student in your class reaches out to you with questions regarding this study, please forward them my contact information.

Thank you!

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