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## The Relationship Between Counselor Educator Technology Self-Efficacy and Distance Counseling Skills Education

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*Walden University*

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# Walden University

College of Counselor Education & Supervision

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Carrie DuPont

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Abstract

The Relationship Between Counselor Educator Technology Self-Efficacy and  
Distance Counseling Skills Education

by

Carrie DuPont

MA, Walden University, 2011

BS, University of Colorado Denver, 1992

Dissertation Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Philosophy  
Counselor and Education Supervision

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## Abstract

Grounded in Bandura's theory of self-efficacy, the purpose of this study was to examine if one aspect of counselor training, counselor educator self-efficacy with technology (SE), was associated with counselor educator teaching distance counseling skills in their classroom (INC). For this correlation study, 176 counselor educators in the United States with experience teaching a skills-based class completed an anonymous online survey. Survey data were used to assess if self-efficacy with technology and demographic data were related to the inclusion of distance counseling skills in the classroom. Point-biserial correlation and logistic regression analysis were used to examine relationships between SE, demographic data, and INC. There was a positive correlation between the Intrapersonal technology integrations scale (ITIS) score, used to measure SE, and INC scores  $n=176$ ,  $r_{pb}=.343$ ,  $p<.001$ . A logistic regression was performed to determine the effects of prior experience (EXP), availability of technology (AV), and SE on teaching distance counseling skills. The model was statistically significant,  $\chi^2(3) = 64.342$ ,  $p<.000$ ., explained 41.5 % (Nagelkerke  $R^2$ ) of the variance in teaching distance counseling, and correctly classified 79.3% of cases. The results of the logistic regression analysis indicated that SE, EXP, and AV were significant predictors of INC. The findings confirm prior research on technology integration in education. Specifically, availability of technology, although an important factor, is not the only variable impacting technology integration. The findings from this study can help guide counselor training programs to prepare students for the expanding use of technology in counseling increasing access to care.

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## Dedication

I would like to dedicate this dissertation to my family, without your support this would not have been possible. A special thanks to my husband, Adel, for his patience with my seemingly never-ending life as a student. Thank you to my sons, Khalid, Saleh, and Ghaith for your unwavering support. Thanks to Shierly for being there to step in when I needed help. Of course, a great thank you to my chair Dr Kelly Dardis; thank you for giving me the space and time needed to work while keeping me on track, motivated, and for never doubting my ability, even when I did. Also, committee member, Dr Shelli Friess, your supportive words and encouragement helped more than you know. This dissertation is also dedicated to the online counselors who are tackling this new medium with enthusiasm, and to the counselor educators who guide and train them.

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## Chapter 1: Introduction to the Study

### **Introduction**

Although it has been nearly 2 decades since professional counseling organizations began to recognize the need for training to include the impact of technology in counseling, there has been little attention given to training counseling students in this area (Anthony, 2015; Pipoly, 2013). The field of distance counseling is recent, and research regarding counselor training in distance counseling is also new (Anthony, 2015). The limited research available indicates that mental health professionals often lack training and information on distance counseling (Blumer, Hertlein, & VandenBosch, 2015; Bruno & Abbott, 2015; Cabaniss, 2002; Finn & Barak, 2010; Glueckauf et al., 2018; Tanrikulu, 2009). Considering the evolution of the counseling profession towards the use of distance counseling, Callan, Maheu, and Bucky (2017) described the lack of training in telemental health as a crisis.

The need for counselors trained in distance counseling is growing as the use of distance counseling is expected to continue to increase. However, based on what counselors report they are not receiving adequate training in distance counseling. Research indicates counselors lack training and that the training available is often postgraduate and can be costly (Anthony, 2015). The lack of training among counselors may extend to counselor educators as well, a possible explanation for the training deficit (Trepal, Haberstroh, Duffey, & Evans, 2007). The use of technology in counseling is an important part of professional development and should be included in master level counselor preparation programs (Anthony, 2015; Blumer et al., 2015; Cabaniss, 2002;

Cartreine, Ahern, & Locke, 2010; Callan et al., 2017; Finn & Barak, 2010; Glueckauf et al., 2018; Kozlowski & Holmes, 2017; Pipoly, 2013).

The use of technology is an essential component of distance counseling. Prior use of counseling related technology and past use of distance counseling has been associated with a more positive attitude towards distance counseling (Simms, Gibson, & O'Donnell, 2011). Prior research on technology integration in education indicates that intrapersonal factors such as self-efficacy play an important role in technology integration (Davis, 1989; Niederhauser & Perkmen, 2008). In addition, self-efficacy is understood to be a significant factor in motivation and behavior (Bandura, 1977). The influence of self-efficacy on technology integration can be applied to distance counseling training as well. Technology is used in distance counseling and training is preferable to include a hands-on approach (Anthony, 2015; Hilty et al. 2017; Holmes, Hermann, & Kozlowski, 2014; Manring, Greenberg, Gregory, & Gallinger, 2011; Shandley et al. 2011). Counselor educators' perceptions of their skills could have an impact on their confidence and their teaching behavior.

In this study, I investigated the self-efficacy of counselor educators in relation to distance counseling instruction. This study provides additional insight into this area of counselor education that has been largely ignored. Counselor training for distance counseling in master programs is an important area to investigate, in order to better understand the training deficit in this area. Distance counseling does have the potential to increase access for rural areas and underserved communities (Flaum, 2013), but it must be done in accordance with professional standards (Richards & Vigano, 2013; Hilty,

Maheu, Drude, & Hertlein, 2018). The training of counseling students is an essential step in that process, yet little has been investigated. I began this search by investigating intrapersonal factors of counselor educators that might impact training. Specifically, counselor educator self-efficacy with technology and the relationship of this intrapersonal variable on distance counseling instruction.

This chapter will provide background information on the research study; examining counselor educators self-efficacy with technology integration and teaching master level students distance counseling skills. In this study, I reviewed past research relevant to training in distance counseling and then discussed why this problem is important to study. In addition, I describe the methodology that was used and variables that were explored. I also explained the theoretical basis for the study and assumptions and limitations of the study. Finally, I clarify definitions to that were used.

### **Background**

Technology has changed the way people work, play, form relationships, and communicate. The field of mental health has also been impacted by evolving technological advances. It has become more important for the mental health field to adapt to the widespread use of technology, both by counseling professionals and their clients, and to keep up with technological advances (Anthony, 2015; Mallen, Jenkins, Vogel, & Day, 2011). However, the counseling profession has not been responsive to the changes resulting from technological advances, especially regarding counselor training to utilize technology for distance counseling (Allenman, 2002; Anthony, 2015; Callan et al., 2017; Cartreine et al., 2010; Pipoly, 2013; Reljic, Harper, & Crethar, 2013). There have been



growing concerns that counselors are unprepared for the evolution of technology in counseling.

There is no definitive terminology used regarding the use of technology to provide counseling services; many terms are used to describe distance counseling. The American Counseling Association (ACA) defined distance counseling as “the provision of counseling services by means other than face-to-face meetings, usually with the aid of technology” (ACA, 2014, p. 20). Distance counseling includes synchronous and asynchronous methods of communication that include texting, email, chat, bulletin boards, smartphone applications, or videoconferencing (Myers & Turvey, 2013). I used the term distance counseling throughout this study.

The use of distance counseling is expected to continue to grow (Barnett, 2011; Backhaus et al., 2012; Cartreine et al., 2010; Haberstroh, Parr, Bradley, Morgan-Fleming, & Gee, 2008; Layne & Hohenshil, 2005; Menon & Rubin, 2011; Richards & Vigano, 2013; Shandley et al., 2011). It is important that counselors have appropriate training to provide distance counseling services (Cartreine et al., 2010; Hilty et al., 2018; Glueckauf et al., 2018; Maheu et al., 2017). There has been a growing body of research on distance counseling; however, little research has been done regarding training (Anthony, 2015). The few studies that have been conducted indicate that online practitioners often lack training for distance counseling but provide services online regardless (e.g. Blumer et al., 2015; Bruno & Abbott, 2015; Finn & Barak, 2010; Chester & Glass, 2006; Maheu & Gordon, 2000). Further, counselors reported they feel undertrained regarding distance counseling (Bastemur & Bastemur, 2015; Benavides-Vaello, Strode, & Sheeran, 2013;

Blumer et al., 2015; Cipolletta & Mocellin, 2017; Santhiveeran, 2009; Shaw & Shaw, 2006; Simms et al., 2011). The practice of distance counseling is expected to continue to increase and there is a gap in training that must be addressed (Anthony, 2015; Callan et al., 2017; Pipoly, 2013). There have been concerns that counselor training programs have not been meeting the needs of students concerning distance counseling (Anthony, 2015; Blumer et al., 2015; Pipoly, 2013). The use of technology in counseling requires training; however, many counselors have reported they lack training in this area.

Professionals have been calling for master programs to include distance counseling training (Anthony, 2015; Blumer et al., 2015; Callan et al., 2017; Glueckauf et al., 2018; Pipoly, 2013). There have been concerns that counseling programs have not been preparing students for the current and future work environment (Anthony, 2015; Cabaniss, 2002; Callan et al., 2017; Glueckauf et al., 2018; Maheu et al., 2017; Pipoly, 2013). The need to train counselors regarding technology in counseling has also been recognized by The Council for Accreditation of Counseling and Related Educational Programs ([CACREP], 2001, 2009, 2016) and The Association for Counselor Education and Supervision ([ACES], 2007; ACES Technology Interest Network, 1999). Counselor training programs are obligated to include distance counseling in their programs, but they do not appear to be meeting the needs of students. Counselors must be prepared to work in a technology supported environment (Glueckauf et al., 2018; Maheu et al., 2017). Mental health practitioners are expected to have the skills necessary to work as a member of an integrated team that utilizes technological tools (Maheu et al., 2017). In addition,

the practice of distance counseling is a viable career option (Pipoly, 2013). There are practitioners who have been working online for years (Haberstroh & Duffey, 2011).

Counseling students have expressed interest in learning about distance counseling. When asked, students have reported that they would like more information on distance counseling practices (Bastemur & Bastemur, 2015; Blumer et al., 2015, Tanrikulu, 2009). Despite the need for and student interest in distance counseling training, training is lacking.

If training for distance counseling should occur in counselor education programs, why is it not occurring? One explanation may be barriers with technology integration. Distance counseling uses various technological tools. Student trainees and clients reported technical problems were a significant factor in their distance counseling satisfaction (Haberstroh, Duffey, Evans, Gee, & Trepal, 2007). Practitioners must have adequate skills and knowledge of the technologies used for distance counseling to practice, to train (Haberstroh et al., 2008), or to supervise others in distance counseling (Haberstroh & Duffey, 2011).

Haberstroh et al. (2007) noted that few counselors are trained in distance counseling which may be indicative that few counselor educators are trained in distance counseling as well. Experience or training with distance counseling has been associated with clinicians' attitude about distance counseling (Simms et al., 2011). The lack of training could impact a counselor educator's attitude about distance counseling, including self-efficacy, ultimately influencing counselor educator classroom behavior. Past research in technology integration has found an association between self-efficacy and technology

integration (Anderson, Groulx, & Maninger, 2011; Bunch, Robinson & Edwards, 2012; Niederhauser & Perkmen, 2008; Perkmen & Pamuk, 2011, Perkmen, 2014). Counselor educator self-efficacy could be a barrier to technology integration relating to distance counseling.

Technology integration has been researched in education to better understand barriers to integrating technology into classrooms. The research indicated that teacher attitudes and beliefs were found to influence teacher technology integration (e.g. Bunch et al., 2012; Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur, & Sendurur, 2012; Gu, Zhu, & Guo, 2012; Holden & Rada, 2011; Hew & Brush, 2007; Kim, Kim, Lee, Spector, & DeMeester, 2013; Niederhauser & Perkmen, 2008). There are differences between student and educator levels of comfort with technology. In fact, Geer and Sweeney (2012) found that students had concerns about teachers' abilities to use technology in the classroom. Nearly 100% of young adults, especially college students, use the internet regularly (Pew & Pew, 2018). The college student population is more comfortable with using the internet and technology than other groups. Indeed, students may be more comfortable with technology than educators.

With this study, I investigated one possible factor for the deficit in training, counselor educator self-efficacy with technology. It has been understood that technology acceptance, which includes self-efficacy and outcome expectation, is influential in the implementation of distance counseling (Bruno & Abbott, 2015; Simms et al., 2011; Terpstra et al., 2018). There is a body of research supporting the importance of perceived self-efficacy as influential in technology integration in the classroom (Anderson et al.,

2011; Bunch et al., 2012; Ertmer et al., 2012; Gu et al., 2012; Holden & Rada, 2011; Hew & Brush, 2007; Kim et al., 2013; Niederhauser & Perkmen, 2008, Perkmen & Pamuk, 2011, Perkmen, 2014, Perkmen & Surmelioglu 2016, Tezci, 2011a, 2011b). Considering the importance of technology in distance counseling and the need for integrating the technology into the classroom in order to teach distance counseling, self-efficacy with technology was an appropriate construct to explore. In this study, I examined one possible deficit, intrapersonal factors relating to self-efficacy with technology among counselor educators, and the relationship with distance counseling skills in clinical skills courses.

### **Problem Statement**

Distance counseling is becoming more commonplace in the field of mental health practice but despite the increasing use of technology in counseling, counselor training is not keeping up with the demand (Anthony, 2015; Callan et al., 2017; Hilty et al., 2018; Pipoly, 2013). Although counselors have been practicing online, the available research indicates a majority of providers have been doing so without adequate training (Bruno & Abbott, 2015; Chester & Glass, 2006; Maheu & Gordon, 2000; Shaw & Shaw, 2006) and not adhering to ethical standards of professional organizations (Chester & Glass, 2006; Finn & Barak, 2010; Heinlen, Welfel, Richmond, & Rak, 2003; Maheu & Gordon, 2000; Santhiveeran, 2009; Shaw & Shaw, 2006). The evolution of technology in counseling is an important aspect of counseling practice and counselor training. The Council for Accreditation of Counseling and Related Educational Programs (CACREP) accreditation requirements include the need to address the impact of technology in counseling,

however, students have reported that they had not received training in this area (Benavides-Vaello et al., 2013; Blumer et al., 2015; Bruno & Abbott, 2015; Tanrikulu, 2009). There has been concern that the lack of attention paid to training in distance counseling has led to counselors unable to meet the demands of the future marketplace (Anthony, 2015; Callan et al., 2017; Gilkey, Carey, & Wade, 2009; Hilty et al., 2018; Pipoly, 2013). Although training students in the area of distance counseling is necessary, based on the scant research available, students reported they have not received the training needed to prepare them adequately in this area.

Researchers who have examined distance counseling have reinforced the importance of training counselors in distance counseling practices (Abbott, Klein, & Ciechomski, 2008; Anthony, 2015; Finn & Barak, 2010; Gentile & Liu, 2008; Haberstroh et al., 2008; Hilty et al., 2018; Kozlowski & Holmes, 2017; Shandley et al., 2011; Simms et al., 2011; Tanrikulu, 2009; Trepal et al., 2007). The practice of distance counseling requires an understanding of the unique characteristics of counseling via the use of technology. The face-to-face skills are not wholly transferable in the online world where non-verbal communication is absent, and communication may be exclusively text-based and asynchronous (Haberstroh et al., 2007; Haberstroh & Duffey, 2011; Johnson, 2017; Shandley et al., 2011; Trepal et al., 2007). Training is necessary, unfortunately it is available in post-graduate settings and may be expensive, costing hundreds of dollars (Anthony, 2015).

Counselors themselves have reported that they lack the training required to provide competent distance counseling services (Benavides-Vaello et al., 2013; Finn &

Barak, 2010; Hertlein, Blumer & Smith, 2014; Santhiveeran, 2009; Simms et al., 2011; Shaw & Shaw, 2006; Tanrikulu, 2009). In fact, counselors may be unaware of the unique aspects of distance counseling and feel confident to practice without understanding the complex legal and ethical requirements or practice issues relevant to distance counseling (Trepal et al., 2007). This lack of knowledge or training is of concern, the lack of training could result in client harm (Goss & Anthony, 2009; Holmes, 2008; Shandley et al., 2011; Terpstra et al., 2018). Allenman (2002) has also expressed concerns that unethical practices have a negative impact on the reputation of the counseling profession. There are consequences to clients, clinicians, and to the counseling professions legitimacy resulting from the deficit in counselor training.

Unfortunately, the research indicated that a variety of online mental health practitioners have been failing to meet ethical and legal standards. There has been some research into the practice of distance counseling; through interviewing practitioners or examining websites of online practitioners. The findings indicated that a majority of mental health professionals conducting distance counseling services were not adhering to ethical standards established by professional organizations including the ACA, (2014) and the National Board for Certified Counselors ([NBCC], 2016b) (Chester & Glass, 2006; Finn & Barak, 2010; Heinlen et al., 2003; Maheu & Gordon, 2000; Santhiveeran, 2009; Shaw & Shaw, 2006).

The organization that is instrumental in counselor education, CACREP, responded to the influence of technology in counseling practice by updating counselor training to include the impact of technology on counseling into curriculum (CACREP,

2001, 2009). As a result, the CACREP standards were updated to incorporate technological influence on the counseling profession into counseling curriculum (CACREP, 2009; CACREP, 2016). Counselor education programs have the responsibility of preparing students to be competent to practice, including with regards to the impact of technology in counseling services (CACREP, 2016). However, counselor educators have the choice on how, if, or to what degree they implement distance counseling into their curriculum (CACREP, 2016).

Similarly, the ACES Technology Interest Network developed competencies regarding technology and the use of technology in the field of counselor education nearly two decades ago (ACES, 2007). ACES (2007), recognized the impact of technology on varying aspects of the counseling profession and developed *Technical Competencies for Counselor Education Students: Recommended Guidelines for Program Development* in 1999 (ACES, 1999). Specifically, ACES (year) proposed technology competencies “be infused throughout counselor education curriculum at the masters’ and doctoral program levels” (p. 1). However, based on student reports and past research on practice, this does not appear to be occurring (Blumer et al., 2015; Cabaniss, 2002; Hilty et al., 2015; Tanrikulu, 2009).

Despite the call to integrate technology into counselor training, there has been little research done regarding training counseling students to use technology (Anthony, 2015; Fitzgerald, Hunter, Hadjistavropoulos, & Koocher, 2010; Kozlowski & Holmes, 2014; Shandley et al., 2011). It is concerning that few counselors possess NBCC distance counseling certification (DCC), conduct distance counseling, or to provide the necessary



training to counseling students (Trepal et al., 2007). The DCC has been changed to Board Certified Telemental Health Provider (BC-TMH)

The need for counselors trained to provide online services is increasing; however, counselors report they lack the skills and training. The need for graduate training programs to include distance counseling into counseling programs is necessary to ensure counselors are prepared to work with the unique aspects of distance counseling upon graduation (Anthony, 2015; Blumer et al., 2015; Callan et al., 2017; Glueckauf et al., 2018; Hertlein, Blumer, & Mihaloliakis, 2014; Hilty et al., 2017; Mallen, Vogel, & Rochlen, 2005; Pipoly, 2013). The use of technology in counseling has become widespread and all students should be provided with the necessary skills to ensure ethical and legal practice. There is a training crisis that must be addressed (Callan et al., 2017). The information gained through this study can be used to support counselor educators training needs to ensure that students are prepared for the impact of technology on the counseling profession. Investigating counselor educators' self-efficacy can provide insight into the training needs of counselor educators as well.

Counseling students, counselors, other mental health professionals, and professional organizations agree that training for distance counseling should occur in master level counselor education programs (Anthony, 2015; Blumer et al., 2015; Cardenas, Serranno, Flores, De LaRosa, 2008; Glueckauf et al., 2018; Hertlein, Blumer, & Smith, 2014; Hilty et al., 2017; Mallen et al., 2005; Pipoly, 2013, Trepal et al., 2007). However, based on prior research on practice and experience this training is reportedly not occurring. I explored one possible area related to lack of training; specifically,

counselor educators perceived self-efficacy with technology. Past research into technology integration has indicated that intrapersonal factors, such as self-efficacy have an influence on technology integration in the classroom (Kim et al., 2013; Ertmer et al., 2012). This study considered one variable which may be related to counselor educator's incorporation of distance counseling training into the classroom, the impact of counselor educator's technology self-efficacy in relation to distance counseling skills instruction in the master level classroom.

In addition to self-efficacy, demographic variables were included in statistical analysis. Both correlation and regression models were developed to determine which, if any, demographic variables were significant predictors of including distance counseling skills in their class.

### **Purpose of the Study**

The purpose of the study was to examine if there was a statistically significant relationship between counselor educators' self-efficacy with technology and counselor educator inclusion of distance counseling instruction in the master level classroom. In addition, the study also examined if there were any significant demographic factors that predicted the inclusion of distance counseling skills instruction in the skills-based classroom of master level counseling programs. Counselor educator self-efficacy with technology was be measured using three subscales from the Intrapersonal Technology Integration Scale (ITIS), and the full score of the ITIS as well. Specifically, the self-efficacy (SE), outcome expectations (OE), and interest (INT) subscales. The inclusion of

distance counseling skills was based on counselor educator self-reports. Finally, demographic data was collected using an online survey, along with the ITIS questions.

### **Research Questions and Hypotheses**

In this research study, I examined if there was a relationship between counselor educators' self-efficacy with technology, as measured by the full score of the ITIS and each of the individual subscales; self-efficacy, outcome expectations, and interest, and counselor educator's instruction of distance counseling skills in the master level classroom.

RQ1: Is there a relationship between the level of perceived self-efficacy with technology as measured by the Intrapersonal Technology Integration Scale (ITIS) and the inclusion of distance counseling skills in the skills-based courses in which they are an instructor, as measured by self-report?

*H<sub>1</sub>*: There is a statistically significant correlation between counselor educator self-efficacy with technology, based on scores on the self-efficacy, outcome expectations, and interest subscales and the total score from the ITIS and teaching distance counseling skills in the classroom based on self-report.

*H<sub>0</sub>*: There is not a statistically significant correlation between counselor educator self-efficacy with technology, based on scores on the self-efficacy, outcome expectations, and interest subscales and the total score from the ITIS and teaching distance counseling skills in the classroom based on self-report.

RQ2: Which, if any demographic variables are predictive of counselor educator inclusion of distance counseling skills in the skills-based courses in which they are an instructor, as measured by self-report?

*H<sub>12</sub>*: There is a relationship between demographic variables, counselor educator self-efficacy with technology, based on scores on the self-efficacy, outcome expectations, and interest subscales and the full score from the ITIS, and teaching distance counseling skills in the classroom based on self-report.

*H<sub>02</sub>*: There is a not a relationship between demographic variables, counselor educator self-efficacy with technology, based on scores on the self-efficacy, outcome expectations, and interest subscales and the full score from the ITIS, and teaching distance counseling skills in the classroom based on self-report.

### **Theoretical and/or Conceptual Framework for the Study**

Bandura's theory of self-efficacy is the framework for the study. Self-efficacy, in short, is one's belief in his or her ability to perform a task (Bandura, 1977, 1997). The development of perceived self-efficacy is a process that includes the person, behavior, and environment. The individual's beliefs in his or her ability are formed through a process of environment interaction and successes or failures in completed tasks (Bandura, 1989). Self-efficacy beliefs are a substantial factor in motivation and behavior. Bandura included two components: self-efficacy expectations and outcome expectations (Resnick, 2011). Both factors influence the performance of activities (Resnick, 2011). Self-efficacy has been found to be associated with several behaviors (Renick, 2011) and is also important in motivation to change or adopt a behavior (Bandura, 1977).

The theory of self-efficacy has been applied to many tasks, including technology integration. Technology is an important component of distance counseling and in training counselors to practice distance counseling (Myers & Turvey, 2013). Distance counseling requires the use of various hardware and software. Technological tools such as computers, smart phones, webcams, and the accompanying software require knowledge to use effectively, especially regarding the competent delivery of therapy services. Given the importance of perceived self-efficacy and outcome expectation on behavior and the relevance to technology integration, it is an appropriate starting point to examine counselor educator technology integration in the form of distance counseling training and skills development in the classroom

### **Nature of the Study**

I used an anonymous online survey to collect quantitative data on counselor educator self-efficacy with technology and their inclusion of distance counseling skills in master level skills-based classes they taught. Self-efficacy with technology has been examined in education to better understand barriers to technology integration that are intrapersonal in nature. I examined the variables, counselor educator self-efficacy with technology and teaching distance counseling skills in the master level classroom, as a starting point in understanding barriers to training students in distance counseling skills. Self-efficacy and outcome expectation are recognized as significant predictors of behavior (Bandura, 1989) and a logical starting point in examining counselor educator behavior regarding instructional habits in the classroom.

A correlation study was selected to understand the relationship better, as it occurs in an educational setting, between counselor educator self-efficacy with technology and their inclusion of distance counseling skills training in the master level classroom. The problem exists in the educational environment and examining the problem in the natural setting provides insight into the issue and hopefully can be used to better prepare counseling students for the changing landscape in mental health practice. Similarly, the study is designed to collect data directly from counselor educators with experience in training counselors. An online survey was selected to collect data from a wider geographic area which provided information on a more significant number of counseling programs across the united states. Based on the results of the correlation, a logistic regression analysis was performed using the subscale scores, full scale score, and the demographic data collected to examine if any of the demographic data was predictive of counselor educator inclusion of distance counseling skills in their master level skills-based class.

### **Definitions**

*Asynchronous*: Not simultaneously, asynchronous communication methods refer to communication methods that do not occur in real time such as email (Perle, Langsam, & Nierenberg, 2011).

*Distance counseling*: NBCC (2016a) defined distance counseling as professional services delivered through electronic means which includes telephone, secure e-mail, chat, videoconferencing, or stand-alone programs. There is no agreement on terminology nor definitions regarding distance services.

*Internet supported psychological interventions (ISPIS)*: Defined by Bruno and Abbott (2015) to include a variety of web-based interventions including self-guided intervention, synchronous and asynchronous communication methods, therapeutic software, and other online activities such as blogs or self-help groups.

*Online counseling*: Richards and Vigano (2013) defined online counseling as a therapeutic intervention facilitated through computer-mediated communication technologies conducted by a trained professional, either stand-alone or as an adjunct to other services.

*Self-efficacy*: One's belief in their own ability to "exercise influence over events that affect their lives" (Bandura, 1994, p. 71). It can be simply stated as one's belief in their own ability.

*Synchronous*: At the same time, concurrent. Synchronous communication methods refer to communication in real time such as using video, instant messaging, or instant chatroom (Perle et al., 2011).

*Telemental health*: The general delivery of mental health services via technology (Zur, 2018). The services are provided by mental health professionals.

*Videoconferencing*: A synchronous communication method through the use of a webcam and associated software the use of video to transmit and receive video and audio (Yellowless, Shore, & Roberts, 2009).

### **Assumptions**

In this study, I had assumptions that individuals responding to the survey would respond appropriately. For example, it was assumed that all participants answered the

questions truthfully and to the best of their ability. A survey method was selected to ensure anonymity because some of the content might be perceived as sensitive by counselor educators, especially regarding their level of confidence with technology. It was also assumed that counselor educators have the information required to answer questions about online therapy and counselor education. It was expected that counselor educators had at least a basic knowledge of distance counseling and accurately reported their teaching of distance counseling skills.

In addition, I assumed, based on validation studies, that the ITIS (Niederhauser & Perkmen, 2008) is a valid measure. Niederhauser and Perkmen (2008) determined that each subscale has strong internal consistency and each subscale is a distinct construct. Factor validity and internal consistency support the instrument. However, although the validity of the ITIS is established, the ITIS was developed for use in education and the use in counselor education is a new use of the scale. The ITIS has been used in other education-related studies and the validity accepted (Bunch et al., 2012; Benigno, Chifari, & Chiorri, 2014).

### **Scope and Delimitations**

There is a deficit in distance counseling training in university counseling programs. I explored one possible factor: counselor educator self-efficacy with technology. Technology is an important part of distance counseling work and problems with using technology can result in both clients and counselors feeling unhappy and unsatisfied with distance counseling (Trepal et al., 2007).



The importance of technological knowledge on the distance counseling process can be applied to counselor training in distance counseling skills as well. To train counselors on the skills required to conduct distance counseling, the counselor educator may benefit from self-confidence in their knowledge and skills. Past research in technology integration confirms the impact self-efficacy has on integrating technology in the classroom (Bunch et al., 2012; Hew & Brush, 2007; Kim et al., 2013; Niederhauser & Perkmen, 2008; Perkmen & Pamuk, 2011).

I examined the relationship between self-efficacy with technology and the instruction of distance counseling skills in the master level classroom. There is a body of research that supports intrapersonal factors, including self-efficacy, exerting influence over technology integration in an educational setting (Ertmer et al., 2012; Holden & Rada, 2011). The integration of technology is an important factor in distance counseling skills. There are different technologies utilized in distance counseling and having the technical knowledge to use the technological tools effectively has been found to be an important aspect of distance counseling practice (Trepal et al., 2007; Haberstroh et al., 2008).

Counselor educators who have experience in teaching a counseling skills class such as practicum or internship were surveyed through an online survey for this study. I examined intrapersonal factors that were hypothesized to be associated with technology integration, specifically self-efficacy, and also related factors included in the ITIS, outcome expectation and interest. The availability of technology in the classroom was also important to know and was included in the survey. However, past research has found

that the availability of technology in the educational environment does not wholly explain barriers to technology integration (Hew & Tan, 2016). Prior use of distance counseling and prior training have also been noted to be associated with greater acceptance of distance counseling (Simms et al., 2011) so those questions were included as well.

The sample was drawn from counselor educators throughout the United States from both CACREP accredited and nonaccredited master counseling programs. The findings may not be generalizable to all counselor educators because of the diversity among counselor educators. In addition, participants were contacted by e-mail and invited to participate in an online survey. Because the survey is online, it introduced the possibility that nontechnology savvy individuals were excluded.

### **Limitations**

There are always limitations in research studies; this study is no exception. An online survey was used which required some technical knowledge and ability to complete. An internet survey was chosen because it is easy to access and complete and the geographic reach was broad. However, the data collected is representative of the sample group and may not be truly representative of all counselor educators.

The study examined the relationship between self-efficacy with technology and counselor educator training students in distance counseling. The participants were self-selecting and likely had comfort with technology which may have introduced sampling bias. However, to access and complete the survey was not technologically challenging, the skills required were not much greater than responding to an email or surfing the internet. The prevalence of internet usage among the population of the United States is

high, many Americans know how to surf the web (File & Ryan, 2014). However, it must be considered that the ability to complete an online survey may have excluded participants with lower levels of technology self-efficacy simply because it requires basic technical skills to complete.

### **Significance**

There are several reasons why distance counseling is growing and is expected to continue to grow (Anthony, 2015; Barnett, 2011; Finn & Barak, 2010; Simms et al., 2011; Hilty et al., 2013). Distance counseling has the capacity to improve access to mental health care and is a workable career option. Distance counseling is being used to increase access to psychotherapy services to a larger population such as rural communities, prisons, retirement homes, individuals who are homebound, people who suffer from social anxiety, or individuals who are deaf (Benavides-Vaello et al., 2013; Crowe, 2017; Hilty et al., 2013; McGinty, Saeed, Simmons, & Yildirim, 2006; Reljic et al., 2013; Swenson, Smothermon, Rosenblad, & Chalmers, 2016; Toscos et al., 2018). In addition, it is possible to practice exclusively online in the current marketplace, an online practice is a realistic career option for counselors today (Pipoly, 2013). Ensuring that practitioners are aware of the unique requirements and skills is an important aspect of counselor preparation and training.

The use of online counseling is beneficial for clients and counselors alike. Online therapy can be a way to augment a therapy practice providing additional income. In addition, online counseling is a way to provide mental health services to underserved communities and to reach individuals who are unable or unwilling to attend face-to-face

counseling. At the heart of this endeavor is educating counseling professionals to provide services that are ethical, efficacious, and adhere to the law. The education of counselors is where this knowledge is provided, so it is essential to determine if counselor educators are meeting this requirement and examining possible barriers. The information gained in this study can be used to improve training for counseling students in distance counseling. Ensuring counseling students are prepared to meet the evolving demands of the profession can have a positive impact on increasing access to needed mental health services. The information gained from this study can be used to better understand self-efficacy as a factor in distance counseling training in master level counseling programs, and counselor educators teaching distance counseling skills.

### **Summary**

There is a call for training mental health providers in distance counseling, preferably during their master level education (Anthony, 2015; Callan et al., 2017; Cartreine et al., 2010; Glueckauf et al., 2018; Pipoly, 2013). Distance counseling is recognized as an effective tool in providing care to underserved areas and populations. Some practitioners have embraced the online domain exclusively and others use online services to augment their private practice or an adjunct to face-to-face therapy. There are a small number of research studies that explored the practice of distance counseling. The limited research that has been conducted indicates that mental health providers are failing to live up to core ethical and legal standards for online practice (Hertlein, Blumer, & Mihaloliakos, 2014). There are unique aspects to distance counseling such as the asynchronous nature of communication, lack of non-verbal cues, reliance on written

language, informed consent, and how to manage a crisis with a client in a distance location (Abbott et al., 2008; Barnett, 2011; Cartreine et al., 2010). The topic is rapidly evolving, and the laws are complex or often lacking, making training vital for ethical, legal, and evidence-based practice (Pennington, Patton, Ray, & Katafiasz, 2017). There is a desire for training and recognition among mental health professionals that they lack the knowledge and skills necessary to adequately practice in this area (Bruno & Abbott, 2015). However, given past research, it is evident that practitioners are using technology, many, without the information required to do so (Finn & Barak, 2010; Glueckauf et al., 2018; Pipoly, 2013).

The topic of training in distance counseling is recent since distance counseling itself is new. However, the research available confirms the need for training and the support among professionals and students for training in distance counseling (Anthony, 2015; Callan et al., 2017; Glueckauf et al., 2018; Pipoly, 2013). Professional associations such as CACREP and ACES also recognize the need to train counseling students adequately, so they have the skills to work ethically with an understanding of the impact of technology on the lives of clients and the counseling profession.

The practice of distance counseling requires the use of technology such as smartphones, computers, and web cameras. Distance counselors are expected to have the knowledge, skills, and abilities required to utilize distance counseling technology ethically, legally, and effectively. Further, they must be able to help clients with the technology as well. Researchers have found that prior use or training in distance counseling is associated with greater acceptance and use of distance counseling (Simms

et al., 2011). Training students in distance counseling should incorporate hands-on opportunities to conduct distance therapy (Anthony, 2015; Hilty et al., 2017; Manring et al., 2011; Shandley et al., 2011). There are not a high number of counselors that are trained as BC-TMH which could mean that counselor educators also lack the specific training for distance counseling. Understanding the deficit in training is important to ensure that counselors are prepared to work in the evolving counseling environment. Past research on technology integration has found that internal and external factors impact teacher technology integration (e.g. Ertmer et al., 2012). There are interpersonal factors such as self-efficacy and a component of self-efficacy, outcome expectation, which are influential in technology integration (Harrell & Bynum, 2018; Niederhauser Perkmen, 2008; Niederhauser, Perkmen, & Toy, 2012). I examined if there is a relationship between counselor educator self-efficacy with technology, and the inclusion of distance counseling skills in the master level classroom. In the coming chapter, I will review the relevant research in more detail.

## Chapter 2: Literature Review

### **Introduction**

The rapid evolution of technology has impacted the counseling profession in many ways, particularly in the use of technology to provide counseling services. Distance counseling is becoming more commonplace in the field of mental health practice but despite the increasing demand for the use of technology in counseling, counselor training is not keeping up (Anthony, 2015; Callan et al., 2017; Glueckauf et al., 2018; Pipoly, 2013). Although the research regarding distance counselor practice and training is limited, what is evident is that mental health providers are working online but are failing to adhere to professional standards (Chester & Glass, 2006; Finn & Barak, 2010, Gassova, 2016; Heinlen et al., 2003; Maheu & Gordon, 2000; Murphy, McFadden, & Mitchell, 2008; Shaw & Shaw, 2006). Further, providers are often not trained to work online, reportedly not received training as part of their education (Finn & Barak, 2010; Pipoly, 2013). Counselor training has not kept up with the evolution of technology-related practices. This deficit in training has become a significant problem in the field of counseling (Anthony, 2015; Callan et al., 2017; Glueckauf et al., 2018; Pipoly, 2013).

Professional organizations took steps to address the influence of technology in counseling more than 20 years ago. For example, The NBCC (2016b) developed specific ethical guidelines for distance counseling as early as 1997. The ACA, and the American Mental Health Counseling Association (AMHCA) followed in 1999, and 2000, respectively by updating their ethical codes to address the new medium (ACA, 1999; AMHCA, 2000; Attridge, 2004; Centore, & Milacci, 2008). Despite the inclusion of

distance counseling into professional standards and ethical codes, the counseling profession continues to be divided on the topic of integration of technology in counseling due to unclear laws and concerns for privacy (Harris & Birnbaum, 2014).

The growing demand for technology-related services has had an impact on counselor training as well. CACREP updated the requirement for accredited educational programs to include the impact of technology on the counseling profession into the 2009 and 2016 CACREP Standards (CACREP, 2009; 2016). ACES also acknowledged the need for training counselors to work with technology and developed technology competencies for counselors as early as 1999 (ACES, 2007; ACES Technology Interest Network, 1999). Although professional organizations have developed standards in training, it seems that counseling programs have not kept up with training counseling students to use and work with the diverse technological applications in counseling practice (Anthony, 2015; Finn & Barak, 2010; Haberstroh et al., 2007; Pipoly 2013; Trepal et al., 2007). Counselors report that they are not feeling adequately trained in distance counseling (Anthony, 2015; Blumer et al., 2015; Cabaniss, 2002; Pipoly, 2013). Anthony (2015) and Callan et al. (2017) reported that there are legitimate concerns that training programs are not adequately preparing students for the current and future work environment.

Training counselors to provide distance counseling requires counselor educators who also have the necessary training and skills in the topic. The practice of distance counseling is complex and evolves rapidly (Anthony, 2015). The topic of distance counseling is broad with several practice related concerns and unique ethical and legal



issues. In addition, the practice of distance counseling uses various types of technology and the provider must be adept enough to provide technical support to clients in some cases. Technological issues are a factor in the satisfaction of distance counseling for both clients and clinicians (Haberstroh et al., 2011). Given the low number of BC-TMH professionals certified through NBCC (Haberstroh et al., 2011), counselor educators may lack the knowledge and skills to teach distance counseling. Researchers found that mental health professionals who had received training in distance counseling were more likely to utilize or to consider utilizing distance counseling (Finn & Barak, 2010; Simms et al., 2011). Applying the theory of self-efficacy, a counselor educator may be unsure of their own abilities, low self-efficacy, to provide training in this domain if they lack the training and experience themselves.

Findings from research into the integration of technology in the educational setting indicate intrapersonal factors including self-efficacy and outcome expectation may have an influence on technology integration (Anderson, et al. , 2011, Bunch et al., 2012; Hew & Brush, 2007; Kim et al., 2013; Niederhauser & Perkmen, 2008; Niederhauser, Perkmen, & Troy, 2015; Perkmen & Pamuk, 2011, Perkmen, 2014, Perkmen & Sulmelioglu, 2016). Self-efficacy with technology is also related to perceived ease of use and perceived usefulness, which are also related to outcome expectations, regarding technology integration in the classroom (Davis, 1989; Niederhauser & Perkmen, 2008). Self-efficacy beliefs are influenced by feedback from the environment as well. Specifically, if a person believes in his or her ability, they are likely to feel they have the skills needed to complete the task. Further, if done

successfully, further attempts are increased, by contrast, if done unsuccessfully then future attempts are reduced (Bandura, 1977). Technology integration in counselor training is not well understood, especially regarding training in distance counseling. However, given the research on technology integration in educational settings, it is certainly possible that counselor educators who have low levels of perceived self-efficacy with technology could be hesitant to include technology-related counseling skills in their classroom. Self-efficacy has been noted to be a relevant factor in technology integration in education. It is possible to apply this information to counselor education as to examine the impact of self-efficacy on distance counseling instruction.

The demand for skills in distance counseling is an expectation for graduates and counseling programs have standards and competencies in place (ACES Technology Interest Network, 1999; CACREP, 2016). Unfortunately, there is little research in counselor training programs and training counselors regarding distance counseling skills. This study fills a gap that exists regarding possible factors that impact counselor training regarding distance counseling skills. Specifically, in this study I investigated one aspect of training, counselor educator self-efficacy with technology, and the influence on distance counseling training in master level counselor training programs. I examined the impact of counselor educator self-efficacy with technology and inclusion of distance counseling skills in counseling skills classes.

The purpose of the study was to examine if there was a relationship between self-efficacy with technology, as measured by the ITIS (Niederhauser & Perkmen, 2008) and counselor educators' distance counseling skills instruction in master level skill-based

classes. There is currently little research on training counselors in distance counseling and no current research on counselor educator technology integration in counseling programs.

### **Synopsis of Current Literature**

In this literature review, I synthesized research relevant to the training of counselors to provide distance counseling retrieved from various sources. The use of technology in counseling is new to the field and research is limited (Anthony, 2015). Similarly, training counselors to practice distance counseling is also a newer aspect of the profession and research is also very limited (Anthony, 2015). The literature available on distance counseling includes the practice of distance counseling and training counselors to practice with the use of technology. In addition to the important research on distance counseling training, research on clinical practice has been included. The research available on practice provides insight into what practices have been occurring in the field by counselors and other mental health professionals and provides insight into what practitioners know and what training they did or did not have prior to undertaking distance counseling work. Further, the information on practice is useful in better understanding what distance counseling professionals should know if they are to provide services via technology.

Researchers investigating professional practices have collected information two ways; either by examining websites (e.g. Gassova, 2016; Heinlen et al., 2003; Recupero & Rainey, 2006; Santhiveeran, 2009; Shaw & Shaw, 2006) or collecting information from practitioners directly (e.g. Bruno & Abbott, 2015; Bambling, King, Reid, &

Wegner, 2008; Chester & Glass, 2006; Finn & Barak, 2010; Maheu & Gordon, 2000; Menon & Rubin, 2011; Simms et al., 2011). The research is not exclusive to counseling, other professions with similar practices such as marriage and family therapy (e.g. Gassova, 2016; Hertlein, Blumer, & Mihaloliakos, 2014; Hertlein, Blumer, & Smith, 2014), social work (e.g. Santhiveeran, 2009), psychology (e.g. Wangberg, Gammon & Spitznogle, 2007), or a mixed group of online practitioners (e.g. Bruno & Abbott, 2015; Chester & Glass, 2006; Finn & Barak, 2010; Menon & Rubin, 2011) provided insight into current practices. Information collected included the types of technology mental health practitioners had been using, adherence to ethical standards, and the unique aspects of counseling practice with the use of technology. This information provided insight into services practitioners had been providing to the public and the standard of care provided. In some cases, information on practice was also collected as to whether the providers had been trained to provide distance counseling services.

The training of related mental health practitioners to use technology appropriately for counseling is also relevant to this study. The research available in this area includes similar professions such as social work (e.g. Mishna, Levine, Bogo, Van Wert, 2013), psychology (e.g. Cardenas et al., 2008) school counselors (e.g. Gentile & Lui, 2008), or a group of mixed professionals (e.g. Murphy et al., 2008). There are a handful of studies in which training programs for counselors were developed and then feedback obtained on the experience from the participants (e.g. Haberstroh et al., 2008; Kozlowski & Holmes, 2017; Trepal et al., 2007). The research on training, although very limited, supports the importance of training to provide distance counseling services. Participants who have had

training support the need for training due to the unique aspects of technology related services versus face-to-face counseling.

Regarding the topic of technology integration or related topics, only two studies were located. Quinn, Hohenshil, and Fortune (2002), and Myers and Gibson (1999). The ACES Technology competencies were published in 1999, soon after, researchers set out to ascertain baseline data on the ACES competencies in counselor education.

Myers and Gibson (1999) asked respondents collected from the CESNET-L, to self-rate their level of competence on the 12 ACES competencies (ACES Technology Interest Network, 1999). Competency 10, knowledge about web-counseling, was rated 11<sup>th</sup> on the list of competencies, meaning that the counselor educators rated their competency low. Myers and Gibson (1999) found that there was not a consistently high level of technology competency in the sample. Despite the low ratings on web-counseling, about 96% reported that they actively seek opportunity to develop their technology skills.

Quinn et al. (2002) investigated technology use in counselor education as well, the technology that CACREP programs were using. This study was drawn from CACREP programs across the United States, a group of counselor educators were asked which technology they were using in their schools (Quinn et al., 2002). The findings indicated that counselor educators used technology mainly in the areas of research, and teaching or training (Quinn et al., 2002). The technologies that were reported as being used, such as interactive satellite, were about teaching or training, not as a mode of counseling (Quinn et al., 2002). The counselor educators in the study felt satisfied with

their training in the use of technology, 65.9% felt their training was adequate, 27.3% said they had training but that it was not adequate. 39% of the counselor educators did report that they use the ACES competency guidelines in the teaching (Quinn et al., 2002). To summarize, although a majority of counselor educators reported satisfaction with their training to use technology; the technology used by counselor educators was used for teaching or training.

Research on training counselors to provide distance counseling is lacking. Related topics include the current practices of online mental health practitioners and a handful of studies on training mental health practitioners to use technology-related services. Based on available research, mental health providers online practices are not meeting professional standards (Bruno & Abbott, 2011; Finn & Barak, 2010; Glueckauf et al. 2018; Santhiveeran, 2009; Shaw & Shaw, 2006). The research available examines the practices of different providers including social work (Santhiveeran, 2009; Mishna, Levine, Bogo, Van Wert, 2013), psychologist (Glueckauf et al., 2018; Hilty et al., 2017) family therapists (Hertlein, Blumer, & Smith, 2014; Hertlein, Blumer & Mihaloliakos, 2014 and counselors (Bruno & Abbott, 2011; Finn & Barak, 2010; Trepal, et al., 2007). The research presents a trend of poor ethical online practice with practitioners in most of the cases not adhering to the standards of their professional organizations (Bruno & Abbott, 2015; Finn & Barak, 2010; Glueckauf et al., 2018, Simms et al., 2011).

There are a few pioneers in counselor training in distance counseling such as Anthony (2013), Haberstroh (2009), and Trepal et al. (2007), Barak & Grohol, 2011 Murphy et al. (2008), and, specific to group distance counseling, Kozlowski and Holmes

(2017). Other researchers have also contributed to the field of distance counseling including Hertlein, Blumer & Smith (2014) in marriage and family therapy, Mishna, Levine, Bogo, Van Wert (2013) in social work, Maheu et al. (2017) in psychology, and Hilty et al. (2018) in psychiatry. All have been proponents of advancing training for professionals to ensure the quality of services available to the public as well. It is the insights and research of these pioneers that encourages researchers to look further and continue to better understand how best to train counseling students to prepare them for the future of distance counseling.

The barriers that counselor educators face regarding training counselors in distance counseling are not well understood due to the lack of research in this area. Similarly, research on counselor educator self-efficacy in distance counseling is relatively unexplored and worth examining as self-efficacy is established as an important factor in the integration of technology in the teaching setting

### **Sections in this Chapter**

In this chapter I provide a review of the existing literature on or relating to training clinicians in distance counseling. Specifically, I have begun by laying out the strategy used to find available literature on the topic. Next, research on the practice of distance counseling is discussed to provide insight into the practice of clinicians and the need for training. The insight from clinicians who are or have practiced distance counseling provides a greater understanding of the unique aspects of the medium and the specific practice issues and legal and ethical concerns relevant to distance counseling. Researchers have collected information through counselors and other mental health

professionals directly and by examining websites for compliance to professional organization ethical codes and state laws. The research from both approaches is included. The next section includes research on training programs that have been undertaken and the information gleaned by these programs. And finally, a short discussion on the professional organization's positions on training in distance counseling.

### **Literature Search Strategy**

A search of the recent literature was conducted using several sources available including the PsycARTICLES, PsychINFO, ERIC, and EBSCO databases, and Google Scholar. In addition, journals specific to the field of telemental health and counselor education were also included in the literature search. There is a lack of consensus in terminology for distance counseling, as a result keyword searches included *telemental health, teletherapy, online counseling, online therapy, distance counseling, e-therapy, web counseling, or web therapy*. Although I focused primarily on research after 2008, due to the limited research available I included some early studies including Maheu and Gordon (2000) and Chester and Glass (2006), which were significant research studies in an under researched area specific to the practice of distance counseling. I also searched for research on counselor education and technology integration. There is little research concerning practitioners' practice of distance counseling and even less in the training of counselors to provide distance counseling services. Although more recent research is preferable, the lack of research in the recent past was augmented by later research. The gap in the literature relating to counselor training and counselor educators training in



distance counseling skills to master level students illuminates the need for research in this area.

The topic of distance counseling has been examined by other doctoral students. For example, some dissertations explore various aspects of distance counseling such as school counselors' intention to use online counseling (Golden, 2017), and ethics of websites of marriage and family therapists (Gassova, 2016) counselor beliefs, intentions, and self-identification relationship to the intention to practice distance counseling (Holmsten, 2018), and clinicians experience conducting psychotherapy using Skype video conferencing (Stanard-Kinnaird, 2014)

There was almost no recent research in counselor educator training specifically relating to distance counseling skills in master level programs found despite an exhaustive search on the subject. Trepal et al. (2007) reported their experience in training a group of master level counseling students, and the students also shared their experiences of learning web counseling. In addition, there has been some attention paid to training counselors to provide distance group counseling (Kozlowski & Holmes, 2017) which is another exciting area open for exploration.

The need for more research in distance counseling is recognized, yet the area of training counseling students in distance counseling has not seen the same attention. There have been related studies such as training social work students (Mishna, Tufford, Cook, & Bogo, 2013), school counselors (Gentile & Lui, 2008), psychologists (Cardenas et al., 2008) or marriage and family therapists (Hertlein, Blumer, & Smith, 2014). In addition, there is increasing recognition for the need for competencies across domains to ensure

that the mental health profession is providing a high level of care in this expanding medium (Maheu et al., 2017; Hilty et al., 2018).

### **Theoretical Foundation**

The theoretical foundation for this study was Bandura's theory of self-efficacy. Self-efficacy is succinctly described as one's belief in their ability to achieve a specific course of action such as a task or behavior (Bandura, 1977, 1997). Self-efficacy includes four major processes, cognitive, motivational, effective, and selection (Bandura, 1993). One's self-efficacy beliefs are the result of several factors including motivation, prior experience, feedback from the environment, and knowledge and training (Bandura, 1994). Bandura (1993) proposes that perceived self-efficacy is a strong influence on thinking, feeling, and doing. Self-efficacy beliefs are influential in motivation, self-regulation, persistence, and resiliency to accomplish a task (Bandura, 1993). Self-efficacy beliefs are the result of interaction with the environment and are shaped by the self-evaluation and self-reflection of the individual based on past successes and failures, not only their own but also vicariously.

Self-efficacy has been established to be a factor in the development of skills and in the ability to perform a variety of functions. For example, self-efficacy has been associated with counselor skill development and ability (Larson & Daniels, 1998), teaching and learning (Zee & Koomen, 2016), and computers and technology integration (Celik & Yesilyurt, 2013; Tweed, 2013). In fact, self-efficacy can be used to predict whether one will carry out a specific behavior (Bandura, 1977 & 1997). Perceived self-

efficacy is an integral aspect of behavior, and is well established as a strong predictor of behavior (Sang, Valcke, van Braak, & Tondeur, 2010)

Researchers have also examined self-efficacy in counseling. Counselor self-efficacy (CSE) is used to describe the counselor's belief in their capabilities to provide effective counseling services (Larson & Daniels, 1998). Bandura's (1977) theory of self-efficacy, applied to counseling supports the belief that a counselor's beliefs would impact the "choice of counselor responses, effort expenditure and persistence in the face of failures, and risk-taking behavior" (Larson & Daniels, 1998, p 180). Research on self-efficacy in counseling includes CSE in relation to the level of training, age, hours of supervision, and developmental level (Larson & Daniels, 1998). In addition, Schiele, West, Youngstrom, Stephan & Lever (2014) found that counselor self-efficacy predicted the quality of practice, knowledge of evidence-based practices, and use of evidence-based practices. Self-efficacy has been noted to have an impact on the student's abilities in many areas (Schiele et al., 2014). This extends to counseling student learning as well. For example, Watson (2012) examined student counselor self-efficacy beliefs in relation to counseling ability for students who participated in online instruction. Schiele et al. (2014) examined counselor self-efficacy and quality of services and knowledge of evidence-based practices. In addition, Tsai (2015) examined the relationship between self-efficacy in student counselors and anxiety. In general, findings support self-efficacy as influential in skills development and counselor practice. Counselor self-efficacy is an important aspect of counselor training and can influence the counselor's ability to provide appropriate services.

The principles of self-efficacy have also been researched in the field of education. For example, self-efficacy has been examined for teachers in a variety of domains including teacher well-being (Skaalvik & Skaalvik, 2007), teacher effectiveness (Holzberger, Phillip, Kunter, 2013), level of performance (Ross, 1998), student achievement (Capara, Barbaranelli, Steca, & Malone, 2006), providing student feedback (Motley, Reese, & Campos, 2013), higher learning goals (Wolters & Daugherty, 2007), and most relevant to this study, technology integration (Bunch et al., 2012; Curts, Tanguma & Peña, 2008; Morales, Knezek & Christensen, 2008; Niederhauser & Perkmen, 2008; Stewart, Antonenko, Robinson, & Mwavita, 2013). The research supports the importance of educator self-efficacy beliefs and the impact of these beliefs on both educators and students. Self-efficacy impacts educators in many ways including technology integration.

Self-efficacy has also been examined as a variable impacting the integration of computers and technology into classrooms. Past research in education, has supported self-efficacy with technology as a factor related to the integration of technology in the classroom (Celik & Yesilyurt, 2013; Curts et al., 2008; Morales et al., 2008; Niederhauser & Perkmen, 2008; Stewart et al., 2013). I propose it is applicable to distance counseling because distance counseling methods generally require utilization of technology. Both synchronous and asynchronous methods utilize technology ranging from texting, computer chat rooms, or video conferencing platforms. The ability to utilize these technologies is essential for counselors and the counselor educators who train them (Anthony, 2015; Trepal et al., 2007). Given past research, it is possible that counselor

educators' self-efficacy with technology could be related to distance counseling instruction provided by the counselor educator. The basic tenets of self-efficacy theory propose that one's perceived beliefs in their own abilities will influence their behavior including their cognitions, motivations, affective states, and selection (Bandura, 1977). Currently, there is no research on factors that might correlate with counselor educator inclusion of distance counseling. However, given past research on learning and teaching, self-efficacy is a logical starting point.

Measuring technology integration has also been a focus of research. Davis (1989) developed the technology acceptance model (TAM) to examine factors that predict user acceptance of computers in the business field. Davis (1989) determined that two factors, (a) perceived usefulness and (b) perceived ease of use, were important factors in the acceptance of information technology. Perceived ease of use is also noted to be a component of motivation in relation to self-efficacy. Two research studies on counselor use of distance counseling have used an adapted TAM to examine the variables that impact technology integration by mental health professionals or students (Bruno & Abbott, 2015; Simms et al., 2011). Bruno and Abbott (2015) found that perceived usefulness, perceived ease of use, and attitude toward internet supported psychological interventions influenced study participants willingness to use Internet supported psychological interventions (ISPIs). Similarly, Simms et al. (2011) found that mental health provider attitude and perceived ease of use were influential in willingness to use telemental health. Simms et al. (2011) also found providers who received training were more likely to use telemental health. The limited research available supports the

importance of educator self-efficacy beliefs and the impact of these beliefs on the integration of technology (Celik & Yesilyurt, 2013; Ertmer et al., 2012; Holden & Rada, 2011; Hsu, 2010; Niederhauser & Perkmen, 2008; Niederhauser & Perkmen, 2010; Perkmen & Pamuk, 2011; Saade & Kira, 2009).

Counselor educators, like educators, are influenced by the principles of self-efficacy. The theory of self-efficacy supports the idea that an instructor that has low self-efficacy regarding his or her ability to utilize distance counseling resources would be less likely to attempt to attempt such tasks. It can be surmised that an instructor who lacks self-efficacy in an area would also be hesitant to teach the topic area. Distance counseling utilizes different types of technology including smartphones, tablets, or computers. Saade & Kira (2009) have explored computer self-efficacy, they report that the level of self-efficacy “plays a significant role in mediating the impact of anxiety on perceived ease of use” (p 177). Knowledge of and practice using technology are important factors in technology integration as well (Potter & Rockinson-Szapkiw, 2010). It is possible that counselor educators’ level of computer self-efficacy has an impact on their motivation to include computer-related counseling tools in their classroom. Bruno and Abbott (2015) and Simms et al. (2011) found that perceived ease of use influenced the use of distance counseling (Bruno & Abbott, 2015; Simms et al., 2011). Examining the relationship between self-efficacy and counselor educator teaching behavior in distance counseling skills can provide insight into current training.

## **Review of the Literature**

### **The Growth of Distance Counseling**

Counseling, like many other professions, has evolved in response to advances in technology. Mental health practitioners have been providing online services and the practice of distance counseling continues to expand (Cartreine et al. 2010; Finn & Bruce, 2008; Perle et al., 2011). There are several benefits to distance counseling such as increasing access to care, anonymity, a larger pool of practitioners, and in some cases lower costs (Ostrowski & Collins, 2016; Richards & Vigano, 2013). For a majority of Americans in rural areas, distance counseling is not just an alternative form of counseling, it is the only feasible option (Center for Credentialing and Education Global [CCE], 2018). The use of distance counseling is a feasible option to address a variety of presenting problems, the efficacy has been researched and distance counseling is found to be comparable to face-to-face counseling for many conditions (Hilty et al., 2013) and even superior in some cases (Kiluk et al, 2018). The profession is moving online and is expected to increase in the future.

### **Distance Counseling as a Profession**

The goal of counselor training programs is to provide counseling students with the knowledge and skills to practice as a counseling professional. Distance counseling skills are an important tool for counselors to have. Distance counseling is a viable career option for clinicians (Pipoly, 2013). The growth of online counseling has opened the door for clinicians to practice exclusively online. It is essential that counseling programs include distance counseling material into their counselor preparation programs (Anthony, 2015;

Haberstroh et al., 2009; McAdams & Wyatt, 2010; Myers & Gibson, 1999; Pipoly, 2013). Unfortunately, counselor preparation programs do not appear to be meeting the needs of students (Anthony, 2015; Callan et al., 2017). As technology continues to evolve, so must counselor training. Despite the increasing use of distance counseling, counselor training programs are not providing the necessary training to ensure counselors have the knowledge and skills necessary to provide services in this domain (Anthony, 2015; Callan et al., 2017; Goss & Anthony, 2009). It is essential to better understand the deficit in training to address the deficit and better prepare counselors for practice online.

### **Research on Current Practice**

It is important to obtain information on current practices in distance counseling to better understand professional use of distance counseling and practice related issues.

Researchers have used two approaches to collect information, they have surveyed practitioners or evaluated practitioner websites. Researchers set out to better understand the attitudes and practices of providers by collecting information directly from professionals themselves such as Bruno and Abbott (2015), Finn and Barak (2010), Hertlein, Blumer, Mihaloliakos (2014), Hertlein, Blumer, & Smith (2014), Menon and Rubin (2011), Simms et al. (2011), Wangberg et al. (2007) or from websites of providers (Heinlen et al., 2003; Recupero & Rainey, 2006; Santhiveeran, 2009; Shaw & Shaw, 2006). The research is limited and much of it dated more than a decade ago.

Unfortunately, due to the evolution of technology, especially in teleconferencing software, much of it does not provide insight into current practices. However, the



research does provide limited information on practices and the training of clinicians in distance counseling.

### **Research on Distance Counseling Practices**

Research on the practice and training of distance counseling is limited and includes different mental health professionals such as social workers, psychologists, marriage and family therapists, and counselors. Research on the training experiences of counselors using technology is also scant. The distance counseling tools utilized vary which makes comparison difficult. Different tools that are under the umbrella of distance counseling including self-directed online tools, telephone, email, chatrooms, or video conferencing. There are a small number of studies, and often the technology utilized is not consistent. The research available is difficult to compare as the variables measured vary as well.

Glueckauf et al. (2018) and Bruno and Abbott (2015) are the most recent researchers to investigate the use of technology in mental health practice. Glueckauf et al. (2018) conducted an online survey including practitioners from various mental health fields throughout the U.S. The survey is unique in that it asked about current use and also attitudes about what technologies they considered useful for distance counseling. The findings in Glueckauf et al. (2018) contrasted with past research; e-mail was used by only 37.8% and video-conferencing was used by 25.61%. The percentage of clinicians using e-mail was lower than other researchers such as Finn and Barak (2010) and Simms et al. (2011) reported. In addition, the percentage of participants using video-conferencing was much higher than reported by other researchers such as Centore and Milacci (2008) who

reported 1.2% of the practitioners using video conferencing, and 4.48% reported by Chester and Glass (2006). The percentages reported regarding attitudes was higher with 72.56% considering video-conferencing to be useful for distance counseling (Glueckauf et al., 2018). The shift from e-mail to videoconferencing could be the result of advances in video conferencing platforms.

Bruno & Abbott (2015) surveyed mental health providers in Australia about their use of what they refer to as internet supported psychological interventions (ISPIs); ISPIs including everything from self-directed internet tools to video-conferencing. The participants in the Bruno and Abbott (2015) study reported they used one or more forms of ISPIs with clients (69.8%). The most prevalent was self-guided web-based therapeutic interventions and web-based educational interventions (45 %). Only 17.4 % reported using online counseling and therapy which included therapist contact via email, instant messaging, or video; therapist contact was reported as a single variable. Although practitioners were using ISPIs, only 23% had received training. Further, of the 23% who had training, they reported the training they received lacked opportunities to practice. (Bruno & Abbott, 2015). The research done by Bruno and Abbott (2015) indicated that despite what could be characterized by limited training, practitioners are using distance counseling tools.

Telephone, e-mail, chat, or video conferencing are the primary modes of distance counseling. However, some of the research was conducted more than a decade ago when video-conferencing software was not as prevalent nor HIPAA compliant. Centore and Milacci (2008) found 73.8% of practitioners used the telephone for therapy, 28.1% used

email, 5.6% used text chat, and only 1.2% used video conferencing. Hertlein, Blumer & Smith (2014) asked MFT's about their use of email, 83.4 % used email to communicate with clients. Finn and Barak (2010) recorded 87% of providers used e-mail. Simms et al. (2011) had similar findings with 72 % of their sample communicating with clients via e-mail. E-mail use has been common among mental health professionals, but the past research indicates that video-conferencing has not been widely used. Chester and Glass (2006) also found participants in their study were using email (71%) and chat (17%) mainly to communicate with clients and to provide services. However, the most current research from Glueckauf et al. (2018) report that only 37.8% of psychologists surveyed use email. Although the numbers seem to have decreased, practitioners are utilizing distance counseling and have been for over a decade. The shift seems to be moving to the use of synchronous video technology.

The limited research confirms that providers, often educated, licensed professionals, are utilizing distance counseling. Unfortunately, research indicates providers have not been practicing within ethical standards or sometimes within the law. For example, Maheu and Gordon (2000) collected information about online practitioners including their professional background, the technologies used, and clinical interventions employed. The study participants were predominately licensed (93%), yet nearly half of the practitioners did not have arrangements in place to deal with the crisis, and less than half (48%) employed a consent form for treatment. It is troubling when a majority of online practitioners fail to meet a basic ethical and legal standards of client care. Chester and Glass (2006) had similar results. A significant majority of providers were licensed

(87%), but many did not use encryption (42%), and a majority of the providers surveyed were practicing outside of the state of their license. The research reveals concerns about the distance counseling services available online.

### **Website Analysis**

Researchers have also collected information available publicly on websites. Consumers turn to the internet for therapy and researchers have set out to better understand what consumers might find. The analysis of websites supports the findings that practitioners were not adhering to appropriate ethical and legal standards. Providers online should provide the prospective client with information about online therapy including possible risk, the provider's credentials, and education, the state they practice in, information relating to informed consent, the use of encryption, treating minors, and how a crisis is managed (AAMFT, 2017; NBCC, 2016b). Websites were examined regarding best practices and ethical standards.

The findings indicate that providers are not meeting the standards based on the information available on websites. Gassova (2016) recently examined websites of marriage and family therapists (MFT). Most websites did not have documents such as crisis services, informed consent, or information on privacy. Only 37% had information available. When Gassova (2016) analyzed the websites for compliance with the AAMFT ethical principles for practice online, only a single website met all the principles. Seven websites did not meet a single principle. One interesting finding in this study is the decrease in email use and the increase of video conferencing use for therapeutic contact, similar to the findings of Glueckauf et al. (2018). What was also concerning is that

providers were utilizing video-conferencing. 57% listed the service, but the providers reportedly were utilizing skype (42%) which does not meet the encryption standards necessary for distance counseling (Gassova, 2016). Shaw and Shaw (2006) conducted similar research but used the ACA code of ethics as the standard. The findings were also concerning, only 32% of the websites required clients to sign a waiver for services and only 38% had an intake procedure. In addition, less than half (45%) required the client to provide their full name and address and only 46% required the client to provide a date of birth to confirm their age. There were also deficits in protecting client data, only 27% used secure site or encryption software and only 33% indicated there is a risk when communicating via the internet. This is concerning, especially considering the education level and licensure status of the clinicians presented on the websites.

### **Support for Training in Distance Counseling**

Unfortunately, the studies of practice did not always inquire into the training of practitioners. Finn and Barak did include the question, 94%, reported that they did not receive training in their training programs (Finn & Barak, 2010). Most had read up on the topic themselves (92%), only 20% had attended a workshop and only 16% had attended a training program. Of interest is the e-counselors from the United States were less likely to have received formal training, only 10% of U.S counselors reported having received training. The need for training was agreed upon by 44%, with those who had training more likely to support training (Finn and Barak, 2010). In addition, most participants (56.5%) had not received supervision while doing e-counseling. An additional 41.3% received informal supervision from colleagues, only 6.5% received formal paid online

supervision from another online therapist (Finn & Barak, 2010). The study confirmed that training and supervision were lacking among practicing e-counselors.

Counselors or other mental health professionals who have either received training or have practiced distance counseling support training prior to utilizing distance counseling (Chęć et al., 2016; Finn & Barak, 2010; Murphy et al., 2008; Simms et al., 2011; Wangberg et al., 2007). There are a small number of studies on providing distance counseling training to mental health professionals (Anthony, 2015; Finn & Barak, 2010; Gentile & Liu, 2008; Haberstroh et al., 2008; Trepal et al., 2007). The limited research findings do indicate there are significant ethical and legal concerns among clinicians who practice distance counseling, reinforcing the importance of training counselors prior to implementing distance counseling practices (Anthony, 2015; Coursol & Lewis, 2003; Finn & Barak, 2010; Gentile & Liu, 2008; Haberstroh et al., 2008; Shandley et al., 2011; Simms, et al., 2011; Tanrikulu, 2009; Trepal et al., 2007).

This lack of knowledge or training revealed in the practice research, is of concern. A lack of training may result in negative client outcomes (Barnett, 2011) such as client harm (Goss & Anthony, 2009; Holmes, 2008; Pennington et al., 2017; Shandley, et al., 2011; Terpstra et al., 2018) or ethical or legal violations (Barnett & Kolmes, 2016b; Finn & Barak, 2010; Maheu & Gordon, 2000). Distance counseling tools, especially email, are used by a majority of counseling professionals (Chester & Glass, 2006; Finn & Barak, 2010; Heinlen et al., 2003; Leibert, Archer, Munson, & York, 2006; Murphy et al., 2008; Pelling, 2009; Simms et al., 2011). However, counselors are utilizing email and other available online tools absent of training (Finn & Barak, 2010).

Although the research is limited, it is evident that there are certain concerns regarding the training of practitioners providing online therapy and adherence to professional ethical codes or state laws. It is also evident that many online practitioners have little if any training to practice distance services. Researchers found that a majority of mental health professionals who were providing distance counseling services are not adhering to the ethical guidelines established by the ACA (2014), the NBCC (2016b), or other professional organizations (Chester & Glass, 2006; Finn & Barak, 2010; Heinlen et al., 2003; Maheu & Gordon, 2000; Recupero & Rainer, 2006; Santhiveeran, 2009; Shaw & Shaw, 2006). Further, counselors may not be aware of the unique aspects of distance counseling and may wrongly feel confident to practice without understanding the legal and ethical requirements or practice issues relating to distance counseling (Trepal et al., 2007). Distance counseling skills must be included in counselor training programs to ensure that counselors have the skills needed to practice within the law and ethical standards required for counselors.

### **Research on Training for Distance Counseling**

Educational programs focus on the provision of face-to-face skills but may be neglecting the unique skills to work in a technologically connected world (Anthony, 2015; Callan et al., 2017; Glueckauf et al., 2018; Mishna, Levine, Bogo, & Van Wert, 2013; Pipoly, 2013). Failing to address the unique aspects of online counseling might lead some students to believe no special skills are needed and they can do online therapy the same as face-to-face therapy which is not accurate. Prior research has confirmed that practitioners who have gone through training for distance counseling agree that training is

necessary to provide distance counseling to clients (Cardenas et al., 2008; Haberstroh et al., 2008; Gentile & Lui, 2008; Mishna, Bogo, Root, Sawyer, & Khoury-Kassabri, 2012; Mishna, Levine, Bogo, & Van Wert, 2013, Misha, Tufford, Cook, & Bogo, 2013; Murphy et al., 2008). The lack of visual and other nonverbal cues, present in some forms of distance counseling, requires more dependence on language (Trepal et al., 2007). The process is different than face-to-face counseling and it is often neglected in traditional training programs.

The overall consensus is that training is important in order to appropriately, ethically, and effectively provide distance counseling (Abbott et al., 2008; Baker & Bufka, 2011; Barnett & Kolmes, 2016a, 2016b; Bastemur & Bastemur, 2015; Cardenas et al., 2008; Carlisle, Hays, Pribesh, & Wood, 2015; Gentile & Lui, 2008; Haberstroh et al., 2008; Hertlein, Blumer, Mihaloliakos, 2014; Hertlein, Blumer & Smith, 2014; Gentile & Lui, 2008; Mishna et al., 2012; Langarizadeh, Tabatabaei, Tavakol, Naghipour, & Moghbeli, 2017; Menon & Rubin, 2011; Mishna, Levine, Bogo, & Van Wert, 2013; Mishna, Tufford, Cook & Bogo, 2013; Murphy et al., 2008; Nelson & Duncan, 2015; Kozlowski & Holmes, 2014; Simms et al., 2011; Yuen, 2012). The legal and regulatory guidelines for online counseling are often complex and difficult to understand (Zur, 2016). Training in the ethics and laws relating to distance counseling is needed to navigate the ethical codes and relevant laws (Haberstroh, Barney, Foster, & Duffey, 2014).

Researchers agree on specific ethical concerns that are unique to online therapy. Specifically, informed consent, verifying client identity, privacy, competency, duty to



protect, jurisdictional issues, and therapist transparency in advertising (Abbott et al., 2008; Barnett & Sheetz, 2003; Finn & Barak, 2010; Fitzgerald et al., 2010; Hertlein, Blumer, Mihaloliakos, 2014; Hilty et al., 2017; Hughes, 2000; Richards & Vigano, 2013; Ross, 2016; Shaw & Shaw, 2006; Mallen et al., 2005; Wells, Mitchell, Finkelhor & Becker-Blease, 2007). Support for training is prevalent, especially among those who have experience or training in distance counseling (Finn & Barak, 2010; Simms et al., 2011). Experience and training for therapeutic methods in face-to-face counseling are not adequate for practicing distance counseling (Haberstroh et al., 2008; Murphy et al., 2008; Mishna, Levine, Bogo, & Van Wert, 2013, Mishna, Tufford, Cook, & Bogo, 2013). There are ethical, legal, and practice issues unique to the online setting (Maheu et al., 2017). Counseling students have not been learning the skills necessary for distance counseling in their educational programs (Murphy et al., 2008; Cardenas et al., 2008). Research supports the need for training, specifically hands-on training with technology (Anthony, 2015; Manring et al., 2011; Mitchell, Myers, Swan-Kremeier, & Wonderlich, 2003; Goss & Anthony, 2009; Haberstroh et al., 2008; Hilty et al., 2017; Shandley et al., 2011). There is a call for this training to be provided during the field experience component of therapist preparation, a key time for skill development (Cardenas et al., 2008).

Training in distance counseling has an impact on the counselor's willingness to use distance counseling tools (Finn & Barak, 2010; Simms et al., 2011). Researchers also found that training increased practitioners' self-efficacy beliefs (perceived ease of use and perceived usefulness) and influenced providers use of distance counseling (Lazuras

& Dokou, 2016; Simms et al., 2011). Training has an impact on both self-efficacy with technology and willingness to use technology in counseling.

### **Call for Training in Distance Counseling**

Despite the growing interest in and need for training, there was no research located regarding how distance counseling skills are included in master programs. There are professionals calling for distance counseling training in graduate training programs to ensure counselors are prepared to work with the unique aspects of distance counseling upon graduation (Anthony, 2015; Blumer et al., 2015; Haberstroh et al., 2008; Kozlowski & Holmes, 2017; Maheu et al., 2017; Mallen et al., 2005; McAdams & Wyatt, 2010; Pipoly, 2013; Shandley et al., 2011). Training is necessary to ensure that counselors are competent to perform the day to day clinical practice that is inclusive of technological advances (Maheu et al., 2017). Counselor preparation programs should be meeting this need but based on research findings, they are not.

Counseling students report an interest in learning about distance counseling (Blumer et al., 2015; Hertlein, Blumer, Mihaloliakos, 2014; Tanrikulu, 2009) as do practicing counselors (Bastemur & Bastemur, 2015; Zamani, Nasir, & Yusoof, 2010). Research findings also show that students are not only interested in training (Finn & Barak, 2010; Tanrikulu, 2009; Teh, Acosta, Hechanova, Garabiles, & Aliana, 2014) but also in becoming certified in cyber-based practices (Hertlein, Blumer, Mihaloliakos, 2014). In addition, students agree that graduate programs should be including information about the use of technology in supervision (Hertlein, Blumer, Mihaloliakos, 2014). There is interest among students on the topic, however educational programs are not addressing

this issue of distance counseling training (Anthony, 2015; Callan et al., 2017; Hertlein, Blumer, Mihaloliakos, 2014; Pipoly, 2013)

The practice of distance counseling requires an understanding of the unique characteristics of counseling via the online environment such as the unique visual and verbal components (Holmes & Kozlowski, 2015; Kozlowski & Holmes, 2014; Menon & Rubin, 2011; Murphy et al., 2009). Distance counseling methods utilize a greater reliance on the written and oral communication between counselor and client because there is a lack of visual cues and nonverbal communication that is present in face to face counseling (Anthony, 2015; Finn & Barak, 2010; Gentile & Liu, 2008; Haberstroh et al., 2008; Kozlowski & Holmes, 2014; Menon & Rubin, 2011; Shandley et al., 2011; Tanrikulu, 2009; Trepal et al., 2007). Videoconferencing platforms can improve the visual aspect of distance counseling but the technology itself can be challenging for both client and counselor (Haberstroh et al., 2011). However, new counselors are not being trained in distance counseling practices. Trepal et al. (2007) propose that because few counselors are trained specifically in distance counseling, they lack the knowledge to train in distance counseling. Counselor educators may lack the specific training in distance counseling which could impact their beliefs in their own abilities. This study investigated one possible barrier to distance counseling training, counselor self-efficacy with technology.

### **Professional Organizations Positions on Training**

As technology use in counseling grew, professional organizations established standards for professionals as well as training practices. Professional organizations such

as the NBCC, the ACA, and the American Mental Health Counseling Association (AMHCA) began addressing the impact of technology on counseling in 1995, 1999, and 2000, respectively (Attridge, 2004; Centore, & Milacci, 2008; ACA, 1999; AMHCA, 2000; NBCC, 2016b). In addition, the American Association of Marriage and Family Therapy (AAMFT) recently developed best practices for the use of technology-assisted professional services (Caldwell, Bischoff, Derrig-Palumbo, & Liebert, 2017). Ethical guidelines have been established to ensure adherence to core principles consistent with counseling standards that ensure client protections. The ethical mandates support the use of technology if the professional is competent, provides appropriate informed consent, and meets the professional standards protecting client data and privacy (ACA, 2014; NBCC, 2016b; AAMFT, 2016). Professional organizations have adapted the ethical codes and practice guidelines to include technology in counseling.

The recognition that the use of technology in counseling was growing extended into counselor education as well. The Council for Accreditation of Counseling and Related Educational Programs (CACREP) recognized the need for training counselors in distance counseling and required that counseling programs include the impact of technology on the counseling profession into the CACREP Standards in 2009 (CACREP, 2009). However, counselor educators have the choice of how and to what degree they implement technology's impact on counseling into their curriculum (CACREP, 2016). Of concern is the fact, there are not many counselors NBCC certified in distance counseling to provide the necessary training to counseling students (Trepal et al., 2007). Counselor education programs have the responsibility of preparing students to be competent to

practice, including with regards to the impact of technology in counseling services (CACREP, 2016).

In addition, ACES (2007) recognized the impact that technology had on varying aspects of the counseling profession such as counselor education. Nearly two decades ago in 1999, ACES Technology Interest Network developed a set of technology competencies for counselor education students to have upon graduation, regarding technology and the use of technology in the field of counselor education (ACES, 2007). Two of these competencies relate directly to distance counseling. Specifically, competency (9) Be knowledgeable of the legal and ethical codes which relate to counseling services via the internet, and (10) be knowledgeable of the strengths and weaknesses of counseling services provided via the internet. ACES proposed technology competencies “be infused throughout counselor education curriculum at the masters’ and doctoral program levels” (p. 1). Based on student reports and past research on practice, this does not appear to be occurring (Anthony, 2015; Blumer et al., 2015; Cabaniss, 2002; Pipoly, 2013).

After an exhaustive search for research regarding the technological competence of counselor educators, only two studies were found. Myers and Gibson (1999) surveyed counselor educators on their self-reported level of competency in the ACES technological competencies just established at that time. Quinn et al. (2002) examined the utilization of technology in CACREP accredited counselor education programs also many years ago. Since then the topic of technology in counselor training has been studied in the areas of supervision and distance learning but not on distance counseling training.

The most recent ACA code of ethics addresses online therapy in Section H: Distance Counseling, Technology, and Social Media (ACA, 2014). The online environment has unique ethical issues including privacy online, duty to warn and duty to protect clients who are in a different geographic location, ensuring the age and identity of the client, ensuring the appropriateness of distance therapies for clients, training and competence, and ensuring the appropriate use of technologies (ACA, 2014). The online environment creates unique ethical and legal issues separate from face-to-face counseling.

In an effort to validate counseling training in distance counseling the NBCC offers a Board Certified-TeleMental Health Provider (BC-TMH) credential for those trained in providing distance services (CCE, 2016). They define distance professional services as counseling adapted for delivery through electronic means including telephone, secure e-mail, chat, video conferencing, or stand-alone programs. (NBCC, 2016a). The BC-TMH credential is available to mental health professionals from a variety of disciplines and is a way to indicate that one has received appropriate training on the practical aspects involved in the safe and effective provision of distance counseling services (CCE, 2016).

The NBCC includes guidelines in the code of ethics and also has a specific policy for distance counseling (NBCC, 2012, 2016a). The NBCC ethical code sets forth guidelines for the use of social media and record keeping related to the use of technology in counseling. In addition, the NBCC policy on distance counseling services provides guidelines on best practices to ensure ethical practice of distance counseling. The policy

document is based on three main concepts, that (a) counseling through a distance presents unique ethical dilemmas for professional counselors, (b) the technology continues to advance and become used more frequently by professionals, and (c) the use of technology continues to evolve in the field of counseling (NBCC, 2016a). It is necessary for counselors to be aware of the impact technology has on the profession, and the lives of clients (Anthony, 2015). Unfortunately, counselor education programs are not preparing counselors for the changing landscape of the counseling profession and technology related services.

Considering these multiple professional standards, it would seem that training new counselors in the practice of distance counseling would be common. However, research shows that counselors are not trained in distance counseling (Anthony, 2015; Bastemur & Bastemur, 2015; Benavides-Vaello et al., 2013; Cipolletta & Mocellin, 2017; Finn & Barak, 2010; Glueckauf et al., 2018; Hertlein, Blumer & Smith, 2014; Pipoly, 2013; Santhiveeran, 2009; Shaw & Shaw, 2006; Simms et al., 2011; Tanrikulu, 2009). Of further concern is the fact that counselors are providing distance counseling services often without training and frequently not adhering to the appropriate ethical and legal requirements (Chester & Glass, 2006; Finn & Barak, 2010, Gassova, 2016; Heinlen et al., 2003; Maheu & Gordon, 2000; Shaw & Shaw, 2006).

Despite these professional and educational standards, the training of counselors to provide distance counseling services has not been well researched (Anthony, 2015; Fitzgerald et al., 2010; Shandley et al., 2011). Advances in technology and the increasing use of online counseling warrants continuing research to understand distance counseling

training practices (Haberstroh et al., 2008; Backhaus et al., 2012). To better understand this deficit in training, this study was undertaken to investigate one possible barrier to training, counselor educator self-efficacy with technology and the relationship with distance counseling training in counselor education programs.

### **Summary**

Although distance counseling is a growing field the research on training is limited to a handful of studies not limited to training counselors. Research supports the efficacy of distance counseling and the usefulness of distance counseling to increase access to underserved areas, especially in rural communities which often lack professional services. However, research on training master level students in the skills of distance counseling is limited despite an exhaustive search. Other professions such as social work, psychology, and marriage and family therapy also have limited research and the findings indicate distance counseling requires unique skills and the importance of training to provide distance counseling services. The need for training is supported by those who have experience in the field and those who have obtained training in distance counseling. Further, the limited research examining the practice of distance counseling has found that the professionals in practice are mostly untrained and are not meeting the ethical and legal requirements of their profession. Professionals are utilizing distance counseling tools, although they may not identify as distance counselors or even be aware, they are practicing distance counseling. Behavioral health professionals are utilizing technology and often failing to meet the acceptable ethical standards set forth by professional organizations ethical codes. The lack of training is a problem that must be addressed,



preferably in master level programs to ensure counselors are prepared to work with technology in counseling upon graduation.

The training deficit has not been examined directly in relation to counselor educator's behavior. The available research does indicate that students are interested in receiving training in distance counseling however they are not receiving it in their counseling programs. The gap in understanding what is getting in the way of training counseling students is worth examining. Self-efficacy with technology has been examined in the field of education for many years. The integration of technology in education has been noted to involve different factors, self-efficacy being a strong indicator of an educator's motivation, willingness, and behavioral intention to integrate technology into the classroom. The utilization of technology is an important aspect of distance counseling and self-efficacy with technology may be influential in a counselor educator's integration of technology in the master level skills-based class.

## Chapter 3: Research Method

### **Introduction**

I set out to examine the relationship between counselor educator's self-efficacy with technology and their inclusion of distance counseling skills training in the master level classroom. Self-efficacy with technology was measured by the SE, OE, and INT subscales, and the overall score of the ITIS. The distance counseling skills instruction was determined by self-report. The variables were analyzed to determine if there was a statistically significant relationship between the variables of interest. Demographic information was also collected and was analyzed to determine if any of the demographic variables were predictive of teaching distance counseling skills.

In this chapter, I discuss the research method that was used for this study. I began with selection criteria for the population of the study and the sampling procedure used. I provided information on the procedures used in recruitment, participation, and data collection. I also clarify the specific instrumentation that was used and how the variables were operationalized by the instrument. The next section describes how the data was analyzed for this study. Threats to validity have been considered and how they relate specifically to this study as well. In addition, the ethical procedures followed are included followed by a summary.

### **Research Design and Rationale**

In this study, I examined the relationship between self-efficacy with technology among counselor educators and distance counseling instruction in the classroom. Little is known about this emerging field of training and this research study collected important

data that can be used to better understand the behavior of counselor educators and levels of self-efficacy with technology integration. The variables of interest included counselor educator inclusion of distance counseling skills in their master level skills-based class and counselor educators' self-efficacy with technology. Counselor educator self-efficacy with technology was measured by the ITIS, including a full score and scores for the three subscales: SE, OE, and INT (Niederhauser & Perkmen, 2008). The dependent variable was the inclusion of distance counseling skills in the classroom. Demographic data was collected as was data on counselor educator training in distance counseling and experience using distance counseling. The information collected was reported, providing baseline data for future research in this area.

The design of the study was quantitative, using an anonymous online descriptive survey. A correlation study was used to explore the current teaching environment and the prevalence of distance counseling training. The data was then statistically analyzed to examine the relationship between counselor educators' self-efficacy with technology, measured by their total and individual scale scores on the SE, OE, and INT subscales of ITIS and the inclusion of distance counseling instruction in the master level classroom for skill-based classes. A correlation analysis was used in order to explore relationships between variables that are observed as they occur without interference from the researcher. Correlation studies can be used to examine a behavior as it is occurring without manipulation providing information as to current practices (Creswell, 2012; Creswell & Creswell, 2013). Based on the correlation findings, a regression analysis was performed to see if demographic variables had any relationship with teaching distance

counseling skills and to further examine which demographic variables and scale scores, if any, were predictive of distance counseling instruction.

This study sample was drawn from three sources but was focused on a single sample group, counselor educators, for the data collection. The first source was (a) an email list was created by the researcher of publicly available contact information available from university websites in the United States, (b) the CESNET-L an email listserv for ACES members, and the (c) ACA Connect call for study participant email group list, a counseling newsletter for ACA members specific to request for research participants.

The data was collected using an online survey that was made available for 7 weeks. Two reminders were sent after the initial request for participation, one after 3 weeks and an additional reminder 5 weeks after initial contact. The second reminder informed the contacts that the survey would close in 2 weeks and provided a specific date. An online survey was selected because of the ability to reach a larger number of counselor educators in different geographic locations. Although geographic data was not collected, I contacted universities across the United States and requested their participation. The data I collected provided information that can be used to better understand if counselor educators are including distance counseling skills in their classrooms. In addition, information on counselor educator training and the use of distance counseling was also collected.

I analyzed the survey data using a correlation to ascertain if there is a statistically significant relationship between counselor educator self-efficacy with technology, as

measured by the SE, INT, and OE subscales and the total score on the ITIS, and inclusion of distance counseling skills. The sampling frame included areas throughout the United States to provide a more diverse sample to better understand counselor educator behavior in distance counseling skills training.

### **Methodology**

This section will provide information on my collection of data including how participants were selected and how the data was collected. I will also discuss why the population for the study was selected. I will describe in detail the methods used to collect the sample data.

### **Population**

The population for the study was counselor educators who have experience teaching skills-based counseling classes in master level counseling programs within the United States. This includes counselor educators of various education levels, from either CACREP-accredited programs or nonaccredited programs, and counselor educators who are currently teaching a skills-based course or have in the past taught a skills-based course to master level students. The exact number of counselor educators in the United States is unknown. One prior study sampled counselor educators from CACREP accredited programs which were found to include just over 1,500 counselor educators (Brown-Rice & Furr, 2016). The CESNET-L has 4,475 subscribers and the unedited list collected of probable counselor educators I collected totaled 4,699. The exact number of counselor educators is unknown but could be several thousand.

## **Sampling and Sampling Procedures**

The sampling used a nonprobability purposive sample. I solicited participation through email contact. The sampling was drawn from several sources: (a) CESNET-L, a listserv for ACES members, (b) the ACA connect call for study participant email group, (c) university contacts from universities obtained from the list of CACREP or past CACREP accredited programs available through the CACREP website, and (d) university contacts from master level clinical counseling programs within the United States obtained by an internet search. Participants self-selected to participate in the survey.

The first step was to collect email contact information from master level counseling programs in the United States. A list was obtained from the CACREP website of all CACREP accredited programs, past, current, and in the process. I then visited all the websites listed on the CACREP list. The university website was searched for counseling faculty or counselor education faculty. If email addresses were publicly listed the email address was recorded in an excel spreadsheet along with the state, the name of the university, and the first and last name of the faculty member. A similar process was followed to collect information from nonaccredited programs. An internet search for non-accredited counseling programs was done for all 50 states using Google. Once a university was found, the website was located, and the same process of collection was followed. The university site was viewed and counseling faculty or counselor education faculty that were publicly listed, including email, state, university, and first and last name were recorded in an excel spreadsheet. In both cases, the information obtained was based

on what was available to the general public. The lists were then be combined into one master list with both CACREP and non-CACREP accredited programs to include contact information obtained from the various university websites. Once a list was created, I initiated e-mail contact to counselor educators.

The first sampling email sent was a general email requesting participation (Appendix B). The email was sent to the three sources: (a) the CESNET-L listserv, (b) the ACA connect call for study participant email group list, and (a) directly to individuals from the university email contact list via SurveyMonkey. Approval to submit on the CESNET-L had been obtained earlier (Appendix A); permission is not required but the list manager does request that he is contacted prior to posting on the listserv. In addition, posting on the ACA connect call for study participant email group list required joining the list prior to submission, I had joined the list prior to initiating sampling. The emails collected through public information listed on university websites, were uploaded to Surveymonkey and the survey was sent out (Appendix B). The process was adjusted based on feedback then repeated after 3 weeks and again after 2 additional weeks.

The sampling frame was comprised of counselor educators who have either current or past experience teaching a skills-based class to master students. Skills-based classes will be defined as a practicum or internship as described in Section 3.

The sample size required was calculated based on alpha level, power, and effect size (see Field, 2013, Trochim, 2006). The alpha level represents the probability of a Type I error or rejecting a null hypothesis that is true. For this study, an alpha level of .05 was selected. Psychological research generally uses  $\alpha=.05$  (Trochim, 2006). This is an

acceptable level for research and will allow for a smaller sample size. The power level of .90 was proposed. This is also an acceptable level for research (Rea & Parker, 2014).

The effect size was estimated based on past research on the topic. There are few studies on instructional content relating to self-efficacy. Perkmen and Pamuk (2011) examined the variables included in the ITIS, (a) SE, (b) OE, and (c) INT. There was a medium effect size for SE and a large effect size for OE. Based on these findings, a medium effect size was applied.

Finally, using Cohen's effect size, a medium effect size,  $d = .3$ , was used. Using these parameters, the sample size is calculated using GPower (see Faul, Erdfelder, Lang, & Buchner, 2007) with a power of .90,  $\alpha = .05$ , two-tailed, with a medium effect size of  $d = .3$  the sample required is 109. A regression analysis was included based on the findings of the correlation. It is generally accepted practice to limit the regression model to 10 participants per variable (Concato, Peduzzi, Holford, & Feinstein, 1995), this was followed in the regression analysis with no more than six variables included in any model.

Rea and Parker (2014) considered the size of the population when determining sample size in survey research. There is no specific data on the number of counselor educators in the United States. Past research on counselor educators has estimated counselor educators in CACREP programs to number approximately 1,500 (Brown-Rice & Furr, 2016). Rea and Parker classified populations less than 100,000 as small, the number of counselor educators likely falls into this category given the numbers estimated for CACREP programs by Brown-Rice and Furr (2016). For a sample size based on a



population of 3,000 with a confidence level of 95% and a confidence interval of .10, the recommendation is 94 (Rea & Parker, 2014). A sample of 109, as calculated based on power, was sufficient based on the small population using a survey to collect the data.

### **Procedures for Recruitment, Participation, and Data Collection**

Recruitment was done by direct email contact. A contact list was generated based on data obtained from the CACREP program list and from internet searches for universities with master level clinical mental health counseling programs. Individuals on the created lists were contacted directly via email with a description of the proposed study, the time required for participation, the requirements to participate, and a link for a SurveyMonkey survey (Appendix B). The same email was distributed on the CESNET-L listserv, and the ACA connect call for study participant email group list for the first contact. The informed consent form was provided on the initial landing page of the survey.

Information was provided in the contact form (Appendix B) that described the purpose of the study, the commitment required, the requirements to participate, and the participants' rights around participation. The email included specific information for consent including the right to be informed of the outcome of the research study and a right to receive a copy of the findings. The participants were provided the protection of anonymity and a right to withdraw from the study at any time. My contact information was provided to participants including the opportunity to contact the researcher to withdraw or with any concerns or questions. It was not expected that the nature of the data collected would result in any client harm. However, to ensure participants are

provided adequate support, there was information provided for talkspace.com, an online counseling forum that can be accessed at any time from any location. In addition, given the population of the study, counselor educators training master level clinical counseling students, it was expected the sample would have the ability to access resources if they deemed it necessary.

A statement of privacy was provided on the landing page of the survey. The first page stated that the information was collected anonymously. In order to ensure anonymity, a random number was assigned to participants. In addition, SurveyMonkey has an option to not track participants, SSL encryption is used on the site, and data are kept securely. I set the security settings on SurveyMonkey to no tracking and to not collect any identifying information. Although anonymous data was stored on SurveyMonkey servers in the United States., the data did not contain any information that can be used to identify survey respondents. The data was protected while on the SurveyMonkey server and during transfer by TSL cryptographic protocols. The physical servers are always monitored and protected from intrusion or physical damage (SurveyMonkey, 2019). SurveyMonkey uses procedures to ensure the privacy and confidentiality of the data obtained including SSL encryption and no tracking of participants (SurveyMonkey, 2018). Finally, to protect all data obtained, I stored the data securely using encryption to secure the electronic data. The devices I used are secure, password protected, and antivirus software was maintained throughout the research study. The equipment I used is not available for access by any person, other than me. The data will be kept for the required 5 years and then destroyed.

Based on feedback from the institutional review board (IRB), the second sampling emails were adapted to include how the contact information had been obtained. The updated email was again sent out on the CESNET listserv (Appendix D), the ACA connect call for study participant email group list (Appendix E) and sent directly to the contacts obtained through the online searches and CACREP (Appendix F). In addition, the email list created from public data was edited based on feedback from the previous sampling, for example some of the contacts emailed me directly to indicate they were not eligible, and the names were removed from the list. Similarly, if someone indicated they had already participated they were removed from the contact list as well.

The third and final email soliciting participation was edited to specify it was a third and final request, and a final date for the survey was added then it was sent to the three sources (a) CESNET-L, (b) ACA connect call for study participant email group, and (c) the university email contact list. When possible, the emails were personalized, as recommended by Dillman (2014) in an effort to increase participation. The SurveyMonkey email list allowed for the input of first and last names and this was done on both the second and final sampling but was not done on the first.

The anonymous online survey was created through the website SurveyMonkey. Participants had the ability to exit the survey at any point. In addition, each question included the option to not respond. Email contact was provided in the letter requesting participation and several people contacted me with questions and the request for further information. The emails were recorded, and I responded to the questions or requests

accordingly. I will provide the completed dissertation to the participants who requested the final results.

The data was collected from counselor educators who have taught or were teaching a skill-based counseling class in a master level clinical program during the time of the survey. The survey questions relied on self-report for the information. The survey included questions to collect demographic information including are (a) age, (b) gender, (c) highest level of education completed, (d) years of experience as a counselor educator, (e) CACREP accreditation status of the university teaching occurred, (f) matriculated university CACREP accredited status, (g) prior training in distance counseling, (h) past experience using distance counseling, (i) availability of technology at teaching university, (j) reported use of technology in the teaching setting, and (k) the inclusion of distance counseling skills in the classroom.

The survey also included 21 items adapted from the Intrapersonal Technology Integration Scale ([ITIS], Niederhauser & Perkmen, 2008) (Appendix H). Permission to use and adapt the scale was obtained from both Dr Perkmen and Dr. Niederhauser (Appendix G). The adaptations were done to clarify that the questions were related to distance counseling technology as opposed to instructional technology as had been stated on the original ITIS. For example, in each question the stem items will were replaced the broader term of instructional technology to distance counseling technology. Item 23 has an additional clarification, the question from the original ITIS has been adapted from *I have an interest in listening to a famous **instructional technologist** speaking about effective use of **instructional technology** in the classroom* to *I have an interest in*

*listening to a famous distance counselor speaking about the effective use of distance counseling technology in the classroom.*

To clarify, the subscales that relate to self-efficacy, specifically the SE, OE, and INT were included, with rephrasing to relate to counselor education, in order to collect information on technology self-efficacy and technology integration specific to counselor education. The subscale behavioral intentions (BI) was not included, only 21 of the 25 items of the ITIS will be included to collect scores on self-efficacy, outcome expectations and interest in technology integration. The BI subscale was not included because actual behavior, in this case teaching distance counseling skills in the counselor educator's classroom was the variable to be measured as the outcome variable, not intention to utilize technology in the future.

Each subscale was scored individually, not including the BI subscale will not affect the other subscale's validity or reliability. Perkmen and Pamuk (2011) conducted research on social cognitive predictors in pre-service teachers and technology integration using only the self-efficacy subscale and the outcome expectation subscale and found the subscales to be valid and reliable when used alone. Each subscale has been examined for factorial validity and the SE subscale items ranged from .05 to .75, the OE items loading ranged from .62 to .83. Perkmen and Pamuk (2011) determined that SE and OE were indeed representative of two separate constructs and the scales distinct.

The information collected will provide baseline data on the number of counselor educators who include information on distance counseling in the master level classroom, their training and use of distance counseling, and additional demographic data that was

reported. Given the scarcity of any data on the topic, it will shed some light on this little-researched domain of counselor education.

### **Instrumentation and Operationalization of Constructs**

The instrument used in the study is the Intrapersonal Technology Integration Scale ([ITIS] Niederhauser & Perkmen, 2008). In this section I will describe the scale and discuss the reliability and validity of the ITIS. In addition, I include sample questions and discuss the adaptation of the scale to apply to counselor educators.

The Intrapersonal Technology Integration Scale (Niederhauser & Perkmen, 2008). The Intrapersonal Technology Integration Scale ([ITIS] Niederhauser & Perkmen, 2008) was used to collect information on counselor educator self-efficacy with technology for this research study. The ITIS was created to better understand intrapersonal cognitive variables that affect preservice teacher's integration of technology in their teaching. The ITIS was originally used with pre-service teachers but has also been used with Turkish primary school teachers (Perkmen & Surmelioglu, 2016), and in a university agricultural program (Bunch, et al., 2012). The ITIS was developed to examine the variables of self-efficacy, outcome expectations and performance goals and "the manner in which they may jointly function to predict technology integration performance" (Perkmen, 2008, p. vi).

The variable of interest in this study was counselor educator self-efficacy with technology. The ITIS was selected because it has been used to measure self-efficacy with technology integration and has a legacy in research on self-efficacy and technology integration. The ITIS self-efficacy subscale is drawn from a scale that is also established

in the study of self-efficacy and technology integration, the Computer Technology Integration Survey ([CTIS], Wang, Ertmer, & Newby 2004).

Perkmen (2008) developed the Intrapersonal Technology Integration Scale (ITIS) scale as a dissertation study (Perkmen, 2008). The original ITIS included 25 questions which include the self-efficacy (SE), and outcome expectation (OE) subscales, and one question to assess performance goal setting (PG). The ITIS included questions that had been adapted from other scales. Specifically, the self-efficacy subscale was adapted from the CTIS (Wang, Ertmer, & Newby 2004). In fact, the stems are nearly the same, the language is modified from the word *computer* in some cases, to be more consistent with teaching. The outcome expectations subscale is unique as it was developed to include three aspects of outcome expectation, performance outcome expectation (POE), social outcome expectation (SOE), and self-evaluative outcome expectation (SEOE) (Perkmen, 2008). Outcome expectation is also referred to as perceived usefulness in some measures and is related to the perceived results of carrying out the task (Perkmen, 2008). The ITIS was selected as it measures self-efficacy with technology integration in education, the construct which was examined in this study.

Niederhauser and Perkmen (2008) adapted the scale further. In their validation study, the complete ITIS was comprised of 25 items including four subscales. The four factors were, self-efficacy, outcome expectation, interest, and behavioral intention (Niederhauser & Perkmen, 2008). These four factors are measured in four such named subscales (a) self-efficacy (SE), (b) outcome expectation, (OE), (c) interest (INT), and (d) behavioral intention (BI). The questions were scored on a five-point Likert Scale, 1=

strongly disagree, 2= disagree, 3= neither disagree nor agree, 4= agree, and 5= strongly agree. The subscale scores were calculated by totaling the subscale question responses. Higher scores indicate higher levels of self-efficacy, outcome expectation, interest, and intention to integrate technology. The three subscales, SE, OE, and INT were analyzed against the inclusion of distance counseling skills.

The subscales have been used independently as well as combined with other constructs to measure technology integration. For example, Perkmen (2014) conducted a study using the SE and OE scales along with school climate and personality factors to examine technology integration among a group of Turkish pre-service teachers. The SE and OE scales were also combined again with school climate by Perkmen, Antonenko, & Caracuel (2016) to explore technology integration intentions of pre-service teachers in Turkey, Spain and the United States. The subscales were treated as independent scales in a study conducted by Perkmen & Surmelioglu (2016), the SE and OE scales were found to measure unique constructs both relating to motivational factors of technology integration. Finally, the OE scale was also evaluated independently by Niederhauser and Perkmen (2010). The researchers determined that the construct of outcome expectation was effectively measure by the scale. The subscales have been used independently and the validity and reliability have been confirmed.

The ITIS is used to measure self-efficacy, and performance and outcome related constructs found to contribute to educators' integration of technology in the classroom. For this study, the questions were altered slightly to be more consistent with counselor education and the behavior intention subscale was not be used. The ITIS has been slightly



altered for other use as well. For example, Bunch et al. (2012) replaced the term instructional technology with IWB meaning interactive whiteboard and the validity was not impacted. The adapted scale was pilot tested, and construct reliability was confirmed. Cronbach's alpha coefficients for the SE=0.93, OE=0.91, and INT=0.89 (Bunch et al., 2012). In addition, the adjusted instrument was reviewed by a panel of experts and face validity was determined as well (Bunch et al., 2012). The slight alteration made to the scale in this study is similar to the Bunch et al (2012) study where only the terminology specific to the industry was used in the place of instructional technology.

In addition, Perkmen et al. (2016) recently translated and adapted the ITIS in a study to validate the ITIS in Spanish and Turkish in Turkey, Spain and the United States. The interest scale was not used in this study, the SE and OE were used and found to be valid and reliable to measure self-efficacy and outcome expectation for technology integration in education (Perkmen et al. 2016). The researchers translated the ITIS into both Spanish and Turkish and the construct validity, factorial validity, and reliability were confirmed.

The ITIS subscales have also been used separately or in combination with other scales to further explore the variables of SE and OE as they relate to technology integration for teachers Niederhauser & Perkmen, 2010; Niederhauser et al., 2012; Perkmen et al., 2016; Perkmen & Pamuk, 2011; Perkmen & Surmelioglu, 2016). The subscales, SE and OE, and the constructs, self-efficacy and outcome expectation, are separate and each scale measures the construct as supported by past validation studies

(Niederhauser & Perkmen, 2010; Perkmen & Pamuk, 2011; Perkmen & Surmelioglu, 2016).

### **Operationalization**

The two most important factors in predicting behavior are self-efficacy and outcome expectation (Bandura, 2006). Self-efficacy is the result of many factors including interaction with the environment (Bandura, 1997). Self-efficacy is not a global trait but varies within the individual for different subjects (Bandura, 2006). The integration of technology, as is necessary for distance counseling, is highly dependent on factors related to self-efficacy with technology (Anderson et al., 2011; Bunch et al., 2012; Ertmer et al., 2012; Gu et al., 2012; Holden & Rada, 2011; Hew & Brush, 2007; Kim et al., 2013; Niederhauser & Perkmen, 2008, Perkmen & Pamuk, 2011, Perkmen, 2014, Perkmen & Surmelioglu 2016, Tezci, 2011a, 2011b, Wang, Ertmer, & Newby, 2004).

The interaction of the variables SE and OE were found to be influential in the Niederhauser and Perkmen (2008) scale for technology integration and in the technology assistance model (TAM) as well (Venkatesh & Davis, 2000). Outcome expectation is an important factor in teacher motivation to integrate technology in the classroom (Niederhauser & Perkmen, 2010). Outcome expectation can be explained as the belief that it is worthwhile to do, the “why one should” put for the effort to integrate technology into the classroom. Similarly, Vankatesh and Davis (2000) include perceived usefulness as part of their TAM which in quite similar to the outcome expectation in the ITIS.

The ITIS contains four subscales, self-efficacy (SE), outcome expectation (OE), interest (INT), and behavioral intention (BI). The subscales provide a broader picture of

self-efficacy as it includes the additional factors (a) interest and (b) outcome expectation which are influential factors in self-efficacy, motivation, and behavior (Niederhauser & Perkmen, 2008). The ITIS provides information on the intrapersonal beliefs of educators that have been found to be influential in the decision-making process to integrate technology into the classroom.

The subscales together give a picture of the intrapersonal factors that enhance or inhibit an educators' integration of technology. Three of the four subscales are used to measure educators' self-perceptions of their technology integration in their classroom. Specifically, the SE subscale was used in this study to collect data specific to counselor educators' self-reported confidence regarding their use of technology in the classroom. The OE subscale includes three dimensions of outcomes, (a) performance, (b) self-evaluation, and (c) social. The OE measures the expected benefits in the domains mentioned regarding the use of technology in the classroom. The expected outcome of the behavior considered has been found to be related to self-efficacy (Sang et al., 2010). The third subscale, INT, measures the interest in integrating technology related activities. Bandura viewed interest and self-efficacy to be influential to each other, a certain amount of self-efficacy is needed to spark interest and self-efficacy required to generate interest (Bandura, 1986). The three concepts of self-efficacy, interest, and outcome expectations are related and interrelated factors that contribute to action. The individual's interest in integrating technology into the class can also have an influence on their motivation which also in turn influences behavior. The BI scale measures future intention, as the study was focused on current behavior and not future intention, the BI scale was not included. This

study examined if the factors were related to the inclusion of skills-based instruction in the counselor educator's classroom.

The ITIS has been validated and found to be valid and reliable in English (Niederhauser & Perkmen, 2008; Perkmen, 2008), Italian (Benigno et al., 2014), and Turkish and Spanish (Perkmen et al., 2016). The ITIS was first developed as a dissertation study of Perkmen (2008). The ITIS developed in the dissertation study included three subscales, self-efficacy (SE), outcome expectation (OE), and interest (INT), the three that will be used for this study. In a follow-up study, the ITIS was validated, the concurrent validity of the subscales and the overall scale was found to be Cronbach's alpha coefficients for the three constructs: SE = 0.93; OE = 0.91; INT = 0.89 (Niederhauser & Perkmen, 2008). The latest use of the measure was a study to validate the SE, OE scales in addition to a measure of perceived school climate, as factors affecting technology integration (Perkmen et al., 2016). The SE and OE subscales were used, and the subscale validity confirmed as a reliable measure of self-efficacy with technology and outcome expectation of integrating technology in education (Perkmen et al., 2016).

In addition to the ITIS, counselor educators were asked, "Do you include any component of distance counseling skills in your skills-based class? The question will require a yes or no response. The variable was dummy coded for analysis. No=0 and Yes=1.

The data was collected through the use of an online anonymous websurvey through SurveyMonkey. The ITIS is administered to participants through the websurvey.

The full score for the subscale and the full ITIS, a total of the three subscales, was calculated and entered into a table for analysis using SPSS. In addition to the ITIS questions, the survey also collected demographic data including (a) age, (b) gender, (c) years of experience as a counselor educator, (d) level of education, (e) CACREP status of the university they graduated, (f) the availability of technology, (g) their use of technology in the teaching setting, (h) CACREP accreditation status of the university where teaching occurred, (i) past use of distance counseling and (j) prior training in distance counseling. The questions all rely on self-report.

### **Data Analysis Plan**

The survey data was retrieved from SurveyMonkey after the survey was closed. The data was securely downloaded and was stored securely on an encrypted flash drive for analysis. The data was cleaned, incomplete responses were viewed to determine if key data was missing, specifically if question 11, "*I include distance counseling skills in my classroom*" was missing, the response was omitted from the analysis. In the case of missing data on the ITIS questions, when possible the data was averaged and assumed, incomplete forms where an average score for any one of the three subscales could be calculated was used and analyzed. Specifically, if more than 1 response from a single subscale was missing, then the survey was removed from the analysis. If only one score is missing on a subscale, the average score was calculated, the average score was filled in for the missing response and the response was used in the analysis. In the same way, any cases that contained more than 3 blank responses on the three subscales overall, were rejected. Outliers, values that were +/- 3 standard deviations (SD) from the mean, will not

be included in the statistical analysis but may be reported on if they provide information relevant to the study.

The demographic data was reported in a table including frequencies and percentages for some of the nominal data and mean, range and standard deviation for other variables. Specifically, the survey response data reported was entered into a table and placed into demographic categories. The demographic variables were (a) age (b) gender (c) highest level of education completed, (d) years of experience as a counselor educator, (e) CACREP accreditation status of the university teaching occurred, (f) matriculated university CACREP accredited status, (g) prior training in distance counseling, (h) past experience using distance counseling, (i) availability of technology at teaching university, (j) reported use of technology in the teaching setting, and (k) the inclusion of distance counseling skills in the classroom. Measures of central tendency for the ITIS scores were reported in Figure 1.

The construct of self-efficacy with technology, was assessed through the ITIS. Specifically, the full ITIS score, and the total SE, OE, and INT subscales. Counselor educator self-efficacy with technology was compared to counselor educator's teaching distance counseling skills in any master level skills-based class that they have taught. A correlation was conducted on the inclusion of distance counseling skills and average scores on the SE, OE, and INT subscales of the ITIS. The assumptions of correlation were not met for the data, so a logistic regression was also done to examine if the subscale and full score for the ITIS were predictive of counselor educator teaching distance counseling skills.

Point-biserial correlation can be used with dichotomous dependent variables (Field, 2013). Since counselor educator's instruction used a yes or no scale a point-biserial correlation was appropriate as the dependent variable, yes or no to teaching distance counseling skills, is dichotomous. The point-biserial correlation will be conducted using SPSS version 24. The inclusion of distance counseling skills was dummy coded, 0 for no teaching skills and 1 for yes teaching skills. The ITIS uses a five-point Likert scale and the subscale score were summed and reported for the analysis. The subscales were summed individually and as a total score for the ITIS. The total subscale scores and the full ITIS scores were analyzed.

The statistical analysis was done with a power of .95, alpha level of .05, two-tailed, with a medium effect size of .3. Psychological research often uses a  $\alpha=.05$  (Trochim, 2006). A power of .95 is an acceptable level for research as well (Rea & Parker, 2014). The effect size,  $d=.3$  is based on past research done in the area of self-efficacy and instructional content (Perkmen & Pamuk, 2011). Pearson's  $r_{pb}$  was calculated to determine if there was a statistically significant relationship between counselor educator's self-efficacy with technology and their distance counseling instruction behavior. Correlation studies, such as a point-biserial correlation, measure the association between two variables, the value of  $r_{pb}$  can range from -1 to +1 with + or - 1 indicated the two variables are perfectly correlation and 0 indicating there is no correlation. The + or - indicates the direction of the association, if the variables both increase or decrease in the same direction. In a point-biserial correlation the positive or

negative correlation is also influenced by the coding of the dichotomous variable (Field, 2013).

The assumptions of point-biserial correlation are similar to a Pearson's correlation, with an additional requirement that the dependent variable being dichotomous. Specifically, the Pearson's correlation has the assumption of normality. Another assumption is that the variables have equal variance (Field, 2013). This was tested using Levene's test of equal variance. The findings are reported in Chapter 4.

### **Threats to Validity**

The nature of the study, a correlation study, is not a true experimental design which introduces threats to validity. The nature of a correlation study is to collect information as it occurs naturally without manipulation. In this case, to collect information on technology integration for counselor educators in the current work setting. The goal was not to determine cause and effect but to examine the relationship between variables. As such, the non-experimental nature of the study will introduce threats to validity.

### **External Validity**

External validity relates to the generalizability of the research. In this case, a small sample of 176 counselor educators may not be representative of all counselor educators. The population of counselor educators is somewhat diverse and is represented in all many different states, so this sample may not be truly representative of the population. However, the sampling included universities across the U.S. in order to collect a more diverse sample than a limited geographic area would provide.



Another concern was the survey used an online format and the topic was related to technology integration. To complete the survey required that participants had a level of skill with technology which could have limited the sample group by excluding participants that lacked the technological skills required to complete an online survey. Similarly, two of the sampling sources were online email list services, indicating a level of acceptance in the use of technology as a resource for communication and information for the sample source.

### **Internal Validity**

There were also internal threats to validity including confounding variables and sampling. In this study, the variables examined could have been influenced by unknown and unmeasured variables or confounding variables. In addition, there was also a threat of self-selection bias. The sampling for the survey was purposive so participants self-selected. Another concern was the survey used an online format and the topic of the study was related to the integration of technology. To complete the survey required that participants had a level of skill with technology which could have limited the sample group by excluding participants that lacked the technological skills required to complete an online survey.

### **Construct Validity**

Construct validity refers to a test measuring the construct it is reported to measure. In regard to the construct validity of this study, the instrument that was used, the ITIS has good construct validity and concurrent validity (Niederhauser & Perkmen, 2008; Perkmen, 2008). Chronbach's alpha for the full scale was .96 (Niederhauser & Perkmen,

2008). In addition, the variables examined, self-efficacy, outcome expectation, and interest were found to have internal consistency (Niederhauser & Perkmen, 2008).

Chronbach's alpha for each subscale were .90 for SE subscale, .93 for the OE subscale, and .89 for the INT subscale. The subscales have been validated independently as well.

### **Ethical Procedures**

The research study met the appropriate ethical standards, in accordance with IRB approval. IRB approval was granted, IRB 11-29-18-0081056 (Appendix C). The procedures followed regarding participant confidentiality and privacy, informed consent, and data protection were consistent with ethical standards required for human subjects. Specifically, the survey clearly stated the voluntary nature and included information that the participant may stop and leave the survey prior to submission. Each question provided an option to not answer the question in order to respect the participants' right to withhold information as they wish. Because the survey did ask about gender the option to self-identification was included, as was the option stating that the participant prefers not to answer. Several sources support expanding the binary choices for gender in survey research to respect those who may identify as a non-binary identity (Bauer, Braimoh, Scheim, & Dharma, 2017). In addition, to ensure confidentiality and privacy, the data collected was made anonymous by assigning numbers with no specific identifying factors assigned to the number. The data was protected throughout the process and was coded to ensure no identifying information could be gleaned from the data.

The email soliciting participation (Appendix B) contained the necessary requirements notifying prospective volunteers of the nature of the survey including the

voluntary nature of participation, the anonymous collection of the data and the right to refuse participation at any point. Information to report any concerns was included for the researcher, the dissertation chair, and the Walden University IRB. In addition, the information was repeated on the landing page of the survey, consent was required in order to access the survey.

No adverse effects, nor requests to avail of the Talkspace therapy were reported; however, a person from one university that was contacted, did initiate a complaint to the IRB to incorrectly report the whole university had been sent the solicitation email. The IRB was informed that the procedures that had been stated in the application, publicly available emails were collected and only faculty in the counseling, or related department were contacted, and the problem was resolved. The university was removed from further sampling at that point. After feedback from the IRB, the solicitation email was updated for the second and third sampling to include how their information was obtained (Appendices D, E, F,).

### **Summary**

The dissertation study examined the relationship between self-efficacy with technology and counselor educator teaching of distance counseling skills in the master level skills-based class. The sample was drawn from universities across the U.S. and email group lists in order to find counselor educators with experience teaching a skills-based class at the master's degree level. The sampling was purposive, direct contact was made through (a) publicly available email contact information from universities in the

US, (b) the CESNET-L listserv, and the (c) ACA Connect call for study participant email group list.

The email contained the appropriate information necessary when working with human subjects such as the voluntary nature of the study, the ability to end participation at any time, the protection and storage of the data and protection of participant identity using anonymous data collection procedures. An anonymous online survey was used, through the SurveyMonkey website, encryption and data protection procedures were set to ensure that participants were not tracked, nor any data collected from participants, other than the survey responses. The data was stored securely on an encrypted flash drive and will be store for 5 years as is required.

The data was cleaned, and incomplete responses were ignored. There were 223 total responses, of those 176 were considered complete responses as they had completed all the subscale questions and question 11, *I include distance counseling skills in my class*. The remaining responses were dummy coded as appropriate, and statistically analyzed using both a point-biserial correlation analysis and a logistic regression analysis. The findings of the analysis are discussed in detail in Chapter 4.

## Chapter 4: Results

### Introduction

The purpose of the study was to examine if there was a statistically significant relationship between counselor educator self-efficacy with technology, and inclusion of distance counseling skills instruction in their skills-based class. A correlation analysis was performed on the data collected in the online survey. Based on the findings of the correlation, an additional analysis, a logistic regression, was included. The additional analysis explores if self-efficacy with technology was predictive of distance counseling instruction in the master level skills-based class and, were any demographic variables strong predictors of counselor educator teaching distance counseling skills in their class.

The data was collected using an online survey, which included demographic questions and the items from the ITIS which included three subscales, SE, OE, and INT. Subscale scores and a full-scale score were used in a logistic regression models to determine if the variables were predictive of counselor educator inclusion of distance counseling instruction in their class. The outcome variable, Question 11 on the survey, was self-reported as either yes or no. Demographic variables were analysed and any significant variables were included in logistic regression models until a best-fitting model was found.

The original hypothesis of the study was whether there is a statistically significant correlation between counselor educator self-efficacy with technology and their inclusion of distance counseling skills in skills-based classes they teach. Because the survey data provided demographic variables that were understood to be influential in technology

integration, the demographic variables were included in correlation and regression models to examine if any of the demographic variables, in addition to self-efficacy with technology, would be related to their inclusion of distance counseling skills in the skills-based class taught. A second hypothesis was included: At least one of the demographic variables is associated with counselor educator inclusion of distance counseling skills in their class.

This chapter provides information on how the data was collected including the time frame and the characteristics of the sample. Information including response rates and sample demographics have been provided in this chapter as well. The results of the statistical analysis have also been included and discussed. A summary of the findings concludes the chapter.

### **Data Collection**

The data collection procedures, as discussed in Chapter 3, were followed with slight adaptations. Specifically, as planned, the email list was generated based on publicly available information. I obtained publicly available email contacts from universities across the United States that were found to have master level counseling programs, both CACREP accredited, non-CACREP accredited, and also several in the process of obtaining accreditation. I observed that several programs housed counseling psychology programs, rehabilitation counseling programs, and school counseling programs as well, which at times were difficult to distinguish from the overall counseling department and associated faculty. The first list developed included 4,699 email contacts. The list was edited based on feedback from the IRB and from individuals who had been contacted

requesting removal or notifying the researcher that they were not counselor educators. In addition, several participants notified the researcher they had completed the survey and those individuals were removed from the list as well. This was done after the first and second solicitation emails were sent.

In addition to the researcher generated email list, the CESNET-L and the ACA Connect call for study participant email groups were contacted through the list administrator. The two email list groups were all contacted at the same time. However, there was a delay in the dissemination of the email groups which resulted in an approximately 2-day gap between the groups receiving the email.

A second email was sent approximately 3 weeks after the first email was sent. The researcher compiled email list was reduced to 2,143 after revising the list. A third email was sent 2 weeks after the second email, which was approximately 5 weeks after the first email informing participants that it was the final call and that the survey would close after 2 weeks from the time they received the email.

The total number of responses was 223, however only 176 participants answered all the ITIS questions and Question 11, *I include distance counseling skills in my classroom*. Surveys which did not have a response to Question 11 were excluded from the statistical analysis. The response rate was quite low; it is difficult to calculate the exact number of individuals contacted because there were likely individuals on the CESNET-L or ACA Connect call for study participant group emails that were also contacted through the university email list I created. I generated an email list included 4,699 individuals; the CESNET-L lists 4,475 members, and the ACA Connect call for

study participant email group lists 287 members, it is likely that some individuals were contacted through more than one source.

The email generated list was the primary source of responses, 133 participants who had been contacted by the researcher generated list responded to the first email, an additional 51 responded through the weblink provided in the emails sent to the CESNET-L and ACA connect group, the second email solicitation collected 23 responses and the final call collected an addition 16 responses. The number of responses exceed the minimum number required so the survey was closed approximately 7 weeks after the sampling began. Most participants, 172, were from the researcher-generated email list.

## **Results**

### **Descriptives**

There is little research on counselor educator demographic information, however one study by Sangganjanavanich and Balkin (2013) collected demographic data for counselor educators. Sangganjanavanich and Balkin (2013) sampled 220 counselor educators and of the participants, 68% were women, 32% were men, the average was 46.95 years old and the average time as a faculty member was 8.53 years. The participant demographics in this sample were similar: 64.8% were women, 33.5% were male, the majority were in the age group 45-54 (26.7%), and the average time as a counselor educator was 11.02 years. In addition, the majority held a doctoral degree (85.8%), the majority were teaching in CACREP accredited universities (90.3%) and a majority had graduated from CACREP accredited PhD programs (60.8%) (Table 1). When it comes to distance counseling specifically, 55.7% did not have training in distance counseling,



54.5% did not have experience using distance counseling and a 57.4% did not include distance counseling skills in their classroom (Table 1). Nearly all the participants used technology in the classroom (97.7%) and 67.6% reported having technology available to teach distance counseling (Table 1). The results show that counselor educators are using technology; however, it does not seem to be technology for distance counseling. The findings show that a majority of highly educated counselor educators in primarily CACREP accredited programs are not teaching distance counseling skills in their classroom (Table 1).

Table 1

*Demographic Data Frequencies and Percentages*

Variable	Frequency	Percent
Age		
25-34	29	16.5
35-44	42	23.9
45-54	47	26.7
55-64	44	25
65+	13	7.4
Gender		
Male	59	33.5
Female	114	64.8
Highest Level of Education		
Bachelor's degree	1	0.6
Master's degree	21	11.9
Doctoral Degree	151	85.9
Teaching University is CACREP Accredited		
Yes	159	90.3
No	15	8.5
University Graduated from is CACREP Accredited		
Yes	107	60.8
No	57	38.1
Have Had Training in Distance Counseling		
Yes	77	43.8
No	98	55.7
Have Experience Using Distance Counseling		
Yes	80	54.5
No	96	45.5
Teaching University has Technology Available to Teach Distance Counseling		
Yes	119	67.6
No	55	31.3
Use Technology in Teaching Setting		
Yes	172	97.7
No	4	2.3
Include Distance Counseling Skills in my Classroom		
Yes	75	42.6
No	101	57.4

## Assumptions

A point-biserial correlation was conducted on the survey data. The assumptions of a point-biserial correlation include (a) one of the variables is measured on a continuous scale, (b) one of the variables is dichotomous, (c) there should not be any outliers, (d) the continuous variable should be approximately normally distributed, and (e) the continuous variable should have equal variances (Field, 2009). When testing the full-scale score and each of the subscale scores, the assumptions were not all met. For example, the Shapiro-Wilk test was significant for all three subscales and for the full-scale (Table 2) but the histograms for the full scale (Figure 1) and the OE subscale show a nearly normal distribution (Figure 2). The SE (Figure 3) and INT subscales (Figure 4) were both skewed right.

Table 2

### *Test of Normality Subscale Scores*

	Tests of Normality		
	<i>Shapiro-Wilk Statistic</i>	<i>df</i>	<i>Sig.</i>
Self-Efficacy Subscale Total Score	0.918	176	0
Outcome Expectation Subscale Total Score	0.973	176	0.002
Interest Subscale Total Score	0.902	176	0
Full Scale Score	0.972	176	0.001

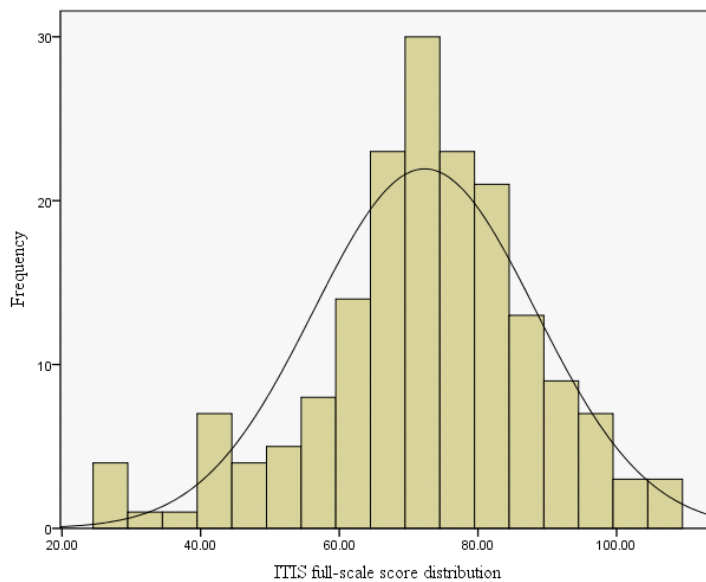


Figure 1. ITIS full-scale score distribution

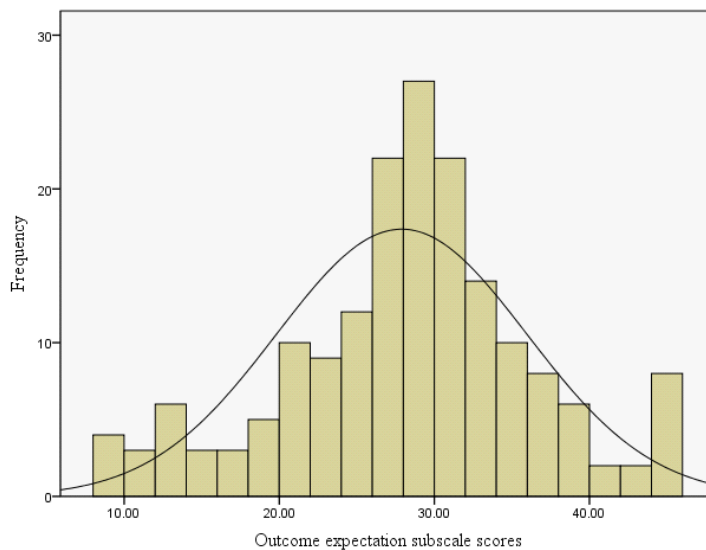
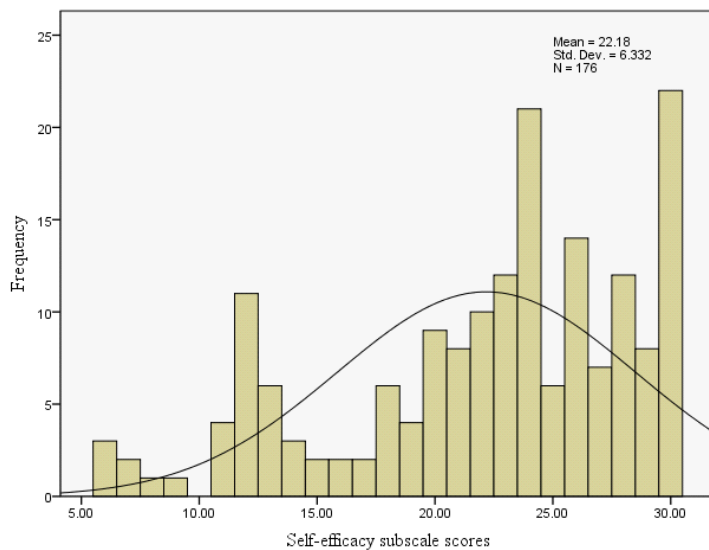
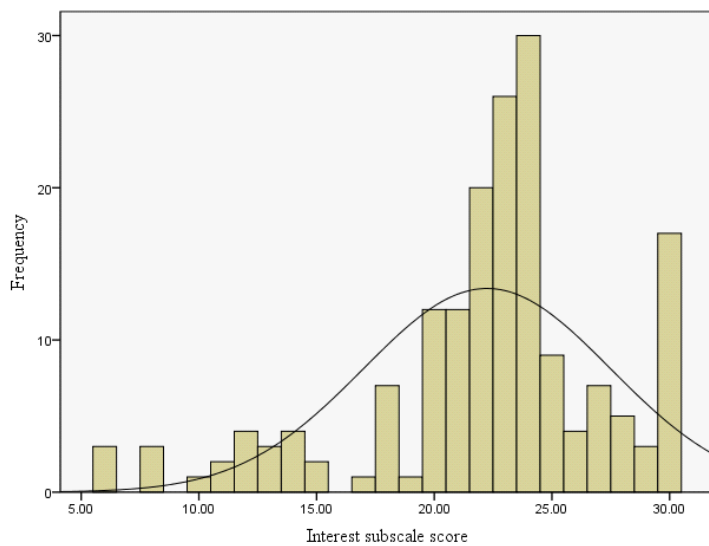


Figure 2. Outcome expectation subscale score distribution



*Figure 3.* Self-efficacy subscale score distribution



*Figure 4.* Interest subscale score distribution

The Levene's test was not significant for the OE, INT and full-scale score; however, it was significant for the SE subscale.

The assumptions for a binary logistic regression are (a) the dependent variable is binary, (b) independent observations, (c) little or no multicollinearity, (d) linearity of independent variables and log odds, (e) large sample size, generally 10 cases for each independent variable in the model (Htway, 2018). The assumptions for binary logistic regression were met, the correlations of the independent variables were all less than 1, and the variable inflation factor for all independent variables were under 5. The sample size was  $n=176$  and no models included more than seven independent variables.

### **Statistical Findings**

The initial research question was, *Is there a relationship between counselor educator self-efficacy with technology and their inclusion of distance counseling skills in the classroom?* The correlation was found to be significant; there was a positive correlation between the full-scale ITIS score and including distance counseling skills in the skills-based class.  $n=176$ ,  $r_{pb}=.343$ ,  $p<.001$ . Similarly, there was a significant relationship between self-efficacy subscale total scores and the inclusion of distance counseling skills in the classroom,  $n=176$ ,  $r_{pb}=.403$ ,  $p<.001$ , the outcome expectation subscale total scores and the inclusion of distance counseling skills in the classroom,  $n=176$ ,  $r_{pb}=.240$ ,  $p=.001$ , and the interest subscale total scores and the inclusion of distance counseling skills in the classroom,  $n=176$ ,  $r_{pb}=.191$ ,  $p=.011$ . The SE subscale total score was the most highly correlated subscale.

Scatterplot diagrams for the full-scale ITIS (Figure 5), the SE (Figure 6) subscale, the OE subscale (Figure 7), and the INT subscale (Figure 8) respectively, with the inclusion of distance counseling skills in the classroom show there is a positive

correlation between self-efficacy with technology and including distance counseling skills in the classroom.

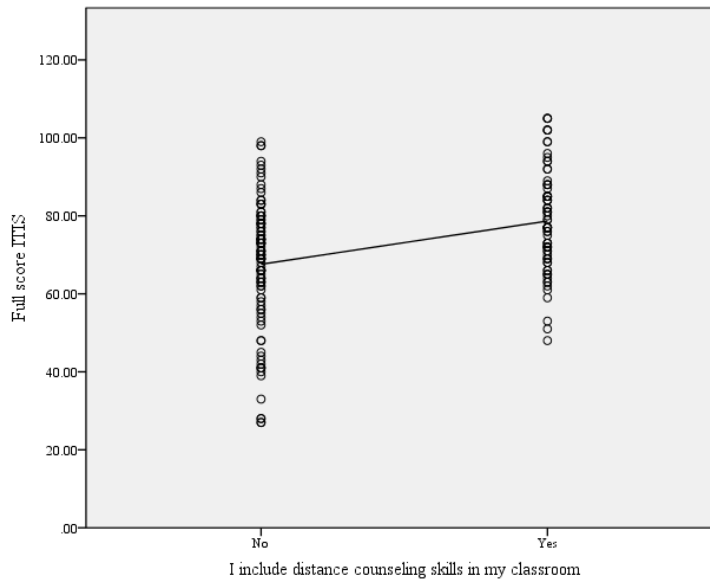


Figure 5. Scatterplot full-scale ITIS score and inclusion of distance counseling skills in the classroom

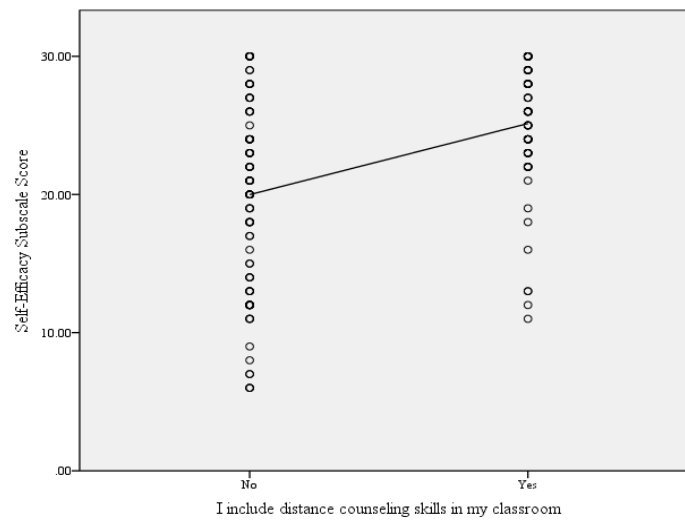


Figure 6. Scatterplot SE subscale total score and inclusion of distance counseling skills in the classroom

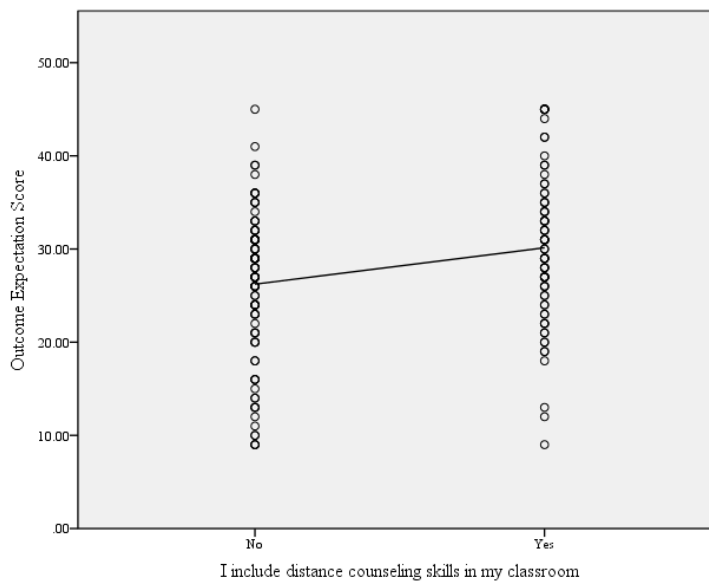


Figure 7. Scatterplot OE subscale total score and inclusion of distance counseling skills in the classroom

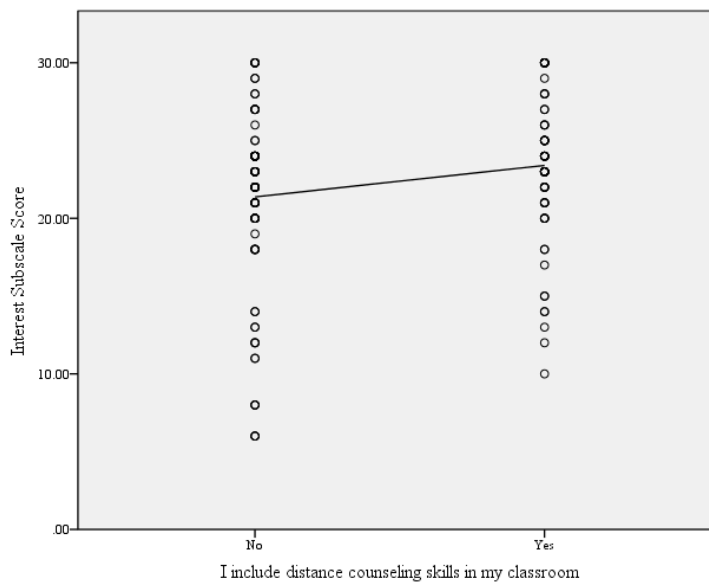


Figure 8. Scatterplot INT subscale total score and inclusion of distance counseling skills in the classroom



In addition to the ITIS full-scale scores and the three subscale total scores, a correlation analysis was done on the demographic variables to determine if there were any significant variables from the demographic information collected. The variables found to be significantly correlated with inclusion of distance counseling skills were, (a) *I have had training in distance counseling*,  $n=176$ ,  $r_{pb}=.372$ ,  $p<.001$ . (b) *I have experience using distance counseling*  $n=176$ ,  $r_{pb}=.436$ ,  $p<.001$ ., and (c) *The university where I teach has technology available to teach distance counseling*  $n=176$ ,  $r_{pb}=.385$ ,  $p<.001$ . Based on the findings from the correlation, a logistic regression analysis was done including the significant demographic variables to examine relationships further.

A logistic regression was done with the outcome variable, *I include distance counseling skills in my classroom*, and all the demographic variables to determine which demographic variables were significant in the different models. The variables *I have experience using distance counseling*  $p=.001$ , *The university where I teach has technology available to teach distance counseling*  $p<.000$ , and *about how many years have you been a counselor educator*  $p=.049$ , were all found to be significant, these variables were included in future models. In future models that included *I have experience using distance counseling*, *I have had training in distance counseling*, and *the university where I work has technology available to teach distance counseling*, the predictor variable, *about how many years have you been a counselor educator* was not significant. This was true for models which included the self-efficacy subscale score only, the full ITIS score, and the three subscales together. The variable was removed from further models.

Regression models were run using the outcome variable, *I include distance counseling skills in the class*, and each of the total subscale scores and the full ITIS score (Table 3). First the full ITIS scale scores were run in a model with the outcome variable, inclusion of distance counseling skills. The full ITIS score was found to be significant (Table 3). Next, a model was run with all three subscale score totals were analyzed, only self-efficacy was significant in the model with the three subscale scores with the outcome variable, inclusion of distance counseling skills (Table 3). The further models were run using only the full-scale ITIS and the SE subscale.

Table 3

*Logistic Regression Models with Inclusion of Distance Counseling Skills and ITIS Full-Scale and Subscale Scores*

	B	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I. for EXP(B)		% Correct	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
							Lower	Upper				
Self-Efficacy Subscale Total Score	0.153	0.03c5	18.973	1	0.000	1.166	1.088	1.249				
Outcome Expectation Subscale Total Score	0.039	0.029	1.866	1	0.172	1.040	0.983	1.101	67.6	205.776 <sup>a</sup>	0.177	0.238
Interest Subscale Total Score	-0.019	0.045	0.184	1	0.668	0.981	0.898	1.071				
Full Scale Score	0.052	0.012	18.041	1	0.000	1.054	1.029	1.079	64.2	217.364 <sup>a</sup>	0.121	0.163

Based on the findings of the correlation, three variables were included in regression models, (a) *I have had training in distance counseling*, (b) *I have experience using distance counseling*, and (c) *the university where I teach has technology available*

to teach distance counseling. The three variables were significant predictors in each of the models. Additional models were run that included all the three demographic variables as predictor variables individually (Table 4) and together (Table 5), with either the full ITIS scores or the self-efficacy subscale total score alone.

Table 4

*Logistic Regression of Inclusion of Distance Counseling Skills and ITIS Full-Scale and Subscale Total Scores with Significant Predictors Individually*

	B	S.E.	Wald	df	Sig.	95% C.I. for EXP(B)			% Correct	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
						Exp(B)	Lower	Upper				
ITIS Full Scale Score	0.041	0.013	10.461	1.000	0.001	1.042	1.016	1.068				
I have had training in distance counseling	1.277	0.346	13.589	1.000	0.000	3.586	1.819	7.072	69.7	202.325 <sup>a</sup>	0.189	0.254
ITIS Full Scale Score	0.038	0.013	8.834	1.000	0.003	1.039	1.013	1.066				
I have experience using distance counseling	1.606	0.354	20.618	1.000	0.000	4.982	2.491	9.964	73.9	195.650 <sup>a</sup>	0.223	0.300
ITIS Full Scale Score	0.051	0.013	15.818	1.000	0.000	1.053	1.026	1.080				
The university where I teach has technology available to teach distance counseling	1.904	0.442	18.526	1.000	0.000	6.711	2.820	15.968	70.1	189.607 <sup>a</sup>	0.240	0.322
Self-Efficacy Subscale Total Score	0.129	0.034	14.081	1.000	0.000	1.138	1.064	1.218	70.3	197.227 <sup>a</sup>	0.212	0.285

I have had training in distance counseling	1.082	0.360	9.025	1	0.003	2.952	1.457	5.981				
Self-Efficacy Subscale Total Score	0.123	0.034	12.797	1	0.000	1.130	1.057	1.209				
I have experience using distance counseling	1.479	0.362	16.729	1	0.000	4.390	2.161	8.919	73.9	190.641 <sup>a</sup>	0.245	0.329
Self-Efficacy Subscale Total Score	0.139	0.034	16.262	1	0.000	1.149	1.074	1.230				
The university where I teach has technology available to teach distance counseling	1.633	0.447	13.323	1	0.000	5.118	2.130	12.300	75.3	189.067 <sup>a</sup>	0.242	0.325

Table 5

*Logistic Regression of Inclusion of Distance Counseling Skills and ITIS Full-Scale and Subscale Total Scores with Significant Predictors Together*

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)		% Correct	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
							Lower	Upper				
ITIS Full Scale Score	0.039	0.014	8.093	1	0.004	1.039	1.012	1.067				
I have experience using distance counseling	1.382	0.445	9.629	1	0.002	3.982	1.664	9.53	78.6	169.845 <sup>a</sup>	0.319	0.428
I have had training in distance	0.348	0.449	0.599	1	0.439	1.416	0.587	3.417				

counseling														
The university where I teach has technology available to teach distance counseling	1.723	0.472	13.349	1	0	5.6	2.222	14.112						
Self-Efficacy Subscale Total Score	0.101	0.036	7.859	1	0.005	1.106	1.031	1.187						
I have experience using distance counseling	1.385	0.449	9.526	1	0.002	3.997	1.658	9.634						
I have had training in distance counseling	0.274	0.458	0.359	1	0.549	1.315	0.536	3.227						
									75.1	170.213 <sup>a</sup>	0.317	0.426		
The university where I teach has technology available to teach distance counseling	1.551	0.473	10.729	1	0.001	4.714	1.864	11.921						

The regression models that included both *I have experience using distance counseling* and *I have had training in distance counseling* showed that when experience using distance counseling was included in the model, having had training in distance counseling was no longer a significant predictor (Table 5).

The best fit model was found to contain the two predictor variables *the university where I teach has technology available to teach distance counseling* and *I have experience using distance counseling*. The full-scale ITIS score and the SE subscale total

score varied only slightly in the models (Table 6). The full ITIS score was clearly driven by the SE subscale score primarily.

Table 6

*Logistic Regression Models Full-Scale Scores with Significant Variables and Self-Efficacy Subscale with Significant Variables*

Variables	<i>B</i>	<i>SE</i>	<i>Wald</i>	<i>d</i> <i>f</i>	<i>Sig</i>	<i>Exp(B)</i>	95% <i>C.I. for</i> <i>EXP(B)</i>		<i>%</i> <i>Correc</i> <i>t</i>	-2 <i>Log</i> <i>likelihoo</i> <i>d</i>	<i>Cox &amp;</i> <i>Snell</i> <i>R</i> <i>Squar</i> <i>e</i>	<i>Nagelkerk</i> <i>e R</i> <i>Square</i>
						<i>Lower</i>	<i>Upper</i>					
I have experience using distance counseling	1.477	0.380	15.102	1	0.000	4.380	2.079	9.227		173.494 <sup>a</sup>	0.307	0.413
The university where I teach has technology available to teach distance counseling	1.526	0.469	10.597	1	0.001	4.601	1.836	11.534	74.1			
Self-Efficacy Subscale Total Score	0.104	0.035	8.739	1	0.003	1.110	1.036	1.189				
I have experience using distance counseling	1.513	0.378	16.030	1	0.000	4.539	2.165	9.519				
The university where I teach has technology available to teach distance counseling	1.720	0.466	13.605	1	0.000	5.582	2.239	13.920				
ITIS Full Scale Score	0.040	0.013	9.061	1	0.003	1.041	1.014	1.069		172.973 <sup>a</sup>	0.309	0.415
									79.3			

The model which included the full-scale ITIS score was more accurate in the percent correct, 79.3% correct as compared to 74.1 % correct in the model which included the SE subscale score only, however the pseudo  $R^2$  values were much closer with the full-scale ITIS model ranging from 30.9 - 41.5 % of the variance a result of the full score and the self-efficacy only model findings with 30.7-41.3 % of the variance explained the scores. The self-efficacy subscale was clearly contributing to the full-scale score and the inclusion of distance counseling skills.

The model including the full-scale ITIS also shows that the variable, *the university where I teach has technology available to teach distance counseling* has a higher odds ratio,  $Exp(B)=5.38$  than the SE subscale model  $Exp(B)=4.601$ . The variable *I have experience using distance counseling* also varied between the two models, the full-scale ITIS score odds ratio was  $Exp(B)=4.539$ , in the SE subscale only model,  $Exp(B)=4.3$ . Meaning those with experience are about 4 times more likely to be in the group that did include distance counseling in the classroom. What is clear from the models, self-efficacy, experience, and having the technology available were significant predictors of including distance counseling skills in the classroom.

### **Summary**

The research question was, is there a relationship between counselor educator self-efficacy with technology, as measured by the ITIS, and their inclusion of distance counseling skills in the master level skills-based classroom. The correlation analysis confirmed a significant relationship between the full-scale score on the ITIS and the dependent variable, *I include distance counseling skills in the classroom*. Based on the

correlation and regression analysis, there is a relationship between counselor educator self-efficacy with technology and their inclusion of distance counseling skills in the skills-based classroom. Further, having experience using distance counseling, the university having technology available to teach distance counseling were also significantly correlated and were significant predictors of including distance counseling instruction in the master level skills-based classes taught by these counselor educators.

The findings of the study are consistent with past research on counselor practice and the importance of prior experience with using distance counseling. The availability of technology to teach distance counseling skills is also a contributing factor to teaching distance counseling skills. Past research in the area of technology integration confirms that although availability of technology is a factor, it alone does not explain technology integration (Hew & Tan, 2016) The results and analysis of the findings is contained in Chapter 5.



## Chapter 5: Discussion, Conclusions, and Recommendations

### **Introduction**

This research study was conducted to examine if a statistically significant relationship exists between counselor educator self-efficacy with technology and their teaching distance counseling skills in master level counselor skills-training classes. Based on the findings of this study, there was a significant relationship between the scores on the ITIS and inclusion of distance counseling skills in the skills-based class.

Based on the findings of significance in the correlation analysis, the data was further explored using logistic regression. To better understand the relationship between counselor educator self-efficacy with technology and teaching distance counseling skills, demographic variables were included in the analysis. Demographic variables were examined to determine which, if any, were significantly correlated with counselor educator inclusion of distance counseling skills in skills-based master level classes. Significant demographic variables were included in a logistic regression model that included the ITIS full-scale score, and the self-efficacy scale alone. From the regression analysis it was found that the demographic variables (a) have had experience using distance counseling, (b) the university where I teach has the technology available for me to teach, and (c) I have had training in distance counseling were all found to be significant predictors of teaching distance counseling skills, along with self-efficacy.

The study findings support that self-efficacy with technology, as measured by the ITIS full-scale score and the SE subscale score, was significantly correlated with the teaching of distance counseling skills in master level skills-based class. In addition to

self-efficacy, prior experience using distance counseling, having prior training, and the availability of the technology needed to teach distance counseling were found to be significant predictors of including distance counseling skills in the skills-based class.

Using a regression analysis, it was determined that self-efficacy with technology was predictive of counselor educator teaching distance counseling skills in their skills-based class. Further, experience using distance counseling and the university having technology available to teach distance counseling were the most significant predictors in counselor educator and including distance counseling skills in their skills-based class. I discuss how these findings related to past research in this chapter.

### **Relating to Past Research**

There is limited research on counselor education and teaching distance counseling skills in master level programs, and very limited information specific to skills-based classes. There is some information on the importance of training and experience (e.g. Holmes et al., 2014; Lazuras & Dokou, 2016; Potter & Rockinson-Szapkiw, 2012) and availability of technology regarding technology integration (e.g. Eickelmann, 2011). The findings of this study are consistent with research in that area. There are several factors that seem to influence teacher technology integration: (a) self-efficacy and related concepts such as perceived usefulness and perceived ease of use, (b) past experience, and (c) availability of technology are important predictors of technology integration (Harrell & Bynum, 2018). The process of technology integration is impacted by factors which are intrapersonal and environmental. This study confirms this as well.

Consistent with prior research on counselors and distance counseling training, counselors who had received training in distance counseling were more likely to use distance counseling and had a more positive attitude about distance counseling (Simms et al., 2011). They were also more likely to recommend training (Finn & Barak, 2010; Simms et al., 2011).

The percentage of participants in this study who reported including distance counseling skills in the classroom is a minority, 42.6%. No prior research could be found which collected information on the number of counselor educators who are including distance counseling skills in the classroom, so the information from my study provides a starting point in understanding the impact of technology in distance counseling instruction. The data obtained in this study can provide a baseline count of counselor educators who are including distance counseling skills in their master level skills-based class.

### **Interpretation of the Findings**

The participants in this survey were mainly from CACREP accredited programs, most had a doctoral level degree, and nearly all use technology in their class. The sample was not diverse regarding level of education, accreditation status of the university where they teach, or the counselor educator self-reported use of technology in teaching. This is the first survey that has directly asked counselor educators if they were including distance counseling skills in their classroom so there is no way to directly compare these findings to past findings. However, some findings can be compared to what has been looked at in the areas of education, counseling, and technology integration.

The findings of the study support that self-efficacy is related to counselor educator teaching distance counseling skills in their skills-based class. The full score and the SE subscale alone models were only slightly different which indicates that SE is the contributing factor to the full-scale score. Self-efficacy alone does not fully explain the relationship if demographic information is included in the model. Prior experience and the university having technology available to teach distance counseling were also found to be significant predictors of including distance counseling skills in their skills-based class. In some of the regression models, it was four times more likely that the respondents with experience would be including distance counseling skills in their skills-based class.

One interesting finding of this study was that when both experience and training were included in the logistic regression models, experience was significant while training was not significant, indicating that experience using distance counseling technology accounted for counselor educator technology integration to a higher degree than training alone. This also confirms prior research in the use of distance counseling by students who were conducting distance counseling as part of their counselor training (see Simms et al., 2011). Similarly, this was found in regard to practice with counselors who had experience using distance counseling having a more positive attitude about distance counseling (see Simms et al., 2011). In addition, prior experience was a significant predictor of teaching distance counseling, which supports the need for hands-on skills included in training, (see Anthony, 2015; Holmes et al., 2014; Manring et al., 2011; Mitchell et al., 2003; Goss & Anthony, 2009; Haberstroh et al., 2008; Hilty et al., 2017; Shandley et al., 2011).

Training is important but experience is more important; training that includes experience is a preferable method of training.

One aspect of the findings that is concerning is the lack of training that counselor educators have received themselves. The research supports that counselors who have experience are more likely to use distance counseling (see Simms, et al., 2011). Training can increase self-efficacy beliefs (Lazarus & Dokou, 2016) and use of distance counseling (Finn & Barak, 2010). Training and experience both are significant, but experience is more significant in predicting including distance counseling skills in their skills-based class.

The demographic information collected indicates that counseling programs are still not meeting the needs of counseling students. The last research study that examined the use of technology by counselor educators was focused mainly on how technology was utilized in teaching specifically (see Quinn, 2001). One finding of the Quinn (2001) dissertation was that 39% of respondents used the ACES Technical Competencies with their students. The main uses of technology reported by the respondents was for email communication, listservs, reading online journals, and participating in chat rooms (citation). The use of the internet in these programs was focused on communication and research related functions.

This study found that most counselor educators are not trained in, do not have experience in, and are not including distance counseling skills in their skills-based master level classroom. However, the numbers were close to the 50% range in most of the areas. It is a positive finding that 45.5% of the counselor educators who responded to the survey

report having experience using distance counseling. It is also positive that a majority, 68.4%, of the respondents said that the university where they teach has the technology available to teach distance counseling. Given the findings that prior experience, the university having the technology available, and self-efficacy are important factors related to including distance counseling skills in the master level skills-based classroom, the availability of technology reported by a majority of counselor educators is a positive finding. The findings of this study confirm the importance of prior experience, self-efficacy, and the availability of technology as important factors to predict the inclusion of distance counseling skills instruction.

### **Theoretical Framework**

The data collected from this survey confirmed the relationship between self-efficacy with technology and counselor educator teaching distance counseling skills. In addition, self-efficacy was determined to be an important factor in predicting teaching distance counseling skills along with prior experience, prior training, and having the technology available. The study confirms that counselor educator self-efficacy with technology has a significant relationship with counselor educator including distance counseling skills in their skills-based class.

Although not all of the subscales had a significant relationship with including distance counseling skills in the classroom, there is likely some interconnectedness between the variables of prior training, past experience, and self-efficacy. Training can have a positive influence on self-efficacy beliefs (Lazuras & Dokou, 2016), and also on use of distance counseling (Lazuras & Dokou, 2016; Simms et al., 2011). The theory of

self-efficacy proposes the process of decision making and the role of self-efficacy is complex and changes in response to an interaction with the environment. The findings of this study support the hypothesis that there is a statistically significant relationship between counselor educator self-efficacy with technology as measured by the Intrapersonal Technology Integration Scale (ITIS), and their including distance counseling skills in the master level skills-based class they have taught.

### **Limitations of the Study**

There are some limitations to the study. The study utilized an anonymous online survey, this required participant to self-select. This self-selection could have introduced bias into the study. In addition, the survey request was sent by email, this required a minimal level of ability to use technology which could have excluded counselor educators who do not use email to communicate.

In addition, it is important to remember that counselor educators may not share the characteristics of the sample group and the results may not be applicable to all counselor educators. The group sampled for this study was drawn from multiple sources, however the results of this study may not be applicable to all counselor educators. The group sampled may not be representative of all counselor educators in the United States.

### **Recommendations**

There is a lack of research in the area of counselor training to provide distance counseling. The increasing use of technology in the field of counseling, both by counselors and by their clients, are areas that researchers are only beginning to explore. Technology is being used in several ways including self-guided therapy, virtual reality, or

professionally guided therapy. These are just some of the uses of technology in therapy. The diversity in technological based interventions has made understanding the research more difficult as well. There are many areas of study that need further study.

Based on the lack of training that has been occurring in counseling programs, training counseling students, is an area in need of more research as well. Further studies providing information on the practice of distance counseling and training in distance counseling would be useful to better understand what is being practiced in the marketplace, and the training experiences of counselors, especially the training experiences of counselors who practice online.

This study provided some insight into the practices of counselor educators in master level counseling programs. Although the findings indicate that counseling programs are not including distance counseling skills training in all cases, the results are positive in two ways. The number of counselor educators who have experience is nearly half and approximately 2/3 of the counselor educators who responded to the survey, reported that the university where they teach has the technology available. The findings of this study indicate that these two factors are both significant predictors of including distance counseling skills in the master level skills-based class. In order to make the most of training, there should be hands-on opportunities to use the technology in a simulate environment. Training that includes experience provides an added aspect that is superior to training alone.

Training should include hands-on opportunities to use the technology. The relationship between experience and inclusion of distance counseling skills supports that



training that includes experience is the most effective approach. Training that is hands on provides opportunities for using the technology and allows for vicarious learning.

Training counselors should include a hands-on opportunity for learning to be most effective (Anthony, 2015; Manring et al., 2011; Mitchell et al, 2003; Goss & Anthony, 2009; Haberstroh et al., 2008; Hilty et al., 2017; Shandley et al., 2011).

What is also confirmed is the importance of universities in providing the technology to faculty and students, to be skilled and trained to practice distance counseling. Having technology available was found to be the most significant predictor of including distance counseling skills in the master level classroom.

### **Implications**

The counseling field is moving online, there are many reasons why, for both counselors and clients. What we can be sure of, is the field continues to grow. Distance counseling offers many benefits and may be available in many places where in person counseling is not. The reach of a counselor is now literally across the world. The need for counselors, all counselors, to have at least basic knowledge in distance counseling is imperative given the integration of technology and counseling. Not knowing basic information on practice, ethics, and legal issues regarding distance counseling could lead to violations of ethical and legal protections and could cause client harm.

Ensuring that counseling students are receiving the appropriate training needed to navigate the online world is no longer something to think about, it is here now. The findings from this study can be useful in better understanding counselor educator's behavior regarding distance counseling instruction, in practice. One important finding of

this study is to have a baseline number of counselor educators who are including distance counseling skills in their classrooms. This study also provided more data on the prevalence of counselor educators who have training in distance counseling. This information is beneficial for counseling programs to better understand the needs for not only counseling students to receive training consistent with CACREP standards, but to support counselor educators by providing support such as training opportunities and technical support in the classroom. The findings of this study confirm that training, experience, and availability of technology, are important factors in predicting teaching distance counseling skills in the master-level skills-based classroom.

### **Conclusion**

This study extends the knowledge of technology integration into counselor education. The future of behavioral health care will require the ability to utilize technology, in a number of ways, in accordance with appropriate ethical and legal standards. Master level counselor training programs are overall not including distance counseling into their curricula, if we depend on student or professional report (Blumer et al., 2015; Bruno & Abbott, 2011; Finn & Barak, 2011; Pipoly, 2013). It is interesting that the findings in this study show different information from counselor educators than from students as to training in the classroom. Counselor educators were close to 50% reporting that they include distance counseling skills. In the research available where counselors or students are asked, a large majority, often in the 70-80% range, state they never received information on technology or related distance counseling topics (Blumer et al., 2015; Bruno & Abbott, 2011; Finn & Barak, 2011; Pipoly, 2013).

The availability, quality, and necessity of distance counseling are just some of the reasons why it continues to grow. The lack of access to behavioral healthcare has moved onto the web, beyond self-help into professional help. Therapy has partnered with the internet in reducing the stigma behind therapy and making therapy available to people around the world. The public are using distance counseling, counselors are using distance counseling and ethical codes have specific guidelines, as do educational programs, on the key areas to know in order to practice. The importance of distance counseling, as a tool in the fight to increase access to mental healthcare, requires that it be used appropriately. The findings of this study support prior studies, hands-on training is preferable and that it is imperative that the university has the technology available in order to teach distance counseling.

This study can provide another layer of support for factors that are associated with technology integration in education. In this case in the area of counselor education and distance counseling skills. The findings support self-efficacy as significant in predicting distance counseling skills instruction. Two demographic variables, the university having the technology available and having had experience using distance counseling, were the only two factors that were significant predictors of distance counseling instruction in the regression models with the self-efficacy measures.

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## Appendix A: Permission to Use CESNET-L

**Re: request to use CESNET LISTSERV-L**

**JENCIUS, MARTIN**

Wed 7/25/2018 7:30 AM

To: Carrie Dupont

Carrie,

Thank you for taking the appropriate and ethical procedure to contact me and ask permission to post to the listserv. Please also pass on to your advisor my gratitude.

Take a look at the survey recommendations at [www.cesnet-l.net](http://www.cesnet-l.net) for ideas about doing research using CESNET-L. Make sure that your request contains all of the specified information. After that, feel free to proceed and post.

With best regards,

Dr. Marty Jencius

On Jul 25, 2018, at 9:09 AM, Carrie Dupont wrote:

Hi Dr Jencius,

My name is Carrie DuPont, and I am currently a doctoral student working on my dissertation in Counselor Education and Supervision at Walden University

I would like to send a survey request to the listserv members, if possible.

The proposed study will examine the relationship, if any, between counselor educator self-efficacy with technology and teaching distance counseling skills to master level counseling students.

The study is approximately 25 questions and is expected to take 15-20 minutes to answer.

The study seeks information from counselor educators regarding their comfort with technology and if they teach distance counseling skills in their teaching setting. The sample size needed is 112 participants, and the CESNET-L is one of three sources that will be used to contact counselor educators.

An email soliciting participation, which includes information about the study and informed consent information will be sent to list members if approval is given. List members will be contacted three times total. The initial request for participation then again after three weeks and a third time after five weeks to request participation. The survey will be closed after seven weeks if the number of participants has been met. I will not solicit list members more than the three times, consistent with the recommendations provided.

I am in the proposal stage of my dissertation. I expect to have the approvals in the next 8-12 weeks and anticipate soliciting participants in the fall, September or October. I apologize for not having a specific timeline but the approval time varies as I am sure you are aware.

I appreciate your time and would be grateful if permission to contact list members is approved.

Thank you

Sincerely

Carrie DuPont

## Appendix B: First Sampling Request for Participation email

Dear Counselor Educator,

My name is Carrie DuPont and I am a Doctoral student at Walden University in the Counselor Education and Supervision program. I am conducting a quantitative research study to examine if there is a relationship between counselor educator self-efficacy with technology and teaching distance counseling skills in master level skills-based classes. The study is my dissertation to complete the requirements for a PhD in Counselor Education and Supervision at Walden University. The results of the survey will be used for the study and may also be shared at national conferences as well.

I am **seeking participants who are counselor educators and have experience teaching skills-based courses such as pre-practicum skills training courses, practicum or internship**. The online survey will take approximately 10-15 minutes to complete and your information and responses are anonymous and confidential.

Your participation is voluntary, and you can exit the survey at any point. You can choose not to answer any question as well.

Walden University's approval number for this study is **11-29-18-0081056** and it expires on **November 28, 2019**.

Although you will not be compensated or paid for your participation, your responses will help us better understand the relationship between counselor educator self-efficacy with technology and teaching distance counseling skills. The information obtained will be useful for both counselor educators and counseling students.

If you have any questions, concerns, or would like additional information regarding the research study, please feel free to contact me at, phone (XXX) XXX-XXX. My research chair is Dr. Kelly Dardis her email is

If you agree to complete the survey, please follow the link below after reading the consent form included. Please print or save this consent form for your records.



Survey link <https://www.surveymonkey.com/r/CE-TSE>

Thank you for your time and participation

Sincerely

Carrie DuPont, LPC, LMFT, LAC, MAC, SAP, ACS, BC-TMH

Doctoral Candidate- Doctor of Philosophy Counselor Education and Supervision

Walden University

Appendix C: IRB Approval

IRB approval number was 11-29-18-0081056

## Appendix D: Revised Sampling Request for Participation email CESNET-L

Dear Counselor Educator,

My name is Carrie DuPont and I am a Doctoral student at Walden University in the Counselor Education and Supervision program. **I am contacting you via the ACES listserv CESNET-L.** This is a follow up to an email send about 3 weeks ago requesting participation.

I am conducting a quantitative research study to examine if there is a relationship between counselor educator self-efficacy with technology and teaching distance counseling skills in master level skills-based classes. The study is my dissertation to complete the requirements for a PhD in Counselor Education and Supervision at Walden University. The results of the survey will be used for the study and may also be shared at national conferences as well.

I am **seeking participants who are counselor educators and have experience teaching skills-based courses such as pre-practicum skills training courses, practicum or internship.** The online survey will take approximately 10-15 minutes to complete and your information and responses are anonymous and confidential.

Your participation is voluntary, and you can exit the survey at any point. You can choose not to answer any question as well.

Walden University's approval number for this study is **11-29-18-0081056** and it expires on **November 28, 2019.**

Although you will not be compensated or paid for your participation, your responses will help us better understand the relationship between counselor educator self-efficacy with technology and teaching distance counseling skills. The information obtained will be useful for both counselor educators and counseling students.

If you have any questions, concerns, or would like additional information regarding the research study, please feel free to contact me at, phone (XXX) XXX-XXX. My research chair is Dr Kelly Dardis her email is

If you agree to complete the survey, please follow the link below after reading the consent form included. Please print or save this consent form for your records.



Survey link <https://www.surveymonkey.com/r/CE-TSE>

Thank you for your time and participation

Sincerely

Carrie DuPont, LPC, LMFT, LAC, MAC, SAP, ACS, BC-TMH

Doctoral Candidate- Doctor of Philosophy Counselor Education and Supervision  
Walden University

## Appendix E: Revised Sampling Request for Participation email ACA Connect

Dear Counselor Educator,

My name is Carrie DuPont and I am a Doctoral student at Walden University in the Counselor Education and Supervision program. **I am contacting you via the ACA Connect call for study participant email list.** This is a follow up to an email send about 2 weeks ago requesting participation.

This is the final call for participation! Thank you to any and all who have already participated in the survey! The survey will remain open for only 2 more weeks, closing on Feb. 7<sup>th</sup> 2019.

I am conducting a quantitative research study to examine if there is a relationship between counselor educator self-efficacy with technology and teaching distance counseling skills in master level skills-based classes. The study is my dissertation to complete the requirements for a PhD in Counselor Education and Supervision at Walden University. The results of the survey will be used for the study and may also be shared at national conferences as well.

I am **seeking participants who are counselor educators and have experience teaching skills-based courses such as pre-practicum skills training courses, practicum or internship.** The online survey will take approximately 10-15 minutes to complete and your information and responses are anonymous and confidential.

Your participation is voluntary, and you can exit the survey at any point. You can choose not to answer any question as well.

Walden University's approval number for this study is **11-29-18-0081056** and it expires on **November 28, 2019.**

Although you will not be compensated or paid for your participation, your responses will help us better understand the relationship between counselor educator self-efficacy with technology and teaching distance counseling skills. The information obtained will be useful for both counselor educators and counseling students.

If you have any questions, concerns, or would like additional information regarding the research study, please feel free to contact me at, phone (XXX) XXX-XXX. My research chair is Dr Kelly Dardis her email is

If you agree to complete the survey, please follow the link below after reading the consent form included. Please print or save this consent form for your records.



Survey link <https://www.surveymonkey.com/r/CE-TSE>

Thank you for your time and participation

Sincerely

Carrie DuPont, LPC, LMFT, LAC, MAC, SAP, ACS, BC-TMH

Doctoral Candidate- Doctor of Philosophy Counselor Education and Supervision

Walden University

## Appendix F: Revised Sampling Request for Participation email University Website

Dear Counselor Educator,

My name is Carrie DuPont and I am a Doctoral student at Walden University in the Counselor Education and Supervision program. **I obtained your name and email contact info via your affiliated university website.** This is a follow up to an email send about 3 weeks ago requesting participation.

I am conducting a quantitative research study to examine if there is a relationship between counselor educator self-efficacy with technology and teaching distance counseling skills in master level skills-based classes. The study is my dissertation to complete the requirements for a PhD in Counselor Education and Supervision at Walden University. The results of the survey will be used for the study and may also be shared at national conferences as well.

I am **seeking participants who are counselor educators and have experience teaching skills-based courses such as pre-practicum skills training courses, practicum or internship.** The online survey will take approximately 10-15 minutes to complete and your information and responses are anonymous and confidential.

Your participation is voluntary, and you can exit the survey at any point. You can choose not to answer any question as well.

Walden University's approval number for this study is **11-29-18-0081056** and it expires on **November 28, 2019.**

Although you will not be compensated or paid for your participation, your responses will help us better understand the relationship between counselor educator self-efficacy with technology and teaching distance counseling skills. The information obtained will be useful for both counselor educators and counseling students.

If you have any questions, concerns, or would like additional information regarding the research study, please feel free to contact me at, phone (XXX) XXX-XXXX. My research chair is Dr Kelly Dardis her email is

If you agree to complete the survey, please follow the link below after reading the consent form included. Please print or save this consent form for your records.



Survey link <https://www.surveymonkey.com/r/CE-TSE>

Thank you for your time and participation

Sincerely

Carrie DuPont, LPC, LMFT, LAC, MAC, SAP, ACS, BC-TMH

Doctoral Candidate- Doctor of Philosophy Counselor Education and Supervision  
Walden University

## Appendix G: Permission to Use Scale and Permission to Adapt Scale

**Re: Use of the intrapersonal technology integration scale for dissertation**

~~serkan perkmen~~

Sat 8/4/2018 2:17 AM

To: Carrie Dupont

Dear Carry,

Sure you can do it.

Serkan ~~Perkmen~~

From: Carrie Dupont

Sent: Friday, August 3, 2018 6:32:10 PM

To: ~~serkan perkmen~~

Subject: Re: Use of the intrapersonal technology integra on scale for dissertation

Hello again Dr ~~Perkmen~~

I apologize for bothering you again, I would appreciate if you would grant permission to adapt the Intrapersonal Technology Integra on Scale to be used for counselor educators. The wording would be slightly altered to be more consistent with counseling related technology.

Thanks again

Sincerely

Carrie DuPont

From:

Sent: Saturday, June 2, 2018 9:04:21 AM

To: Carrie Dupont

Subject: Re: Use of the intrapersonal technology integra on scale for dissertation

Hi Carrie,

Sure you can use my scale in your dissertation.

Best Wishes!

Serkan ~~Perkmen~~

From: Carrie Dupont

Sent: Saturday, June 2, 2018 8:52 AM

Subject: Use of the intrapersonal technology integration scale for dissertation

Hi Dr ~~Perkmen~~

I am contacting you to request permission to use the intrapersonal technology integration scale for my dissertation study. If you are in agreement, I will send a formal request as well. I am in the proposal stage and have not obtained IRB approval as yet, but I am hoping to get your permission to utilize the ITIS to investigate if there is any relationship between counselor educator scores on the ITIS and technology integration for distance counseling skills. I am very keen to utilize the ITIS as it measures the variables that I am interested in investigating for my dissertation.

Thank you for your time and much appreciation for your research in technology integration and education.

Regards,

Carrie DuPont

Walden University

PhD Candidate Counselor Education and Supervision

## Appendix H: Intrapersonal Technology Integration Scale

- I feel confident that I can regularly incorporate appropriate instructional technology into my lessons to enhance student learning.
- Effectively using instructional technology in the classroom will increase my colleagues' respect of my teaching ability.
- My colleagues will see me as competent if I effectively use instructional technology in the classroom.
- I feel confident that I can select appropriate instructional technology for instruction based on curriculum standards-based pedagogy.
- I have an interest in working on a project involving instructional technology concepts.
- Using instructional technology in the classroom will increase my productivity.
- I feel confident that I can teach relevant subject matter with appropriate use of instructional technology.
- I am interested in learning about new educational software.
- I feel confident that I can help students when they have difficulty with instructional technology.
- I have an interest in listening to a famous instructional technologist speaking about effective use of instructional technology in the classroom.



- Effectively using instructional technology in the classroom will increase my status among my colleagues.
- I have an interest in attending instructional technology workshops during my teaching career.

## Appendix I: Survey Questions

Counselor Educator Technology Self-Efficacy

## 2. Demographic Information

### Demographic Information

1. Your age

2. Which gender best describes you

Male  Prefer not to answer this question

Female

Prefer to self -describe

3. What is the highest level of education completed

High school  Master Degree

Associate Degree  Doctoral Degree

Bachelor Degree  I prefer not to answer this question

Other (please specify)

4. About how many years have you been a counselor educator?

0 Years 26

5. The university where I teach is CACREP accredited

Yes  No

Prefer not to answer

6. I graduated from a CACREP accredited PhD program

- Yes  No  
 Prefer not to answer

7. I have had training in distance counseling

- Yes  
 No  
 Prefer not to answer

8. I have experience using distance counseling

- Yes  
 No  
 Prefer not to answer

9. The university where I teach has technology available to teach distance counseling

- Yes  
 No  
 Prefer not to answer

10. I use technology in my teaching setting

- Yes  
 No  
 Prefer not to answer

11. I include distance counseling skills in my classroom

- Yes  
 No  
 Prefer not to answer

**Counselor Educator Technology Self-Efficacy****3. Questionnaire****The ITIS**

12. I feel confident that I can teach relevant subject matter with the appropriate use of distance counseling technology

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

13. I feel confident that I can select appropriate distance counseling technology for instruction based on curriculum standards-based pedagogy

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

14. I feel confident that I have the necessary skills to use distance counseling technology for distance instruction

- |  |   |
|--|---|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree          |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree |
| <input type="radio"/> Neither agree nor disagree |   |

15. I feel confident that I can regularly incorporate appropriate distance counseling technologies into my lessons to enhance student learning

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

16. I feel confident that I can effectively use distance counseling technology in my teaching

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

17. I feel confident that I can help students when they have difficulty with distance counseling technology

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

18. Using distance counseling technology in the classroom will increase my effectiveness as a teacher

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

19. Using distance counseling technology in the classroom will increase my productivity

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

20. Using distance counseling technology in the classroom will make it easier for me to teach

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

21. Using distance counseling technology in the classroom will make my teaching more exciting

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

22. Using distance counseling technology in the classroom will make my teaching more satisfying

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

23. Effectively using distance counseling technology in the classroom will increase my sense of self accomplishment

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

24. Effectively using distance counseling technology in the classroom will increase my status among colleagues

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

25. Effectively using distance counseling technology in the classroom will increase my colleagues' respect of my teaching ability

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

26. My colleagues will see me as competent if I effectively use distance counseling technology in the classroom

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

27. I have an interest in listening to a famous distance counselor speaking about the effective use of distance counseling technology in the classroom

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

28. I am interested in working with distance counseling technology tools

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

29. I am interested in learning about new distance counseling software

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

30. I have an interest in attending distance counseling technology workshops during my teaching career

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

31. I have an interest in reading articles or books about distance counseling technology

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |

32. I have an interest in working on a project involving distance counseling technology concepts

- |  |  |
|--|--|
| <input type="radio"/> Strongly agree             | <input type="radio"/> Disagree             |
| <input type="radio"/> Agree                      | <input type="radio"/> Strongly disagree    |
| <input type="radio"/> Neither agree nor disagree | <input type="radio"/> Prefer not to answer |